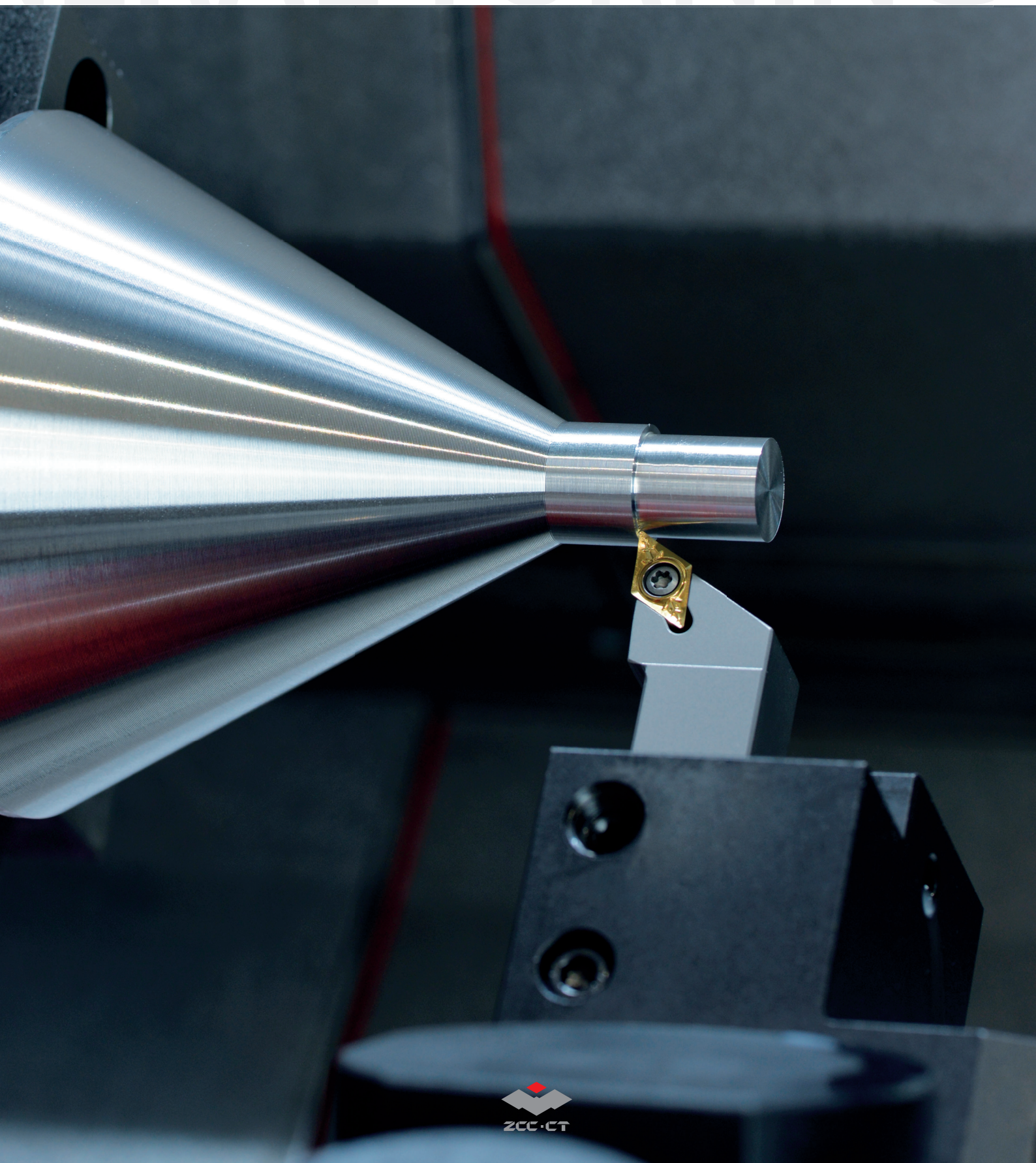


GENERAL TURNING



General turning

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Carbide and cermet inserts

Double sided, negative – Finishing



CNEG-NF

12

A52



CNMG-ADF

12

A51



CNMG-DF

09 12

A51



CNMG-EF

09 12

A51



CNMG-SF

09 12

A51



CNMG-XF

12

A52

Edge length
Page



DNEG-NF

15

A66



DNEG-NGF

15

A66



DNMG-ADF

15

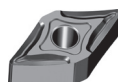
A62



DNMG-DF

11 15

A62



DNMG-EF

11 15

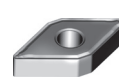
A66



DNMG-FM

15

A66



DNMG-SF

11 15

A62



DNMG-XF

11 15

A63

Edge length
Page



SNMG-ADF

12

A71



SNMG-DF

12

A71



SNMG-EF

09 12 15

A72



SNMG-SF

09 12

A71



SNMG-XF

12

A73

Edge length
Page



TNMG-ADF

16

A87



TNMG-DF

16 22

A87



TNMG-EF

11 16 22

A89



TNMG-FM

16

A90



TNMG-SF

16

A88

Edge length
Page



VNEG-NF

16

A100



VNEG-NGF

16

A101



VNMG-ADF

16

A100



VNMG-DF

16

A100



VNMG-EF

16

A100



VNMG-SF

16

A101



VNMG-XF

16

A102

Edge length
Page



WNEG-NF

08

A106



WNMG-ADF

08

A105



WNMG-DF

06 08

A105



WNMG-EF

06 08

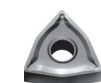
A106



WNMG-NF

06

A106



WNMG-SF

06 08

A105



WNMG-XF

06 08

A107

Edge length
Page

Double sided, negative, Wiper – Finishing



CNMG-WG

12

A51



DNMX-WG

11 15

A62



TNMX-WG

16

A87



WNMG-WG

08

A106

Edge length
Page

Carbide and cermet inserts

Double sided, negative – Medium machining

							
CNMG	CNMG-DM	CNMG-EG	CNMG-EM	CNMG-NM			
12 16 19	09 12 16 19	12	12 16	12	Edge length		
A61	A54	A54	A54	A56	Page		
							
CNMG-PM	CNMG-TC	CNMG-TK	CNMG-XM	CNMG-ZM			
09 12 16 19	12 16	12	12 16 19	12	Edge length		
A53	A56	A56	A53	A55	Page		
							
DNMG-DM	DNMG-EG	DNMG-EM	DNMG-NM				
11 15	15	11 15	15	Edge length			
A64	A67	A67	A67	Page			
							
DNMG-PM	DNMG-TC	DNMG-TK	DNMG-XM	DNMG-ZM			
11 15	15	15	11 15	15	Edge length		
A64	A67	A68	A63	A65	Page		
							
SNMG	SNMG-DM	SNMG-EG	SNMG-EM	SNMG-NM			
12 25	09 12 15 19	12	12 15	12	Edge length		
A83	A75	A75	A76	A77	Page		
							
SNMG-PM	SNMG-TC	SNMG-TK	SNMG-XM				
09 12 15 19	12 15	12	12 15 19	Edge length			
A74	A76	A76	A73	Page			
							
TNMG	TNMG-DM	TNMG-EG	TNMG-EM	TNMG-PM	TNMG-TC	TNMG-XM	TNMG-ZM
16 22 27 33	11 16 22	16	16 22	11 16 22	16 22	16 22	16
A98	A91	A93	A93	A91	A93	A90	A92
							Edge length
							Page

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C

Drilling

D

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Turning

Carbide and cermet inserts

Double sided, negative – Medium machining



VNMG



VNMG-DM



VNMG-EM



VNMG-NM

16

A103

16

A103

16

A103

16

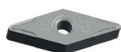
A103

Edge length

Page



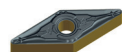
VNMG-PM



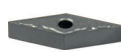
VNMG-SNR



VNMG-TC



VNMG-XM



VNMG-ZM

16

A104

16

A104

16

A104

16

A102

16

A104

Edge length

Page

B

Milling



WNMG-DM



WNMG-EG



WNMG-EM



WNMG-NM

06 08

A108

08

A108

06 08

A108

08

A110

Edge length

Page

C

Drilling



WNMG-PM



WNMG-TC



WNMG-TK



WNMG-XM



WNMG-ZM

06 08

A109

08

A110

08

A110

06 08

A107

08

A109

Edge length

Page



RNMG

12

A112

Edge length

Page

D

Technical Information

Double sided, negative – Medium machining to roughing



CNMA



DNMA



SNMA



SNUN



TNMA



WNMA

12 16 19

A61

15

A69

12 15 19

A84

12 19

A86

16 22

A99

06 08

A111

Edge length

Page

E

Index

Double sided, negative – Roughing



CNMG-DR



CNMG-ER



CNMG-SNR



DNMG-DR



DNMG-ER



DNMG-SNR

12 16 19 25

A57

12 16 19

A58

12 16 19

A57

15

A68

15

A69

15







A68

Edge length

Page







Carbide and cermet inserts





Double sided, negative – Roughing







					
SNMG-DR	SNMG-ER	SNMG-SNR	TNMG-DR	TNMG-ER	TNMG-SNR
12 15 19 25	12 15 19	12	16 22 27	16 22	16
A77	A78	A78	A94	A95	A92
					Edge length
					Page


		
WNMG-DR	WNMG-SNR	
06 08	08	
A111	A109	
		Edge length
		Page

Single sided, negative – Roughing







					
CNMM	CNMM-DR	CNMM-ER	CNMM-HDR	CNMM-HPR	CNMM-LR
12 19	12 16 19 25	25	12 16 19 25	19 25	12 16 19 25
A60	A58	A58	A60	A60	A59
					Edge length
					Page

			
DNMM-DR	DNMM-ER	DNMM-HDR	DNMM-LR
15	15	15	15
A70	A70	A70	A70
			Edge length
			Page

					
SNMM	SNMM-DR	SNMM-ER	SNMM-HDR	SNMM-HPR	SNMM-LR
19 25	15 19 25	25	12 15 19 25	19 25	12 15 19 25
A85	A79	A79	A81	A82	A80
					Edge length
					Page

			
TNMM	TNMM-DR	TNMM-HDR	TNMM-LR
16 22 27	16 22 27	22 27	16
A99	A95	A97	A95
			Edge length
			Page

Special form – Finishing

					
CNMG-RF	CNMM-RF	CNMM-RH	KNUX	LNUX-RF	LNUX-RH
19	19	19	16	19 30	19 30
A114	A114	A114	A113	A115	A115
					Edge length
					Page

Carbide and cermet inserts

Positive – Fine-finishing



CCGT-SF

06 09

A116



CCGT-USF

06 09

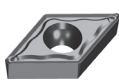
A116



CPGT-SF

06 09

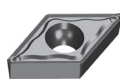
A124



DCGT-SF

07 11

A125



DPGT-SF

07 11

A131

Edge length
Page



TBGH

06

A139



TCGT-SF

06 09 11

A140



TPGH

09 11

A146



TPGT-SF

09 11

A147

Edge length
Page



VBGT-SF

11

A150



VCGT-SF

11 16

A153

Edge length
Page

Positive – Finishing



CCMT-AHF

06 09 12

A117



CCMT-EF

06 09 12

A118



CCMT-HF

06 09 12

A117



CCMT-XF

06 09

A118



CPMT-HF

06

A124

Edge length
Page



DCMT-AHF

07 11

A125



DCMT-EF

07 11

A126



DCMT-HF

07 11

A126



DCMT-XF

07 11

A126



SCMT-AHF

09

A134



SCMT-EF

09

A134



SCMT-HF

09

A135

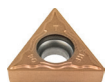


SCMT-XF

09

A134

Edge length
Page



TCMT-AHF

11 16

A141



TCMT-EF

09 11 16

A142



TCMT-HF

09 11 16

A141



TCMT-XF

09 11 16

A141

Edge length
Page



VBET-NF

16

A149



VBET-NGF

16

A151



VBMT-AHF

16

A148



VBMT-EF

11 16

A148



VBMT-HF

11

A149



VBMT-XF

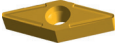


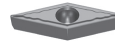

11 16

A148






Edge length
Page

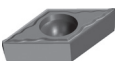


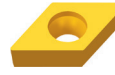
Carbide and cermet inserts

Positive – Finishing


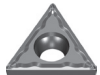



					
VCGT	VCGT-HF	VCGT-NF	VCMT-EF	VCMT-XF	
13	11	16	16	11 16	Edge length
A153	A153	A153	A156	A156	Page






Positive – Medium machining

						
CCMT-EM	CCMT-HM	CCMT-XM	CCMW	CPGW	CPMT-HM	
06 09 12	06 09 12	09 12	09 12	06	09	Edge length
A119	A120	A119	A121	A124	A124	Page









						
DCMT-EM	DCMT-HM	DCMT-XM	DCMW			
07 11	07 11	11	11			Edge length
A127	A128	A127	A129			Page

						
SCMT-EM	SCMT-HM	SPMW	SCMT-XM			
09 12	09 12	09 12	09 12			Edge length
A134	A135	A138	A135			Page

						
TCMT	TCMT-EM	TCMT-HM	TCMW	TCMT-XM		
22	09 11 16	09 11 16	16	16		Edge length
A144	A142	A143	A143	A142		Page

						
VBMT-EM	VBMT-HM	VBMT-XM	VCMT-EM	VCMT-XM		
11 16	16	16	16	16		Edge length
A151	A151	A151	A156	A156		Page

Positive – Roughing

								
CCMT-HR	CCMT-TC	DCMT-HR	RCMT · RCGT	RCMX	RCMX-PV	SCMT-HR	TCMT-HR	
06 09 12	06 09 12	11	08 10 12 16 20 25	08 10 12 16 20 25 32	32	09 12	09 11 16 22	Edge length
A121	A121	A129	A132	A133	A133	A136	A143	Page

A

Turning

Carbide and cermet inserts

Positive – Roughing



VBMT-HR



VBMT-SNR

16	16	Edge length
A152	A152	Page

B

Milling

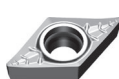
Positive – Aluminium machining



CCGX-LC



CCGX-LH



DCGX-LC



DCGX-LH



RCGX-LH

06 09 12	06 09 12	07 11	07 11	08 12	Edge length
A122	A122	A129	A130	A132	Page



SCGX-LC



SCGX-LH



TCGX-LC



TCGX-LH



VCGX-LC



VCGX-LH

09 12	09 12	09 11 16	09 11 16	11 16 22	11 16 22	Edge length
A136	A137	A145	A145	A154	A155	Page

C

Drilling

PCBN & PCD

Negative



CNGA-2



CNGA-2W



DNGA-2



SNGA-4



TNGA-3

12	12	15	12	16	Edge length
A160	A160	A161	A162	A163	Page

D

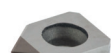
Technical
Information



VNGA-2



WNGA-3



ZNEX

16	08	04	Edge length
A164	A165	A166	Page



CNGN



CNGN-M



RNGN



SNGN



SNGN-M



WNGN



WNGN-M


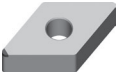

09 12	12	09 12	12	12	08	08	Edge length
A173	A173	A174	A175	A175	A176	A176	Page

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PCBN & PCD

Negative






			
CNGA	DNGA	VNGA	
12	15	16	Edge length
A177	A178	A179	Page



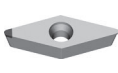


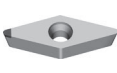
Positive

					
CCGW-2	DCGW-2	TCGW-3	VBGW-2	VCGW-2	
06 09 12	07 11	11 16	16	11 16	Edge length
A167	A169	A170	A171	A172	Page

					
CCGT	CCGT-1MED	CCGT-L	CCGW	CCGW-L	
06 09 12	06 09	09 12	06 09 12	06 09 12	Edge length
A180	A180	A181	A182	A183	Page







			
DCGT	DCGT-1MED	DCGW	
07 11	07 11	07 11	Edge length
A184	A185	A186	Page

					
TCGT	TCGT-1MED	TCGT-L	TCGW	TCGW-L	
11 16	11 16	11 16	11 16	11 16	Edge length
A187	A187	A188	A189	A190	Page

						
VBGT	VBGT-1MED	VBGW	VCGT	VCGT-1MED	VCGW	
11 16	16	11 16	11 16	11 16	11 16 22	Edge length
A191	A191	A192	A193	A194	A195	Page

Ceramic inserts

Negative

						
CNGA	CNGN	CNGX	DNGA	DNGN	DNGX	
12 16	12 16	12	15	15	15	Edge length
A200	A201	A203	A204	A205	A206	Page

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Turning

Ceramic inserts

Negative



RNGA

12

A207



RNGN

06 09 12 15 19 25

A208



SNGA

12

A210



SNGN

12 15 19

A211



SNGX

12

A213



TNGA

16 22

A214



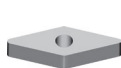
TNGN

16 22

A215

Edge length

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VNGA

16

A216



WNGA

08

A217

Edge length

Page

B

Milling

Positive



RCGX

06 09 12 19

A218



RPGN

12

A219



RPGX

09

A220



TPGN

11 16

A221

Edge length

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Drilling

D


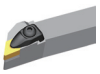




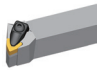
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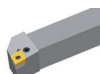






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External tool holders

Holder with double clamping









							
DCLNR/L	DDJNR/L	DSBNR/L	DTGNR/L	DVJNR/L	DVVNN	DWLNR/L	
95°	93°	75°	90°	93°	72.5°	95°	Angle
A230	A231	A232	A233	A235	A234	A236	Page









Holder with knee lever clamping


								
PCBNR/L	PCLNR/L	PDJNR/L	PDNNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	
75°	95°	93°	63°	75°	45°	75°	45°	Angle
A237	A238	A240	A241	A242	A244	A245	A246	Page

				
PTFNR/L	PTGNR/L	PTTNR/L	PWLNR/L	
91°	90°	60°	95°	Angle
A247	A249	A248	A251	Page

Holder with multi clamping

								
MCBNR/L	MCLNR/L	MDJNR/L	MDPNN	MRDNN	MRGNR/L	MSBNR/L	MSDNN	
75°	95°	93°	62.5°	45°	90°	75°	45°	Angle
A252	A253	A254	A255	A267	A268	A256	A259	Page

								
MSKNR/L	MSRNR/L	MTFNR/L	MTGNR/L	MTJNR/L	MTJNR/L-Z	MVJNR/L	MVVNN	
75°	75°	90°	90°	93°	93°	93°	72.5°	Angle
A258	A257	A263	A260	A261	A262	A265	A264	Page

	
MWLNR/L	
95°	Angle
A266	Page

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Turning

B

Milling

C

Drilling

D









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Information









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




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External tool holders


Holder with screw clamping

								
SCACR/L	SCLCR/L	SDACR/L	SDJCR/L	SDNCN	SRDCN	SRGCR/L	SSBCR/L	
90°	95°	90°	93°	63°	45°	90°	75°	Angle
A269	A270	A271	A272	A273	A288	A289	A279	Page









								
SSDCN	SSKCR/L	SSSCR/L	STACR/L	STFCR/L	STGCR/L	STTCR/L	SVABR/L	
45°	75°	45°	90°	90°	90°	60°	90°	Angle
A280	A281	A282	A283	A284	A285	A286	A275	Page




								
SVJBR/L	SVJCR/L	SVVBN	SVVCN	SWACR/L				
93°	93°	72.5°	72.5°	90°				Angle
A274	A278	A276	A277	A287				Page

Holder with top clamping

								
CKJNR/L	CKNNR/L							
93°	63°							Angle
A290	A291							Page









Tool holder for ceramic inserts and solid CBN inserts

								
CCLNR/L	CDJNR/L	CRDNN	CSDNN	CSKNR/L	CSRNR/L	CTJNR/L	CTUNR/L	
95°	93°	45°	45°	75°	75°	93°	93°	Angle
A292	A294	A298	A299	A296	A297	A293	A295	Page

								
JCLNR/L	JDJNR/L	JSDNN						
95°	93°	45°						Angle
A300	A301	A302						Page

External tool holders

Swiss turning






								
SCACR/L-SC	SCLCR/L-SC	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC	SVACR/L-SC	SVJCR/L-SC	
90°	95°	90°	107.5°	93°	63°	90°	93°	Angle
A306	A307	A308	A309	A310	A311	A312	A313	Page







Rail applications

			
RW-PCLNR/L	RW-PLANR/L	RW-PLFNR/L	
90°	90°	90°	Angle
A318	A316	A317	Page





Boring bars









Steel boring bars with knee lever clamping –

					
A***-PCLNR/L	A***-PDSNR/L	A***-PDUNR/L	A***-PSKNR/L	A***-PTFNR/L	
95°	45°	93°	75°	90°	Angle
A324	A326	A327	A329	A330	Page

						
S***-PCLNR/L	S***-PDSNR/L	S***-PDUNR/L	S***-PSKNR/L	S***-PTFNR/L	S***-PWLNR/L	
95°	45°	93°	75°	90°	95°	Angle
A324	A326	A327	A329	A330	A332	Page

Steel boring bars with screw clamping –

				
A***-SCLCR/L	A***-SDQCR/L	A***-SDUCR/L	A***-SDZCR/L	
95°	107.5°	93°	95°	Angle
A334	A336	A337	A338	Page


								
S***-SCFCR/L	S***-SCLCR/L	S***-SCLPR/L	S***-SDQCR/L	S***-SDQPR/L	S***-SDUCR/L	S***-SDUPR/L	S***-SDZCR/L	
90°	95°	95°	107.5°	107.5°	93°	93°	95°	Angle
A352	A334	A348	A336	A349	A337	A350	A338	Page

A

Turning








Boring bars

Steel boring bars with screw clamping –

				
A***-SSKCR/L	A***-STFCR/L	A***-SVQBR/L	A***-SVUBR/L	
75°	90°	107.5°	93°	Angle
A339	A341	A345	A346	Page

B

Milling








							
S***-SSKCR/L	S***-STFCR/L	S***-STUPR/L	S***-SVQBR/L	S***-SVQCR/L	S***-SVUBR/L	S***-SVUCR/L	
75°	90°	93°	107.5°	107.5°	93°	93°	Angle
A339	A341	A351	A345	A343	A346	A344	Page

Solid carbide boring bars with screw clamping –

							
C***-SCLPR/L	C***-SDQPR/L	C***-SDUPR/L	C***-STUPR/L	C***-SVQCR/L	C***-SVUCR/L	C***-SZLNR/L	
A354	A356	A358	A360	A363	A364	A365	Page

C

Drilling

							
E***-SCLPR/L	E***-SCLPR/L	E***-SDQCR/L	E***-SDUCR/L	E***-STFCR/L	E***-STFPR/L	E***-SVUCR/L	
95°	95°	107.5°	93°	90°	90°	93°	Angle
A355	A354	A357	A359	A361	A362	A364	Page

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Finishing

XF

P



Double-sided chip breaker for finishing operations in the P application field. Superb chip control with low cutting forces.

B

Milling

RF

P



Double-sided chip breaker for applications from finishing to medium machining.

C

Drilling

SF

P

M

K



Double sided chip breaker in combination with cermet grades. Geometry with high sharpness for improved chip control and great surface quality. Ideal for machining with small cutting depths and feed rates.

D

Technical Information

DF

P

K



Double sided chip breaker with good chip control. Suitable for finishing and medium machining of steel and cast iron.

ADF

P

M



Ground, double sided chip breaker with good chip control. Wide range of application due to excellent balance of sharpness and cutting edge stability.

E

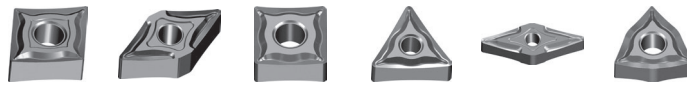
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Negative inserts

Finishing

EF

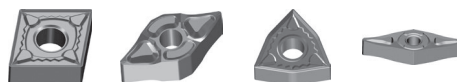
M S



Double sided chip breaker with sharp cutting edge and large rake angle for finishing of stainless steel.

NF

S M



Double sided chip breaker with ground cutting edge and large rake angle for finishing. E-tolerance for high repeatability.

NGF

S M



Double sided chip breaker with ground cutting edge and large rake angle for finishing. E-tolerance for high repeatability.

Wiper

WG

P M K



Double sided chip breaker with wiper geometry. Allows to double the feed rate and improves the surface quality.

Medium machining

XM

P



Double-sided chip breaker for medium machining operations in the P application field. Superb chip control at high and low feed rates.

A

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Medium machining

DM

P

K



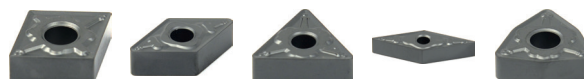
Double sided chip breaker for medium machining. Wide range of application due to excellent balance of sharpness and cutting edge stability.

B

Milling

ZM

P



Double sided chip breaker for medium machining. Wide range of application due to stable cutting edge and large rake angle. Very suitable for machining of steel.

C

Drilling

PM

P

K



Double sided chip breaker for medium machining. Wide range of application in steel and cast iron.

D

Technical Information

TC

K

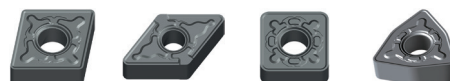
P



Double sided chip breaker with surrounding cutting edge. Process reliable machining due to highest cutting edge stability.

TK

K



Double-sided chip breaker for medium machining operations in the K application field. Optimum combination of impact resistance and cutting edge sharpness.

E

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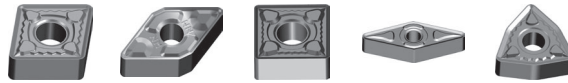
Negative inserts

Medium machining

NM

S

M



Double sided chip breaker with ground cutting edge and large rake angle for medium machining of heat-resistant materials.

EM

M

S

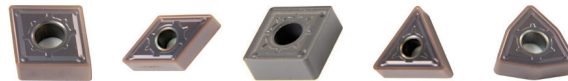


Double sided chip breaker with sharp cutting edge and large rake angle. Process reliable medium machining of stainless steel.

EG

M

S



Double sided chip breaker with grinded cutting edge and large rake angle. Wide range of application for medium machining of stainless steel.

Basic

P

K



Double sided chip breaker with surrounding cutting edge for universal machining of steel and cast iron.

Roughing

DR double sided

P

K



Double sided chip breaker with positive rake angle and stable cutting edge for light to medium roughing of steel and cast iron.

A

Turning

B

Milling

C

Drilling

D

Technical
Information

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A

Turning

Negative inserts

Roughing

DR single sided **P** **K**



Single sided chipbreaker with positive rake angle and stable cutting edge for light to medium roughing of steel and cast iron.

B

Milling

RH **P**



Double-sided chip breaker for applications from medium machining to roughing.

C

Drilling

LR **P** **M**



Single sided chip breaker with curved cutting edge and unique bumpy geometry. Low cutting pressure for process reliable machining. Light roughing of steel and stainless steel.

D

Technical Information

ER double sided **M** **S**



Double sided chip breaker with large rake angle for low cutting forces. Suitable for roughing of stainless steel.

ER single sided **M** **S**



Single sided chip breaker with large rake angle for low cutting forces. Suitable for roughing of stainless steel.

E

Index

Negative inserts

Roughing

HDR

P

K



Single sided chip breaker with high cutting edge stability and deformation resistance. Excellent for roughing with high cutting depths in steel and stainless steel.

HPR

P

K



Single sided chip breaker with high cutting edge stability and large chip space. Excellent for heavy roughing in steel and cast iron.

Flat

K



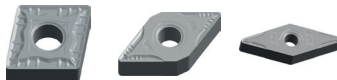
Double sided insert without chip breaker. Stable cutting edge design, due to missing microgeometry. Excellent for roughing in cast iron.

SNR

M

S

N



Double sided chip breaker for roughing. Wide range of application due to excellent balance of sharpness and cutting edge stability.

PCBN & PCD inserts

Flat

N

H



With brazed CBN or PCD cutting edge. For machining of hardened steel (CBN) or non-ferrous metals (PCD).

A

Turning

B

Milling

C

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D

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Negative inserts

PCBN & PCD inserts

Flat

H

K



Solid CBN insert for machining of steel and cast iron.

B

Milling

Ceramic inserts

Flat

K

H



Ceramic inserts for machining of low hardened steel and cast iron.

C

Drilling

Positive inserts

Fine-finishing

USF

P

M



Single sided chip breaker for fine finishing. Sharp cutting edge with large hollow flute, excellently suitable for machining small work pieces. G-tolerance for high repeatability.

D

Technical Information

R/L

P

M



Single sided chip breaker for fine finishing. Excellent for high surface quality. G-tolerance for high repeatability.

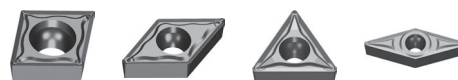
E

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SF

P

M



Single sided chip breaker in combination with cermet grades. Geometry with high sharpness for improved chip control and great surface quality. Ideal for machining with small cutting depths and feed rates.

Positive inserts

Finishing

XF

P



Single-sided chip breaker for finishing operations in the P application field. Superb chip control with low cutting forces.

HF

P

K



Single sided chip breaker with good chip control. Suitable for finishing to medium machining of steel and cast iron.

AHF

M

S

P



Ground, single sided chip breaker with good chip control. Wide range of application due to excellent balance of sharpness and cutting edge stability.

EF

M

S



Single sided chip breaker with sharp cutting edge and large rake angle for finishing of stainless steel.

NF

M

S



Single sided chip breaker with ground cutting edge and large rake angle for finishing. E-tolerance for high repeatability.

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Positive inserts

Finishing

NGF

M S



Single sided chip breaker with ground cutting edge and large rake angle for finishing. E-tolerance for high repeatability.

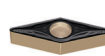
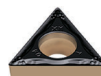
B

Milling

Medium machining

XM

P



Single-sided chip breaker for medium machining operations in the P application field. Superb chip control at high and low feed rates.

C

Drilling

TC

K

P



Single sided chip breaker with encircling cutting edge. Process reliable machining due to highest cutting edge stability.

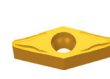
D

Technical Information

HM

P

K



Single sided chip breaker for medium machining. Wide range of application due to excellent balance of sharpness and cutting edge stability.

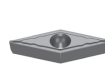
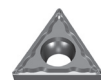
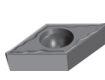
E

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EM

M

S



Single sided chip breaker with sharp cutting edge and large rake angle. Process reliable medium machining of stainless steel.

Positive inserts

Medium machining

Basic

P

K

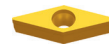


Single sided chip breaker with encircling cutting edge for universal machining of steel and cast iron.

Roughing

Flat

K



Single sided insert without chip breaker. Stable cutting edge design due to missing microgeometry. Excellent for roughing in cast iron.

HR

P

K



Single sided chip breaker with positive rake angle and stable cutting edge for light to medium roughing of steel and cast iron.

SNR

S

M



Single sided chip breaker for roughing. Wide range of application due to excellent balance of sharpness and cutting edge stability.

Basic

P

K



Single sided chip breaker with encircling cutting edge for universal machining of steel and cast iron.

A

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B

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Positive inserts

Aluminium machining

LC

N



Single sided chip breaker with excellent cutting edge design. Sharp cutting edge with positive rake angle. G-tolerance for high repeatability.

B

Milling

LH

N



Single sided chipbreaker for machining of cast aluminium alloys. Sharp cutting edge with positive rake angle. G-tolerance for high repeatability.

PCBN & PCD inserts

C

Drilling

Flat

N

H



With brazed CBN or PCD cutting edge. For machining of hardened steel (CBN) or non-ferrous metals (PCD).

D

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MED

N



Laser-cut chip breaker for finishing and medium machining operations.

E

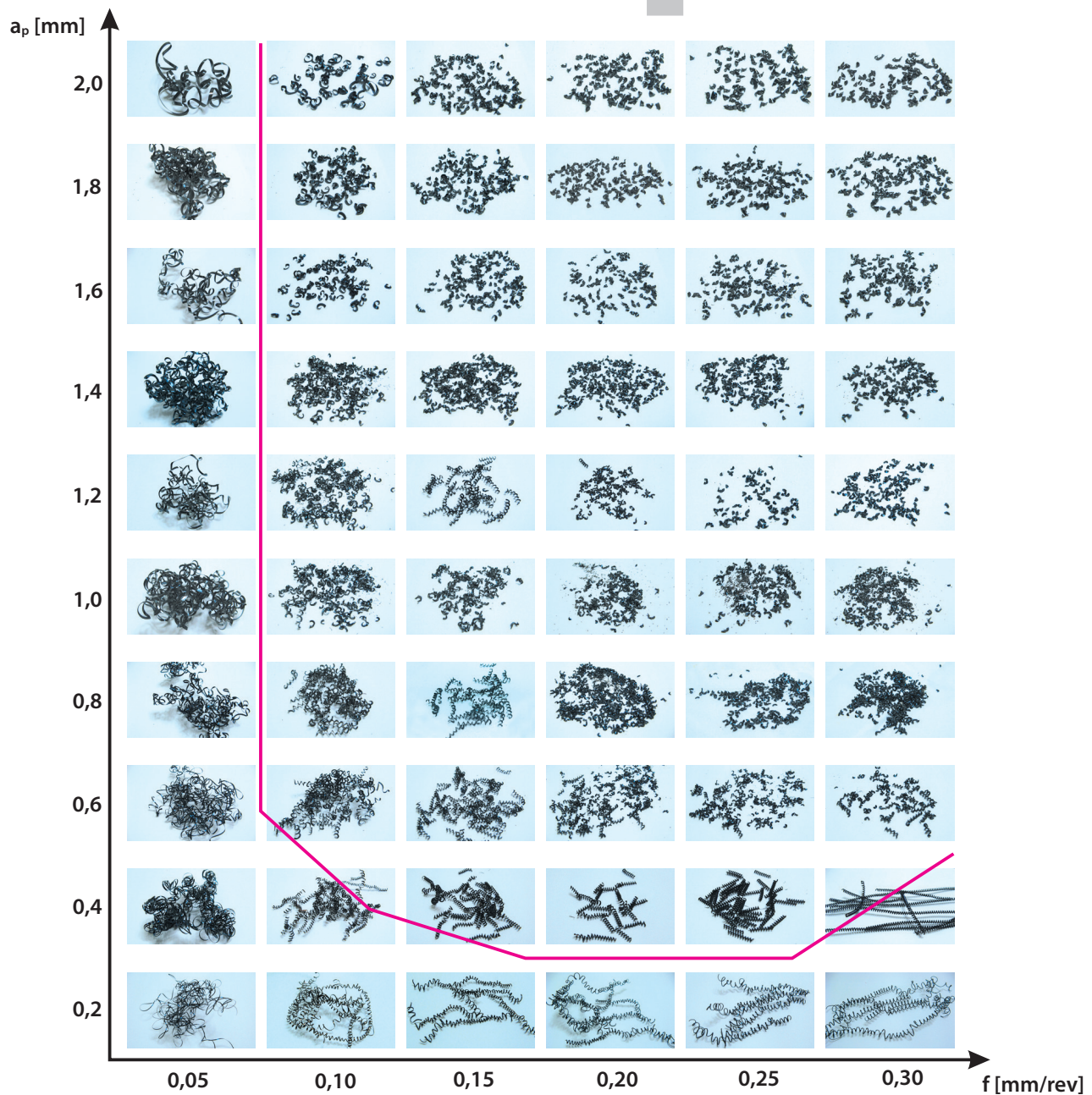
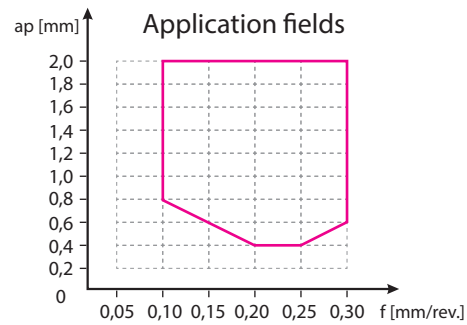
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General turning

Application fields of chip breakers

Example

Insert: CNMG120408-DF
 Holder: PCLNL2525M12
 Material: C45 steel
 V_C : 200 m/min



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Turning

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C

Drilling


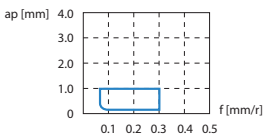
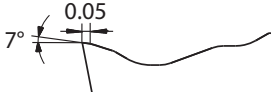


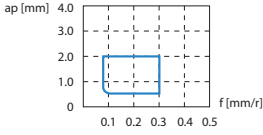



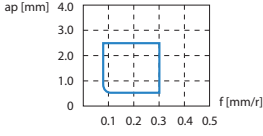



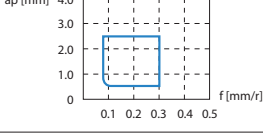



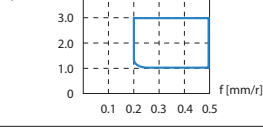
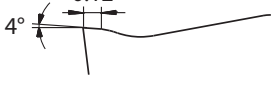


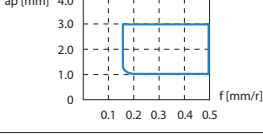




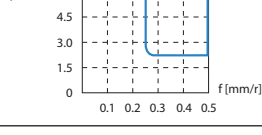
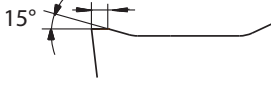
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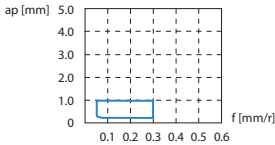
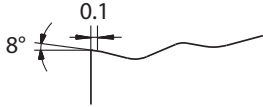

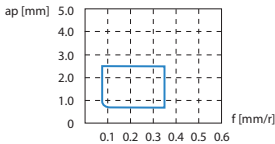


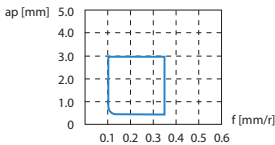
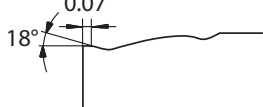

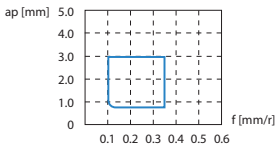
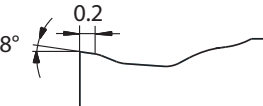

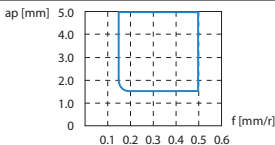
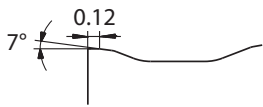

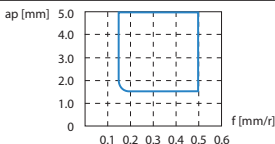
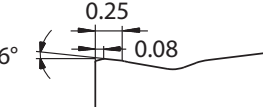

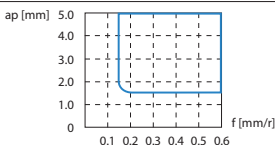
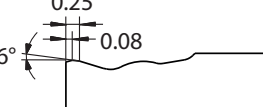

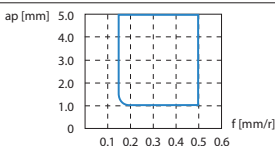
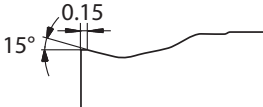

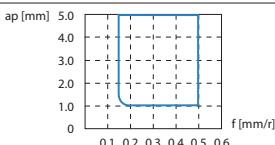
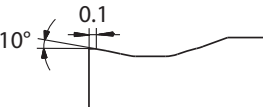

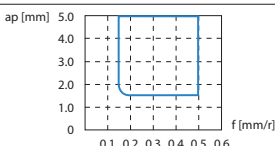
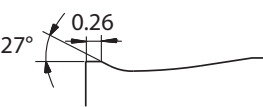

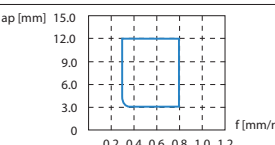
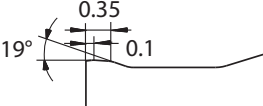
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P Positive inserts

Chip breaker	Application		Application fields	Cutting edge design
SF	Fine-finishing			
HF	Finishing	 		
AHF	Finishing	 		
XF	Finishing	 		
HM	Medium machining	 		
XM	Medium machining	 		
HR	Roughing	  		

P Negative inserts

Chip breaker	Application		Application fields	Cutting edge design
SF	Fine-finishing			
DF	Finishing			
XF	Finishing			
ADF	Finishing			
DM	Medium machining			
PM	Medium machining			
ZM	Medium machining			
XM	Medium machining			
WG	Medium machining			
Basic	Medium machining			
DR	Roughing			

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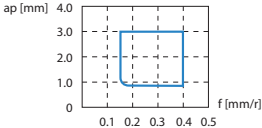
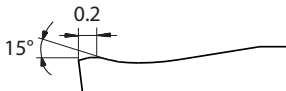

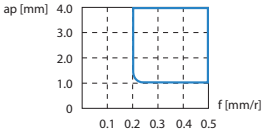
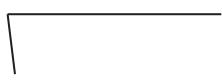
P Negative inserts

Chip breaker	Application		Application fields	Cutting edge design
DR (single sided)	Roughing			
LR (single sided)	Roughing			
HDR (single sided)	Roughing			
HPR (single sided)	Roughing			


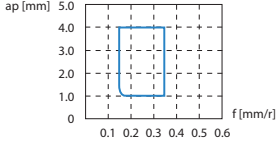
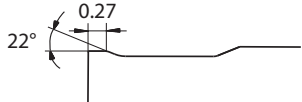

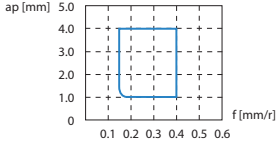
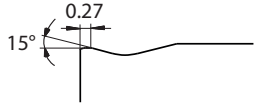

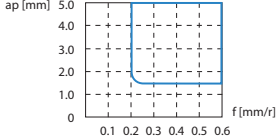

P Negative inserts (rail technology)

Chip breaker	Application		Application fields	Cutting edge design
RF	Finishing			
RH	Roughing			

K Positive inserts

Chip breaker	Application		Application fields	Cutting edge design
TC	Medium machining			
Flat	Roughing			

K Negative inserts

Chip breaker	Application		Application fields	Cutting edge design
TK	Medium machining			
TC	Medium machining			
Flat	Roughing			

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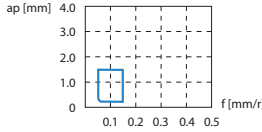



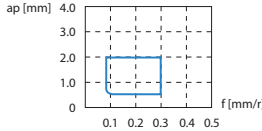
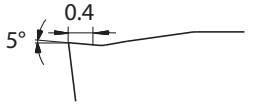



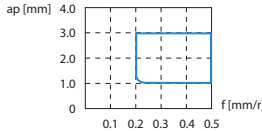
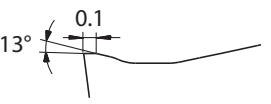
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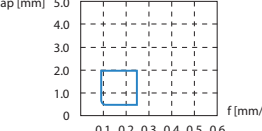
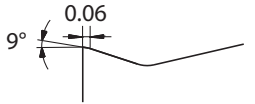


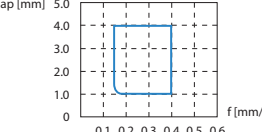
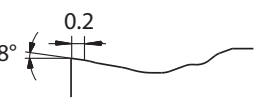


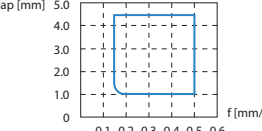
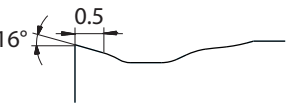



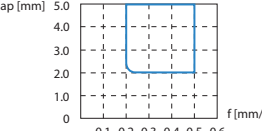
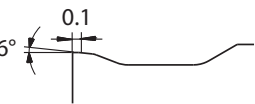



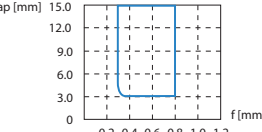
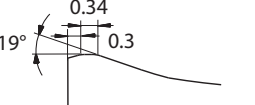
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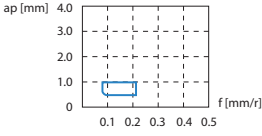



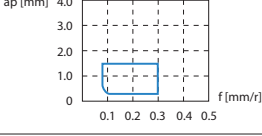




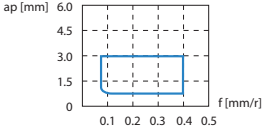

M Positive inserts

Chip breaker	Application		Application fields	Cutting edge design
USF	Fine-finishing			
EF	Finishing	 		
EM	Medium machining	  		


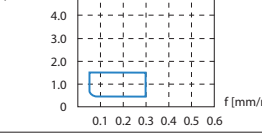
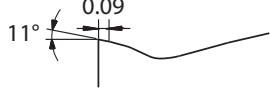


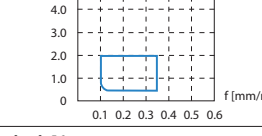



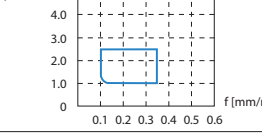
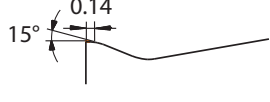



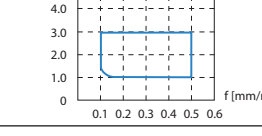
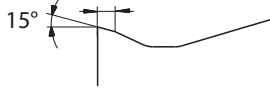
M Negative inserts

Chip breaker	Application		Application fields	Cutting edge design
EF	Finishing			
EM	Medium machining	 		
EG	Medium machining	 		
ER	Roughing	  		
ER (single sided)	Roughing	  		

S Positive inserts

Chip breaker	Application		Application fields	Cutting edge design
NF	Finishing	 		
NGF	Finishing	 		
SNR	Roughing	  		

S Negative inserts

Chip breaker	Application		Application fields	Cutting edge design
NF	Finishing			
NGF	Medium machining	 		
NM	Medium machining	 		
SNR	Roughing	  		

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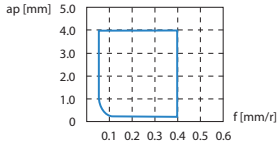
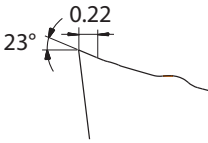

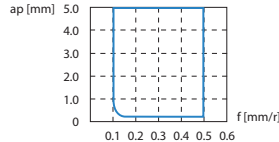
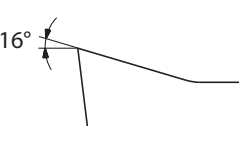
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Positive inserts

Chip breaker	Application		Application fields	Cutting edge design
LC	Finishing			
LH	Finishing			

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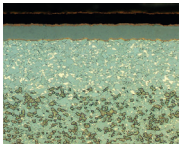
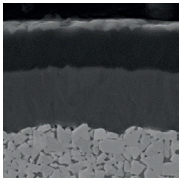
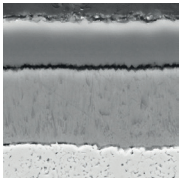
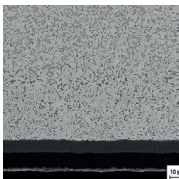
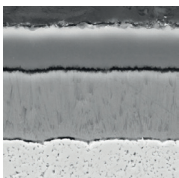
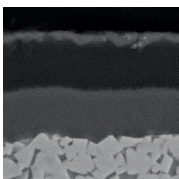
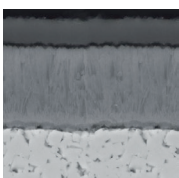
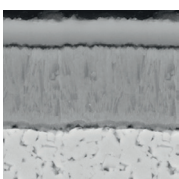
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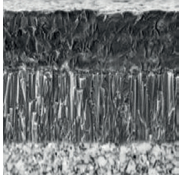
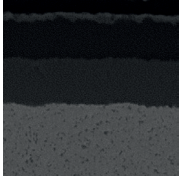
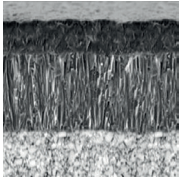
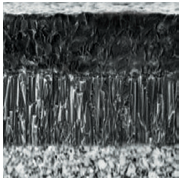
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A	Turning	Coated cemented carbide CVD		
		Grade	ISO	Micro structure
B	Milling	YBC103	P05 – P15	
		YB6315	P05 – P20	
C	Drilling	YBC152	P10 – P20	
		YBC203	P15 – P25	
D	Technical Information	YBC252	P20 - P35	
		YBC352	P20 - P40	
E	Index	YBM153	M10 - M25	
		YBM253	M15 - M35	

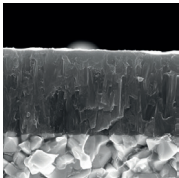
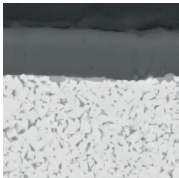
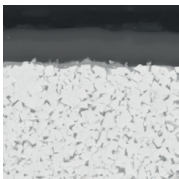
Coated cemented carbide CVD

Grade	ISO	Micro structure	Grade description
YBC103	P05 – P15		P10 grade with excellent wear resistance at higher cutting speeds. Latest sinter processes and CVD coating technologies enable a wide range of applications in the P material range.
YB6315	P05 – P20		CVD coated P10–P20 carbide grade for finishing to medium operation of steel, casting steel and high chrome material. Outstanding performance under high cutting speed and temperature with excellent wear resistance.
YBC152	P10 – P20		CVD coated P10–P20 carbide grade for finishing to medium operation of steel and casting steel. Outstanding performance under higher cutting speed and temperature with excellent wear resistance.
YBC203	P15 – P25		P20 grade with exceptional wear resistance and toughness for reliable machining operations. Ultra-modern sintering technique and CVD coating technologies allow for a wide range of applications in the P material range.
YBC252	P20 - P35		CVD coated P20–P35 carbide grade for medium operation to roughing of steel and casting steel. Optimal performance of wear resistance and toughness for a wide application field.
YBC352	P20 - P40		CVD coated P20–P40 carbide grade for roughing operation of steel and casting steel. Optimal performance of wear resistance and toughness for a wide application field.
YBM153	M10 - M25		CVD coated M10–M25 carbide grade for finishing to medium application in stainless steel. High wear resistance and capability against plastic deformation at higher cutting speed.
YBM253	M15 - M35		CVD coated M15–M35 carbide grade for medium to roughing operation in stainless steel with wide application field. High wear resistance and capability against plastic deformation at higher cutting speed.

Coated cemented carbide CVD

Grade	ISO	Micro structure	Grade description
YBD102	K05 - K20		CVD coated K05-K20 carbide substrate. Optimized for medium operation of cast iron, special nodular cast iron and hard steel at high cutting speed.
YB7315	K10 - K25		CVD coated K10-K25 carbide substrate. Optimized for medium to roughing operation of cast iron. Improved wear resistance and toughness at high cutting speed.
YBD152	K10 - K25		CVD coated K10-K25 carbide substrate. Optimized for medium to roughing operation of cast iron. Good wear resistance and toughness at higher cutting speed.
YBD152C	K10 - K25		Thick Al ₂ O ₃ CVD coated K05-K25 carbide substrate. Optimized for medium to roughing operation of cast iron. Higher wear resistance and toughness at higher cutting speed in combination with TC chip breaker.

Coated cemented carbide PVD

Grade	ISO	Micro structure	Grade description
YBG101	N05 - N20		PVD coated N05-N20 carbide substrate for finishing to semi-finishing in aluminium materials. Coating only on the top face, in combination with the aluminium chip breakers, prevents built-up edges and gives a smooth cut.
YBG102	S05 - S15		PVD coated S05-S15 carbide substrate for finishing to medium application of super alloy material, stainless steel and aluminum. Good wear resistance in a wide application field.
YBG105	S05 - S20		PVD multilayer coated S05-S20 carbide substrate for finishing to medium application of super alloy material but also stainless steel. Good wear resistance and thermal stability in a wide application field.

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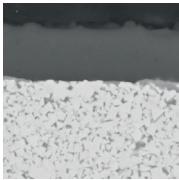
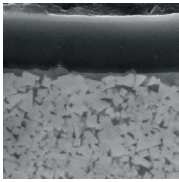
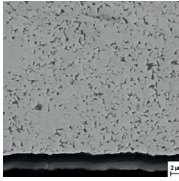
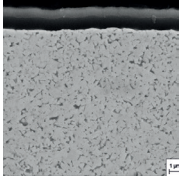
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A

Turning

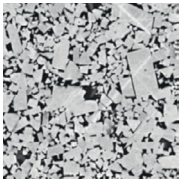
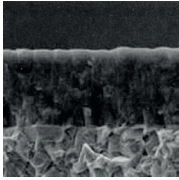
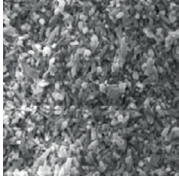
Coated cemented carbide PVD

Grade	ISO	Micro structure	Grade description
YBG205	P10 - P30 M20 - M40 S15-S25		PVD multilayer coated P10-P30/M20-M40/S15-S25 carbide substrate for finishing to medium machining of stainless steel, super alloys and steel (milling). Excellent wear resistance and thermal stability in a wide range of applications.
YB9320	P10 - P30 M10 - M25		PVD multilayer coated P10-P30/M10-M25 carbide substrate for finishing to medium machining of stainless steel, super alloys and steel (grooving/milling). Optimised coating stability for higher wear resistance and thermal stability in a wide range of applications.
YPD201	S20 - S30		Carbide grade for semi-roughing to chip breaking of high-strength and high-alloy materials. High-performance grade with high wear resistance. Balanced hardness and internal stress ratio provide a wide range of applications.
YBS103	S10 - S20		Turning grade for processing nickel-base materials. A special carbide substrate and the latest PVD coating technology enable a very good wear behaviour and high thermal stability.

C

Drilling

Ceramic

Grade	ISO	Micro structure	Grade description
CA1000	K10 - K25 H10 - H25		Uncoated H10-H25/K10-K25 mixed ceramic grade for finishing to medium operation in hardened steel and nodular cast iron. Good wear resistance and toughness.
CM1000	K10 - K25 H10 - H25		Coated H1-H25/K10-K25 mixed ceramic grade for finishing to medium operations in hardened steel, tool steel, HSS material and nodular cast iron. Good wear resistance and toughness.
CN1000	K05 - K15		Uncoated K05-K15 Si3N4 ceramic grade for finishing to medium operation in grey cast iron. Good wear resistance and thermal stability.

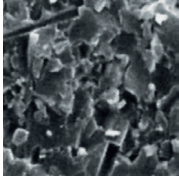
D

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Information

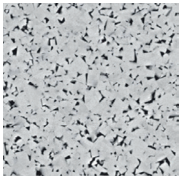
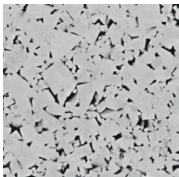
E

Index

Ceramic

Grade	ISO	Micro structure	Grade description
CS1000	S05 – S20		Uncoated SiAlON ceramic grade for medium machining to roughing of nickel- and cobalt-based alloys at medium to low cutting speeds.
CW1400	S10 – S20 H10-H20		Uncoated whisker ceramic grade for medium and low speed cutting in HSS steel, high chrome steel and cobalt-base alloy also with interrupted cut. Good wear resistance, notch wear resistance and thermal stability.
CW1800	S10 – S25		Uncoated whisker ceramic grade for finishing to rough operations in Ni-base alloy material like Inconel, Nimonic or Hastelloy. Good wear resistance, notch wear resistance and thermal stability.

Uncoated cemented carbide

Grade	ISO	Micro structure	Grade description
YD101	N05 - N20 K05 - K20		Uncoated N05–N20/K05–K20 carbide substrate for fine to medium application in aluminum and other material.
YD201	N10 - N30 K10 - K30		Uncoated N10–N30/K10–K30 carbide substrate for medium application in aluminum and other material.

CBN

Grade	ISO	Micro structure	Grade description
YCB112	S10 – S20		Uncoated, brazed S10–S20 CBN grade for fine finishing operations on hardened steel and super alloys. Excellent wear resistance and thermal stability.

A

Turning

B

Milling

C

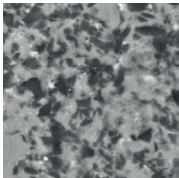
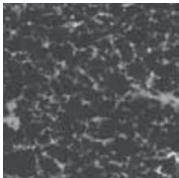
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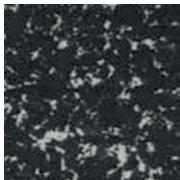
Index

A	CBN			
	Grade	ISO	Micro structure	Grade description
Turning	YCB113	H01 - H10		Uncoated, brazed H01–H10 CBN grade for fine finishing operation in hardened steel with continuous cut. High wear resistance and productivity at higher cutting speed.
	YCB121	H10 - H25		Uncoated, brazed H10–H25 CBN grade for fine to medium application in hardened steel from continuous to light interrupted cut. Good wear resistance and toughness for universal use.
Milling	YCB131	H20 - H35		Uncoated, brazed H20–H35 CBN grade for fine to medium application in hardened steel with interrupted cut. Good wear resistance and optimized toughness for safe process.
C	YCB113C	H01 - H10		Coated, brazed H01–H10 CBN grade for fine finishing operations on hardened steel with a continuous cut. High wear resistance and productivity at higher cutting speeds
	YCB121C	H10 - H25		Coated, brazed H10–H25 CBN grade for fine to medium machining operations on hardened steel with a continuous to partially interrupted cut. Good wear resistance and toughness for universal application.
D	YCB131C	H20 - H25		Coated, brazed H20–H35 CBN grade for fine to medium machining operations on hardened steel with an interrupted cut. Good wear resistance and optimum toughness for reliable operations.
	YCB215	K10 - K20		Uncoated, brazed K10 –K20 CBN grade for fine to medium machining operations on cast iron. Excellent wear resistance and thermal conductivity.
E	YZB630	H20 - H30		Uncoated H20–H30 solid CBN grade for medium machining operations on hardened steel with a slight to medium interrupted cut. Excellent combination of wear resistance and thermal stability.

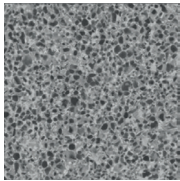
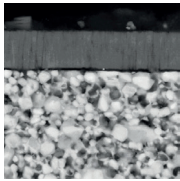
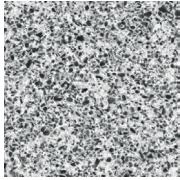
CBN

Grade	ISO	Micro structure	Grade description
YZB630C	H20 - H30		Coated H20–H30 solid CBN grade for medium machining operations on hardened steel with a slight to medium interrupted cut. Excellent combination of wear resistance and thermal stability.
YZB223	K10 - K25		Uncoated H10–H25/K10–K25 mixed ceramic grade for finishing to medium operation in hardened steel and nodular cast iron. Good wear resistance and toughness.

PCD

Grade	ISO	Micro structure	Grade description
YCD421	N01 - N10		Uncoated, brazed N01–N10 PCD grade for fine finishing operation of aluminum alloys less than 12 % Si, composites, copper/magnesium and other alloys. Medium grain size grade with good wear resistance for a wide application field.

Cermet

Grade	ISO	Micro structure	Grade description
YNG151	P05 - P15		Uncoated P05–P15 cermet grade for fine finishing operation of steel and stainless steel. Good resistance against plastic deformation for good surface finishing.
YNG151C	P05 - P15		PVD coated P05–P15 cermet grade for fine finishing operation of steel and stainless steel. Good wear resistance and capability against plastic deformation for good surface roughness.
YNT251	P10 - P25		Uncoated P10–P25 cermet grade for fine finishing to medium operation of steel and stainless steel. Good wear resistance and toughness. Suitable also in light interrupted cut.

A

Turning

B

Milling

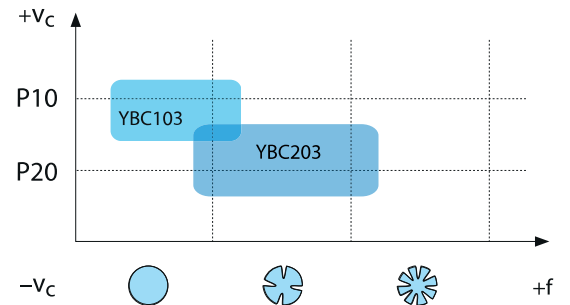
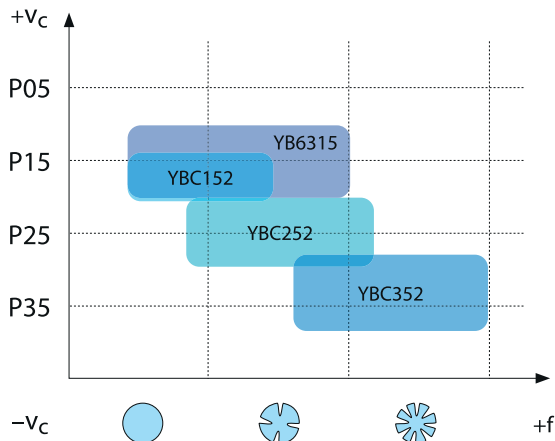
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Drilling

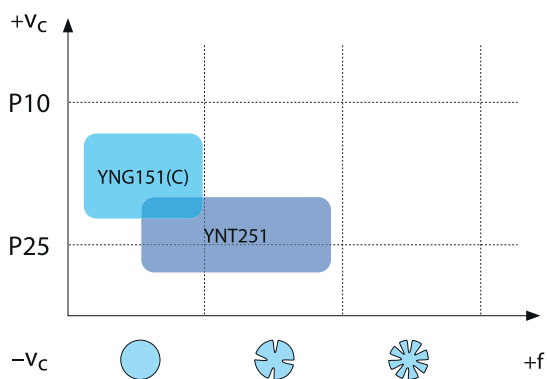
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Information**E**

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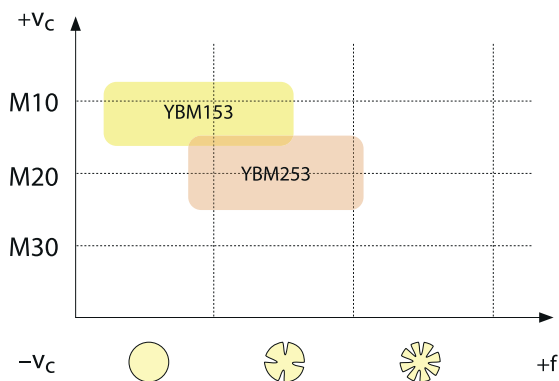
CVD coated carbide grades for steel



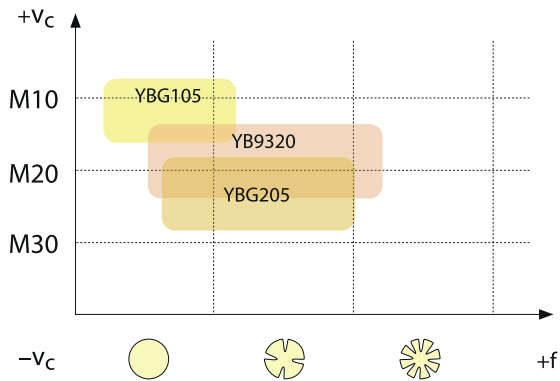
Cermet grades for steel



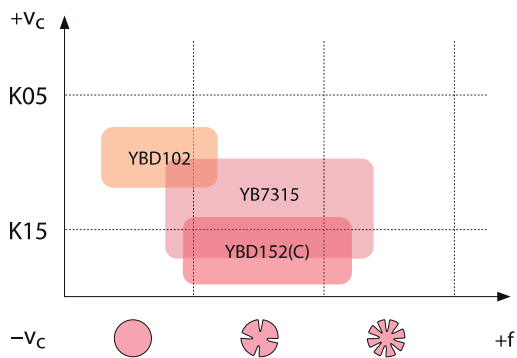
CVD coated carbide grades for stainless steel



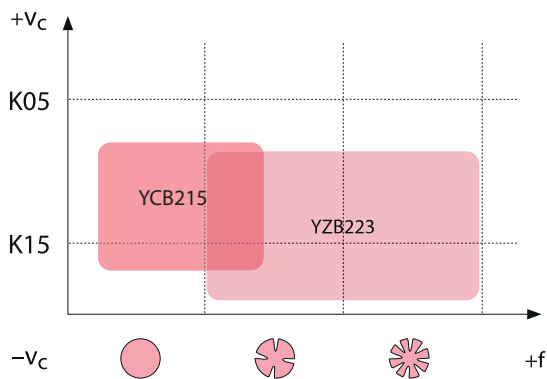
PVD coated carbide grades for stainless steel



CVD coated carbide grades for cast iron



CBN grades for cast iron



A

Turning

B

Milling

C

Drilling

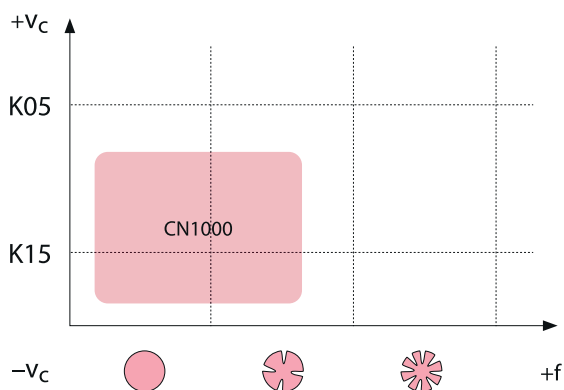
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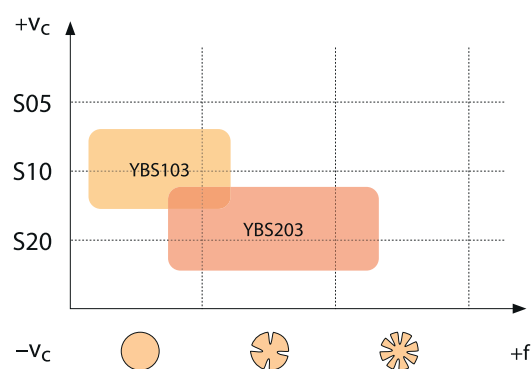
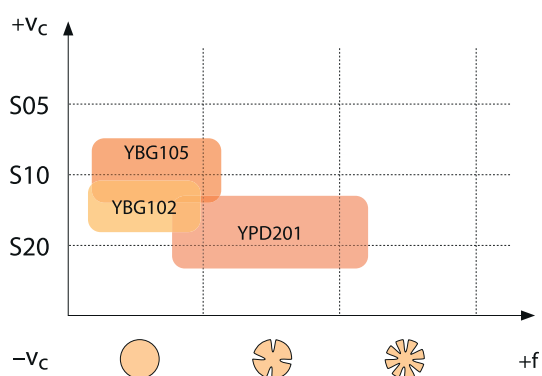
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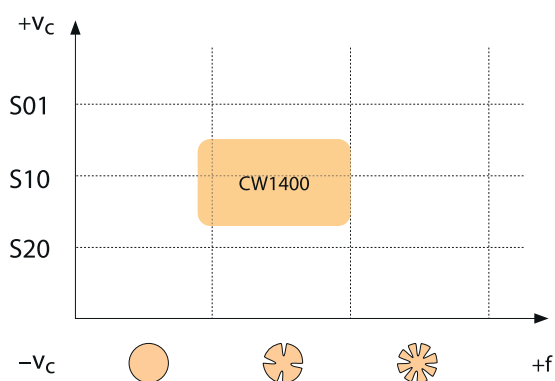
Ceramic grades for cast iron



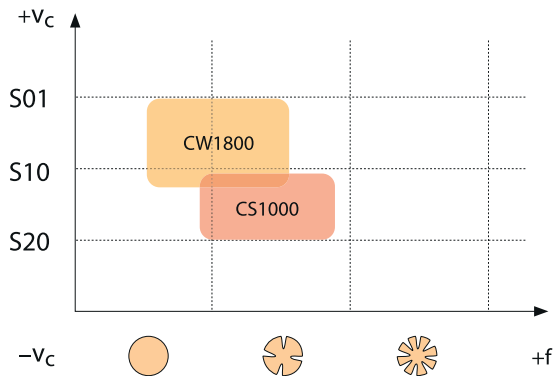
PVD coated carbide grades for superalloys



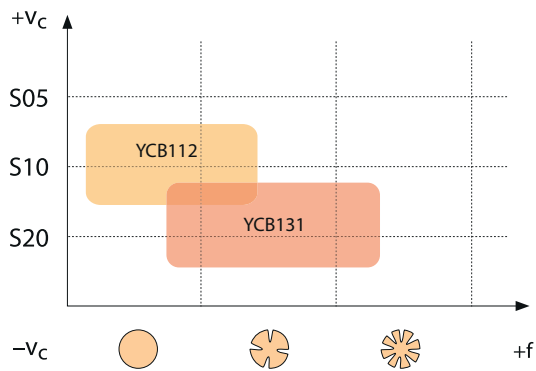
Ceramic grades for cobalt base alloys/HSS



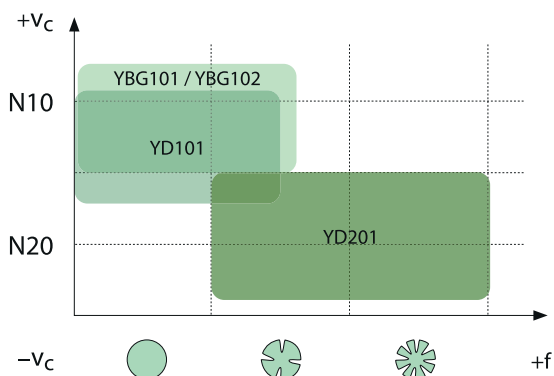
Ceramic grades for nickel base alloys



CBN grades for superalloys



Carbide grades for non-ferrous metals



A

Turning

B

Milling

C

Drilling

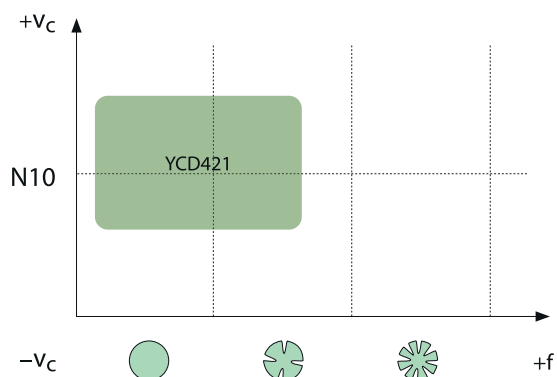
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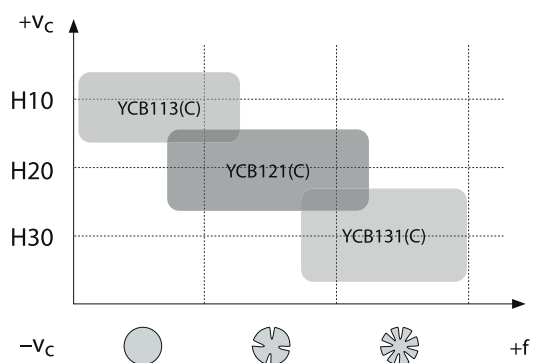
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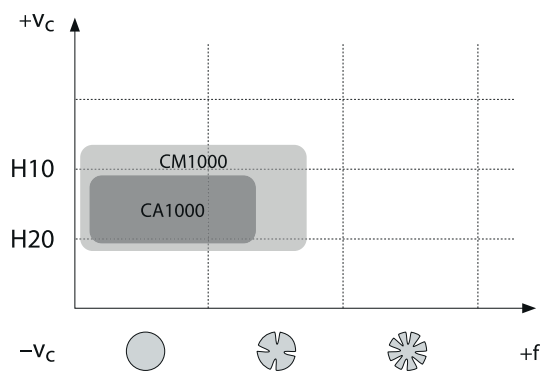
PCD grades for non-ferrous metals



CBN grades for hardened steel



Ceramic grades for hardened steel



Application fields of grades – general turning

	ISO	HC ¹ (CVD)	HC ¹ (PVD)	HT	HC ²	Ceramic	HW	CBN	PCD
P	P01	YBC103							
	P10	YB6315		YNG151	YNG151C				
	P20	YBC152		YNT251					
	P30	YBC203							
	P40	YBC252							
	P40	YBC352							
M	M01		YBG105						
	M10	YBM153	YB9320	YNG151	YNG151C				
	M20	YBM253	YBG205						
	M30								
	M40								
K	K01					CN1000			
	K10	YBD102						YCB215	YZB223
	K20	YBD152					YD201		
	K30	YB7315							
N	N01								
	N10		YBG101				YD101		YCD421
	N20		YBG102				YD201		
	N30								
S	S01		YBS103			CS1000		YCB112	
	S10		YBG102			CW1400		YCB131	
	S20		YBG105			CW1800			
	S30		YB9320						
H	H01		YPD201						
	H10							YCB113(C)	
	H20							YCB121(C)	
	H30							YCB131(C)	

P	Steel
M	Stainless steel
K	Cast iron

N	Non-ferrous metals
S	Heat-resistant alloys
H	Hardened materials

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

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ISO standard

T N M G 22 04 08 (N) – DM

1 2 3 4 5 6 7 8 9

Insert shape		
A	B	C
D	E	H
K	L	M
O	P	R
S	T	V
W	Z Special	

1

Clearance angle	
A	B
C	D
E	F
G	N
P	O Special

2

Tolerance class			
Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,15	±0,005	±0,025
K	±0,05–0,15	±0,013	±0,025
L	±0,05–0,15	±0,025	±0,025
M	±0,05–0,15	±0,08–0,20	±0,130
N	±0,05–0,15	±0,08–0,20	±0,025
U	±0,08–0,25	±0,13–0,38	±0,130

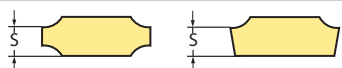
3

Fastening features (metric)	
Insert shape	
A	B
C	F
G	H
J	M
N	Q
R	T
U	W
X Special	

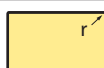
4

Cutting edge length l [mm]								
I.C [mm]	Insert shape							
3,97	06							
5,0	05							
5,56	09							
6,0	06							
6,35	06	07			11	11		
8,0	08							
9,525	09	11	09	09	16	16	06	16
10,0	10							
12,0	12							
12,7	12	15	12	12	22	22	08	
15,875	16		15	15	27			
16,0		19	16					
19,05	19		19	19	33			
20,0	20							
25,0	25	25	25					
25,4			25	25				
31,75			31					
32			32					

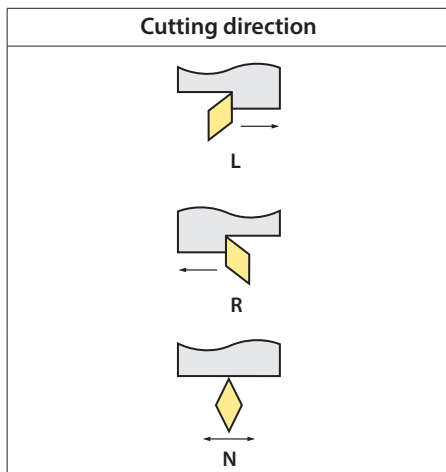
5

Insert thickness S [mm]			
			
Code	S	Code	S
00	0,79	T5	5,95
T0	0,99	06	6,35
01	1,59	T6	6,75
T1	1,98	07	7,94
02	2,38	09	9,52
T2	2,58	T9	9,72
03	3,18	11	11,11
T3	3,97	12	12,70
04	4,76		
T4	4,96		
05	5,56		

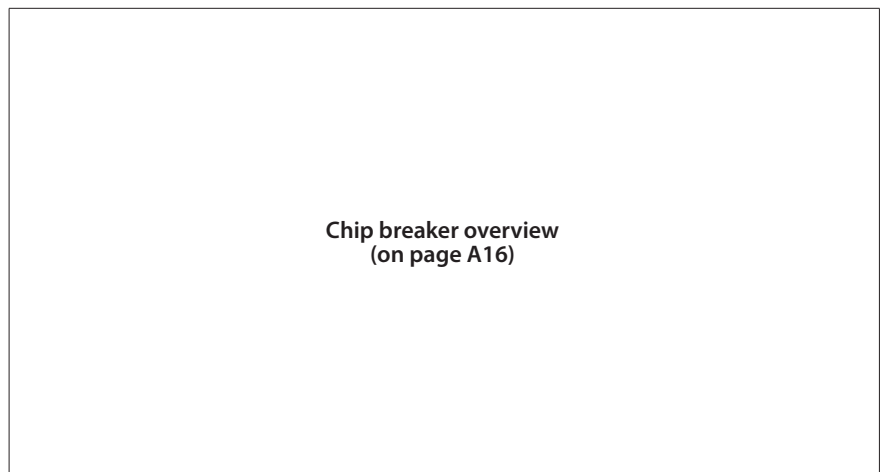
6

Nose radius r [mm]	
	
Code	r
00	–
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
32	3,2
X	Special
MO	Round inserts

7



8



9

ANSI standard

T	N	M	G	4	3	2	(N)	–	DM
1	2	3	4	5	6	7	8		9

Inner circle		
Code	[mm]	Pouce
2	6.35	0.250
3	9.525	0.375
4	12.7	0.500
5	15.875	0.625
6	19.05	0.750
8	25.4	1.000

5

Insert thickness		
Code	[mm]	Pouce
2	3.18	0.125
3	4.76	0.187
4	6.35	0.250
5	7.94	0.313
6	9.52	0.375

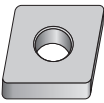
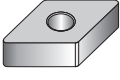


6

Nose radius		
Code	[mm]	Pouce
0	0.2	0.008
1	0.4	0.016
2	0.8	0.031
3	1.2	0.047
4	1.6	0.063
5	2.0	0.079
6	2.4	0.094




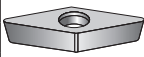



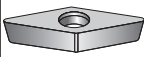


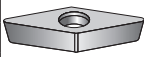

7

Conversion table for general turning inserts (metric/imperial system)

Negative angle/insert

	ISO	Inch
Insert shape C 	090304	321
	090308	322
	120404	431
	120408	432
	120412	433
	120416	434
	160608	542
	160612	543
	160616	544
	190608	642
	190612	643
	190616	644
	190624	646
	250724	856
	250732	858
	250924	866
	250932	868
Insert shape D 	110404	331
	110408	332
	110412	333
	150404	431
	150408	432
	150412	433
	150604	441
	150608	442
	150612	443
	150616	444
Insert shape V 	160404	331
	160408	332
	160412	333
Insert shape R 	0903MO	32
	1204MO	43

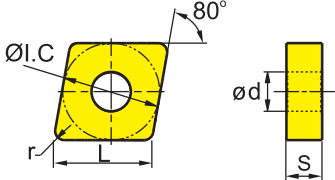





Positive angle/insert

	ISO	Inch
Insert shape C 	060202	2(1.5)0
	060204	2(1.5)1
	060208	2(1.5)2
	09T302	3(2.5)0
	09T304	3(2.5)1
	09T308	3(2.5)2
	120404	431
	120408	432
	120412	433
Insert shape T 	06T102	1.2(1.2)0
	06T104	1.2(1.2)1
	06T108	1.2(1.2)2
	090202	1.8(1.5)0
	090204	1.8(1.5)1
	090208	1.8(1.5)2
	110202	2(1.5)0
	110204	2(1.5)1
	110208	2(1.5)2
	110302	220
Insert shape S 	110304	221
	110308	222
	16T302	30
	16T304	31
	16T308	32
	16T312	33
	160400	330
	220408	432
	220412	433
	220416	434
Insert shape V 	270408	532
	270412	533
	330612	643
	330616	644
Insert shape W 	06T304	3(2.5)1
	06T308	3(2.5)2
	06T312	3(2.5)3
	060404	331
	060408	332
	060412	333
	080404	431
	080408	432
	080412	433
Insert shape T 	113304	221
	110308	222
	160404	331
	160408	332
	160412	333
	220404	431
	220408	432
	220412	433
	220416	434
	270608	542
Insert shape S 	270612	543
	270616	544
Insert shape V 	090304	321
	090308	322
	090312	323
	120404	431
	120408	432
	120412	433
	120416	434
	150608	542
	150612	543
	150616	544
Insert shape W 	190412	633
	190424	636
	190612	643
	190616	644
	250724	856
	250732	858
	250924	866
	250932	868
Insert shape S 	060204	2(1.5)1
	09T302	3(2.5)0
	09T304	3(2.5)1
	09T308	3(2.5)2
	120404	431
	120408	432
	120412	433
	150404	531
	150408	532
	150412	533
Insert shape V 	190408	632
	190412	633
	190416	634
Insert shape W 	110202	2(1.5)0
	110204	2(1.5)1
	110208	2(1.5)2
	110302	220
	110304	221
	110308	222
	160402	330
	160404	331
	160408	332
	160412	333

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CNMG	L	I.C	S	d
09 03	9.7	9.525	3.18	3.81
12 04	12.9	12.7	4.76	5.16

CN** negative insert					HC ¹ (CVD)												HC ¹ (PVD)					HT	HC ²	HW					
				P																									
				M																									
				K																									
				N																									
				S																									
				H																									
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
 WG	CNMG120404-WG	0.4	0.25-3.00	0.05-0.25																									
	CNMG120408-WG	0.8	0.5-5.0	0.15-0.70																									
	CNMG120412-WG	1.2	0.8-6.0	0.20-0.75																									
Wiper																													
 ADF	CNMG120404-ADF	0.4	0.5-3.0	0.05-0.30																									
	CNMG120408-ADF	0.8	0.5-3.0	0.1-0.4																									
	CNMG120412-ADF	1.2	0.8-3.0	0.15-0.50																									
Finishing																													
 DF	CNMG090304-DF	0.4	0.25-1.50	0.07-0.30																									
	CNMG090308-DF	0.8	0.3-1.5	0.1-0.3																									
	CNMG120404-DF	0.4	0.25-1.50	0.07-0.30																									
	CNMG120408-DF	0.8	0.3-1.5	0.1-0.4																									
	CNMG120412-DF	1.2	0.35-1.50	0.10-0.35																									
Finishing																													
 EF	CNMG090304-EF	0.4	0.5-2.0	0.05-0.20																									
	CNMG090308-EF	0.8	0.5-2.0	0.05-0.25																									
	CNMG120404-EF	0.4	0.5-2.5	0.05-0.20																									
	CNMG120408-EF	0.8	0.5-2.5	0.05-0.25																									
	CNMG120412-EF	1.2	0.5-2.5	0.10-0.35																									
Finishing																													
 SF	CNMG090304-SF	0.4	0.05-0.50	0.05-0.30																									
	CNMG120404-SF	0.4	0.1-1.5	0.05-0.30																									
	CNMG120408-SF	0.8	0.1-1.5	0.10-0.35																									
Finishing																													

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	A***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
A230	A237	A238	A252	A253	A324

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366



A

Turning

B

Milling

C

Drilling

D

Technical Information

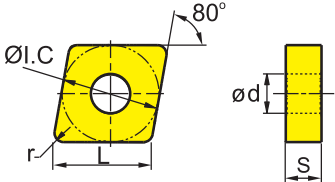




































E

Index

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CN**	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16

Turning inserts

CN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)			HT	HC ²	HW											
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 NF	CNEG120404-NF	0.4	0.2-2.5	0.05-0.30																	○	●								○	
	CNEG120408-NF	0.8	0.2-2.5	0.10-0.35																	○	●								○	
	CNEG120412-NF	1.2	0.2-2.5	0.13-0.40																	○	●								○	
Finishing																															
 XF	CNMG120404-XF	0.4	0.5-2.5	0.1-0.25	●							●																			
	CNMG120408-XF	0.8	0.5-2.5	0.1-0.30	●							●																			
	CNMG120412-XF	1.2	0.5-2.5	0.1-0.35	●							●																			
Finishing																															

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
A230	A237	A238	A252	A253	A324




System code > A48

Grade selection > A42

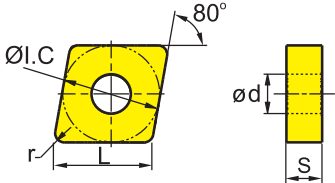


































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions



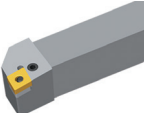
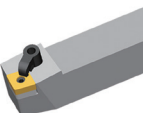
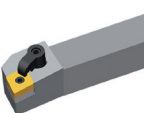
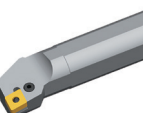
CNMG	L	I.C	S	d
09 03	9.7	9.525	3.18	3.81
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35
19 06	19.3	19.05	6.35	7.94

CN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW								
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Medium Cut	CNMG090304-PM	0.4	0.4-4.0	0.1-0.3																								
	CNMG090308-PM	0.8	0.5-4.0	0.15-0.50																								
	CNMG120404-PM	0.4	0.4-5.5	0.1-0.3																								
	CNMG120408-PM	0.8	0.5-5.5	0.15-0.50																								
	CNMG120412-PM	1.2	0.8-5.5	0.18-0.60																								
	CNMG120416-PM	1.6	1.0-5.5	0.23-0.65																								
	CNMG160608-PM	0.8	0.5-7.2	0.15-0.50																								
	CNMG160612-PM	1.2	0.8-7.2	0.18-0.60																								
	CNMG160616-PM	1.6	1.0-7.2	0.23-0.65																								
	CNMG190608-PM	0.8	0.5-8.6	0.15-0.50																								
	CNMG190612-PM	1.2	0.8-8.6	0.18-0.60																								
CNMG190616-PM	1.6	1.0-8.6	0.23-0.65																									
 Medium Cut	CNMG120404-XM	0.4	1-4.2	0.2-0.3																								
	CNMG120408-XM	0.8	1-4.2	0.2-0.4																								
	CNMG120412-XM	1.2	1-4.2	0.2-0.6																								
	CNMG120416-XM	1.6	1-4.2	0.2-0.65																								
	CNMG160608-XM	0.8	1-5.6	0.2-0.4																								
	CNMG160612-XM	1.2	1-5.6	0.2-0.6																								
	CNMG160616-XM	1.6	1-5.6	0.2-0.65																								
	CNMG190608-XM	0.8	1-6.65	0.2-0.4																								
	CNMG190612-XM	1.2	1-6.65	0.2-0.6																								
	CNMG190616-XM	1.6	1-6.65	0.2-0.65																								

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	A***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

B

Milling

C

Drilling

D

Technical Information

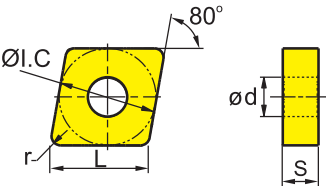



E

Index

CNMG	L	I.C	S	d
09 03	9.7	9.525	3.18	3.81
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35
19 06	19.3	19.05	6.35	7.94

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

CN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 DM Medium Cut	CNMG090304-DM	0.4	0.4-4.0	0.1-0.3			●		●																			
	CNMG090308-DM	0.8	0.5-4.0	0.15-0.50			●		●																			
	CNMG090312-DM	1.2	0.5-3.0	0.1-0.4						○																		
	CNMG120404-DM	0.4	0.4-5.5	0.1-0.3			●		●																			
	CNMG120408-DM	0.8	0.5-5.5	0.15-0.50		○	●		●	●	○	●																
	CNMG120412-DM	1.2	0.8-5.5	0.18-0.60		○	●		●		○	○																
	CNMG120416-DM	1.6	1.0-5.5	0.23-0.65			○		●																			
	CNMG160608-DM	0.8	0.5-7.2	0.15-0.50			○		●																			
	CNMG160612-DM	1.2	0.8-7.2	0.18-0.60				●	●																			
	CNMG160616-DM	1.6	1.0-7.2	0.23-0.65				●	●																			
	CNMG190608-DM	0.8	0.5-8.6	0.15-0.50				●	●																			
	CNMG190612-DM	1.2	0.8-8.6	0.18-0.60				●	●																			
CNMG190616-DM	1.6	1.0-8.6	0.23-0.65						●																			
 EG Medium Cut	CNMG120404-EG	0.4	0.5-4.0	0.05-0.30							●	●							○	●								
	CNMG120408-EG	0.8	0.5-4.0	0.1-0.4							●	●							●	●								
	CNMG120412-EG	1.2	0.5-4.0	0.2-0.5								●								●	●							
 EM Medium Cut	CNMG120404-EM	0.4	0.5-4.0	0.05-0.30							●	●							●									
	CNMG120408-EM	0.8	0.5-5.7	0.15-0.45							●	●							●									
	CNMG120412-EM	1.2	0.5-5.7	0.25-0.60							●	●							●									
	CNMG160608-EM	0.8	0.5-7.2	0.15-0.45							●	●							●									
	CNMG160612-EM	1.2	0.5-7.2	0.25-0.60							●	●							●									

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	A***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
A230	A237	A238	A252	A253	A324

System code > A48

Grade selection > A42

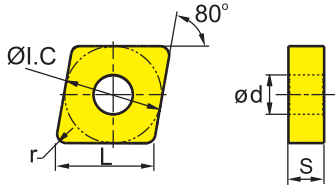

Technical info > A501

Cutting data > A366

Turning inserts

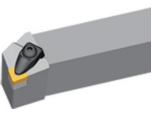

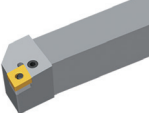
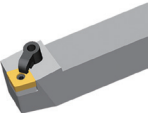
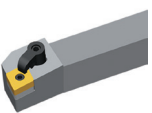
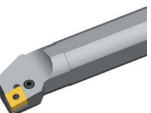
- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

CNMG	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16

CN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
				P	●	●	●	●	●						●	●		●	●											
				M						●	●				●	●	●	●	●	●	●									
				K								●	●	●	●															
				N										●	●						●	●								
				S												●	●	●	●	●		●	●							
				H																										
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
ZM	CNMG120404-ZM	0.4	0.5-3.0	0.05-0.30	●																									
	CNMG120408-ZM	0.8	0.5-4.0	0.1-0.5	○																									
																														
	Medium Cut																													

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

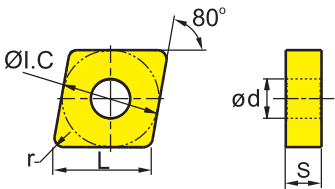



A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CNMG	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35

CN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW									
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 NM	CNMG120404-NM	0.4	0.2-3.0	0.05-0.30																	○	●									
	CNMG120408-NM	0.8	0.2-4.0	0.1-0.5																	○	●	●	●						○	
	CNMG120412-NM	1.2	0.2-4.0	0.2-0.6																	○	●									
Medium Cut																															
 TC	CNMG120404-TC	0.4	0.5-5.0	0.08-0.40													●		●												
	CNMG120408-TC	0.8	0.5-5.0	0.15-0.50													●		●												
	CNMG120412-TC	1.2	0.5-5.0	0.2-0.6													●		●												
	CNMG120416-TC	1.6	0.5-5.0	0.20-0.65													●		○												
	CNMG160608-TC	0.8	1-7	0.15-0.50													●		●												
	CNMG160612-TC	1.2	1-7	0.2-0.6													●		●												
	CNMG160616-TC	1.6	1-7	0.20-0.65													●		○												
Medium Cut																															
 TK	CNMG120408-TK	0.8	0.2-0.4	0.2-0.4													○														
	CNMG120412-TK	1.2	0.2-0.4	0.2-0.45													○														
	CNMG120416-TK	1.6	0.2-0.4	0.2-0.5													●														
Medium Cut																															

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
A230	A237	A238	A252	A253	A324

E

Index




System code > A48

Grade selection > A42

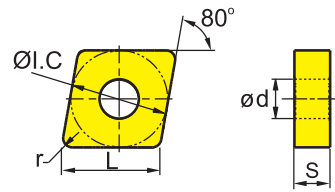































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

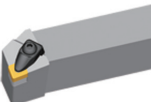

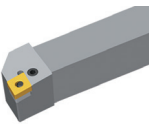
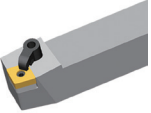
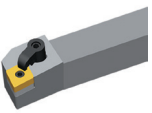
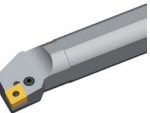
CNMG	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35
19 06	19.3	19.05	6.35	7.94
25 09	25.79	25.4	9.525	9.12

CN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW								
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 DR Roughing	CNMG120408-DR	0.8	0.7-7.0	0.2-0.5	○	●			●	●			●		●													
	CNMG120412-DR	1.2	1-7	0.25-0.70	○	●			●	●			●		●													
	CNMG120416-DR	1.6	1.5-7.0	0.32-0.75		○			●				○		●													
	CNMG160608-DR	0.8	0.7-8.0	0.2-0.5					●				●		○													
	CNMG160612-DR	1.2	1-8	0.25-0.70	○	●			●	○			●		●													
	CNMG160616-DR	1.6	1.5-8.0	0.3-0.8	○	●			●	●			○		○													
	CNMG190608-DR	0.8	0.7-10.0	0.2-0.5			●		●				○		●													
	CNMG190612-DR	1.2	1-10	0.25-0.70	○	●			●	●			○		●													
	CNMG190616-DR	1.6	1.5-10.0	0.3-0.8			●	●	●	●			○		●													
	CNMG190624-DR	2.4	2-10	0.32-0.90	○				●							○												
CNMG250924-DR	2.4	2-15	0.4-1.0					●																				
 SNR Roughing	CNMG120408-SNR	0.8	1-3	0.1-0.4													●			●	●							
	CNMG120412-SNR	1.2	1-3	0.2-0.6														●			●	●						
	CNMG160608-SNR	0.8	2-6	0.1-0.4														●			●	●					○	
	CNMG190616-SNR	1.6	2-7	0.2-0.6														○				●					○	

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

A

Turning

B

Milling

C

Drilling

D

Technical Information

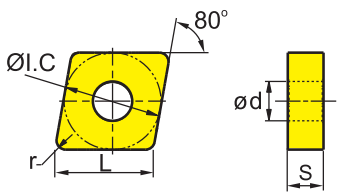



E

Index

CN**	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35
19 06	19.3	19.05	6.35	7.94
25 07	25.79	25.4	7.94	9.12
25 09	25.79	25.4	9.525	9.12

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

CN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)			HT	HC ²	HW								
					P	●	●	●	●	●	●					●	●	●	●									
					M						●	●				●	●	●	●	●	●	●						
					K									●	●	●	●											
					N											●	●						●	●				
					S												●	●	●	●	●		●	●				
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>DR</div>  <div>Roughing</div>	CNMM120412-DR	1.2	1.0-7.5	0.25-0.70	○	●		●	●	○	○																	
	CNMM160612-DR	1.2	1.0-9.5	0.25-0.70			●		●																			
	CNMM160616-DR	1.6	1.5-9.5	0.32-0.90			●		●	○																		
	CNMM190612-DR	1.2	1-12	0.25-0.70	○	●		●	●		●																	
	CNMM190616-DR	1.6	1.5-12.0	0.32-0.90			●		●	●																		
	CNMM190624-DR	2.4	2-12	0.35-1.20	○	●		●																				
	CNMM250924-DR	2.4	2.0-12.5	0.2-1.2			●		●	○																		
<div>ER</div>  <div>Roughing</div>	CNMG120408-ER	0.8	2.0-7.6	0.15-0.55								○																
	CNMG120412-ER	1.2	2.0-7.6	0.25-0.80								○																
	CNMG160612-ER	1.2	2-10	0.35-0.80								○																
	CNMG160616-ER	1.6	2-10	0.45-1.00								○																
	CNMG190612-ER	1.2	2.0-11.4	0.35-1.00					○		○								○									
	CNMG190616-ER	1.6	2.0-11.4	0.45-1.10								○																
<div>ER</div>  <div>Roughing</div>	CNMM250724-ER	2.4	2.0-12.5	0.3-1.4					●																			
	CNMM250732-ER	3.2	2.0-12.5	0.45-1.80						○																		
	CNMM250924-ER	2.4	2.0-12.5	0.3-1.4					●		○																	
	CNMM250932-ER	3.2	2.0-12.5	0.45-1.80					●																			

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
A230	A237	A238	A252	A253	A324

System code > A48

Grade selection > A42

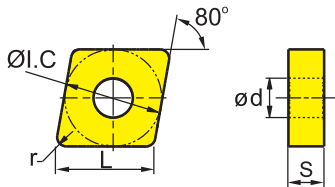





































Technical info > A501

Cutting data > A366

CNMM	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35
19 06	19.3	19.05	6.35	7.94
25 09	25.79	25.4	9.525	9.12

Turning inserts

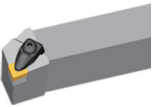

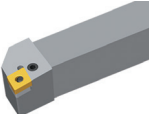
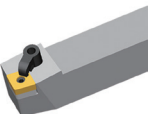
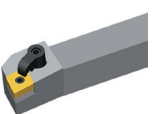
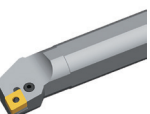
- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CN** negative insert					HC' (CVD)										HC' (PVD)					HT		HC ²	HW										
					P											 																	
					M																												
					K																												
					N																												
					S													    															
					H																												
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201		
<div>LR</div>  <div>Roughing</div>	CNMM120408-LR	0.8	1-5	0.1-0.5					●		●																						
	CNMM120412-LR	1.2	2-6	0.2-0.7					●		●				●																		
	CNMM120416-LR	1.6	2.0-6.5	0.25-0.80							●																						
	CNMM160608-LR	0.8	1-7	0.2-0.6					●		●				○																		
	CNMM160612-LR	1.2	1.0-7.5	0.2-0.7					●		●				●																		
	CNMM160616-LR	1.6	1.0-8.5	0.25-0.80	○			●	○	●																							
	CNMM190612-LR	1.2	2.0-10.5	0.2-0.7				●		●																							
	CNMM190616-LR	1.6	2.0-10.5	0.3-1.0				●		●					●																		
	CNMM190624-LR	2.4	2.0-10.5	0.3-1.1				●		○																							
	CNMM250924-LR	2.4	2.0-12.5	0.3-1.2				○		●																							

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

- Ideal machining conditions
- ✱ Normal machining conditions
- ✱ Unfavourable machining conditions

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

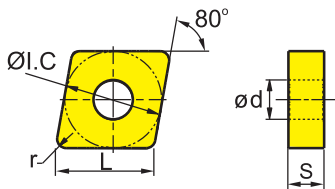













HC ¹	Coated carbide
HT	Uncoated cermet
HC ²	Coated cermet
HW	Uncoated carbide

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

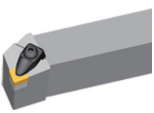
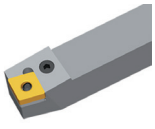
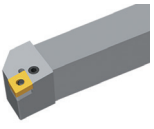
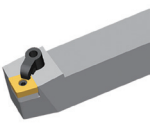
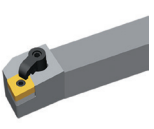

CN**	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35
19 06	19.3	19.05	6.35	7.94

CN** negative insert				HC ¹ (CVD)												HC ¹ (PVD)					HT		HC ²	HW				
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Flat	CNMA120404	0.4	0.2-5.0	0.05-0.40									○															
	CNMA120408	0.8	0.2-5.0	0.05-0.50									●	●	●	●												
	CNMA120412	1.2	0.2-5.0	0.1-0.6									●	●	●	●												○
	CNMA120416	1.6	0.2-5.0	0.10-0.65									●		●	○												
	CNMA160608	0.8	0.2-7.0	0.1-0.5									○															
	CNMA160612	1.2	0.2-7.0	0.1-0.6									●		●													
	CNMA160616	1.6	0.2-7.0	0.15-0.65									○		●													
	CNMA190612	1.2	0.2-8.0	0.15-0.70									○		●													
	CNMA190616	1.6	0.2-8.0	0.15-0.70									●		●													
 Basic	CNMG120404	0.4	0.1-5.0	0.05-0.50					○																			
	CNMG120408	0.8	0.1-5.0	0.1-0.6					○						○													
	CNMG120412	1.2	0.1-5.0	0.1-0.7			○	○																				
	CNMG160612	1.2	0.1-7.0	0.1-0.7																								
	CNMG190608	0.8	0.1-8.0	0.1-0.7																								
	CNMG190612	1.2	0.1-8.0	0.1-0.8																								
	CNMG190616	1.6	0.1-8.0	0.1-1.0																								

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

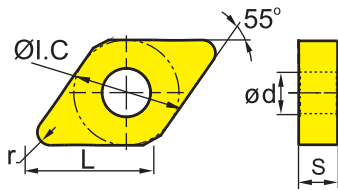
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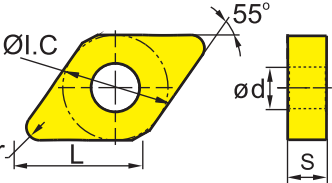




































Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DN**	L	I.C	S	d
11 04	11.6	9.525	4.76	3.81
15 04	15.5	12.7	4.76	5.16
15 06	15.5	12.7	6.35	5.16



DN** negative insert					HC ¹ (CVD)												HC ¹ (PVD)					HT	HC ²	HW								
					P																											
					M																											
					K																											
					N																											
					S																											
					H																											
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201				
WG	DNMX110404-WG	0.4	0.2-1.5	0.08-0.30			○																									
	DNMX110408-WG	0.8	0.5-3.5	0.15-0.50			●		●																							
	DNMX150408-WG	0.8	0.5-5.0	0.15-0.70			○																									
	DNMX150608-WG	0.8	0.5-5.0	0.15-0.70			○		○																							
	DNMX150612-WG	1.2	0.8-6.0	0.20-0.75			○																									
Wiper																																
ADF	DNMG150604-ADF	0.4	0.5-6.0	0.15-0.50		○															●				○							
	DNMG150608-ADF	0.8	0.1-4.0	0.08-0.50		○														●	●				○							
	DNMG150612-ADF	1.2	0.5-4.0	0.15-0.50		○															●											
Finishing																																
DF	DNMG110404-DF	0.4	0.15-2.00	0.08-0.25			●		●																							
	DNMG110408-DF	0.8	0.15-2.00	0.1-0.3			●		●																							
	DNMG110412-DF	1.2	0.35-1.50	0.15-0.50			○																									
	DNMG150404-DF	0.4	0.15-2.00	0.08-0.25			●		●																							
	DNMG150408-DF	0.8	0.15-2.00	0.1-0.3			●		●																							
	DNMG150412-DF	1.2	0.35-1.50	0.15-0.50					○																							
	DNMG150604-DF	0.4	0.8-6.0	0.18-0.60			●		●																							
	DNMG150608-DF	0.8	0.15-2.00	0.1-0.3			●		●																							
	DNMG150612-DF	1.2	0.2-2.5	0.10-0.35			●																									
SF	DNMG110404-SF	0.4	0.05-0.50	0.05-0.25																						●						
	DNMG150404-SF	0.4	0.05-0.50	0.05-0.25																						●						
	DNMG150408-SF	0.8	0.05-0.50	0.10-0.35																						●						
	DNMG150604-SF	0.4	0.05-0.50	0.05-0.25																						●						
	DNMG150608-SF	0.8	0.05-0.50	0.10-0.35																						●						
Finishing																																

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

E

Index

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
A231	A240	A241	A254	A255	A326	A327

System code > A48

Grade selection > A42

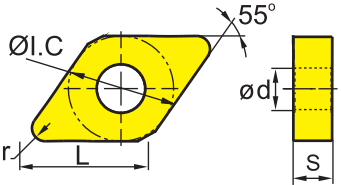
Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DNMG	L	I.C	S	d
11 04	11.6	9.525	4.76	3.81
15 06	15.5	12.7	6.35	5.16

DN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
					P	●	●	●	●	●	●							●	●	●								
					M						●	●					●	●	●	●	●	●	●	●				
					K								●	●	●	●												
					N												●	●							●	●		
					S													●	●	●	●	●	●			●	●	
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
XF	DNMG110404-XF	0.4	0.5-2.0	0.1-0.25	●																							
	DNMG110408-XF	0.8	0.5-2.0	0.1-0.30	○																							
	DNMG150604-XF	0.4	0.5-2.5	0.1-0.25	●				●																			
	DNMG150608-XF	0.8	0.5-2.5	0.1-0.30	●				●																			
	DNMG150612-XF	1.2	0.5-2.5	0.1-0.35	●				●																			
XM	DNMG110404-XM	0.4	1-3.85	0.2-0.4	●				○																			
	DNMG110408-XM	0.8	1-3.85	0.2-0.4	●				○																			
	DNMG110412-XM	1.2	1-3.85	0.2-0.6	●				○																			
	DNMG150604-XM	0.4	1-5.25	0.2-0.4	●				●																			
	DNMG150608-XM	0.8	1-5.25	0.2-0.4	●				●																			
	DNMG150612-XM	1.2	1-5.25	0.2-0.6	●				●																			
	DNMG150616-XM	1.6	1-5.25	0.2-0.65	●				●																			

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
A231	A240	A241	A254	A255	A326	A327

A



Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DNMG	L	I.C	S	d
11 04	11.6	9.525	4.76	3.81
15 04	15.5	12.7	4.76	5.16
15 06	15.5	12.7	6.35	5.16

DN** negative insert				HC ¹ (CVD)								HC ¹ (PVD)		HT	HC ²	HW
				P	●	●	●	●	●	●	●	●	●	●	●	
				M								●	●	●	●	
				K												
				N								●	●			●
				S								●	●			●
				H												

		ISO	r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>DM</div> <div></div> <div>Medium Cut</div>	DNMG110404-DM	0.4	0.4-5.0	0.1-0.3			●	●																					
	DNMG110408-DM	0.8	0.5-5.0	0.15-0.50			●	●																					
	DNMG110412-DM	1.2	0.8-5.0	0.18-0.50			●	●																					
	DNMG150404-DM	0.4	0.4-6.0	0.1-0.3			●	●																					
	DNMG150408-DM	0.8	0.5-6.0	0.15-0.50			●	●																					
	DNMG150412-DM	1.2	0.8-6.0	0.18-0.60			○	●																					
	DNMG150604-DM	0.4	1-6	0.23-0.65			●	●																					
	DNMG150608-DM	0.8	0.5-6.0	0.15-0.50	○	●	●		●																				
	DNMG150612-DM	1.2	0.8-6.0	0.18-0.60	○	●	●																						
	DNMG150616-DM	1.6	1-6	0.23-0.65	○	●	●																						
<div>PM</div> <div></div> <div>Medium Cut</div>	DNMG110404-PM	0.4	0.4-5.0	0.1-0.3				●					○																
	DNMG110408-PM	0.8	0.5-5.0	0.15-0.50			○	●						●															
	DNMG110412-PM	1.2	0.8-5.0	0.18-0.50					○					●															
	DNMG150404-PM	0.4	0.4-6.0	0.1-0.3			○																						
	DNMG150408-PM	0.8	0.5-6.0	0.15-0.50			●	●						●		●													
	DNMG150412-PM	1.2	0.8-6.0	0.18-0.60					○								○												
	DNMG150416-PM	1.6	1-6	0.23-0.65					○																				
	DNMG150604-PM	0.4	0.4-6.0	0.1-0.3			●	●						●			○												
	DNMG150608-PM	0.8	0.5-6.0	0.15-0.50			●	●	●					●		●													
	DNMG150612-PM	1.2	0.8-6.0	0.18-0.60			●	●						●		●													
	DNMG150616-PM	1.6	1-6	0.23-0.65				●																					

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
A231	A240	A241	A254	A255	A326	A327

E

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System code > A48

Grade selection > A42

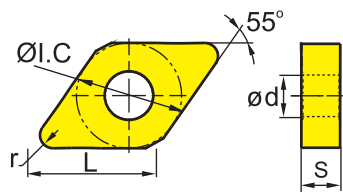




































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

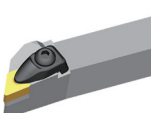
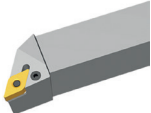
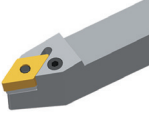
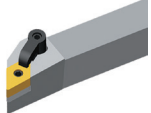
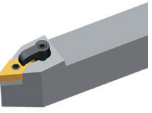
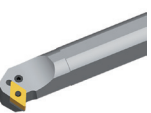
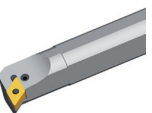
DNMG	L	I.C	S	d
15 06	15.5	12.7	6.35	5.16

DN** negative insert					HC' (CVD)										HC' (PVD)				HT	HC ²	HW											
					P																											
					M																											
					K																											
					N																											
					S																											
					H																											
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201				
ZM	DNMG150612-ZM	1.2	1.0-5.5	0.15-0.60	○				●																							
																																
Medium Cut																																

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DN**	L	I.C	S	d
11 04	11.6	9.525	4.76	3.81
15 04	15.5	12.7	4.76	5.16
15 06	15.5	12.7	6.35	5.16

DN** negative insert					HC ¹ (CVD)												HC ¹ (PVD)	HT	HC ²	HW
					P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
					M												●	●	●	
					K															
					N												●	●	●	
					S												●	●	●	
					H															
ISO					r	a _p	f	YBC103	YBC105	YBC107	YBC109	YBC111	YBC113	YBC115	YBC117	YBC119	YBC121	YBC123	YBC125	YBC127
EF	DNMG110404-EF	0.4	0.1-1.5	0.05-0.20																
	DNMG110408-EF	0.8	0.1-1.5	0.1-0.4																
	DNMG150404-EF	0.4	0.1-1.5	0.05-0.30																
	DNMG150408-EF	0.8	0.1-1.5	0.1-0.4																
	DNMG150604-EF	0.4	0.1-1.5	0.05-0.30																
	DNMG150608-EF	0.8	0.1-1.5	0.1-0.4																
	DNMG150612-EF	1.2	0.1-1.5	0.15-0.50																
FM	DNMG150604L-FM	0.4	0.5-3.0	0.05-0.30																
	DNMG150604R-FM	0.4	0.5-3.0	0.05-0.30																
	DNMG150608L-FM	0.8	0.5-3.0	0.1-0.5																
	DNMG150608R-FM	0.8	0.5-3.0	0.1-0.5																
NF	DNEG150404-NF	0.4	0.2-3.0	0.05-0.30																
	DNEG150408-NF	0.8	0.2-3.0	0.1-0.4																
	DNEG150604-NF	0.4	0.2-3.0	0.05-0.30																
	DNEG150608-NF	0.8	0.2-3.0	0.1-0.4																
NGF	DNEG150608-NGF	0.8	0.2-3.0	0.05-0.40																
	DNEG150612-NGF	1.2	0.2-3.0	0.1-0.5																

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
A231	A240	A241	A254	A255	A326	A327




System code > A48

Grade selection > A42

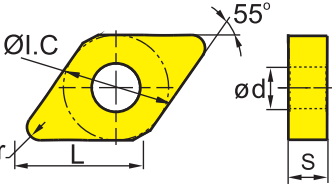







































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

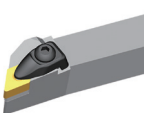
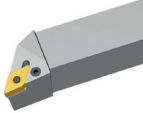
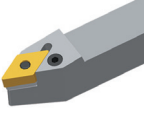
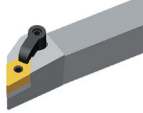
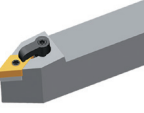
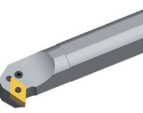
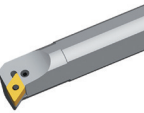
DNMG	L	I.C	S	d
11 04	11.6	9.525	4.76	3.81
15 04	15.5	12.7	4.76	5.16
15 06	15.5	12.7	6.35	5.16

DN** negative insert					HC' (CVD)												HC' (PVD)				HT		HC ²	HW									
					P																												
					M																												
					K																												
					N																												
					S																												
					H																												
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201					
 EG	DNMG150604-EG	0.4	1-3	0.05-0.30							●										●												
	DNMG150608-EG	0.8	1-3	0.1-0.4							●	○								●	●												
	DNMG150612-EG	1.2	1-3	0.2-0.6							●	●								●	●												
Medium Cut																																	
 EM	DNMG110404-EM	0.4	0.5-4.4	0.05-0.30							●									●													
	DNMG110408-EM	0.8	0.5-4.4	0.10-0.45							●									●													
	DNMG150404-EM	0.4	0.5-6.4	0.05-0.30							○									○													
	DNMG150408-EM	0.8	0.5-6.4	0.10-0.45							○									●													
	DNMG150412-EM	1.2	0.5-6.4	0.1-0.6							○																						
	DNMG150604-EM	0.4	0.2-6.4	0.05-0.30							●	●								●													
	DNMG150608-EM	0.8	0.5-6.4	0.10-0.45							●	●								●													
	DNMG150612-EM	1.2	0.5-6.4	0.1-0.6							●	●								●													
Medium Cut																																	
 NM	DNMG150412-NM	1.2	0.2-4.0	0.2-0.6															○														
	DNMG150608-NM	0.8	0.2-4.0	0.1-0.4															●														
	DNMG150612-NM	1.2	0.2-4.0	0.2-0.6															○	●													
Medium Cut																																	
 TC	DNMG150608-TC	0.8	0.5-5.0	0.15-0.40									●	●																			
	DNMG150612-TC	1.2	0.5-5.0	0.2-0.6									●	○																			
Medium Cut																																	

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DNMG	L	I.C	S	d
15 06	15.5	12.7	6.35	5.16

DN** negative insert				HC ¹ (CVD)								HC ¹ (PVD)		HT	HC ²	HW
				P	●	●	●	●	●	●	●	●	●	●	●	
				M								●	●	●	●	
				K												
				N								●	●			●
				S								●	●			●
				H												

B

Milling

ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
TK	DNMG150608-TK	0.8	0.2-0.4	0.2-0.4										○														
	DNMG150612-TK	1.2	0.2-0.4	0.2-0.45										○														
	Medium Cut																											
DR	DNMG150608-DR	0.8	1-6	0.2-0.5			●	●					●	●														
	DNMG150612-DR	1.2	1-6	0.25-0.70			●	●					●	●														
	DNMG150616-DR	1.6	1-6	0.32-0.75			●						●	○														
SNR	DNMG150608-SNR	0.8	0.2-6.0	0.1-0.5														●		○	●							
	DNMG150612-SNR	1.2	0.2-6.0	0.2-0.6														○		○	●							
	Roughing																											

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
A231	A240	A241	A254	A255	A326	A327

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System code > A48

Grade selection > A42

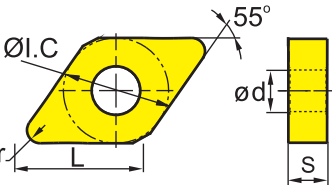










































Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DN**	L	I.C	S	d
15 06	15.5	12.7	6.35	5.16

DN** negative insert				HC ¹ (CVD)																HC ¹ (PVD)					HT		HC ²	HW		
				P	     																 					  				
				M	 																      					  				
				K	   																									
				N																	 								 	
				S																	     								 	
				H																										
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201		
 Flat	DNMA150604	0.4	0.2-6.0	0.1-0.3									●		○															
	DNMA150608	0.8	0.2-6.0	0.1-0.6									●		●															
	DNMA150612	1.2	0.2-6.0	0.15-0.70									●		●															
	DNMA150616	1.6	0.2-6.0	0.2-0.8												○														
 Medium Cut																														
 ER	DNMG150608-ER	0.8	2-6	0.15-0.55									○																	
	DNMG150612-ER	1.2	2-6	0.25-0.80									○																	
Roughing																														

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
A231	A240	A241	A254	A255	A326	A327

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

B

Milling

C

Drilling

D

Technical Information

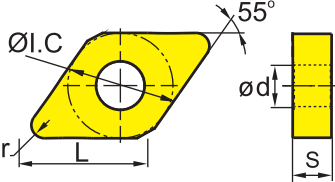































































E

Index

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DNMM	L	I.C	S	d
15 06	15.5	12.7	6.35	5.16

Turning inserts

DN** negative insert					HC ¹ (CVD)												HC ¹ (PVD)				HT	HC ²	HW											
					P																													
					M																													
					K																													
					N																													
					S																													
					H																													
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201						
 DR	DNMM150608-DR	0.8	0.7-6.0	0.20-0.55																														
	DNMM150612-DR	1.2	1-6	0.25-0.70																														
	DNMM150616-DR	1.6	1.5-6.0	0.32-0.90																														
Roughing																																		
 ER	DNMM150608-ER	0.8	0.7-6.0	0.20-0.55																														
	DNMM150612-ER	1.2	1-6	0.25-0.70																														
Roughing																																		
 HDR	DNMM150608-HDR	0.8	1-7	0.25-0.60																														
	DNMM150612-HDR	1.2	1-7	0.3-0.8																														
	DNMM150616-HDR	1.6	1.5-7.0	0.4-1.0																														
Roughing																																		
 LR	DNMM150608-LR	0.8	2-6	0.1-0.6																														
	DNMM150612-LR	1.2	2-6	0.2-0.8																														
	DNMM150616-LR	1.6	2-6	0.25-1.00																														
Roughing																																		

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
A231	A240	A241	A254	A255	A326	A327

System code > A48

Grade selection > A42

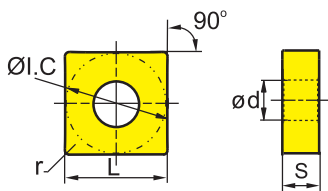



Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

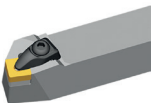
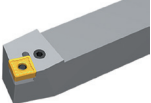
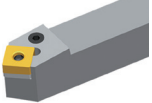


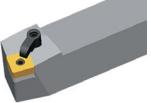



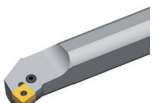
SNMG	L	I.C	S	d
09 03	9.525	9.525	3.18	3.81
12 04	12.7	12.7	4.76	5.16

SN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT		HC ²		HW							
					P	●	●	●	●	●	●							●	●	●											
					M						●	●				●	●	●	●	●	●	●	●								
					K								●	●	●	●															
					N											●	●								●	●					
					S													●	●	●	●	●	●				●	●			
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
ADF 	SNMG120404-ADF	0.4	0.5-5.0	0.1-0.3	●																			●							
	SNMG120408-ADF	0.8	0.5-5.0	0.12-0.50	●																			●							
	SNMG120412-ADF	1.2	1-5	0.2-0.6	●																			●							
Finishing																															
DF 	SNMG120408-DF	0.8	0.3-1.5	0.1-0.4		●	●																								
	SNMG120412-DF	1.2	0.35-1.50	0.15-0.50		●	●																								
Finishing																															
SF 	SNMG090304-SF	0.4	0.05-0.50	0.05-0.20																							●				
	SNMG090308-SF	0.8	0.05-0.50	0.10-0.35																							○				
	SNMG120404-SF	0.4	0.05-0.50	0.05-0.20																							○				
	SNMG120408-SF	0.8	0.05-0.50	0.10-0.35																							○				
Finishing																															

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257
MSKNR/L	MSDNN	S***-PSKNR/L				
Kr: 75°	Kr: 45°	Kr: 75°				
						
A258	A259	A329				

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

B

Milling

C

Drilling

D

Technical Information

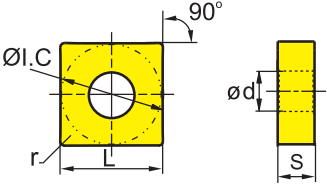





































E

Index

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

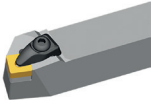
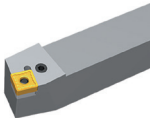
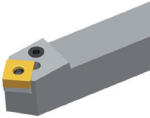
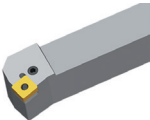
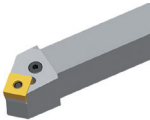
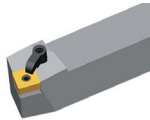
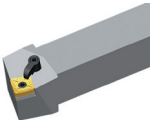
SNMG	L	I.C	S	d
09 03	9.525	9.525	3.18	3.81
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35

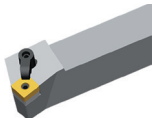
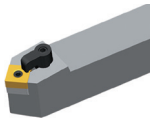
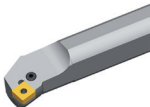
Turning inserts

SN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 EF Finishing	SNMG090304-EF	0.4	0.5-2.0	0.05-0.30										●									●								
	SNMG090308-EF	0.8	0.5-2.0	0.05-0.40										●									●								
	SNMG090312-EF	1.2	0.5-2.0	0.05-0.45										○																	
	SNMG120404-EF	0.4	0.8-3.0	0.05-0.30																			●								
	SNMG120408-EF	0.8	0.8-3.0	0.1-0.4																			●								
	SNMG120412-EF	1.2	0.8-3.0	0.15-0.45										○									●								
	SNMG150608-EF	0.8	1-4	0.1-0.4										○																	
	SNMG150612-EF	1.2	1-4	0.15-0.45										○																	

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329




System code > A48

Grade selection > A42

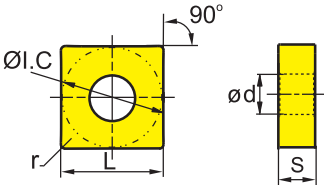


Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

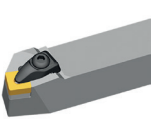
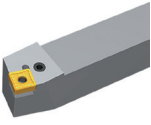
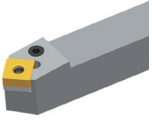
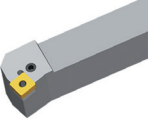
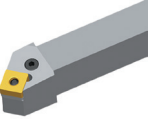
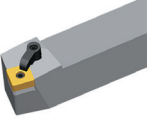
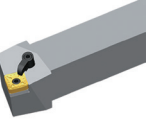
SNMG	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94


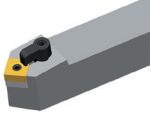
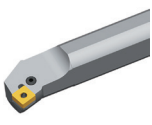
					HC' (CVD)										HC' (PVD)					HT	HC ²	HW								
					P																									
					M																									
					K																									
					N																									
					S																									
					H																									
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>XF</div>  <div>Finishing</div>	SNMG120404-XF	0.4	0.5-2.5	0.1-0.25	●				●																					
	SNMG120408-XF	0.8	0.5-2.5	0.1-0.30	●				●																					
<div>XM</div>  <div>Medium Cut</div>	SNMG120404-XM	0.4	1-4.2	0.2-0.4	○				○																					
	SNMG120408-XM	0.8	1-4.2	0.2-0.4	●				●																					
	SNMG120412-XM	1.2	1-4.2	0.2-0.6	●				●																					
	SNMG120416-XM	1.6	1-4.2	0.2-0.65	○				○																					
	SNMG150608-XM	0.8	1-5.25	0.2-0.4	●				●																					
	SNMG150612-XM	1.2	1-5.25	0.2-0.6	●				●																					
	SNMG150616-XM	1.6	1-5.25	0.2-0.65	○				○		●																			
	SNMG190608-XM	0.8	1-6.65	0.2-0.4	○				○		○																			
	SNMG190612-XM	1.2	1-6.65	0.2-0.6	○				○		○																			
	SNMG190616-XM	1.6	1-6.65	0.2-0.65	○				○		○																			
	SNMG190624-XM	2.4	1-6.65	0.2-1.2	○				○		○																			

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

- Ideal machining conditions
- ✱ Normal machining conditions
- ✱ Unfavourable machining conditions

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

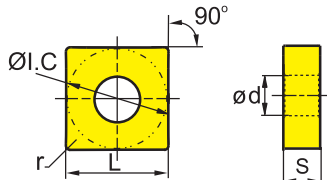


HC ¹	Coated carbide
HT	Uncoated cermet
HC ²	Coated cermet
HW	Uncoated carbide

Cutting data > A366

SNMG	L	I.C	S	d
09 03	9.525	9.525	3.18	3.81
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94

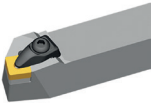
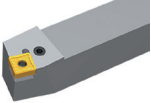
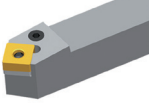
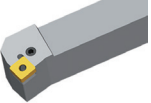
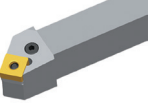
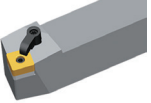



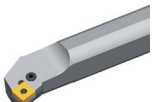
- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

SN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)				HT		HC ²	HW							
				P	●	●	●	●	●	●				●	●		●	●	●									
				M						●	●				●	●	●	●	●	●	●							
				K							●	●	●	●														
				N											●	●						●	●					
				S												●	●	●	●	●			●	●				
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>DM</div>  <div>Medium Cut</div>	SNMG090304-DM	0.4	0.4-4.5	0.1-0.3			●		●																			
	SNMG090308-DM	0.8	0.5-4.5	0.15-0.50			●		●																			
	SNMG120404-DM	0.4	0.4-6.0	0.1-0.3			●		●																			
	SNMG120408-DM	0.8	0.5-6.0	0.15-0.50			●		●	○																		
	SNMG120412-DM	1.2	0.8-6.0	0.18-0.60			●		●																			
	SNMG120416-DM	1.6	1-6	0.23-0.65			○		●																			
	SNMG150608-DM	0.8	0.8-7.5	0.1-0.5			●		●																			
	SNMG150612-DM	1.2	0.8-7.5	0.18-0.60			●		●																			
	SNMG190612-DM	1.2	1-9	0.18-0.60			●		●																			
SNMG190616-DM	1.6	1-9	0.23-0.65			○		●																				
<div>EG</div>  <div>Medium Cut</div>	SNMG120408-EG	0.8	0.5-4.0	0.1-0.5									●					●	●									
	SNMG120412-EG	1.2	0.5-4.0	0.2-0.6									●							●								

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257
MSKNR/L	MSDNN	S***-PSKNR/L				
Kr: 75°	Kr: 45°	Kr: 75°				
						
A258	A259	A329				

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366



A

Turning

Turning inserts




- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SNMG	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35

SN** negative insert				HC ¹ (CVD)								HC ¹ (PVD)		HT	HC ²	HW
				P	●	●	●	●	●	●	●	●	●	●	●	
				M					●	●	●	●	●	●	●	
				K					●	●	●	●	●	●	●	
				N								●	●			●
				S								●	●	●	●	●
				H												

B

Milling

ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>EM</div> <div></div> <div>Medium Cut</div>	SNMG120404-EM	0.4	0.50-6.35	0.05-0.30								○								●								
	SNMG120408-EM	0.8	0.50-6.35	0.20-0.45							●	●									●							
	SNMG120412-EM	1.2	0.50-6.35	0.25-0.60							●	●									●							
	SNMG120416-EM	1.6	0.50-6.35	0.30-0.75								○																
	SNMG150612-EM	1.2	0.5-8.0	0.25-0.60							○	●									●							
	SNMG150616-EM	1.6	0.5-8.0	0.30-0.75								○									●							
<div>TC</div> <div></div> <div>Medium Cut</div>	SNMG120404-TC	0.4	0.5-5.0	0.08-0.25									●															
	SNMG120408-TC	0.8	0.5-5.0	0.15-0.40										●		●												
	SNMG120412-TC	1.2	0.5-5.0	0.2-0.5										●		●												
	SNMG150616-TC	1.6	1-7	0.2-0.7										●														
<div>TK</div> <div></div> <div>Medium Cut</div>	SNMG120412-TK	1.2	0.2-0.4	0.2-0.45									●															

● Ex stock ○ On demand
 YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

D

Technical Information

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
A258	A259	A329

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Index




System code > A48

Grade selection > A42

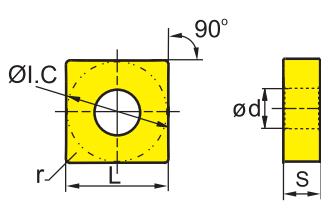








































































Technical info > A501

Cutting data > A366

Turning inserts

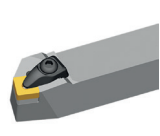
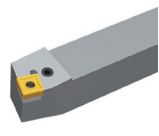
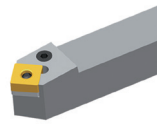
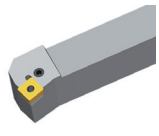
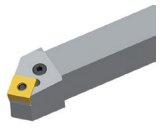
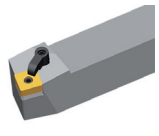
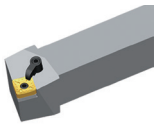
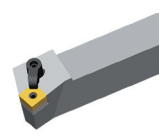
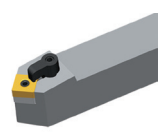

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

SNMG	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94
25 09	25.4	25.4	9.525	9.12

SN** negative insert					HC ¹ (CVD)												HC ¹ (PVD)				HT	HC ²	HW					
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
NM  Medium Cut	SNMG120408-NM	0.8	0.5-5.0	0.1-0.4																								
	SNMG120412-NM	1.2	0.5-5.0	0.15-0.50																								
DR  Roughing	SNMG120408-DR	0.8	0.7-7.0	0.2-0.5																								
	SNMG120412-DR	1.2	1-7	0.25-0.70																								
	SNMG120416-DR	1.6	1.5-7.0	0.32-0.75																								
	SNMG150612-DR	1.2	1-8	0.25-0.70																								
	SNMG150616-DR	1.6	1.5-8.0	0.3-0.8																								
	SNMG190612-DR	1.2	1-10	0.25-0.70																								
	SNMG190616-DR	1.6	1.5-10.0	0.3-0.8																								
	SNMG190624-DR	2.4	2-10	0.32-0.90																								
	SNMG250924-DR	2.4	2-15	0.4-1.2																								

● Ex stock ○ On demand
 YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
DSBNN/L	PSBNN/L	PSDNN	PSKNR/L	PSSNR/L	MSBNN/L	MSRNN/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257
MSKNR/L	MSDNN	S***-PSKNR/L				
Kr: 75°	Kr: 45°	Kr: 75°				
						
A258	A259	A329				

A

Turning

B

Milling

C

Drilling

D

Technical Information

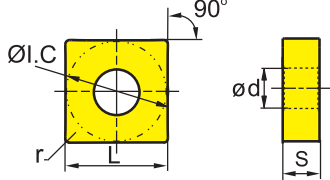
































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Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

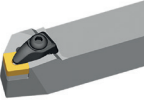
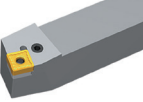
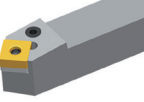
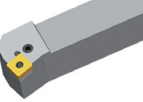
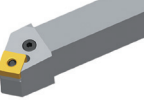
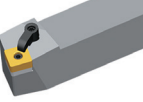
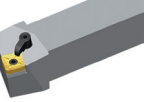



SNMG	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94

SN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Roughing	SNMG120408-ER	0.8	2.0-7.6	0.20-0.55										○	○																
	SNMG120412-ER	1.2	2.0-7.6	0.3-0.6										○	○																
	SNMG150612-ER	1.2	2.0-9.6	0.3-0.6										○	○																
	SNMG190612-ER	1.2	2.0-11.4	0.3-0.6										○																	
	SNMG190616-ER	1.6	2.0-11.4	0.35-0.80										○	○																
SNR	SNMG120408-SNR	0.8	1-4	0.2-0.6																		●				●					
 Roughing																															

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257
MSKNR/L	MSDNN	S***-PSKNR/L				
Kr: 75°	Kr: 45°	Kr: 75°				
						
A258	A259	A329				

System code > A48

Grade selection > A42

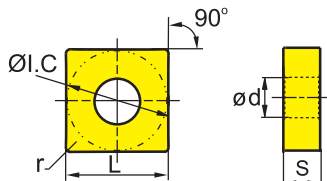













Technical info > A501

Cutting data > A366

SNMM	L	I.C	S	d
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94
25 07	25.4	25.4	7.94	9.12
25 09	25.4	25.4	9.525	9.12

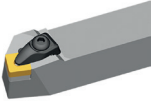
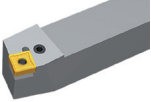
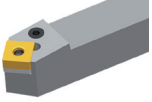
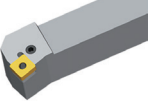
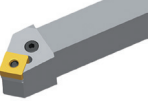
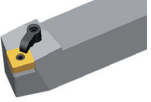
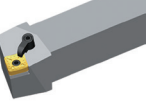


- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

SN** negative insert				HC ¹ (CVD)												HC ¹ (PVD)					HT		HC ²	HW				
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 DR Roughing	SNMM150612-DR	1.2	1-7	0.25-0.60					●																			
	SNMM150616-DR	1.6	1.5-9.0	0.32-0.90			○		●	●																		
	SNMM190608-DR	0.8	2.0-10.5	0.25-0.50					○																			
	SNMM190612-DR	1.2	2.0-10.5	0.25-0.60			●		●	●																		
	SNMM190616-DR	1.6	2.0-10.5	0.35-0.90			●		●	●																		
	SNMM190624-DR	2.4	2.0-10.5	0.4-1.1			●	●	●																			
	SNMM250716-DR	1.6	2.5-12.5	0.4-1.0					●																			
	SNMM250724-DR	2.4	2.5-12.5	0.5-1.2			○		●																			
	SNMM250924-DR	2.4	2.5-12.5	0.5-1.2					●	●																		
 ER Roughing	SNMM250724-ER	2.4	2.8-18.0	0.45-1.40					●		○	●																
	SNMM250732-ER	3.2	2.8-18.0	0.32-1.40					●																			
	SNMM250924-ER	2.4	2.8-18.0	0.45-1.40					●	○		○																
	SNMM250932-ER	3.2	2.8-18.0	0.55-1.80					●																			

● Ex stock ○ On demand
 YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257
MSKNR/L	MSDNN					
Kr: 75°	Kr: 45°					
						
A258	A259					

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

B

Milling

C

Drilling

D

Technical Information

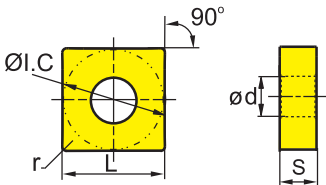

E

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SNMM	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94
25 09	25.4	25.4	9.525	9.12

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

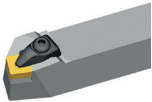
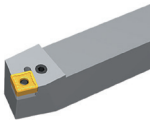
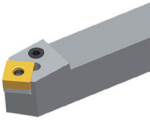
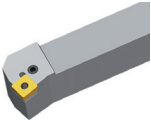
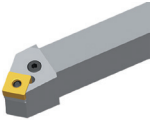
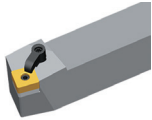
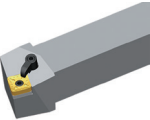
SN** negative insert					HC ¹ (CVD)								HC ¹ (PVD)				HT	HC ²	HW									
					P	●	●	●	●	●	●				●	●	●	●										
					M						●	●			●	●	●	●	●	●	●							
					K								●	●	●	●												
					N										●	●						●	●					
					S											●	●	●	●	●		●	●					
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>LR</div>  <div>Roughing</div>	SNMM120408-LR	0.8	1-6	0.1-0.5			○		●																			
	SNMM120412-LR	1.2	1-6	0.2-0.6			○		●																			
	SNMM120416-LR	1.6	1-6	0.25-0.70					○																			
	SNMM150612-LR	1.2	1.5-7.0	0.1-0.5						●																		
	SNMM150616-LR	1.6	1.5-7.0	0.1-0.5			○		○																			
	SNMM190612-LR	1.2	2-10	0.25-0.70			○		●																			
	SNMM190616-LR	1.6	2-10	0.3-1.0			○		●																			
	SNMM190624-LR	2.4	2-10	0.3-1.1			○		●																			
	SNMM250924-LR	2.4	3.0-12.5	0.3-1.2			○		●	○																		

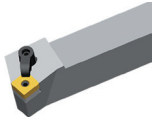
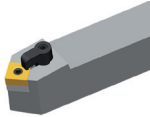
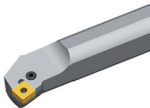
● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder

DSBNN/L	PSBNN/L	PSDNN	PSKNR/L	PSSNR/L	MSBNN/L	MSRNN/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

System code > A48

Grade selection > A42

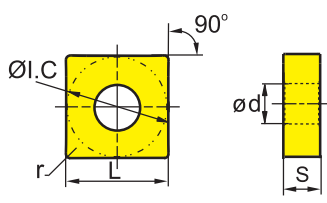

Technical info > A501

Cutting data > A366

SNMM	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94
25 07	25.4	25.4	7.94	9.12
25 09	25.4	25.4	9.525	9.12

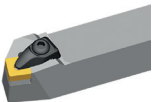
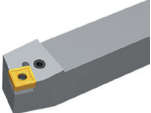
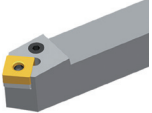
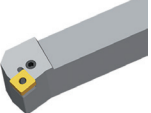

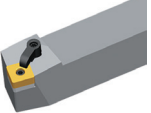
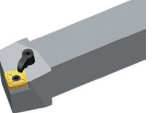

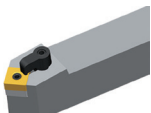

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

SN** negative insert					HC ¹ (CVD)								HC ¹ (PVD)					HT		HC ²	HW											
					P	●	●	●	●	●							●	●		●	●	●										
					M						●	●						●	●	●	●	●	●	●								
					K									●	●	●	●															
					N													●	●							●	●					
					S															●	●	●	●	●			●	●				
					H																											
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
<div>HDR</div> <div></div> <div>Roughing</div>	SNMM120408-HDR	0.8	1-6	0.1-0.6								●																				
	SNMM120412-HDR	1.2	1.5-6.0	0.2-0.7									○																			
	SNMM150608-HDR	0.8	1-7	0.2-0.6										○																		
	SNMM150612-HDR	1.2	1-7	0.25-0.70				●	●																							
	SNMM150616-HDR	1.6	1.5-9.0	0.32-1.00									○																			
	SNMM190612-HDR	1.2	2.0-10.5	0.25-0.70						○	○																					
	SNMM190616-HDR	1.6	2.0-10.5	0.35-1.00				●	●							○																
	SNMM190624-HDR	2.4	2.0-10.5	0.4-1.2				●	●																							
	SNMM250724-HDR	2.4	2.5-12.5	0.5-1.4					●																							
SNMM250924-HDR	2.4	2.5-12.5	0.5-1.4				●	●	●																							

● Ex stock ○ On demand
 YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257
MSKNR/L	MSDNN	S***-PSKNR/L				
Kr: 75°	Kr: 45°	Kr: 75°				
						
A258	A259	A329				

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SNMM	L	I.C	S	d
19 06	19.05	19.05	6.35	7.94
25 09	25.4	25.4	9.525	9.12

SN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW									
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HPR	SNMM190616-HPR	1.6	2.0-10.5	0.35-1.00									●																		
	SNMM190624-HPR	2.4	2.0-10.5	0.4-1.2				○				●																			
	SNMM250924-HPR	2.4	2.0-12.5	0.5-1.4				○				●	●																		
Roughing																															

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

Technical Information

E

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Tool holder						
PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L	MSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°	Kr: 75°
A242	A244	A245	A246	A256	A257	A258




System code > A48

Grade selection > A42

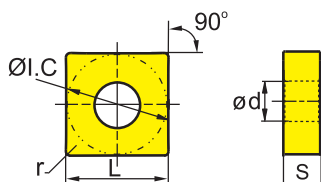


































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

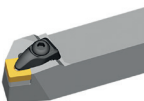
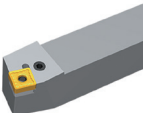
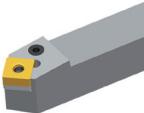
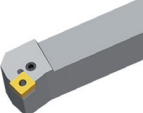
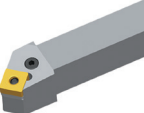
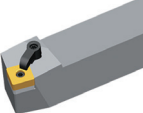
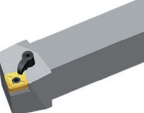
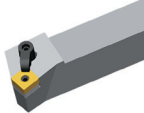
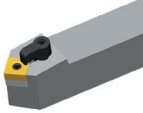
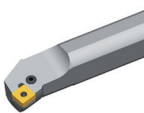
SNMG	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
25 07	25.4	25.4	7.94	9.12
25 09	25.4	25.4	9.525	9.12

SN** negative insert				HC ¹ (CVD)																HC ¹ (PVD)				HT		HC ²	HW					
				P																												
				M																												
				K																												
				N																												
				S																												
				H																												
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201		
Basic 	SNMG120408	0.8	0.5-6.0	0.1-0.6						●		●																				
	SNMG120412	1.2	0.5-6.0	0.1-0.7						○		○																				
	SNMG250724	2.4	1-9	0.1-1.1																												
	SNMG250924	2.4	1-9	0.1-1.1																												
Medium Cut																																

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257
MSKNR/L	MSDNN	S***-PSKNR/L				
Kr: 75°	Kr: 45°	Kr: 75°				
						
A258	A259	A329				

A

Turning

B

Milling

C

Drilling

D

Technical
Information

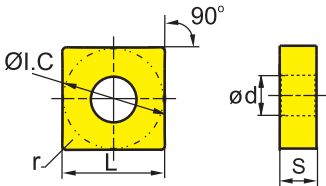


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Index

SN**	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94
25 07	25.4	25.4	7.94	9.12

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

SN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW								
				P	●	●	●	●	●	●					●	●	●	●										
				M						●	●			●	●	●	●	●	●	●								
				K								●	●	●	●													
				N											●	●						●	●					
				S											●	●	●	●	●			●	●					
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
	SNMA120408	0.8	0.5-5.0	0.1-0.5									●	●	●													
	SNMA120412	1.2	0.5-5.0	0.2-0.7									○	○	●	○												
	SNMA120416	1.6	0.5-5.0	0.2-1.0									○	●	○													
	SNMA150608	0.8	0.8-7.0	0.1-0.5												○												
	SNMA150612	1.2	0.8-7.0	0.2-0.7													●											
	SNMA190612	1.2	0.8-7.0	0.2-0.7										○		●												
	SNMA190616	1.6	0.8-7.0	0.3-0.8										○		●												
	SNMM250724-1	2.4	2.0-12.5	0.3-1.2					●	●																		

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder

DSBNR/L Kr: 75°	PSBNR/L Kr: 75°	PSDNN Kr: 45°	PSKNR/L Kr: 75°	PSSNR/L Kr: 45°	MSBNR/L Kr: 75°	MSRNR/L Kr: 75°
A232	A242	A244	A245	A246	A256	A257
MSKNR/L Kr: 75°	MSDNN Kr: 45°	S***-PSKNR/L Kr: 75°				
A258	A259	A329				

System code > A48

Grade selection > A42

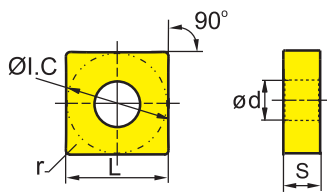














Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

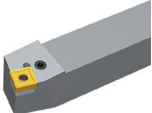
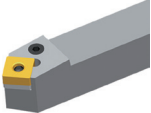
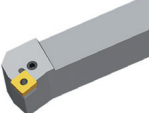

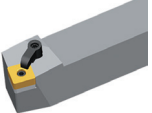
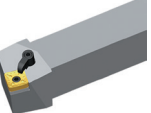

SNMM	L	I.C	S	d
19 06	19.05	19.05	6.35	7.94
25 09	25.4	25.4	9.525	9.12

SN** negative insert																				HC' (CVD)								HC' (PVD)				HT		HC ²		HW	
				P																																	
				M																																	
				K																																	
				N																																	
				S																																	
				H																																	
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201							
 Basic	SNMM190612	1.2	1.5-10.5	0.2-0.7								○																									
	SNMM190616	1.6	0.5-10.5	0.2-1.0								○																									
	SNMM250924	2.4	2.0-12.5	0.3-1.2								●																									

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L	MSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°	Kr: 75°
						
A242	A244	A245	A246	A256	A257	A258

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SNUN	L	I.C	S
12 04	12.7	12.7	4.76
19 04	19.05	19.05	4.76

SN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
				P	●	●	●	●	●	●				●	●	●	●	●												
				M						●	●			●	●	●	●	●	●	●										
				K								●	●	●	●															
				N										●	●						●	●								
				S										●	●	●	●	●			●	●								
				H																										
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>Flat</div>	SNUN120408	0.8	0.7-6.0	0.2-0.5														●												
	SNUN120412	1.2	0.7-6.0	0.25-0.60												○		○												
	SNUN190412	1.2	0.9-6.0	0.25-0.60																									○	

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

C

Drilling

Tool holder		
CSKNR/L	CSRNR/L	CSDNN
Kr: 75°	Kr: 75°	Kr: 45°
A296	A297	A299

D

Technical Information

E

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System code > A48

Grade selection > A42

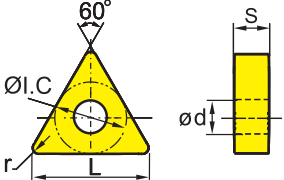














Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TN**	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16

TN** negative insert				HC ¹ (CVD)												HC ¹ (PVD)					HT		HC ²	HW				
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
WG 	TNMX160408-WG	0.8	0.5-5.0	0.15-0.70		●																						
	TNMX160412-WG	1.2	0.8-6.0	0.20-0.75		○																						
Wiper																												
ADF 	TNMG160404-ADF	0.4	0.5-5.0	0.05-0.30	●																●			●				
	TNMG160408-ADF	0.8	0.5-5.0	0.1-0.4	●																○	●			●			
	TNMG160412-ADF	1.2	0.5-5.0	0.2-0.5	●																	●						
Finishing																												
DF 	TNMG160404-DF	0.4	0.15-2.00	0.08-0.25		●			●																			
	TNMG160408-DF	0.8	0.15-2.00	0.1-0.3		●			●																			
	TNMG160412-DF	1.2	0.35-1.50	0.15-0.50		●			●																			
	TNMG220408-DF	0.8	0.3-1.5	0.1-0.4		●			●																			
	TNMG220412-DF	1.2	0.35-1.50	0.15-0.50		●																						
Finishing																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DTGNNR/L	PTFNNR/L	PTTNNR/L	PTGNNR/L	MTGNNR/L	MTJNNR/L	MTJNNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262
MTFNNR/L	S***-PTFNNR/L					
Kr: 91°	Kr: 90°					
A263	A330					

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366



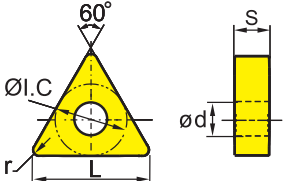
A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TNMG	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81

TN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)		HT	HC ²	HW										
				P	●	●	●	●	●	●				●	●	●	●											
				M						●	●			●	●	●	●	●	●									
				K								●	●	●	●													
				N										●	●				●	●								
				S										●	●	●	●	●		●	●							
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
SF	TNMG160404-SF	0.4	0.05-1.00	0.05-0.30																				○	●			
	TNMG160408-SF	0.8	0.05-1.00	0.05-0.40																					●			
Finishing																												

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

Technical Information

E

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Tool holder						
DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262
MTFNR/L	S***-PTFNR/L					
Kr: 91°	Kr: 90°					
A263	A330					




System code > A48

Grade selection > A42

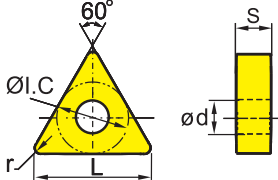






























Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

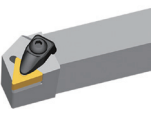


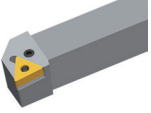
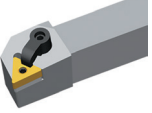
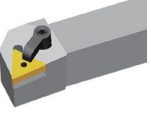
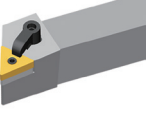
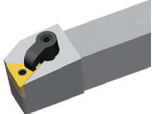
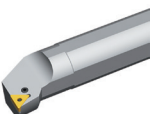
TNMG	L	I.C	S	d
11 03	11	6.35	3.18	2.26
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16

TN** negative insert				HC ¹ (CVD)												HC ¹ (PVD)					HT		HC ²	HW					
				P																									
				M																									
				K																									
				N																									
				S																									
				H																									
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
 EF Finishing	TNMG110304-EF	0.4	0.1-1.0	0.05-0.20																●									
	TNMG110308-EF	0.8	0.1-1.0	0.05-0.40																●									
	TNMG160404-EF	0.4	0.1-1.5	0.05-0.30							●									●									
	TNMG160408-EF	0.8	0.1-1.5	0.1-0.4							●									●									
	TNMG160412-EF	1.2	0.2-2.5	0.15-0.40							○									●									
	TNMG220404-EF	0.4	0.5-2.5	0.05-0.25							○									●									
	TNMG220408-EF	0.8	0.5-2.5	0.1-0.4							○									●									

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
DTG NR/L	PTF NR/L	PTT NR/L	PTG NR/L	MTG NR/L	MTJ NR/L	MTJ NR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262
MTF NR/L	S***-PTF NR/L					
Kr: 91°	Kr: 90°					
						
A263	A330					

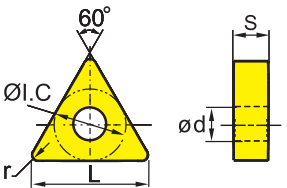


A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TNMG	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16

TN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
					P	●	●	●	●	●	●							●	●	●								
					M							●	●				●	●	●	●	●	●	●					
					K									●	●	●	●											
					N												●	●						●	●			
					S													●	●	●	●	●			●	●		
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Finishing	TNMG160404L-FM	0.4	0.5-3.0	0.1-0.3					●											●								
	TNMG160404R-FM	0.4	0.5-3.0	0.1-0.3			○		●											●								
	TNMG160408L-FM	0.8	0.5-3.0	0.15-0.50			○		●											●								
	TNMG160408R-FM	0.8	0.5-3.0	0.15-0.50				●	●											●								
 Medium Cut	TNMG160404-XM	0.4	1-5.6	0.2-0.4	●		○																					
	TNMG160408-XM	0.8	1-5.6	0.2-0.4	●				●																			
	TNMG160412-XM	1.2	1-5.6	0.2-0.6	●				●																			
	TNMG160416-XM	1.6	1-5.6	0.2-0.65	○					●																		
	TNMG220408-XM	0.8	1-7.7	0.2-0.4	●				●																			
	TNMG220412-XM	1.2	1-7.7	0.2-0.6	●				●																			
	TNMG220416-XM	1.6	1-7.7	0.2-0.65	○					●																		

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

Technical Information

E

Index

Tool holder						
DTG NR/L	PTF NR/L	PTT NR/L	PTG NR/L	MTG NR/L	MTJ NR/L	MTJ NR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262
MTF NR/L	S***-PTF NR/L					
Kr: 91°	Kr: 90°					
A263	A330					




System code > A48

Grade selection > A42

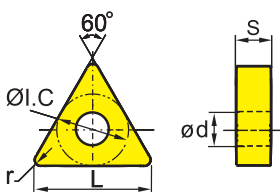

















































































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

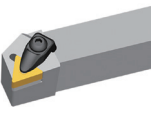

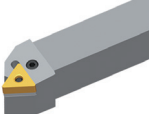
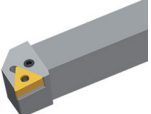
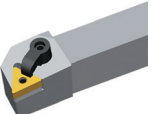
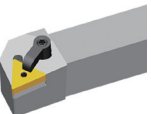
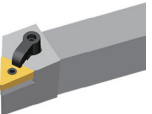
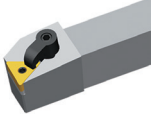
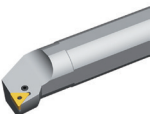
TNMG	L	I.C	S	d
11 03	11	6.35	3.18	2.26
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16

TN** negative insert				HC ¹ (CVD)												HC ¹ (PVD)				HT	HC ²	HW						
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 DM Medium Cut	TNMG110308-DM	0.8	0.3-3.0	0.1-0.4																								
	TNMG160404-DM	0.4	0.4-5.0	0.1-0.3																								
	TNMG160408-DM	0.8	0.5-5.0	0.15-0.50																								
	TNMG160412-DM	1.2	0.8-5.0	0.18-0.60																								
	TNMG220404-DM	0.4	0.4-6.6	0.1-0.3																								
	TNMG220408-DM	0.8	0.5-6.6	0.15-0.50																								
	TNMG220412-DM	1.2	0.8-6.6	0.18-0.60																								
TNMG220416-DM	1.6	1.0-6.6	0.23-0.65																									
 PM Medium Cut	TNMG110304-PM	0.4	0.4-3.0	0.1-0.3																								
	TNMG110308-PM	0.8	0.4-3.0	0.15-0.40																								
	TNMG160404-PM	0.4	0.4-5.0	0.1-0.3																								
	TNMG160408-PM	0.8	0.5-5.0	0.15-0.50																								
	TNMG160412-PM	1.2	0.8-5.0	0.18-0.60																								
	TNMG220408-PM	0.8	0.5-6.6	0.15-0.50																								
	TNMG220412-PM	1.2	0.8-6.6	0.18-0.60																								
TNMG220416-PM	1.6	1.0-6.6	0.23-0.65																									

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
DTG NR/L	PTF NR/L	PTT NR/L	PTG NR/L	MTG NR/L	MTJ NR/L	MTJ NR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262
MTF NR/L	S***-PTF NR/L					
Kr: 91°	Kr: 90°					
						
A263	A330					

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

Turning inserts



- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TNMG	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81

TN** negative insert		HC ¹ (CVD)	HC ¹ (PVD)	HT	HC ²	HW
	P	●●●●●●●●	●●●●	●●●		
	M		●●●●●●●●	●●●		
	K		●●●●●●●●			
	N			●●●		●●●
	S			●●●●●●●●		●●●
	H					

B

Milling

ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
ZM	TNMG160404-ZM	0.4	0.5-5.0	0.08-0.30	●																								
 Medium Cut	TNMG160408-ZM	0.8	0.5-5.0	0.1-0.4	●																								
	TNMG160412-ZM	1.2	0.5-5.0	0.1-0.6	●																								
SNR	TNMG160408-SNR	0.8	1-5.6	0.1-0.5																		●							
 Roughing																													

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

C

Drilling

Tool holder						
DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262

D

Technical Information

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
A263	A330

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System code > A48

Grade selection > A42

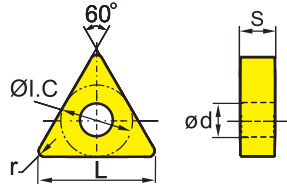



Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TNMG	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16

TN** negative insert				HC ¹ (CVD)												HC ¹ (PVD)					HT		HC ²	HW						
				P	●	●	●	●	●	●						●	●		●	●	●									
				M						●	●						●	●	●	●	●	●	●	●	●	●				
				K								●	●	●	●															
				N													●	●									●	●		
				S															●	●	●	●	●	●				●	●	
				H																										
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201			
 EG Medium Cut	TNMG160404-EG	0.4	0.5-4.0	0.1-0.3																●										
	TNMG160408-EG	0.8	0.5-4.0	0.1-0.4						●	●								●	●										
	TNMG160412-EG	1.2	0.5-4.0	0.15-0.50							●								●											
 EM Medium Cut	TNMG160404-EM	0.4	0.5-4.8	0.05-0.30						●	○								●											
	TNMG160408-EM	0.8	0.5-4.8	0.10-0.45						●	●								●											
	TNMG160412-EM	1.2	0.5-4.8	0.1-0.6						●	●								●											
	TNMG220408-EM	0.8	0.5-6.6	0.10-0.45						●	●								●											
	TNMG220412-EM	1.2	0.5-6.6	0.1-0.6						○	●								●											
	TNMG220416-EM	1.6	0.5-6.6	0.10-0.65							●								●											
 TC Medium Cut	TNMG160404-TC	0.4	0.5-3.0	0.05-0.20								●		●																
	TNMG160408-TC	0.8	0.5-3.0	0.08-0.25								●		●																
	TNMG160412-TC	1.2	1-3	0.1-0.3								●		●																
	TNMG220412-TC	1.2	1-6	0.15-0.40								●		●																
	TNMG220416-TC	1.6	1-6	0.2-0.5								●																		

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262
MTFNR/L	S***-PTFNR/L					
Kr: 91°	Kr: 90°					
A263	A330					

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TNMG	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16
27 06	27.5	15.875	6.35	6.35

TN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW									
					P	●	●	●	●	●						●	●	●	●											
					M						●	●					●	●	●	●	●	●	●							
					K									●	●	●	●													
					N												●	●							●	●				
					S														●	●	●	●	●			●	●			
					H																									
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
	TNMG160408-DR	0.8	0.7-6.0	0.20-0.55			●	●							●	●														
	TNMG160412-DR	1.2	1-6	0.25-0.65			●	●							○	●														
	TNMG220408-DR	0.8	0.7-7.0	0.20-0.55							●							○												
	TNMG220412-DR	1.2	1-7	0.25-0.65			○	●										●												
	TNMG220416-DR	1.6	1.5-7.0	0.32-0.75							●					○	●													
	TNMG270608-DR	0.8	1.5-12.0	0.35-0.55																										
	TNMG270612-DR	1.2	2-12	0.35-0.75								○																		

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

C

Drilling

Tool holder						
DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
A263	A330

D

Technical Information

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System code > A48

Grade selection > A42

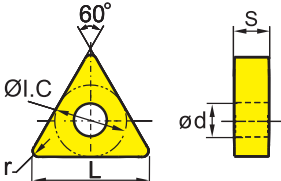



Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TN**	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16
27 06	27.5	15.875	6.35	5.16

TN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW							
				P	●	●	●	●	●	●					●	●		●	●	●								
				M						●	●				●	●	●	●	●	●	●	●						
				K								●	●	●	●													
				N												●	●							●	●			
				S													●	●	●	●	●	●			●	●		
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Roughing	TNMM160408-DR	0.8	0.7-6.0	0.20-0.55		○		●																				
	TNMM160412-DR	1.2	1-6	0.25-0.70		○																						
	TNMM220408-DR	0.8	0.7-8.0	0.20-0.55			○		○																			
	TNMM220412-DR	1.2	1-8	0.25-0.70					●																			
	TNMM220416-DR	1.6	1.5-8.0	0.32-0.90					○																			
	TNMM270612-DR	1.2	2.5-11.0	0.25-0.70					○																			
	TNMM270616-DR	1.6	2.5-11.0	0.3-0.9					○																			
 Roughing	TNMG160408-ER	0.8	2.0-5.6	0.15-0.55								○																
	TNMG160412-ER	1.2	2.0-5.6	0.15-0.60								○																
	TNMG220408-ER	0.8	2.0-7.7	0.15-0.55								○																
	TNMG220412-ER	1.2	2.0-7.7	0.15-0.60								○																
 Roughing	TNMM160408-LR	0.8	1-5	0.1-0.5		●		●		●																		
	TNMM160412-LR	1.2	1.5-6.0	0.1-0.6		○		○		○																		

● Ex stock ○ On demand
 YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

B

Milling

C

Drilling

D

Technical
Information

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System code > A48

Grade selection > A42

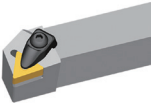
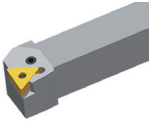
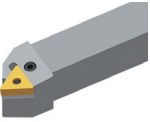
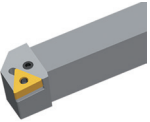
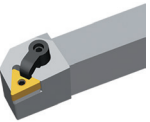
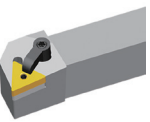
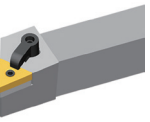
Technical info > A501

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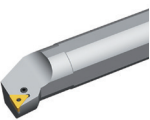
A

Turning

Tool holder						
DTG NR/L	PTF NR/L	PTT NR/L	PTG NR/L	MTG NR/L	MTJ NR/L	MTJ NR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

B

Milling

MTF NR/L	S***-PTF NR/L
Kr: 91°	Kr: 90°
	
A263	A330

C

Drilling

D

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System code > A48

Grade selection > A42

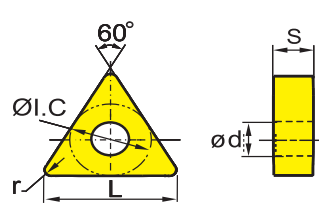

Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

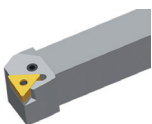
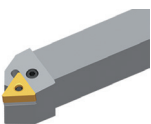
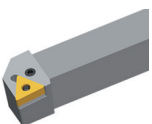
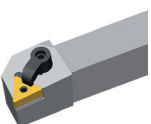
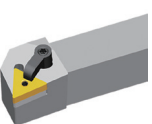
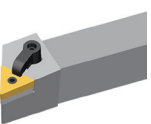
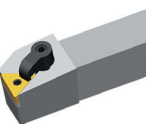
TNMM	L	I.C	S	d
22 04	22	12.7	4.76	5.16
27 06	27.5	15.875	6.35	6.35

TN** negative insert															HC' (CVD)						HC' (PVD)				HT		HC ²		HW				
					P	●	●	●	●	●	●									●	●		●	●	●								
					M								●	●								●	●	●	●	●	●	●	●				
					K												●	●	●	●													
					N																	●	●								●	●	
					S																				●	●	●	●	●	●		●	●
					H																												
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201			
 Heavy Turning	TNMM220412-HDR			1.2	2-9	0.25-0.80			○																								
	TNMM220416-HDR			1.6	2-9	0.35-1.00						○																					
	TNMM270616-HDR			1.6	2-6	0.35-1.00						●																					
	TNMM270624-HDR			2.4	2-7	0.4-1.2						●			○																		

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L	MTFNR/L
Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°	Kr: 91°
						
A247	A248	A249	A260	A261	A262	A263

A

Turning

B

Milling

C

Drilling

D

Technical Information

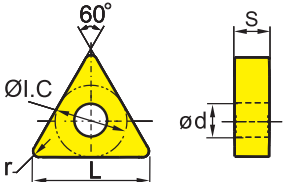

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TNMG	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16
27 06	27.5	15.875	6.35	6.35
33 09	33	19.05	9.525	7.94

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

TN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)			HT	HC ²	HW											
					P	●	●	●	●	●	●					●	●	●	●												
					M							●	●			●	●	●	●	●	●	●									
					K									●	●	●	●														
					N											●	●					●	●								
					S												●	●	●	●	●		●	●							
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Medium Cut	TNMG160404	0.4	0.2-4.0	0.05-0.20								○																			
	TNMG160408	0.8	0.2-4.0	0.08-0.30				●		●																					
	TNMG160412	1.2	0.2-4.0	0.1-0.4				●																							
	TNMG220404	0.4	0.2-6.0	0.05-0.20								○																			
	TNMG220408	0.8	0.2-6.0	0.1-0.3																											
	TNMG220416	1.6	0.2-6.0	0.1-0.5								○																			
	TNMG270612	1.2	0.2-9.0	0.1-0.5								○																			
	TNMG270616	1.6	0.2-9.0	0.1-0.5								○																			
	TNMG330916	1.6	0.2-11.0	0.1-0.5								○																			
	TNMG330924	2.4	0.2-11.0	0.1-0.7																											

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262
MTFNR/L	S***-PTFNR/L					
Kr: 91°	Kr: 90°					
A263	A330					

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TN**	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16
27 06	27.5	15.875	6.35	6.35

TN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
					P	●	●	●	●	●	●					●	●		●	●	●							
					M						●	●				●	●	●	●	●	●	●						
					K								●	●	●	●												
					N												●	●						●	●			
					S														●	●	●	●	●		●	●		
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
	TNMA160404	0.4	0.2-4.0	0.05-0.20									○		●													
	TNMA160408	0.8	0.2-4.0	0.08-0.30									●	●	●													
	TNMA160412	1.2	0.2-4.0	0.1-0.4									○		●													
	TNMA160416	1.6	0.5-4.0	0.05-0.50									○		○													
	TNMA220404	0.4	0.2-6.0	0.05-0.20												●												
	TNMA220408	0.8	0.2-6.0	0.1-0.3									●		●													
	TNMA220412	1.2	0.2-6.0	0.1-0.4											●	●												
TNMA220416	1.6	0.2-6.0	0.1-0.5													○												
	TNMM160404	0.4	0.2-7.0	0.05-0.60					○																			
	TNMM160408	0.8	0.5-7.0	0.05-0.60					○																			
	TNMM220408	0.8	0.5-7.0	0.05-0.60					○																			
	TNMM220412	1.2	1-7	0.1-0.6																								
	TNMM220416	1.6	0.5-7.0	0.05-0.60					○																			
	TNMM270616	1.6	0.5-6.5	0.05-0.70					○																			

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
DTG NR/L	PTF NR/L	PTT NR/L	PTG NR/L	MTG NR/L	MTJ NR/L	MTJ NR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262
MTF NR/L	S***-PTF NR/L					
Kr: 91°	Kr: 90°					
A263	A330					

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366



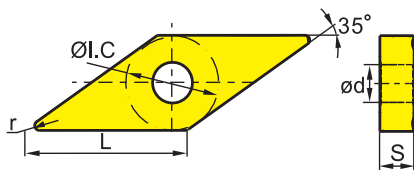




A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VN**	L	I.C	S	d
16 04	16.6	9.525	4.76	3.81

VN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201			
ADF	VNMG160404-ADF	0.4	0.5-2.5	0.1-0.3	●																●										
	VNMG160408-ADF	0.8	0.5-2.5	0.1-0.5	●																●										
																															
Finishing																															
DF	VNMG160404-DF	0.4	0.25-1.50	0.07-0.30			○		●																						
	VNMG160408-DF	0.8	0.3-1.5	0.1-0.4			●		●																						
																															
Finishing																															
EF	VNMG160404-EF	0.4	0.1-1.5	0.05-0.25							●									●											
	VNMG160408-EF	0.8	0.2-2.5	0.08-0.35							●									●											
	VNMG160412-EF	1.2	0.2-2.5	0.10-0.45							○																				
																															
Finishing																															
NF	VNEG160404-NF	0.4	0.2-4.0	0.05-0.30															●								○				
	VNEG160408-NF	0.8	0.2-4.0	0.05-0.50															●								○				
																															
Finishing																															


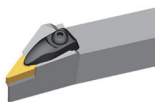


● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder			
DVNN	DVJNR/L	MVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

E

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System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VN**	L	I.C	S	d
16 04	16.6	9.525	4.76	3.81

VN** negative insert					HC ¹ (CVD)								HC ¹ (PVD)	HT	HC ²	HW
					P	●	●	●	●	●	●		●	●	●	
					M					●	●		●	●	●	
					K					●	●					
					N								●	●		●
					S								●	●		●
					H											
ISO					r	a _p	f	YBC103	YBC103	YBC103	YBC103	YBC103	YBC103	YBC103	YBC103	YBC103
NGF	VNEG160408-NGF	0.8	0.2-3.0	0.1-0.3												
	VNEG160412-NGF	1.2	0.2-3.0	0.1-0.5												
Finishing																
SF	VNMG160404-SF	0.4	0.05-3.00	0.05-0.20												
	VNMG160408-SF	0.8	0.05-3.00	0.05-0.35												
Finishing																

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder			
DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
A234	A235	A264	A265

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366



A

Turning

Turning inserts



- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VNMG	L	I.C	S	d
16 04	16.6	9.525	4.76	3.81

VN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)		HT	HC ²	HW
				P	●	●	●	●	●	●	●	●	●	●	●	●	●	
				M										●	●	●	●	
				K														
				N										●	●		●	●
				S										●	●		●	●
				H														

B

Milling

ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>XF</div> <div></div>	VNMG160404-XF	0.4	0.5-2.5	0.1-0.25	●																							
	VNMG160408-XF	0.8	0.5-2.5	0.1-0.30	●																							
	VNMG160412-XF	1.2	0.5-2.5	0.1-0.35	●																							
Finishing																												
<div>XM</div> <div></div>	VNMG160404-XM	0.4	1-5.6	0.2-0.4	●		○																					
	VNMG160408-XM	0.8	1-5.6	0.2-0.4	●		●																					
	VNMG160412-XM	1.2	1-5.6	0.2-0.6	●		●																					
	VNMG160416-XM	1.6	1-5.6	0.2-0.65	○		○																					
Medium Cut																												

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

C

Drilling

Tool holder			
DVNN	DVJNR/L	MVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
A234	A235	A264	A265

D

Technical Information

E

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System code > A48

Grade selection > A42

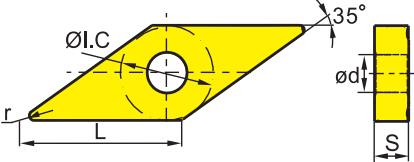
































Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VNMG	L	I.C	S	d
16 04	16.6	9.525	4.76	3.81

VN** negative insert				HC' (CVD)												HC' (PVD)					HT	HC ²	HW					
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	VNMG160404	0.4	0.2-6.0	0.05-0.60			○																					
	VNMG160408	0.8	0.2-6.0	0.08-0.60			○																					
Medium Cut																												
DM	VNMG160408-DM	0.8	0.5-4.0	0.15-0.50			●		●																			
	VNMG160412-DM	1.2	0.8-4.0	0.18-0.60			●		●																			
Medium Cut																												
EM	VNMG160404-EM	0.4	0.2-3.0	0.05-0.30							●									●								
	VNMG160408-EM	0.8	0.5-4.0	0.10-0.45							●									●								
Medium Cut																												
NM	VNMG160412-NM	1.2	0.2-4.0	0.05-0.40															●									
Medium Cut																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder			
DVVNN Kr: 72°30'	DVJNR/L Kr: 93°	MVVNN Kr: 72°30'	MVJNR/L Kr: 93°
A234	A235	A264	A265

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VNMG	L	I.C	S	d
16 04	16.6	9.525	4.76	3.81

VN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)		HT	HC ²	HW
				P	●	●	●	●	●	●						●	●	
				M						●	●			●	●	●	●	
				K														
				N									●	●				●
				S									●	●	●			●
				H														

B

Milling

ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
PM	VNMG160404-PM	0.4	0.4-4.0	0.13-0.40			●	●					●		○													
	VNMG160408-PM	0.8	0.5-4.0	0.15-0.50			●	●					●		●													
	VNMG160412-PM	1.2	0.8-4.0	0.18-0.60					●				●															
TC	VNMG160404-TC	0.4	0.5-2.0	0.05-0.20										●		●												
	VNMG160408-TC	0.8	0.5-2.0	0.08-0.25										●		●												
	VNMG160412-TC	1.2	0.5-3.0	0.08-0.30										●		●												
ZM	VNMG160404-ZM	0.4	0.5-3.0	0.08-0.30	○																							
	VNMG160408-ZM	0.8	0.5-3.0	0.1-0.4	●																							
SNR	VNMG160408-SNR	0.8	0.2-2.0	0.1-0.4														●		○	●							
	VNMG160412-SNR	1.2	0.2-2.0	0.1-0.5														●		○	●							
Roughing																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder			
DVNN	DVJNR/L	MVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
A234	A235	A264	A265

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System code > A48

Grade selection > A42

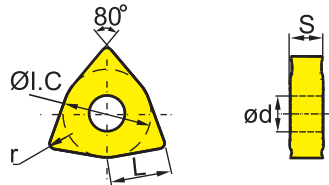

































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

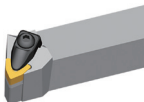
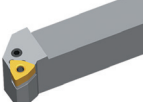


WNMG	L	I.C	S	d
06 T3	6.5	9.525	3.97	3.81
06 04	6.5	9.525	4.76	3.81
08 04	8.7	12.7	4.76	5.16

WN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
ADF 	WNMG080404-ADF	0.4	0.2-2.5	0.05-0.30	●																●			●				
	WNMG080408-ADF	0.8	0.5-2.5	0.05-0.40	●															○	●			●				
	WNMG080412-ADF	1.2	0.5-2.5	0.05-0.50	●																●							
Finishing																												
DF 	WNMG060404-DF	0.4	0.15-2.00	0.08-0.25		●		●																				
	WNMG060408-DF	0.8	0.15-2.00	0.1-0.3		●		●																				
	WNMG080404-DF	0.4	0.15-2.00	0.08-0.25		●		●																				
	WNMG080408-DF	0.8	0.15-2.00	0.1-0.3		●		○																				
	WNMG080412-DF	1.2	0.2-2.5	0.10-0.35		●		●																				
SF 	WNMG060404-SF	0.4	0.05-0.50	0.05-0.20																					●			
	WNMG060408-SF	0.8	0.05-0.50	0.05-0.35																					●			
	WNMG06T304-SF	0.4	0.05-0.50	0.05-0.20																					●			
	WNMG06T308-SF	0.8	0.05-0.50	0.05-0.35																					●			
	WNMG080404-SF	0.4	0.05-0.50	0.05-0.20																					●			
	WNMG080408-SF	0.8	0.05-0.50	0.05-0.35																					●			

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder			
DWLN/L	PWLN/L	MWLN/L	S***-PWLN/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

WN**	L	I.C	S	d
06 T3	6.5	9.525	3.97	3.81
06 04	6.5	9.525	4.76	3.81
08 04	8.7	12.7	4.76	5.16

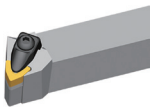
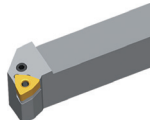
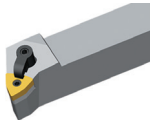

Turning inserts

WN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW									
					P	●	●	●	●	●							●	●	●	●											
					M					●	●					●	●	●	●	●	●	●									
					K								●	●	●	●															
					N												●	●							●	●					
					S														●	●	●	●	●			●	●				
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 WG Wiper	WNMG080408-WG	0.8	0.5-5.0	0.15-0.70				●		●																					
	WNMG080412-WG	1.2	0.8-6.0	0.20-0.75				●		○																					
 EF Finishing	WNMG060404-EF	0.4	0.1-1.5	0.05-0.30										○									●								
	WNMG060408-EF	0.8	0.1-1.5	0.1-0.4										○									●								
	WNMG06T308-EF	0.8	0.1-1.5	0.1-0.4																			●								
	WNMG080404-EF	0.4	0.1-1.5	0.05-0.30									●										●								
	WNMG080408-EF	0.8	0.1-1.5	0.1-0.4									●									○		●							
 NF Finishing	WNEG080404-NF	0.4	0.2-3.0	0.05-0.30																		○	●								
	WNEG080408-NF	0.8	0.2-2.5	0.05-0.30																			●								
 NF Finishing	WNMG060408-NF	0.8	0.2-2.5	0.05-0.30																			●								

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder			
DWLNRL/L	PWLNRL/L	MWLNRL/L	S***-PWLNRL/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

System code > A48

Grade selection > A42

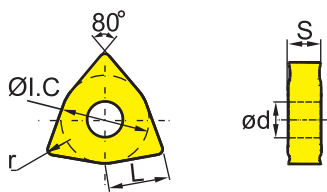


Technical info > A501

Cutting data > A366

Turning inserts

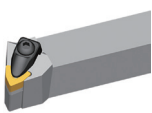
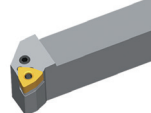
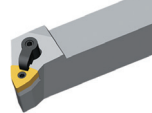

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

WNMG	L	I.C	S	d
06 04	6.5	9.525	4.76	3.81
08 04	8.7	12.7	4.76	5.16

WN** negative insert					HC ¹ (CVD)												HC ¹ (PVD)					HT	HC ²	HW							
					P	●	●	●	●	●									●	●	●										
					M								●	●						●	●	●	●	●	●	●					
					K									●	●	●	●														
					N													●	●										●	●	
					S																●	●	●	●	●	●				●	●
					H																										
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201			
XF 	WNMG060404-XF	0.4	0.5-2.0	0.1-0.25	●																										
	WNMG060408-XF	0.8	0.5-2.0	0.1-0.30	●																										
	WNMG080408-XF	0.8	0.5-2.5	0.1-0.30	●																										
	WNMG080412-XF	1.2	0.5-2.5	0.1-0.35	●																										
XM 	WNMG060404-XM	0.4	1-2.1	0.2-0.4	●			○																							
	WNMG060408-XM	0.8	1-2.1	0.2-0.4	●			●																							
	WNMG060412-XM	1.2	1-2.1	0.2-0.6	●			●																							
	WNMG080404-XM	0.4	1-2.8	0.2-0.4	●			●																							
	WNMG080408-XM	0.8	1-2.8	0.2-0.4	●			●																							
	WNMG080412-XM	1.2	1-2.8	0.2-0.6	●			●																							
	WNMG080416-XM	1.6	1-2.8	0.2-0.65	○			○																							

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder			
DWLNLR/L	PWLNLR/L	MWLNLR/L	S***-PWLNLR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

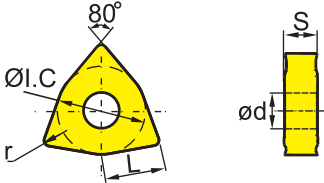



A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

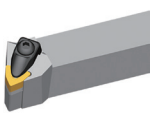
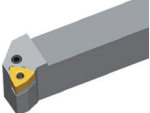
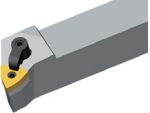

WNMG	L	I.C	S	d
06 T3	6.5	9.525	3.97	3.81
06 04	6.5	9.525	4.76	3.81
08 04	8.7	12.7	4.76	5.16

WN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW							
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Medium Cut	WNMG060408-DM	0.8	0.5-3.0	0.15-0.50			●		●																			
	WNMG060412-DM	1.2	0.8-3.0	0.18-0.60	○		●		●																			
	WNMG06T308-DM	0.8	0.5-3.0	0.15-0.15						○																		
	WNMG080404-DM	0.4	0.5-4.0	0.1-0.4			●		●																			
	WNMG080408-DM	0.8	0.5-4.0	0.15-0.50	○		●		●	●		●																
	WNMG080412-DM	1.2	0.8-4.0	0.18-0.60	○		●		●																			
	WNMG080416-DM	1.6	1-4	0.23-0.65			●		●																			
 Medium Cut	WNMG080408-EG	0.8	0.5-4.0	0.05-0.40							○	●								●	●							
	WNMG080412-EG	1.2	0.5-4.0	0.05-0.60							○	●								●	●							
 Medium Cut	WNMG060404-EM	0.4	0.5-3.0	0.05-0.30							○	●								●								
	WNMG060408-EM	0.8	0.5-3.0	0.1-0.5							●	●								●								
	WNMG06T304-EM	0.4	0.5-3.0	0.05-0.30							●																	
	WNMG06T308-EM	0.8	0.5-3.0	0.1-0.5							●																	
	WNMG06T312-EM	1.2	0.5-3.0	0.1-0.7							○									○								
	WNMG080404-EM	0.4	1-4	0.05-0.30							●	●								●								
	WNMG080408-EM	0.8	1-4	0.1-0.5							●	●								●								
	WNMG080412-EM	1.2	1-4	0.1-0.7							●	●								●								

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Technical Information

Tool holder			
DWLNRL/L	PWLNRL/L	MWLNRL/L	S***-PWLNRL/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

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System code > A48

Grade selection > A42

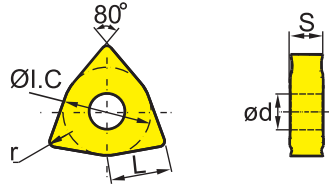






























































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

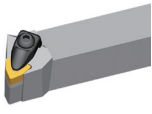
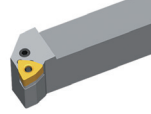


WNMG	L	I.C	S	d
06 04	6.5	9.525	4.76	3.81
08 04	8.7	12.7	4.76	5.16

WN** negative insert					HC' (CVD)										HC' (PVD)				HT	HC ²	HW							
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>PM</div>  <div>Medium Cut</div>	WNMG060408-PM	0.8	0.5-3.0	0.15-0.50																								
	WNMG060412-PM	1.2	0.8-3.0	0.18-0.60																								
	WNMG080404-PM	0.4	0.4-4.0	0.12-0.40																								
	WNMG080408-PM	0.8	0.5-4.0	0.15-0.50																								
	WNMG080412-PM	1.2	0.8-4.0	0.18-0.60																								
	WNMG080416-PM	1.6	1-4	0.23-0.65																								
<div>ZM</div>  <div>Medium Cut</div>	WNMG080408-ZM	0.8	0.5-4.0	0.1-0.5																								
	WNMG080412-ZM	1.2	1.0-5.5	0.15-0.60																								
<div>SNR</div>  <div>Roughing</div>	WNMG080408-SNR	0.8	1-3	0.1-0.5																								
	WNMG080412-SNR	1.2	1-3	0.2-0.6																								

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder			
DWLNLR/L	PWLNLR/L	MWLNLR/L	S***-PWLNLR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

WNMG	L	I.C	S	d
08 04	8.7	12.7	4.76	5.16

WN** negative insert		HC ¹ (CVD)	HC ¹ (PVD)	HT	HC ²	HW
	P	●●●●●●●●	●●●●●●●●	●●●●●●●●		
	M		●●●●●●●●	●●●●●●●●		
	K		●●●●●●●●			
	N		●●●●●●●●		●●●●●●●●	
	S		●●●●●●●●			●●●●●●●●
	H					

B

Milling

	ISO	r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
	NM																											
	WNMG080404-NM	0.4	0.2-3.0	0.05-0.30															●									
	WNMG080408-NM	0.8	0.2-3.0	0.1-0.3															●	●	○							
	TC																											
	WNMG080404-TC	0.4	0.5-3.0	0.08-0.25										●		○												
	WNMG080408-TC	0.8	0.5-4.0	0.15-0.40										●		●												
	TK																											
	WNMG080408-TK	0.8	0.2-0.4	0.2-0.4										●														
	WNMG080412-TK	1.2	0.2-0.4	0.2-0.45										○														
	WNMG080416-TK	1.6	0.2-0.4	0.2-0.5										○														

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder			
DWLNRL/L	PWLNRL/L	MWLNRL/L	S***-PWLNRL/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
A236	A251	A266	A332

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System code > A48

Grade selection > A42

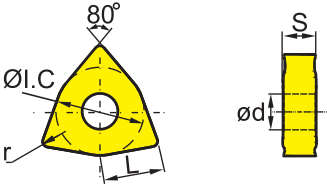








































































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

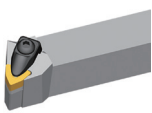
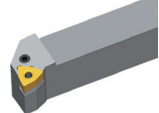
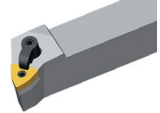

WN**	L	I.C	S	d
06 T3	6.5	9.525	3.97	3.81
06 04	6.5	9.525	4.76	3.81
08 04	8.7	12.7	4.76	5.16

WN** negative insert					HC ¹ (CVD)								HC ¹ (PVD)					HT	HC ²	HW								
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>DR</div>  <div>Roughing</div>	WNMG060408-DR	0.8	0.7-3.5	0.20-0.45																								
	WNMG060412-DR	1.2	0.8-3.5	0.25-0.55																								
	WNMG080408-DR	0.8	0.7-5.0	0.20-0.55																								
	WNMG080412-DR	1.2	1-5	0.25-0.70																								
	WNMG080416-DR	1.6	1.5-5.0	0.32-0.75																								
<div>Flat</div> 	WNMA060408	0.8	0.5-3.0	0.1-0.3																								
	WNMA060412	1.2	0.5-3.0	0.15-0.30																								
	WNMA06T308	0.8	0.5-3.0	0.1-0.3																								
	WNMA080404	0.4	0.5-4.0	0.08-0.25																								
	WNMA080408	0.8	0.5-4.0	0.15-0.30																								
	WNMA080412	1.2	0.5-5.0	0.15-0.30																								
	WNMA080416	1.6	0.5-5.0	0.2-0.5																								

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder			
DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

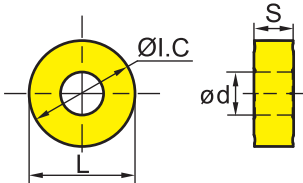
A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

RNMG	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16

RN** negative insert			HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW								
			P	●	●	●	●	●					●	●		●	●											
			M						●	●			●	●	●	●	●	●	●									
			K								●	●	●	●														
			N										●	●						●	●							
			S												●	●	●	●	●		●	●						
			H																									
ISO			a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	RNMG120400	0.5-7.0	0.1-1.8												○	○												
Medium Cut																												

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

Technical Information

E

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Tool holder	
MRDNN	MRGNN/L
A267	A268




System code > A48

Grade selection > A42

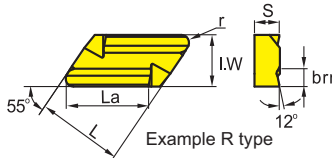





































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

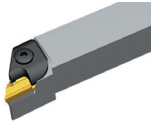
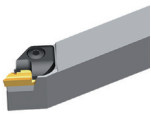
KNUX	L	I.W	S
16 04		9.525	4.76

KN** negative insert							HC ¹ (CVD)								HC ¹ (PVD)				HT	HC ²	HW									
							P																							
							M																							
							K																							
							N																							
							S																							
							H																							
ISO		La	brn	r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Finishing	KNUX160405L11	16	2.2	0.5	0.2-6.0	0.05-0.70						●																		○
	KNUX160405L12	16	2.2	0.5	0.2-6.0	0.05-0.70																								
	KNUX160405R11	16	2.2	0.5	0.2-6.0	0.05-0.70						●																		○
	KNUX160405R12	16	2.2	0.5	0.2-6.0	0.05-0.70																								
	KNUX160410L11	16	2.2	1	0.2-6.0	0.05-0.70																								
	KNUX160410L12	16	2.2	1	0.2-6.0	0.05-0.70			○																					
	KNUX160410R11	16	2.2	1	0.2-6.0	0.05-0.70						●																		
	KNUX160410R12	16	2.2	1	0.2-6.0	0.05-0.70																								

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder	
CKJNR/L	CKNNR/L
Kr: 93°	Kr: 63°
	
A290	A291




A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CN**	L	I.C	S	d
19 07	19.3	19.05	7.94	7.93
19 11	19.3	19.05	11	7.8

CN** negative insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW									
					P	●	●	●	●	●							●	●	●	●											
					M						●	●					●	●	●	●	●	●	●								
					K								●	●	●	●															
					N												●	●								●	●				
					S														●	●	●	●	●			●	●				
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>RF</div> 	CNMG191140-RF	4	1.0-5.5	0.20-0.60						●																					
<div>RF</div> 	CNMM190740-RF	4	1.0-5.5	0.20-0.60						●																					
	CNMM191140-RF	4	1.0-5.5	0.20-0.60						●																					
<div>RH</div> 	CNMM190740-RH	4	1.5-7.0	0.35-1.20						●	●																				
	CNMM191140-RH	4	1.5-7.0	0.35-1.20						●	●																				
Roughing																															

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder

PCLNR/L

Kr: 95°



A318

E

Index

System code > A48

Grade selection > A42

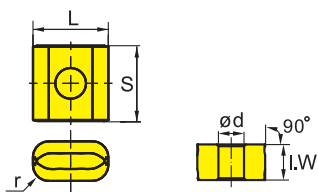


Technical info > A501

Cutting data > A366

Turning inserts



- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

LNUX	L	I.C	S	d
19 19	19.05	10	19.05	6.35
30 19	30	10	19.05	6.35

LN** negative insert				HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW							
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>RF</div>  <div>Heavy Turning</div>	LNUX191940-RF	4	1,0-5,5	0,20-0,60			●		●																			
	LNUX301940-RF	4	1,0-6,0	0,20-0,70			●		○																			
<div>RH</div>  <div>Heavy Turning</div>	LNUX191940-RH	4	1,5-7,0	0,35-1,20			●		●																			
	LNUX301940-RH	4	1,5-8,0	0,35-1,40			●		●																			

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder	
PLANR/L	PLFNR/L
Kr: 90°	Kr: 90°
	
A316	A317

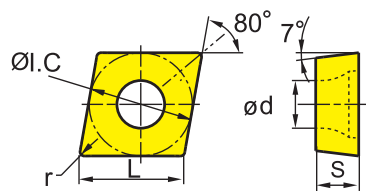



A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CCGT	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4

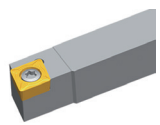
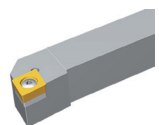
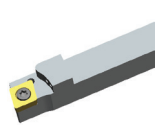
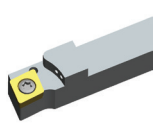

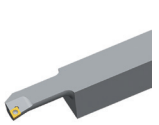
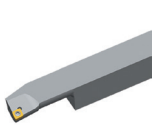
CC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)			HT	HC ²	HW											
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>SF</div> 	CCGT060202-SF	0.2	0.05-2.00	0.05-0.18																							●	●			
	CCGT060204-SF	0.4	0.05-2.00	0.05-0.35																							●	●	●		
	CCGT09T304-SF	0.4	0.05-2.00	0.05-0.35																							●	●	●		
	Finishing																														
<div>USF</div> 	CCGT060202L-USF	0.2	0.05-2.00	0.05-0.18																			○								
	CCGT060204L-USF	0.4	0.05-2.00	0.05-0.35																			○								
	CCGT09T301L-USF	0.1	0.2-2.0	0.01-0.08																					●						
	CCGT09T302L-USF	0.2	0.2-2.0	0.05-0.18																				●							
	CCGT09T304L-USF	0.4	0.2-2.0	0.05-0.20																				○							
<div>USF</div> 	CCGT09T304R-USF	0.4	0.2-2.0	0.05-0.20																			○								
Finishing																															

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	S***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L

Kr: 95°



A355

E

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System code > A48

Grade selection > A42

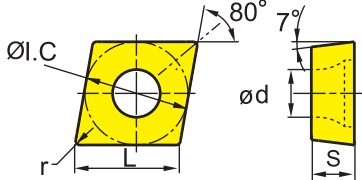































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

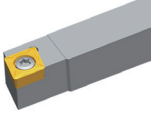
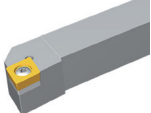
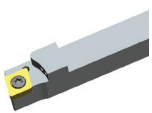
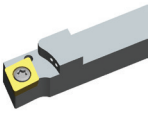



CCMT	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

CC** positive insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW								
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 AHF Finishing	CCMT060204-AHF	0.4	0.2-2.5	0.05-0.20	●																●		●		●			
	CCMT060208-AHF	0.8	0.3-2.5	0.05-0.30	○																	●						
	CCMT09T302-AHF	0.2	0.08-2.00	0.04-0.15																							●	
	CCMT09T304-AHF	0.4	0.2-3.0	0.05-0.30	●																○	●	○		●			
	CCMT09T308-AHF	0.8	0.3-3.0	0.05-0.40	●																○	●			●			
	CCMT120404-AHF	0.4	0.5-4.0	0.05-0.30	○																○	●						
	CCMT120408-AHF	0.8	0.8-4.0	0.08-0.40	●																	●						
 HF Finishing	CCMT060202-HF	0.2	0.06-1.70	0.03-0.11		●		●																				
	CCMT060204-HF	0.4	0.1-1.7	0.05-0.17		●		●								○												
	CCMT060208-HF	0.8	0.1-1.7	0.05-0.30		○		●																		●		
	CCMT09T302-HF	0.2	0.08-2.00	0.04-0.15		●		●																	○			
	CCMT09T304-HF	0.4	0.11-2.00	0.06-0.23		●		●						○	●													
	CCMT09T308-HF	0.8	0.15-2.00	0.08-0.30		●		●						○	●													
	CCMT120404-HF	0.4	0.14-2.40	0.07-0.27		●		●																				
	CCMT120408-HF	0.8	0.2-3.0	0.08-0.30		●		○																				

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°



System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

B

Milling

C

Drilling

D

Technical Information

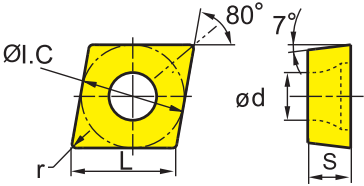


E

Index

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CCMT	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

Turning inserts

CC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW							
					P	●	●	●	●	●							●	●	●	●								
					M						●	●					●	●	●	●	●	●	●					
					K								●	●	●	●												
					N												●	●								●	●	
					S														●	●	●	●	●			●	●	
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>EF</div> <div></div> <div>Finishing</div>	CCMT060202-EF	0.2	0.06-1.70	0.03-0.11							●								●									
	CCMT060204-EF	0.4	0.1-1.7	0.05-0.17							●								●									
	CCMT09T302-EF	0.2	0.08-2.00	0.04-0.15							○								●									
	CCMT09T304-EF	0.4	0.11-2.00	0.06-0.23							●								○	●								
	CCMT09T308-EF	0.8	0.15-2.00	0.08-0.30							●								○	●								
	CCMT120404-EF	0.4	0.14-2.40	0.07-0.27							●								●									
	CCMT120408-EF	0.8	0.2-3.0	0.1-0.3							●								●									
<div>XF</div> <div></div> <div>Finishing</div>	CCMT060202-XF	0.2	0.5-1.5	0.08-0.15				●																				
	CCMT060208-XF	0.8	0.5-1.5	0.08-0.20	●																							
	CCMT09T302-XF	0.2	0.5-2.0	0.08-0.15	●		●																					
	CCMT09T308-XF	0.8	0.5-2.0	0.08-0.25	●		○																					

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°






System code > A48

Grade selection > A42

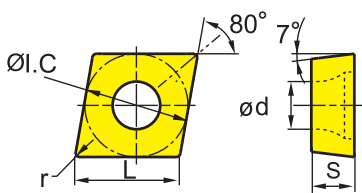



































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

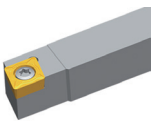
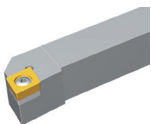
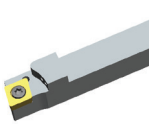
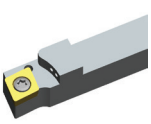
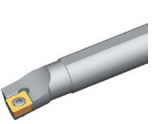
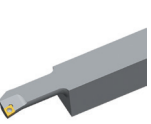
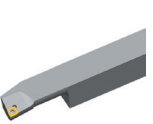
CCMT	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

CC** positive insert				HC ¹ (CVD)												HC ¹ (PVD)				HT	HC ²	HW						
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>EM</div>  <div>Medium Cut</div>	CCMT060204-EM	0.4	0.2-2.4	0.06-0.17							●	●								●								
	CCMT060208-EM	0.8	0.4-2.4	0.08-0.23							●	○								●								
	CCMT09T304-EM	0.4	0.25-3.00	0.08-0.23							●	●								●								
	CCMT09T308-EM	0.8	0.5-3.0	0.1-0.3							●	●								●								
	CCMT120404-EM	0.4	0.3-3.6	0.09-0.27								●								●								
	CCMT120408-EM	0.8	0.6-3.6	0.12-0.36							●	●								●								
	CCMT120412-EM	1.2	0.72-3.60	0.14-0.43									○															
<div>XM</div>  <div>Medium Cut</div>	CCMT09T304-XM	0.4	1-2.5	0.15-0.3	●		○																					
	CCMT09T308-XM	0.8	1-2.5	0.15-0.35	●		●																					
	CCMT09T312-XM	1.2	1-2.5	0.15-0.4	●		●																					
	CCMT120404-XM	0.4	1-3.0	0.15-0.3	○		○																					
	CCMT120408-XM	0.8	1-3.0	0.15-0.35	○		○																					
	CCMT120412-XM	1.2	1-3.0	0.15-0.4	○		○																					

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°



System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

B

Milling

C

Drilling

D

Technical Information

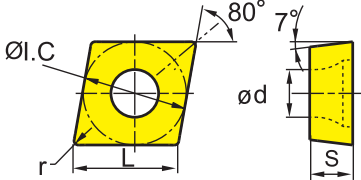

E

Index

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CCMT	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

CC** positive insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
				P	●	●	●	●	●					●	●		●	●												
				M						●	●			●	●	●	●	●	●	●										
				K								●	●	●	●															
				N										●	●					●	●									
				S										●	●	●	●	●		●	●									
				H																										
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Medium Cut	CCMT060204-HM	0.4	0.2-2.4	0.06-0.17		●	●		●	●																				
	CCMT060208-HM	0.8	0.2-3.0	0.08-0.20		●	●			●																				
	CCMT09T304-HM	0.4	0.25-3.00	0.08-0.23		●	●			●	●																			
	CCMT09T308-HM	0.8	0.5-3.0	0.1-0.3		●	●			●	●																			
	CCMT120404-HM	0.4	0.3-3.6	0.09-0.27		●	●					○																		
	CCMT120408-HM	0.8	0.6-3.6	0.12-0.36		●	●					●																		
	CCMT120412-HM	1.2	0.72-3.60	0.14-0.43		●	○						○																	

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353
E***-SCLCR/L						
Kr: 95°						
						
A355						




System code > A48

Grade selection > A42

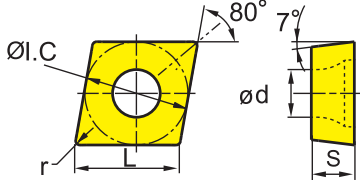































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

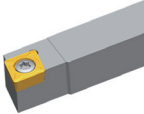
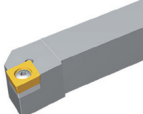
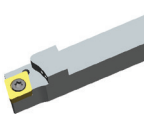
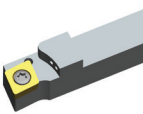




CC**	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

CC** positive insert				HC ¹ (CVD)								HC ¹ (PVD)				HT	HC ²	HW										
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>Basic</div> 	CCMW09T304	0.4	0.1-5.0	0.05-0.50																								○
	CCMW120404	0.4	0.2-5.0	0.05-0.50																							○	○
	CCMW120408	0.8	0.5-5.0	0.08-0.50												○												○
Medium Cut																												
<div>TC</div> 	CCMT060204-TC	0.4	0.5-3.0	0.1-0.3										○		●												
	CCMT09T304-TC	0.4	0.5-3.0	0.1-0.3										○		●												
	CCMT09T308-TC	0.8	0.5-3.0	0.1-0.4										●		●												
	CCMT120404-TC	0.4	1-4	0.1-0.3										●		●												
	CCMT120408-TC	0.8	1-4	0.1-0.4										●		●												
Medium Cut																												
<div>HR</div> 	CCMT060204-HR	0.4	0.5-3.0	0.05-0.24		●	●																					
	CCMT060208-HR	0.8	0.8-3.2	0.09-0.26		●	○								●													
	CCMT09T304-HR	0.4	0.2-4.0	0.05-0.30		●	●								●													
	CCMT09T308-HR	0.8	1-4	0.12-0.35		●	●							●		●												
	CCMT120408-HR	0.8	1.2-4.8	0.14-0.42		●	●							●		●												
	CCMT120412-HR	1.2	1.44-4.80	0.17-0.50		●	●							○														
Roughing																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353
E***-SCLCR/L						
Kr: 95°						
						
A355						

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366



A

Turning

B

Milling

C

Drilling

D

Technical Information

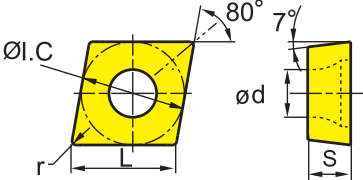


E

Index

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CCGX	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

CC** positive insert				HC ¹ (CVD)												HC ¹ (PVD)			HT	HC ²	HW											
				P																												
				M																												
				K																												
				N																												
				S																												
				H																												
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201				
 LC Alum Machining	CCGX060202-LC	0.2	0.3-3.0	0.05-0.15													●										●					
	CCGX060204-LC	0.4	0.5-3.0	0.1-0.3														●									●					
	CCGX09T302-LC	0.2	0.5-4.0	0.1-0.2														●									●					
	CCGX09T304-LC	0.4	0.5-5.0	0.1-0.3														●									●					
	CCGX09T308-LC	0.8	0.5-5.0	0.15-0.60														●									●					
	CCGX120404-LC	0.4	0.5-7.0	0.1-0.3														●									●					
	CCGX120408-LC	0.8	0.5-7.0	0.15-0.60														●									●					
 LH Alum Machining	CCGX060202-LH	0.2	0.3-3.0	0.05-0.15													●										●					
	CCGX060204-LH	0.4	0.5-3.0	0.1-0.3														●									●					
	CCGX060208-LH	0.8	0.6-3.0	0.15-0.40														●									●					
	CCGX09T302-LH	0.2	0.4-5.0	0.05-0.15														●									●					
	CCGX09T304-LH	0.4	0.5-5.0	0.1-0.3														●									●					
	CCGX09T308-LH	0.8	0.5-5.0	0.15-0.60														●									●					
	CCGX120402-LH	0.2	0.4-7.0	0.05-0.15														○									○					
	CCGX120404-LH	0.4	0.5-7.0	0.1-0.3														●									●					
	CCGX120408-LH	0.8	0.5-7.0	0.15-0.60														●									●					
	CCGX120412-LH	1.2	0.5-7.0	0.15-0.80														○									●					

● Ex stock ○ On demand

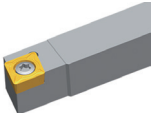
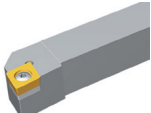
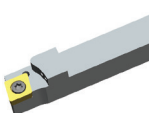
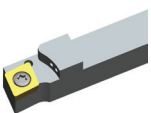



HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E*-SCLCR/L**
Kr: 95°



A355

A

Turning

B

Milling

C

Drilling

D

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System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

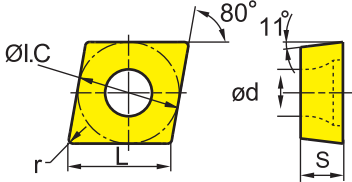




A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CP**	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4

CP** positive insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW									
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201			
HF	CPMT060204-HF	0.4	0.1-1.5	0.04-0.18			○								○					○											
	CPMT060208-HF	0.8	0.1-1.5	0.05-0.25																○											
 Finishing																															
SF	CPGT060202-SF	0.2	0.05-2.00	0.05-0.25																				○	○						
	CPGT060204-SF	0.4	0.05-2.00	0.05-0.35																				●	●						
	CPGT09T304-SF	0.4	0.05-2.00	0.05-0.35																					●	●					
 Finishing																															
Flat	CPGW060204	0.4	0.5-1.5	0.05-0.40																							○				
 Medium Cut																															
HM	CPMT09T304-HM	0.4	0.2-3.5	0.05-0.35																●											
	CPMT09T308-HM	0.8	0.2-3.5	0.10-0.55						○																					
 Medium Cut																															

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

Technical Information

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Tool holder	
S***-SCLPR/L	C***-SCLPR/L
Kr: 95°	Kr: 95°
A348	A354




System code > A48

Grade selection > A42

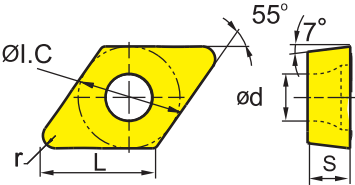





























Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

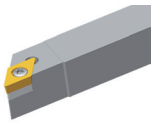
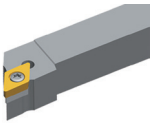
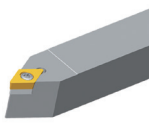
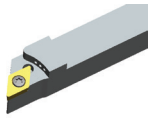
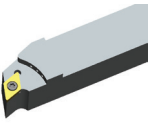
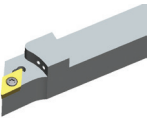
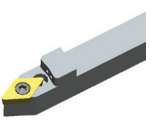
DC**	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

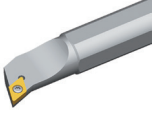

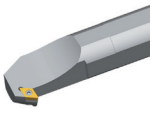

DC** positive insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW								
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 AHF	DCMT070204-AHF	0.4	0.2-2.5	0.05-0.20	○															○	●			●				
	DCMT11T302-AHF	0.2	0.5-3.0	0.05-0.15	○																●	●			●	●		
	DCMT11T304-AHF	0.4	0.5-3.0	0.05-0.30	●																●	●			●			
	DCMT11T308-AHF	0.8	0.5-3.0	0.05-0.40	●																	●			●	●		
Finishing																												
 SF	DCGT070202-SF	0.2	0.05-1.50	0.05-0.15																				●	●	○		
	DCGT070204-SF	0.4	0.05-1.50	0.05-0.20																					○	●		
	DCGT070208-SF	0.8	0.05-1.50	0.05-0.30																						●		
	DCGT11T302-SF	0.2	0.05-2.00	0.05-0.15														○							○	●	●	
	DCGT11T304-SF	0.4	0.05-2.00	0.05-0.20																					●	●	●	
	DCGT11T308-SF	0.8	0.05-2.00	0.05-0.30																					●	●		
Finishing																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

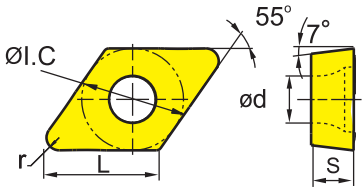



A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DCMT	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW										
					P																											
					M																											
					K																											
					N																											
					S																											
					H																											
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201				
 EF Finishing	DCMT070202-EF	0.2	0.06-1.50	0.03-0.11							○									○												
	DCMT070204-EF	0.4	0.08-1.50	0.05-0.17							●									●												
	DCMT11T302-EF	0.2	0.08-2.00	0.04-0.15							○									●												
	DCMT11T304-EF	0.4	0.11-2.00	0.06-0.23							●									●												
	DCMT11T308-EF	0.8	0.15-2.00	0.08-0.30							●									●	●											
 HF Finishing	DCMT070202-HF	0.2	0.06-1.50	0.03-0.11			○		●																							
	DCMT070204-HF	0.4	0.08-1.50	0.05-0.17			●		●																							
	DCMT070208-HF	0.8	0.08-1.50	0.05-0.30			●		○																							
	DCMT11T302-HF	0.2	0.08-2.00	0.04-0.15			○		●											○												
	DCMT11T304-HF	0.4	0.11-2.00	0.06-0.23			●		●					○		●																
DCMT11T308-HF	0.8	0.15-2.00	0.08-0.30			●		●					●																			
 XF Finishing	DCMT070202-XF	0.2	0.5-1.5	0.08-0.15				○																								
	DCMT070204-XF	0.4	0.5-1.5	0.08-0.15	○																											
	DCMT070208-XF	0.8	0.5-1.5	0.08-0.25	○																											
	DCMT11T304-XF	0.4	0.5-2.0	0.08-0.15	○																											
	DCMT11T308-XF	0.8	0.5-2.0	0.08-0.25	○																											

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
A336	A337	A338	A357

E

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System code > A48

Grade selection > A42

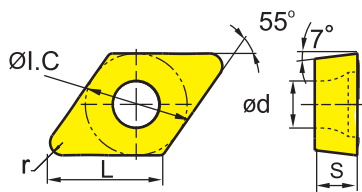






























Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

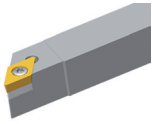
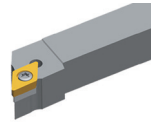
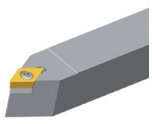
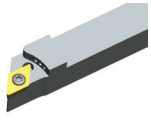
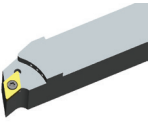
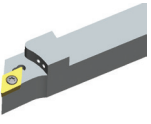
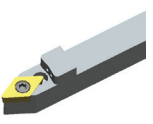
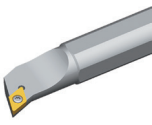

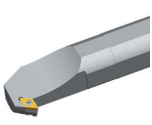

DCMT	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** positive insert				HC ¹ (CVD)										HC ¹ (PVD)		HT	HC ²	HW										
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EM  Medium Cut	DCMT070204-EM	0.4	0.19-2.25	0.06-0.17							●	●								●								
	DCMT070208-EM	0.8	0.38-2.25	0.08-0.23							●	○								●								
	DCMT11T304-EM	0.4	0.25-3.00	0.08-0.23							●	●								●								
	DCMT11T308-EM	0.8	0.5-3.0	0.1-0.3							●	●								●								
XM  Medium Cut	DCMT11T304-XM	0.4	1-2.5	0.15-0.3	●		○																					
	DCMT11T308-XM	0.8	1-2.5	0.15-0.35	●		●																					
	DCMT11T312-XM	1.2	1-2.5	0.15-0.4	●		●																					

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311
S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L			
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'			
						
A336	A337	A338	A357			

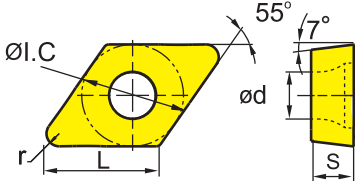

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DCMT	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW												
					P																												
					M																												
					K																												
					N																												
					S																												
					H																												
ISO					r	a _p	f		YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
 Medium Cut	HM	DCMT070204-HM	0.4	0.19-2.25	0.06-0.17																												
		DCMT070208-HM	0.8	0.38-2.25	0.08-0.23																												
		DCMT11T304-HM	0.4	0.25-3.00	0.08-0.23																												
		DCMT11T308-HM	0.8	0.5-3.0	0.1-0.3																												
		DCMT11T312-HM	1.2	0.6-3.0	0.12-0.36																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

Technical Information

E

Index

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
A336	A337	A338	A357

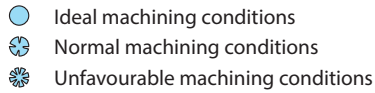
System code > A48

Grade selection > A42

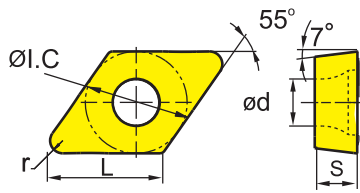
Technical info > A501

Cutting data > A366

Turning inserts



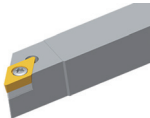
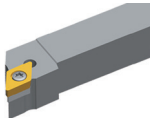
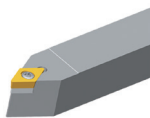
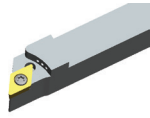
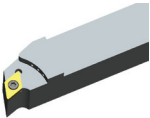
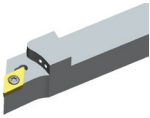
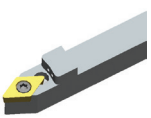
DC**	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

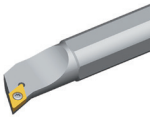

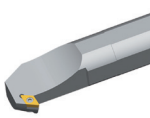

[illegible]

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC ¹	Coated carbide
HT	Uncoated cermet
HC ²	Coated cermet
HW	Uncoated carbide

Tool holder						
SDACR/L Kr: 90°	SDJCR/L Kr: 93°	SDNCN Kr: 62°30'	SDACR/L-SC Kr: 90°	SDHCR/L-SC Kr: 107°30'	SDJCR/L-SC Kr: 93°	SDNCN-SC Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L Kr: 107°30'	A***-SDUCR/L Kr: 93°	S***-SDZCR/L Kr: 85°	E***-SDQCR/L Kr: 107°30'
			
A336	A337	A338	A357

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DCGX	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** positive insert				HC ¹ (CVD)					HC ¹ (PVD)	HT	HC ²	HW
				P	●	●	●	●	●	●	●	
				M					●	●	●	
				K					●	●	●	
				N					●	●	●	
				S					●	●	●	
				H								

B

Milling

ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
LH Alum Machining	DCGX070202-LH	0.2	0.3-4.0	0.05-0.15													●										●	
	DCGX070204-LH	0.4	0.5-4.0	0.1-0.3													●										●	
	DCGX070208-LH	0.8	0.5-4.0	0.15-0.60													○										●	
	DCGX11T302-LH	0.2	0.3-5.5	0.05-0.15													●										●	
	DCGX11T304-LH	0.4	0.5-5.5	0.1-0.3													●										●	
	DCGX11T308-LH	0.8	0.5-5.5	0.15-0.60													●										●	

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

C

Drilling

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
A271	A272	A273	A308	A309	A310	A311

D

Technical Information

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
A336	A337	A338	A357

E

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System code > A48

Grade selection > A42

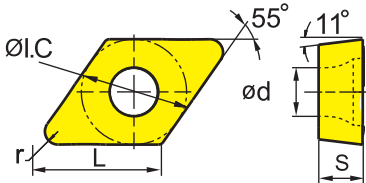
Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DPGT	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DP** positive insert					HC' (CVD)										HC' (PVD)				HT	HC ²	HW							
					P	●	●	●	●	●					●	●		●	●	●								
					M						●	●			●	●	●	●	●	●	●	●						
					K								●	●	●	●												
					N											●	●						●	●				
					S												●	●	●	●	●	●		●	●			
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
SF	DPGT070202-SF	0.2	0.05-2.00	0.05-0.15																			○	●				
	DPGT070204-SF	0.4	0.05-2.00	0.05-0.30																				●	●			
	DPGT11T304-SF	0.4	0.05-2.00	0.1-0.3																				●	●			
	DPGT11T308-SF	0.8	0.05-2.00	0.1-0.4																				○	○			
Finishing																												

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder		
S***-SDQPR/L	S***-SDUPR/L	C***-SDQPR/L
Kr: 107°30'	Kr: 93°	Kr: 107°30'
A349	A350	A356

A

Turning

B

Milling

C

Drilling

D

Technical Information

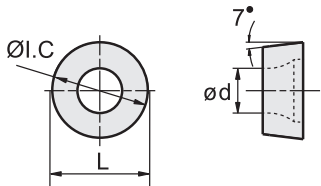




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RC**	L	I.C	S	d
08 03	8	8	3.18	3.36
10 T3	10	10	3.97	3.6
12 04	12	12	4.76	44.4
16 06	16	16	6.35	5.5
20 06	20	20	6.35	6.5
25 07	25	25	7.94	7.7

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Turning inserts

RC** positive insert			HC ¹ (CVD)										HC ¹ (PVD)			HT	HC ²	HW									
			P																								
			M																								
			K																								
			N																								
			S																								
			H																								
ISO		a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Basic	RCMT0803MO	0.5-3.0	0.1-0.4					●				●															
	RCMT10T3MO	0.5-4.0	0.1-0.5					○				●															
	RCMT1204MO	0.8-5.0	0.1-0.6			○		●				●	●		●												
 Medium Cut	RCMT1606MO	1-6	0.1-0.8			●		●			○	●															
	RCMT2006MO	1.2-8.0	0.1-1.0			○		●																			
	RCMT2507MO	1.4-10.0	0.1-1.2			○		○																			
 LH	RCGX0803MO-LH	1-4	0.2-0.5																							●	
	RCGX1204MO-LH	1.2-5.0	0.2-0.6																							●	
 Alum Machining																											

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder	
SRDCN	SRGCR/L
A288	A289

System code > A48

Grade selection > A42

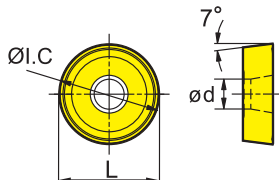



Technical info > A501

Cutting data > A366

RCMX	L	I.C	S	d
08 03	8	8	3.18	3.36
10 03	10	10	3.18	4.4
12 04	12	12	4.76	4.4
16 06	16	16	6.35	5.5
20 06	20	20	6.35	6.5
25 07	25	25	7.94	7.2
32 09	32	32	9.52	10.2

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

RC** positive insert				HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
				P	●	●	●	●	●	●						●	●	●									
				M						●	●				●	●	●	●	●	●							
				K							●	●	●	●													
				N											●	●						●	●				
				S													●	●	●	●	●			●	●		
				H																							
ISO		a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Light Roughing	RCMX0803MO	0.5-4.0	0.1-0.5					●																			
	RCMX1003MO	0.5-5.0	0.1-0.6					●																			
	RCMX1204MO	1-6	0.1-0.8			○		●																			
	RCMX1606MO	1-7	0.2-0.9			○		●			○									○							
	RCMX2006MO	1-9	0.2-1.0			●		●						●													
	RCMX2507MO	2-10	0.25-1.20					●																			
	RCMX3209MO	2-13	0.25-1.40			○		●																			
Basic	RCMX2507MO-1	2-9	0.1-0.4			○																					
 Light Roughing																											
Basic	RCMX3209MO-PV	3-12	0.1-0.4			○		●																			
 Light Roughing																											

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

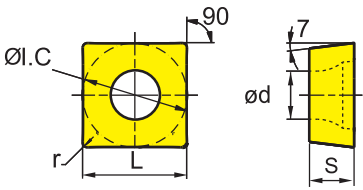
A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SCMT	L	I.C	S	d
09 T3	9.525	9.525	3.97	4.4
12 04	12.7	12.7	4.76	5.56

SC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
	ISO	r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
AHF	SCMT09T304-AHF	0.4	0.5-3.0	0.05-0.30	●																●			○				
	SCMT09T308-AHF	0.8	0.5-3.0	0.05-0.40	●																●			●				
Finishing																												
EF	SCMT09T302-EF	0.2	0.07-2.00	0.05-0.15																●								
	SCMT09T304-EF	0.4	0.11-2.00	0.06-0.23																●								
	SCMT09T308-EF	0.8	0.15-2.00	0.08-0.30																●								
Finishing																												
EM	SCMT09T304-EM	0.4	0.25-3.00	0.08-0.23							○	○								●								
	SCMT09T308-EM	0.8	0.5-3.0	0.1-0.3							●	●								●								
	SCMT120404-EM	0.4	0.3-3.6	0.09-0.27							○	○								●								
	SCMT120408-EM	0.8	0.6-3.6	0.12-0.36							○	○								●								
	SCMT120412-EM	1.2	0.72-3.60	0.14-0.43									○							●								
XF	SCMT09T304-XF	0.4	0.5-2.0	0.08-0.25	●																							
	SCMT09T308-XF	0.8	0.5-2.0	0.08-0.30	●		○																					
Finishing																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

Tool holder				
SSBCR/L	SSDCN	SSKCR/L	SSSCR/L	S***-SSKCR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°
A279	A280	A281	A282	A339

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System code > A48

Grade selection > A42

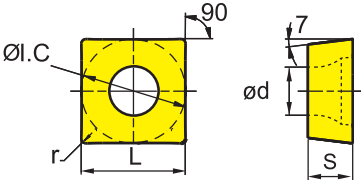



Technical info > A501

Cutting data > A366

Turning inserts

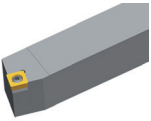
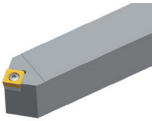
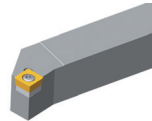
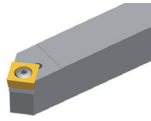

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SCMT	L	I.C	S	d
09 T3	9.525	9.525	3.97	4.4
12 04	12.7	12.7	4.76	5.56

SC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Finishing	SCMT09T302-HF	0.2	0.15-2.00	0.05-0.15																								
	SCMT09T304-HF	0.4	0.11-2.00	0.05-0.23																								
	SCMT09T308-HF	0.8	0.15-2.00	0.05-0.30																								
 Medium Cut	SCMT09T304-HM	0.4	0.25-3.00	0.08-0.23																								
	SCMT09T308-HM	0.8	0.5-3.0	0.1-0.3																								
	SCMT120404-HM	0.4	0.3-3.6	0.09-0.27																								
	SCMT120408-HM	0.8	0.6-3.6	0.12-0.36																								
	SCMT120412-HM	1.2	0.72-3.60	0.14-0.43																								
 Medium Cut	SCMT09T304-XM	0.4	1-2.5	0.15-0.3																								
	SCMT09T308-XM	0.8	1-2.5	0.15-0.35																								
	SCMT09T312-XM	1.2	1-2.5	0.15-0.4																								
	SCMT120408-XM	0.8	1-3.0	0.15-0.35																								
	SCMT120412-XM	1.2	1-3.0	0.15-0.4																								

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder				
SSBCR/L	SSDCN	SSKCR/L	SSSCR/L	S***-SSKCR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°
				
A279	A280	A281	A282	A339

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366



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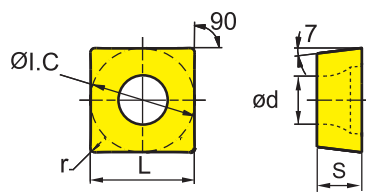


A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SC**	L	I.C	S	d
09 T3	9.525	9.525	3.97	4.4
12 04	12.7	12.7	4.76	5.55.56

SC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
					P	●	●	●	●	●						●	●	●	●												
					M						●	●			●	●	●	●	●	●	●										
					K								●	●	●	●															
					N											●	●						●	●							
					S											●	●	●	●	●			●	●							
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 HR Roughing	SCMT09T304-HR	0.4	0.2-4.0	0.05-0.40						○		●							○												
	SCMT09T308-HR	0.8	1-4	0.12-0.35						●		●					●		●												
	SCMT09T312-HR	1.2	1.2-4.0	0.14-0.42									○																		
	SCMT120404-HR	0.4	0.5-4.0	0.05-0.50						○		○																			
	SCMT120408-HR	0.8	1.2-4.8	0.14-0.42							●		●				●		●												
	SCMT120412-HR	1.2	1.44-4.80	0.17-0.50							●		●				●		○												
 LC Alum Machining	SCGX09T304-LC	0.4	0.5-5.0	0.1-0.5																											●
	SCGX09T308-LC	0.8	0.5-5.0	0.15-0.60																											●
	SCGX120408-LC	0.8	1-7	0.15-0.60																	●										●

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

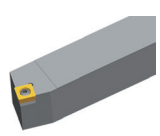
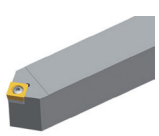
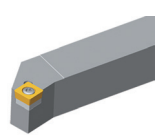
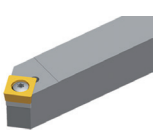

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

Tool holder				
SSBCR/L	SSDCN	SSKCR/L	SSSCR/L	S***-SSKCR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°
				
A279	A280	A281	A282	A339

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System code > A48

Grade selection > A42

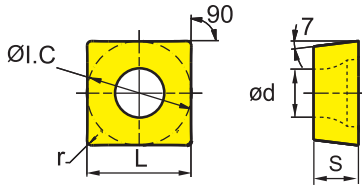































Technical info > A501

Cutting data > A366

Turning inserts

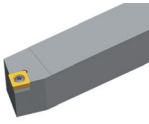
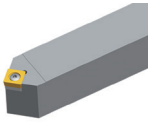
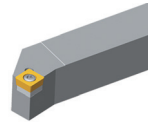
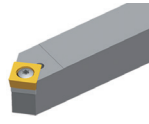

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

SCGX	L	I.C	S	d
09 T3	9.525	9.525	3.97	4.4
12 04	12.7	12.7	4.76	5.56

SC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)		HT	HC ²	HW											
					P																									
					M																									
					K																									
					N																									
					S																									
					H																									
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Alum Machining	SCGX09T302-LH	0.2	0.5-4.0	0.05-0.15																○									●	
	SCGX09T304-LH	0.4	0.5-4.0	0.1-0.3																									●	
	SCGX09T308-LH	0.8	0.5-4.0	0.15-0.60																									●	
	SCGX120408-LH	0.8	0.5-5.0	0.15-0.60																	○								●	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder				
SSBCR/L	SSDCN	SSKCR/L	SSSCR/L	S***-SSKCR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°
				
A279	A280	A281	A282	A339

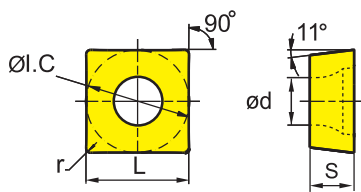

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Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SPMW	L	I.C	S	d
09 T3	9.525	9.525	3.97	4.4
12 04	12.7	12.7	4.76	5.56

SP** positive insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW								
					P	●	●	●	●	●	●				●	●		●	●											
					M						●	●			●	●	●	●	●	●	●									
					K								●	●	●	●														
					N											●	●					●	●							
					S											●	●	●	●	●			●	●						
					H																									
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>Flat</div> 	SPMW09T304	0.4	0.5-4.0	0.1-0.4													○													
	SPMW09T308	0.8	0.5-4.0	0.2-0.4														○												
	SPMW120408	0.8	1-6	0.3-0.6														○												

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

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System code > A48

Grade selection > A42

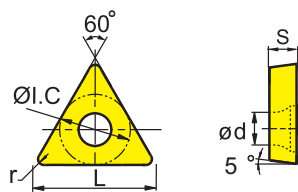

































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

TBGH	L	I.C	S	d
06 01	6.87	3.97	1.59	2.2

TB** positive insert				HC ¹ (CVD)												HC ¹ (PVD)				HT	HC ²	HW					
				P																							
				M																							
				K																							
				N																							
				S																							
				H																							
ISO	r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
	TBGH060102L	0.2	0.5-3.5	0.05-0.40													●						●				
	TBGH060104L	0.4	0.5-3.5	0.05-0.40													○						●				

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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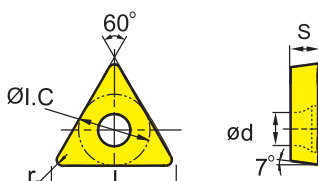

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Turning inserts

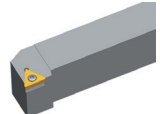

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TCGT	L	I.C	S	d
06 T1	6.87	3.97	1.98	2.2
09 02	9.63	5.56	2.38	2.5
11 03	11	6.35	3.18	2.8

TC** positive insert				HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
				P	●	●	●	●	●	●							●	●	●								
				M							●	●				●	●	●	●	●	●	●					
				K								●	●	●	●												
				N												●	●						●	●			
				S													●	●	●	●	●	●					
				H																				●	●		
ISO	r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 SF Finishing	TCGT06T102-SF	0.2	0.05-2.00	0.05-0.15																				●			
	TCGT090202-SF	0.2	0.05-2.00	0.05-0.15																			○	○			
	TCGT090204-SF	0.4	0.05-2.00	0.1-0.3																					●		
	TCGT090208-SF	0.8	0.05-2.00	0.10-0.35																					●		
	TCGT110302-SF	0.2	0.05-2.00	0.05-0.15																					○		
	TCGT110304-SF	0.4	0.05-2.00	0.1-0.3																			●	●			
	TCGT110308-SF	0.8	0.05-2.00	0.10-0.35																					○		

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder	
STGCR/L	E***-STFCR/L
Kr: 91°	Kr: 90°
	
A285	A361




System code > A48

Grade selection > A42

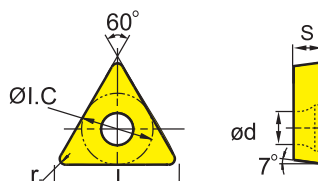


































Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

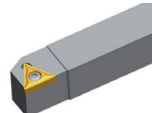
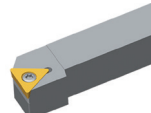
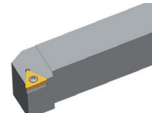
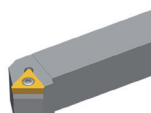


TCMT	L	I.C	S	d
09 02	9.63	5.56	2.38	2.5
11 02	11	6.35	2.38	2.8
16 T3	16.5	9.525	3.97	4.4

TC** positive insert					HC ¹ (CVD)								HC ¹ (PVD)				HT	HC ²	HW									
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>AHF</div>  <div>Finishing</div>	TCMT110204-AHF	0.4	0.2-2.5	0.05-0.30	●																●							
	TCMT110208-AHF	0.8	0.2-2.5	0.1-0.4	●																	●						
	TCMT16T304-AHF	0.4	0.5-3.0	0.05-0.30	●																	●						
	TCMT16T308-AHF	0.8	0.5-3.5	0.1-0.4	●																	●						
<div>HF</div>  <div>Finishing</div>	TCMT090202-HF	0.2	0.06-1.70	0.03-0.13		○	●																	○				
	TCMT090204-HF	0.4	0.1-1.7	0.05-0.19		○	●																					
	TCMT090208-HF	0.8	0.15-1.70	0.10-0.25					○																			
	TCMT110202-HF	0.2	0.08-2.00	0.05-0.20					●																			
	TCMT110204-HF	0.4	0.1-2.0	0.05-0.30			○	●						○														
	TCMT110208-HF	0.8	0.1-2.0	0.05-0.35		●		●					●															
	TCMT16T304-HF	0.4	0.11-2.00	0.05-0.23			○	●																				
	TCMT16T308-HF	0.8	0.2-3.5	0.05-0.30																								
<div>XF</div>  <div>Finishing</div>	TCMT090202-XF	0.2	0.5-1.5	0.08-0.15				○																				
	TCMT090204-XF	0.4	0.5-1.5	0.08-0.20	●																							
	TCMT110202-XF	0.2	0.5-2.0	0.08-0.15				○																				
	TCMT110204-XF	0.4	0.5-2.0	0.08-0.20	●																							
	TCMT110208-XF	0.8	0.5-2.5	0.08-0.25	●																							
	TCMT16T304-XF	0.4	0.5-2.5	0.08-0.20	●																							
	TCMT16T308-XF	0.8	0.5-2.5	0.08-0.25	●																							

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder					
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

A

Turning

B

Milling

C

Drilling

D

Technical Information

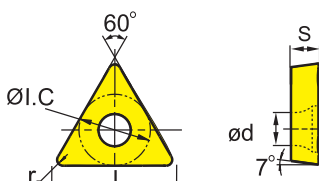



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Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

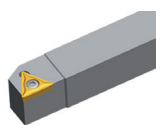
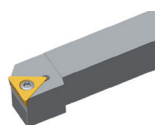
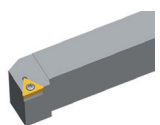
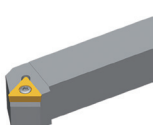
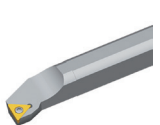

TCMT	L	I.C	S	d
09 02	9.63	5.56	2.38	2.5
11 02	11	6.35	2.38	2.8
16 T3	16.5	9.525	3.97	4.4

TC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW						
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Finishing	TCMT090202-EF	0.2	0.06-1.70	0.03-0.13																								
	TCMT090204-EF	0.4	0.1-1.7	0.05-0.19																●								
	TCMT110202-EF	0.2	0.2-2.0	0.05-0.13																○								
	TCMT110204-EF	0.4	0.2-2.0	0.05-0.20																●								
	TCMT16T304-EF	0.4	0.3-3.0	0.05-0.23																●								
	TCMT16T308-EF	0.8	0.3-3.0	0.1-0.4								●								●								
 Medium Cut	TCMT090204-EM	0.4	0.19-2.25	0.06-0.17							○								●									
	TCMT110204-EM	0.4	0.2-2.7	0.05-0.30							○								●									
	TCMT110208-EM	0.8	0.8-2.7	0.08-0.30															●									
	TCMT16T304-EM	0.4	0.25-3.00	0.08-0.23							●								●									
	TCMT16T308-EM	0.8	0.5-3.0	0.1-0.3							●	●							●									
 Medium Cut	TCMT16T304-XM	0.4	1-3.0	0.15-0.3	○		○																					
	TCMT16T308-XM	0.8	1-3.0	0.15-0.35	○		○																					
	TCMT16T312-XM	1.2	1-3.0	0.15-0.4	○		○																					

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

TC**	L	I.C	S	d
09 02	9.63	5.56	2.38	2.5
11 02	11	6.35	2.38	2.8
16 T3	16.5	9.525	3.97	4.4
22 04	22	12.7	4.76	5.5

TC** positive insert				HC ¹ (CVD)										HC ¹ (PVD)					HT		HC ²	HW							
				P																									
				M																									
				K																									
				N																									
				S																									
				H																									
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
Flat	TCMW16T308	0.8	0.5-5.0	0.05-0.60												○													
Medium Cut																													
HM	TCMT090204-HM	0.4	0.19-2.25	0.06-0.17			●	●					●	●															
	TCMT090208-HM	0.8	0.38-2.25	0.08-0.23			○	○							○														
	TCMT110204-HM	0.4	0.2-2.7	0.07-0.20			●	●					●	●															
	TCMT110208-HM	0.8	0.5-2.7	0.1-0.3			●	●					●	●															
	TCMT16T304-HM	0.4	0.25-3.00	0.08-0.23			●	●					●	●															
	TCMT16T308-HM	0.8	0.5-3.0	0.1-0.3			●	●					●	●															
	TCMT16T312-HM	1.2	0.6-3.0	0.12-0.36			○	●																					
HR	TCMT090204-HR	0.4	0.5-3.0	0.1-0.3					○																				
	TCMT090208-HR	0.8	0.5-3.5	0.08-0.50					○						○														
	TCMT110204-HR	0.4	0.5-3.0	0.1-0.4					●																				
	TCMT110208-HR	0.8	1-4	0.1-0.5					●																				
	TCMT16T304-HR	0.4	0.5-4.0	0.1-0.4					●				●																
	TCMT16T308-HR	0.8	1-4	0.12-0.35					●				●	●															
	TCMT16T312-HR	1.2	1.2-4.0	0.14-0.42			○						○	●															
	TCMT220408-HR	0.8	1.2-4.8	0.14-0.42			○	●						●															

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder					
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
A283	A284	A285	A286	A341	A361

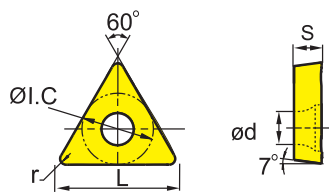

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TCMT	L	I.C	S	d
22 04	22	12.7	4.76	5.5

TC** positive insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
				P	●	●	●	●	●	●				●	●		●	●	●											
				M						●	●			●	●	●	●	●	●	●										
				K									●	●	●	●														
				N											●	●					●	●								
				S											●	●	●	●	●			●	●							
				H																										
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>Basic</div> 	TCMT220408				0.8	1.2-4.8	0.14-0.42								●															

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

Technical Information

E

Index




System code > A48

Grade selection > A42

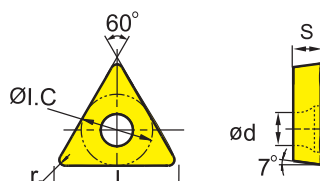































Technical info > A501

Cutting data > A366

Turning inserts

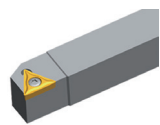
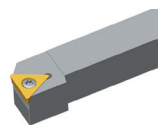
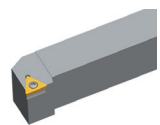
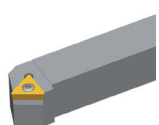
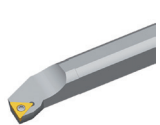

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

TCGX	L	I.C	S	d
09 02	9.63	5.56	2.38	2.5
11 02	11	6.35	2.38	2.8
16 T3	16.5	9.525	3.97	4.4

TC** positive insert					HC ¹ (CVD)								HC ¹ (PVD)				HT	HC ²	HW									
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Alum Machining	TCGX090202-LC	0.2	0.3-4.0	0.05-0.15													●										●	
	TCGX090204-LC	0.4	0.5-4.0	0.1-0.3														●									●	
	TCGX110202-LC	0.2	0.3-5.0	0.05-0.15														●									●	
	TCGX110204-LC	0.4	0.5-5.0	0.1-0.3														●									●	
	TCGX110208-LC	0.8	0.5-5.0	0.15-0.60														●									●	
	TCGX16T304-LC	0.4	0.5-7.0	0.1-0.3																							●	
	TCGX16T308-LC	0.8	0.5-7.0	0.15-0.60														●									●	
 Alum Machining	TCGX090202-LH	0.2	0.3-4.0	0.05-0.15														○									●	
	TCGX090204-LH	0.4	0.5-4.0	0.1-0.3																							●	
	TCGX110202-LH	0.2	0.3-5.0	0.05-0.15															○								●	
	TCGX110204-LH	0.4	0.5-5.0	0.1-0.3															●								●	
	TCGX110208-LH	0.8	0.5-5.0	0.15-0.60																							●	
	TCGX16T302-LH	0.2	0.5-7.0	0.05-0.15																							●	
	TCGX16T304-LH	0.4	0.5-7.0	0.1-0.3															○								●	
	TCGX16T308-LH	0.8	0.5-7.0	0.15-0.60															○								●	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder					
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

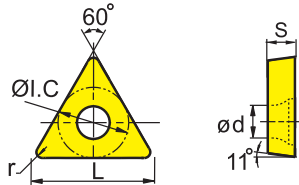

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TPGH	L	I.C	S	d
09 02	9.63	5.56	2.38	2.8
11 03	11	6.35	3.18	3.18

TP** positive insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW										
				P	●	●	●	●	●	●					●	●	●	●												
				M						●	●			●	●	●	●	●	●	●										
				K								●	●	●	●															
				N										●	●					●	●									
				S										●	●	●	●	●		●	●									
				H																										
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Super Finishing	TPGH090202L	0.2	0.2-3.0	0.05-0.15																●							●	●		
	TPGH090204L	0.4	0.2-3.0	0.05-0.30																●							●	●		
	TPGH110302L	0.2	0.2-3.5	0.05-0.15																●							●	●		
	TPGH110304L	0.4	0.2-3.5	0.05-0.30																●							●	●		

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

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System code > A48

Grade selection > A42

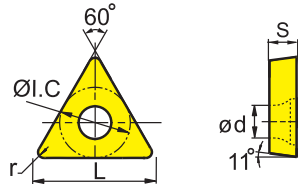













Technical info > A501

Cutting data > A366

Turning inserts

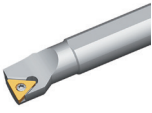


- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

TPGT	L	I.C	S	d
09 02	9.63	5.56	2.38	2.5
11 03	11	6.35	3.18	2.8

TP** positive insert																				HC' (CVD)				HC' (PVD)				HT	HC ²	HW	
				P																											
				M																											
				K																											
				N																											
				S																											
				H																											
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
 SF Finishing	TPGT090202-SF	0.2	0.05-2.00	0.05-0.15																								●			
	TPGT090204-SF	0.4	0.05-2.00	0.05-0.25																○							●	●			
	TPGT090208-SF	0.8	0.05-2.00	0.05-0.35																							●	●			
	TPGT110302-SF	0.2	0.05-2.00	0.05-0.15																							●	●			
	TPGT110304-SF	0.4	0.05-2.00	0.05-0.25																						○	●				
	TPGT110308-SF	0.8	0.05-2.00	0.05-0.35																								●			

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder		
S***-STUPR/L	C***-STUPR/L	E***-STFPR/L
Kr: 93°	Kr: 93°	Kr: 90°
		
A351	A360	A362

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

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Turning

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Milling

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Drilling

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Technical
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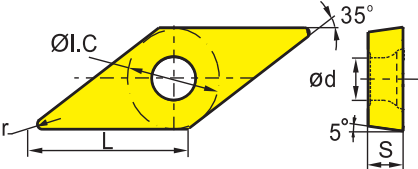



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- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

VBMT	L	I.C	S	d
11 02	11	6.35	2.38	2.8
11 03	11	6.35	3.18	2.8
16 04	16.5	9.525	4.76	4.4

Turning inserts

VB** positive insert				HC ¹ (CVD)												HC ¹ (PVD)				HT	HC ²	HW						
				P	●	●	●	●	●	●						●	●	●	●									
				M						●	●						●	●	●	●	●	●	●					
				K								●	●	●	●													
				N													●	●									●	●
				S															●	●	●	●	●				●	●
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
AHF	VBMT160404-AHF	0.4	0.2-3.0	0.05-0.30	●																●							
	VBMT160408-AHF	0.8	0.8-3.5	0.08-0.40	●																●							
																												
	Finishing																											
EF	VBMT110302-EF	0.2	0.06-1.70	0.03-0.13																●								
	VBMT110304-EF	0.4	0.1-1.7	0.05-0.19							●									●								
	VBMT110308-EF	0.8	0.13-1.70	0.07-0.26							●									○								
	VBMT160404-EF	0.4	0.1-1.8	0.05-0.20							●									●								
	VBMT160408-EF	0.8	0.14-1.80	0.07-0.27							●									●								
Finishing																												
XF	VBMT110202-XF	0.2	0.5-2.0	0.08-0.20				○																				
	VBMT110204-XF	0.4	0.5-2.0	0.08-0.20	●																							
	VBMT110302-XF	0.2	0.5-2.0	0.08-0.20				○																				
	VBMT110304-XF	0.4	0.5-2.0	0.08-0.20	●																							
	VBMT160404-XF	0.4	0.5-2.5	0.08-0.20	●																							
	VBMT160408-XF	0.8	0.5-2.5	0.08-0.25	●																							
Finishing																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
A274	A275	A276	A345	A346	A347

System code > A48

Grade selection > A42

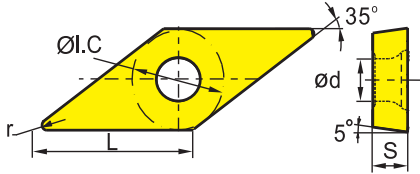
Technical info > A501

Cutting data > A366

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VB**	L	I.C	S	d
11 02	11	6.35	2.38	2.8
16 04	16.5	9.525	4.76	4.4

VB** positive insert				HC' (CVD)										HC' (PVD)				HT		HC ²	HW										
				P	●	●	●	●	●	●					●	●		●	●	●											
				M							●	●				●	●	●	●	●	●	●									
				K								●	●	●	●																
				N												●	●						●	●							
				S													●	●	●	●	●			●	●						
				H																											
ISO				r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
HF	VBMT110202-HF	0.2	0.2-2.0	0.05-0.15																											
	VBMT110204-HF	0.4	0.2-2.0	0.05-0.35																											
	VBMT110208-HF	0.8	0.2-2.0	0.05-0.40																											
Finishing																															
NF	VBET160404-NF	0.4	0.2-3.0	0.05-0.30																○	●										
	VBET160408-NF	0.8	0.2-3.0	0.08-0.40																○	●										
Finishing																															

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder					
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
A274	A275	A276	A345	A346	A347

System code > A48

Grade selection > A42

Technical info > A501

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Turning

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Milling

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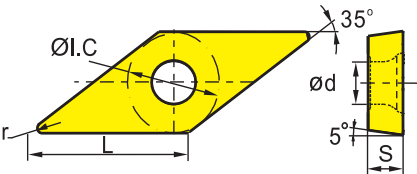
A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VBGT	L	I.C	S	d
11 03	11	6.35	3.18	2.8

VB** positive insert				HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW								
				P	●	●	●	●	●	●				●	●	●	●											
				M						●	●			●	●	●	●	●	●	●								
				K							●	●	●	●														
				N										●	●					●	●							
				S											●	●	●	●	●		●	●						
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
SF	VBGT110302-SF	0.2	0.05-2.00	0.05-0.15																				○	○	●		
	VBGT110304-SF	0.4	0.05-2.00	0.05-0.20																					○	●		
Finishing																												

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

Tool holder			
SVJBR/L	SVABR/L	SVVBN	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 93°
A274	A275	A276	A347

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Technical Information

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System code > A48

Grade selection > A42

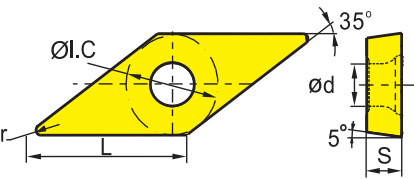



Technical info > A501

Cutting data > A366

Turning inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

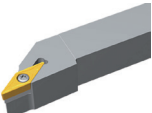
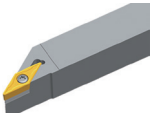
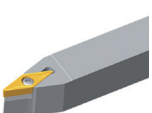
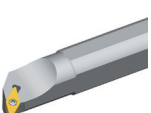
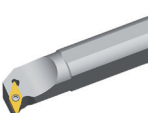

VB**	L	I.C	S	d
11 03	11	6.35	3.18	2.8
16 04	16.5	9.525	4.76	4.4

VB** positive insert				HC' (CVD)												HC' (PVD)					HT		HC ²	HW				
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
NGF	VBET160408-NGF	0.8	0.2-3.0	0.08-0.30																●								
	VBET160412-NGF	1.2	0.2-3.0	0.1-0.4																●								
																												
Finishing																												
EM	VBMT110304-EM	0.4	0.15-2.00	0.07-0.20							●									●								
	VBMT110308-EM	0.8	0.2-2.0	0.09-0.27			○				●									●								
	VBMT160404-EM	0.4	0.23-2.70	0.07-0.20							●									●								
	VBMT160408-EM	0.8	0.45-2.70	0.09-0.27							●									●								
Medium Cut																												
HM	VBMT160404-HM	0.4	0.23-2.70	0.07-0.20		●		●			●		●															
	VBMT160408-HM	0.8	0.45-2.70	0.09-0.27		●		●			●	●	●		●													○
	VBMT160412-HM	1.2	0.54-2.70	0.11-0.32		●		●																				
																												
Medium Cut																												
XM	VBMT160404-XM	0.4	1-2.5	0.15-0.25	●		○																					
	VBMT160408-XM	0.8	1-2.5	0.15-0.3	●		○																					
	VBMT160412-XM	1.2	1-2.5	0.15-0.35	●		○																					
																												
Medium Cut																												

● Ex stock ○ On demand

YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder					
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VBMT	L	I.C	S	d
16 04	16.5	9.525	4.76	4.4

VB** positive insert				HC ¹ (CVD)										HC ¹ (PVD)			HT	HC ²	HW
				P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				M										●	●	●	●	●	
				K															
				N										●	●			●	●
				S										●	●	●	●	●	●
				H															

B

Milling

ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HR	VBMT160404-HR	0.4	0.5-3.0	0.1-0.3			●	●																				
	VBMT160408-HR	0.8	0.9-3.6	0.11-0.32			○	●																				
	VBMT160412-HR	1.2	1.08-3.60	0.13-0.38			○	●																				
Roughing																												
SNR	VBMT160408-SNR	0.8	0.5-4.0	0.1-0.3															●			○						
	VBMT160412-SNR	1.2	0.5-4.0	0.3-0.6															●			○	○					
Roughing																												

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

C

Drilling

Tool holder					
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
A274	A275	A276	A345	A346	A347

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System code > A48

Grade selection > A42

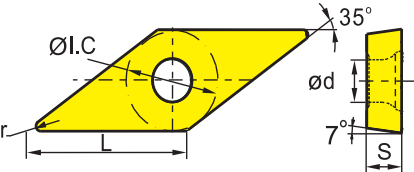


















Technical info > A501

Cutting data > A366

Turning inserts

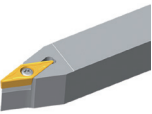
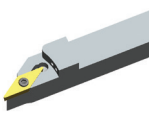
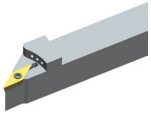

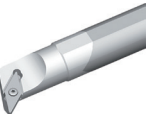
- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VCGT	L	I.C	S	d
11 03	11	6.35	3.18	2.8
16 04	16.5	9.525	4.76	4.4

VC** positive insert				HC' (CVD)												HC' (PVD)					HT	HC ²	HW						
				P																									
				M																									
				K																									
				N																									
				S																									
				H																									
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
HF	VCGT110304-HF	0.4	0.2-2.0	0.05-0.30																○									
																													
Finishing																													
NF	VCGT160408-NF	0.8	0.2-2.0	0.1-0.4																●									
																													
Finishing																													
SF	VCGT110302-SF	0.2	0.05-1.00	0.05-0.15																					●	●	●		
	VCGT110304-SF	0.4	0.05-1.00	0.05-0.25															○		●				●	○	●		
	VCGT160404-SF	0.4	0.05-1.50	0.05-0.25																						●			
Finishing																													

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Tool holder						
SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363
C***-SVUCR/L						
Kr: 93°						
						
A364						

System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366



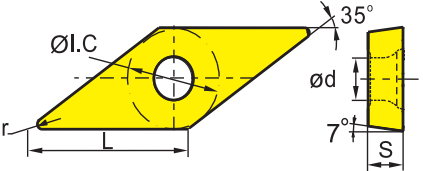






































A

Turning

Turning/Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VCGX	L	I.C	S	d
11 03	11	6.35	3.18	2.8
16 04	16.6	9.525	4.76	4.4
22 05	22	12.7	5.56	5.5

VC** turning/milling insert					HC ¹ (CVD)										HC ¹ (PVD)					HT	HC ²	HW									
					P																										
					M																										
					K																										
					N																										
					S																										
					H																										
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
 Alum Machining	VCGX110301-LC	0.1	0.3-3.0	0.05-0.10																●			●							●	
	VCGX110302-LC	0.2	0.3-3.0	0.05-0.15																●			○							●	
	VCGX110304-LC	0.4	0.5-3.0	0.1-0.3																●										●	
	VCGX110308-LC	0.8	1-3	0.1-0.5																●										●	
	VCGX160404-LC	0.4	0.5-5.0	0.1-0.3																●										●	
	VCGX160408-LC	0.8	0.5-5.0	0.15-0.60																●										●	
	VCGX160412-LC	1.2	0.5-5.0	0.15-0.80																○										●	
	VCGX220530-LC	3	0.5-7.0	0.25-1.00																●										○	●

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

B

Milling

C

Drilling

D

Technical Information

E

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Tool holder						
SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°
A364




System code > A48

Grade selection > A42

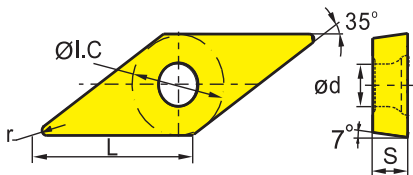

































Technical info > A501

Cutting data > A366

Turning/Milling inserts

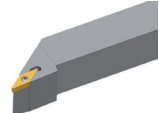
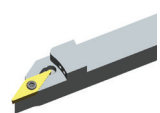
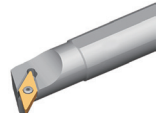

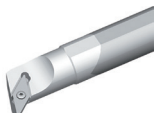

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

VCGX	L	I.C	S	d
11 02	11	6.35	2.38	2.8
11 03	11	6.35	3.18	2.8
16 04	16.6	9.525	4.76	4.4
22 05	22	12.7	5.56	5.5

VC** turning/milling insert					HC ¹ (CVD)								HC ¹ (PVD)				HT	HC ²	HW									
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
ISO		r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
<div>LH</div>  <div>Alum Machining</div>	VCGX110204-LH	0.4	0.5-3.0	0.1-0.3														●									●	
	VCGX110301-LH	0.1	0.5-3.0	0.05-0.10																							●	●
	VCGX110302-LH	0.2	0.3-3.0	0.05-0.15															●								●	○
	VCGX110304-LH	0.4	0.5-3.0	0.1-0.3															●								●	○
	VCGX110308-LH	0.8	0.5-3.0	0.15-0.60															○								●	
	VCGX160402-LH	0.2	0.5-5.0	0.05-0.10															●								●	
	VCGX160404-LH	0.4	0.5-5.0	0.1-0.3															●								●	
	VCGX160408-LH	0.8	0.5-5.0	0.15-0.60															●								●	
	VCGX160412-LH	1.2	0.5-5.0	0.15-0.80															○								●	
	VCGX220530-LH	3	0.5-7.0	0.25-1.00															○									●

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder						
SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363
C***-SVUCR/L						
Kr: 93°						
						
A364						

A

Turning

Turning inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VCMT	L	I.C	S	d
11 03	11	6.35	3.18	2.8
16 04	16	9.525	4.76	4.4

VC** positive insert					HC ¹ (CVD)										HC ¹ (PVD)				HT	HC ²	HW											
					P																											
					M																											
					K																											
					N																											
					S																											
					H																											
ISO					r	a _p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
<div>XF</div> <div></div> <div>Finishing</div>	VCMT110302-XF	0.2	0.5-2.0	0.08-0.20								○																				
	VCMT110304-XF	0.4	0.5-2.0	0.08-0.20	●																											
	VCMT110308-XF	0.8	0.5-2.0	0.08-0.25	●																											
	VCMT160404-XF	0.4	0.5-2.5	0.08-0.20	●																											
	VCMT160408-XF	0.8	0.5-2.5	0.08-0.25	●																											
EF	VCMT160404-EF	0.4	0.5-2.5	0.05-0.20																			●									
<div>EM</div> <div></div> <div>Medium Cut</div>																																
	VCMT160404-EM	0.4	0.5-2.5	0.05-0.35											○								●									
	VCMT160408-EM	0.8	0.5-2.5	0.10-0.45											○								●									
XM	VCMT160412-XM	1.2	1-2.5	0.15-0.35	○			○																								
<div>Medium Cut</div>																																

● Ex stock ○ On demand
YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

D

Technical Information

E

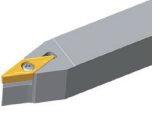
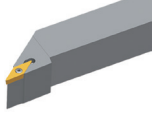
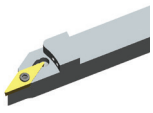
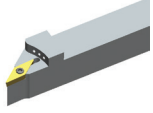
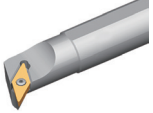

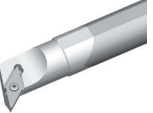
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System code > A48

Grade selection > A42

Technical info > A501

Cutting data > A366

Tool holder						
SVVCN Kr: 72°30'	SVJCR/L Kr: 93°	SVACR/L-SC Kr: 90°	SVJCR/L-SC Kr: 93°	S***-SVQCR/L Kr: 107°30'	S***-SVUCR/L Kr: 93°	C***-SVQCR/L Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L Kr: 93°

A364

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Turning

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System code > A48

Grade selection > A42

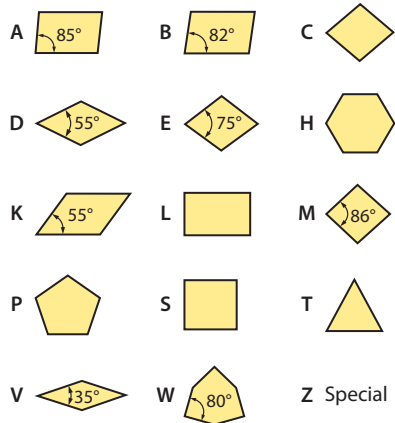
Technical info > A501

Cutting data > A366

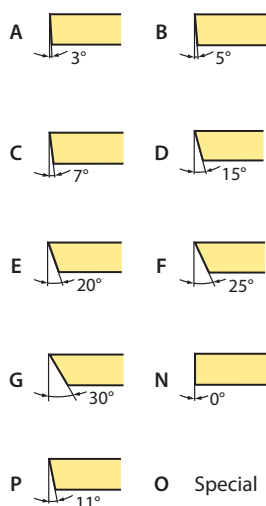
C N G A 12 04 08 T 020 20 – 2 (W)

1 2 3 4 5 6 7 8 9 10 11 12

Insert shape



Clearance angle



Tolerance class

Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,15	±0,005	±0,025
K	±0,05–0,15	±0,013	±0,025
L	±0,05–0,15	±0,025	±0,025
M	±0,05–0,15	±0,08–0,20	±0,130
N	±0,05–0,15	±0,08–0,20	±0,025
U	±0,08–0,25	±0,13–0,38	±0,130

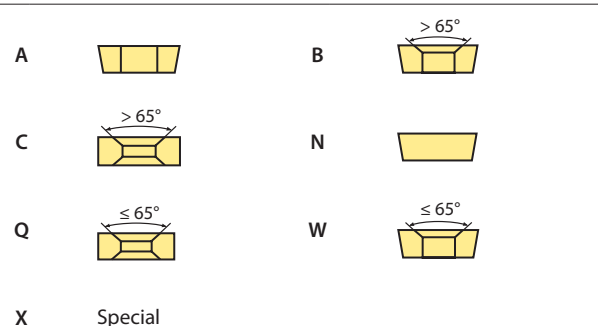
1

2

3

Fastening features (metric)

Insert shape

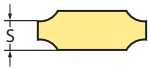
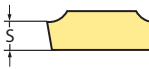


4

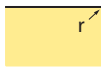
Cutting edge length l [mm]

I.C [mm]	Insert shape					
	C	D	S	T	V	W
3,97	06					
5,0						
5,56	09					
6,0						
6,35	06	07		11	11	
8,0						
9,525	09	11	09	16	16	06
10,0						
12,0						
12,7	12	15	12	22	22	08
15,875	16		15	27		
16,0	19					
19,05	19		19	33		
20,0						
25,0	25	25				
25,4	25					
31,75						
32						





5

Insert thickness S [mm]			
			
Code	S	Code	S
02	2,38	06	6,35
T2	2,58	T6	6,75
03	3,18	07	7,94
T3	3,97	09	9,52
04	4,76	T9	9,72
T4	4,96	11	11,11
05	5,56	12	12,70
T5	5,95		

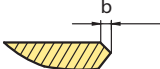
6

Nose radius r [mm]	
	
Code	r
00	–
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
32	3,2
X	Special
MO	Round inserts


7

Cutting edge profile		
Code	Cutting edge	Insert shape
E	Rounding	
F	Sharp edge	
T	Chamfer	
S	Chamfer + Rounding	





8

Chamfer width b [mm]	
	
Code	b
010	0,10
015	0,15
020	0,20
025	0,25
030	0,30
035	0,35
040	0,40
045	0,45
050	0,50
100	1,00
200	2,00

9

Chamfer angle α	
	
Code	α
05	5°
10	10°
15	15°
20	20°
25	25°
30	30°

10

Cutting edges	
Code	Form
1	
2	
3	
4	

11

Extra	
Code	Description
W	Wiper
HS	Full face single brazed CBN insert
M	Solid CBN with clamping dimple
CB	Chip breaker (CBN)
MED	Chip breaker, fine – medium (PCD)
ROF	Chip breaker, medium – roughing (PCD)
L (L/R)	Full-edge tipped (PCD)

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A

Turning

B

Milling

C

Drilling

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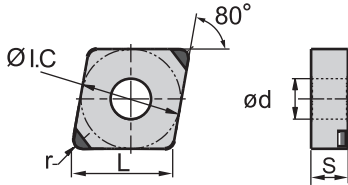











E

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

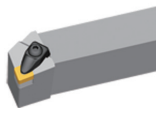

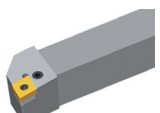

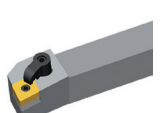
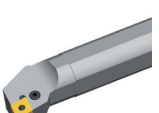
CNGA	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16

Turning CBN inserts

CN** negative insert					BL (CBN)				BC (CBN)			BH (CBN)			
					P										
					M										
					K										
					N										
					S										
					H										
ISO		r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215			
	CNGA120402S01020-2	0.2	0.08-0.50	0.05-0.15			○			○					
	CNGA120402S01225-2	0.2	0.08-0.50	0.05-0.15			○			○					
	CNGA120404E-2	0.4	0.08-0.50	0.05-0.20	○			○							
	CNGA120404S01020-2	0.4	0.08-0.50	0.05-0.20				●		○			○		
	CNGA120404S01225-2	0.4	0.08-0.50	0.05-0.20			●			○					
	CNGA120408E-2	0.8	0.08-0.50	0.05-0.25	○			○							
	CNGA120408S01525-2	0.8	0.08-0.50	0.05-0.25			●	●		●					
	CNGA120408S02020-2	0.8	0.08-0.50	0.05-0.25				●		●					
	CNGA120412E-2	1.2	0.08-0.50	0.05-0.30	○			○							
	CNGA120412S01020-2	1.2	0.08-0.50	0.05-0.30									●		
	CNGA120412S01525-2	1.2	0.08-0.50	0.05-0.30			●	●		●					
	CNGA120412S02020-2	1.2	0.08-0.50	0.05-0.30				●		○					
	CNGA120416S01020-2	1.6	0.08-0.50	0.05-0.35									○		
	CNGA120416S01525-2	1.6	0.08-0.50	0.05-0.35			○	○		○					
CNGA120416S02020-2	1.6	0.08-0.50	0.05-0.35				○		○						
	CNGA120408S01525-2W	0.8	0.08-0.50	0.05-0.25			●	○		○					
	CNGA120408S02020-2W	0.8	0.08-0.50	0.05-0.25						○					

● Ex stock ○ On demand

BL CBN with a low CBN content
BC CBN with coating
BH CBN with a high CBN content

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324




System code > A158

Grade selection > A42

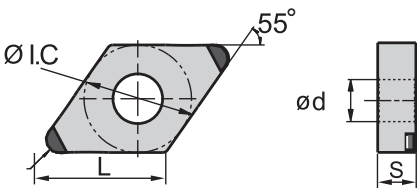

Technical info > A501

Cutting data > A366

Turning CBN inserts

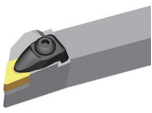
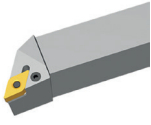
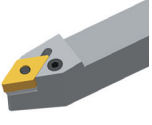
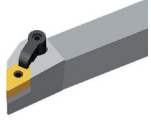
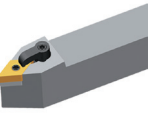
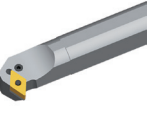
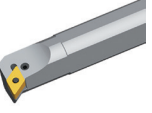
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

DNGA	L	I.C	S	d
15 06	15.5	12.7	6.35	5.16

DN** negative insert					BL (CBN)				BC (CBN)				BH (CBN)			
					P											
					M											
					K											
					N											
					S											
					H											
ISO					r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215	
	DNGA150604E-2				0.4	0.08-0.50	0.05-0.20	○		○						
	DNGA150604S01020-2				0.4	0.08-0.50	0.05-0.20		○			○			○	
	DNGA150604S01225-2				0.4	0.08-0.50	0.05-0.20	○	○			○				
	DNGA150608E-2				0.8	0.08-0.50	0.05-0.25	○		○						
	DNGA150608S01020-2				0.8	0.08-0.50	0.05-0.25								○	
	DNGA150608S01525-2				0.8	0.08-0.50	0.05-0.25	●		●		●				
	DNGA150608S02020-2				0.8	0.08-0.50	0.05-0.25			●		●				
	DNGA150612S01020-2				1.2	0.08-0.50	0.05-0.30								○	
	DNGA150612S01525-2				1.2	0.08-0.50	0.05-0.30	●		○		○				
	DNGA150612S02020-2				1.2	0.08-0.50	0.05-0.30			●		○				

● Ex stock ○ On demand

BL CBN with a low CBN content
 BC CBN with coating
 BH CBN with a high CBN content

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SNGA	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16

Turning CBN inserts

SN** negative insert				BL (CBN)	BC (CBN)	BH (CBN)			
				P					
				M					
				K					
				N					
				S	●	●			
				H	○	○	○	○	○

ISO				r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	SNGA120408S01020-4			0.8	0.08-0.50	0.05-0.25								○
	SNGA120408S01525-4			0.8	0.08-0.50	0.05-0.25	○		○		○			
	SNGA120408S02020-4			0.8	0.08-0.50	0.05-0.25			○		○			
	SNGA120412S01020-4			1.2	0.08-0.50	0.05-0.30								○
	SNGA120412S01525-4			1.2	0.08-0.50	0.05-0.30	○		○		○			
	SNGA120412S02020-4			1.2	0.08-0.50	0.05-0.30			○		○			

● Ex stock ○ On demand

BL CBN with a low CBN content
BC CBN with coating
BH CBN with a high CBN content

C

Drilling

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
A258	A259	A329




System code > A158

Grade selection > A42

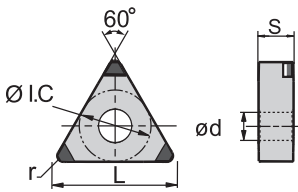


























Technical info > A501

Cutting data > A366

Turning CBN inserts


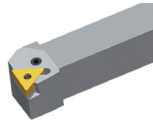
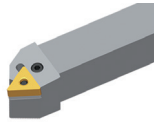
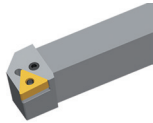
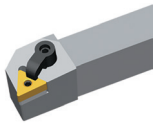
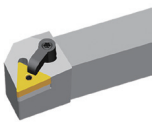
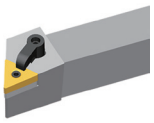
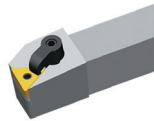
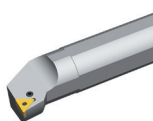
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

TNGA	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81

TN** negative insert					BL (CBN)				BC (CBN)				BH (CBN)			
					P											
					M											
					K											
					N											
					S											
					H											
ISO					r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215	
	TNGA160404S01020-3	0.4	0.08-0.50	0.05-0.20												
	TNGA160404S01225-3	0.4	0.08-0.50	0.05-0.20												
	TNGA160408S01020-3	0.8	0.08-0.50	0.05-0.25												
	TNGA160408S01525-3	0.8	0.08-0.50	0.05-0.25												
	TNGA160408S02020-3	0.8	0.08-0.50	0.05-0.25												
	TNGA160412S01020-3	1.2	0.08-0.50	0.05-0.30												
	TNGA160412S01525-3	1.2	0.08-0.50	0.05-0.30												
	TNGA160412S02020-3	1.2	0.08-0.50	0.05-0.30												

● Ex stock ○ On demand

BL CBN with a low CBN content
 BC CBN with coating
 BH CBN with a high CBN content

Tool holder						
DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L-Z
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262
MTFNR/L	S***.PTFNR/L					
Kr: 91°	Kr: 90°					
						
A263	A330					

A

Turning

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VNGA	L	I.C	S	d
16 04	16.6	9.525	4.76	3.81

Turning CBN inserts

VN** negative insert				BL (CBN)	BC (CBN)	BH (CBN)
	P					
	M					
	K					●
	N					
	S	●	●			
	H	●	●	●	●	

B

Milling

ISO	r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	VNGA160404S01020-2	0.4	0.08-0.50	0.05-0.20	●			○			○
	VNGA160404S01225-2	0.4	0.08-0.50	0.05-0.20	●			○			○
	VNGA160408S01020-2	0.8	0.08-0.50	0.05-0.25							○
	VNGA160408S01525-2	0.8	0.08-0.50	0.05-0.25	●			○			○
	VNGA160408S02020-2	0.8	0.08-0.50	0.05-0.25	●			○			○

● Ex stock ○ On demand

BL CBN with a low CBN content
BC CBN with coating
BH CBN with a high CBN content

C

Drilling

Tool holder			
DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
A234	A235	A264	A265

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System code > A158

Grade selection > A42

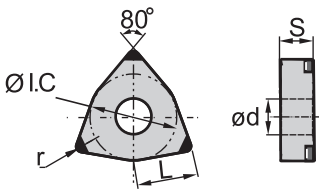

























Technical info > A501

Cutting data > A366

Turning CBN inserts

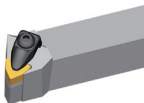
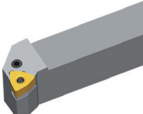
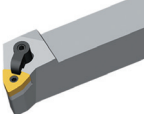

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

WNGA	L	I.C	S	d
08 04	8.69	12.7	4.76	5.16

WN** negative insert					BL (CBN)				BC (CBN)			BH (CBN)				
					P											
					M											
					K											
					N											
					S											
					H											
ISO					r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215	
	WNGA080404S01020-3	0.4	0.08-0.50	0.05-0.20												
	WNGA080404S01225-3	0.4	0.08-0.50	0.05-0.20												
	WNGA080408S01020-3	0.8	0.08-0.50	0.05-0.25												
	WNGA080408S01525-3	0.8	0.08-0.50	0.05-0.25												
	WNGA080408S02020-3	0.8	0.08-0.50	0.05-0.25												
	WNGA080412S01020-3	1.2	0.08-0.50	0.05-0.30												
	WNGA080412S01525-3	1.2	0.08-0.50	0.05-0.30												
	WNGA080412S02020-3	1.2	0.08-0.50	0.05-0.30												

● Ex stock ○ On demand

BL CBN with a low CBN content
 BC CBN with coating
 BH CBN with a high CBN content

Tool holder			
DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

A

Turning

Turning CBN inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

ZNEX	I.C	S	d
04 01	4.76	1.59	2.3

ZN** negative insert				BL (CBN)			BC (CBN)			BH (CBN)		
				P								
				M								
				K								
				N								
				S	●	●						
				H	○	○	○	○	○			
ISO	r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215	
	ZNEX040102S01515	0.2	0.08-0.50	0.05-0.15	○	○						
	ZNEX040104S01515	0.4	0.08-0.50	0.05-0.20	○	○						

● Ex stock ○ On demand

BL CBN with a low CBN content
BC CBN with coating
BH CBN with a high CBN content

B

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Tool holder
C***-SZLNR/L
Kr: 95°

A365




System code > A158

Grade selection > A42

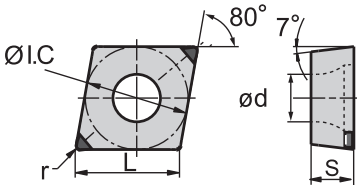









Technical info > A501

Cutting data > A366

Turning CBN inserts

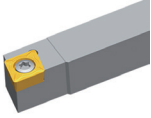
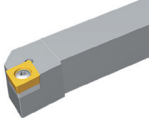
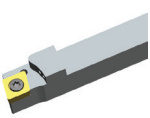
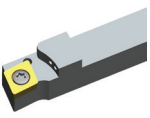

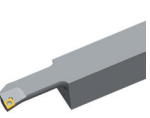
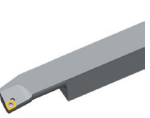
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

CCGW	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.5

CC** positive insert					BL (CBN)				BC (CBN)			BH (CBN)						
					P													
					M													
					K													
					N													
					S													
					H													
ISO		r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215						
	CCGW060202S01020-2	0.2	0.08-0.50	0.05-0.20		○			○			○						
	CCGW060202S01225-2	0.2	0.08-0.50	0.05-0.150.05-0.20	○				○			○						
	CCGW060204S01020-2	0.4	0.08-0.50	0.05-0.20		○			○			○						
	CCGW060204S01225-2	0.4	0.08-0.50	0.05-0.20	○				○			○						
	CCGW060208S01020-2	0.8	0.08-0.50	0.05-0.25								○						
	CCGW060208S01525-2	0.8	0.08-0.50	0.05-0.25	○				○									
	CCGW060208S02020-2	0.8	0.08-0.50	0.05-0.25		○			○									
	CCGW09T302S01020-2	0.2	0.08-0.50	0.05-0.15		○			○			○						
	CCGW09T302S01225-2	0.2	0.08-0.50	0.05-0.15	○				○									
	CCGW09T304E-2	0.4	0.08-0.50	0.05-0.20	○		○											
	CCGW09T304S01020-2	0.4	0.08-0.50	0.05-0.20		●			○			○						
	CCGW09T304S01225-2	0.4	0.08-0.50	0.05-0.20	●				○									
	CCGW09T308E-2	0.8	0.08-0.50	0.05-0.25	○		○											
	CCGW09T308S01020-2	0.8	0.08-0.50	0.05-0.25								●						
	CCGW09T308S01525-2	0.8	0.08-0.50	0.05-0.25	●	○			○									
	CCGW09T308S02020-2	0.8	0.08-0.50	0.05-0.25		●			●									
	CCGW09T312E-2	1.2	0.08-0.50	0.05-0.30	○		○											
	CCGW120404S01020-2	0.4	0.08-0.50	0.05-0.20		○			○			○						
	CCGW120404S01225-2	0.4	0.08-0.50	0.05-0.20	○				○									
	CCGW120408S01020-2	0.8	0.08-0.50	0.05-0.25								○						
	CCGW120408S01525-2	0.8	0.08-0.50	0.05-0.25	○	○			○									
	CCGW120408S02020-2	0.8	0.08-0.50	0.05-0.25		○			○									
	CCGW120412S01020-2	1.2	0.08-0.50	0.05-0.30								○						
	CCGW120412S01525-2	1.2	0.08-0.50	0.05-0.30	○	○			○									
	CCGW120412S02020-2	1.2	0.08-0.50	0.05-0.30		○			○									

A

Turning

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L

Kr: 95°



A355

B

Milling

C

Drilling

D

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System code > A158

Grade selection > A42

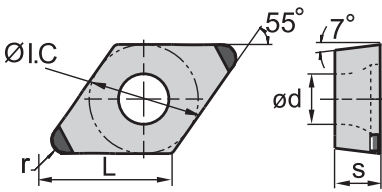

Technical info > A501

Cutting data > A366

Turning CBN inserts

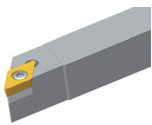
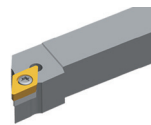
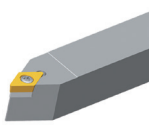
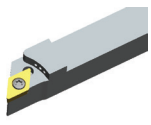
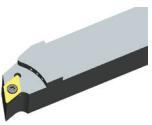
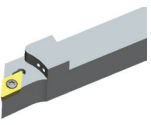
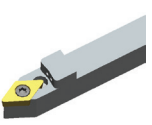
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

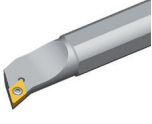

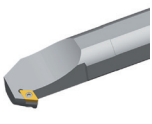

DCGW	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** positive insert				BL (CBN)				BC (CBN)			BH (CBN)			
				P										
				M										
				K										
				N										
				S										
				H										
ISO				r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	DCGW070202S01020-2	0.2	0.08-0.50	0.05-0.15			●				○			
	DCGW070202S01225-2	0.2	0.08-0.50	0.05-0.15			○				○			
	DCGW070204S01020-2	0.4	0.08-0.50	0.05-0.20			●				○			○
	DCGW070204S01225-2	0.4	0.08-0.50	0.05-0.20			●				○			
	DCGW070208S01020-2	0.8	0.08-0.50	0.05-0.25										○
	DCGW070208S01525-2	0.8	0.08-0.50	0.05-0.25			●				○			
	DCGW070208S02020-2	0.8	0.08-0.50	0.05-0.25			●				○			
	DCGW11T302S01020-2	0.2	0.08-0.50	0.05-0.15			○				○			○
	DCGW11T302S01225-2	0.2	0.08-0.50	0.05-0.15			○				○			
	DCGW11T304E-2	0.4	0.08-0.50	0.05-0.20			○		○					
	DCGW11T304S01020-2	0.4	0.08-0.50	0.05-0.20			●				○			●
	DCGW11T304S01225-2	0.4	0.08-0.50	0.05-0.20			●				○			
	DCGW11T308E-2	0.8	0.08-0.50	0.05-0.25			○		○					
	DCGW11T308S01020-2	0.8	0.08-0.50	0.05-0.25										●
	DCGW11T308S01525-2	0.8	0.08-0.50	0.05-0.25			●	○			●			
	DCGW11T308S02020-2	0.8	0.08-0.50	0.05-0.25			●				●			
	DCGW11T312E-2	1.2	0.08-0.50	0.05-0.30			○		○					

● Ex stock ○ On demand

BL CBN with a low CBN content
 BC CBN with coating
 BH CBN with a high CBN content

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

System code > A158

Grade selection > A42

Technical info > A501

Cutting data > A366

A

Turning

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Milling

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Drilling

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TCGW	L	I.C	S	d
11 02	11	6.35	2.38	2.5
16 T3	16.5	9.525	3.97	4.4

Turning CBN inserts

TC** positive insert				BL (CBN)		BC (CBN)		BH (CBN)	
	P								
	M								
	K							●	
	N								
	S	●	●						
	H	●	●	●		●	●		




ISO		r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	TCGW110204S01020-3	0.4	0.08-0.50	0.05-0.20		○			○			○
	TCGW110204S01225-3	0.4	0.08-0.50	0.05-0.20	○				○			○
	TCGW110208S01020-3	0.8	0.08-0.50	0.05-0.25								○
	TCGW110208S01525-3	0.8	0.08-0.50	0.05-0.25	○				○			○
	TCGW110208S02020-3	0.8	0.08-0.50	0.05-0.25		○			○			○
	TCGW16T304S01020-3	0.4	0.08-0.50	0.05-0.20		●			○			○
	TCGW16T304S01225-3	0.4	0.08-0.50	0.05-0.20	●				○			○
	TCGW16T308S01020-3	0.8	0.08-0.50	0.05-0.25								○
	TCGW16T308S01525-3	0.8	0.08-0.50	0.05-0.25	●				○			○
	TCGW16T308S02020-3	0.8	0.08-0.50	0.05-0.25		●			○			○

● Ex stock ○ On demand

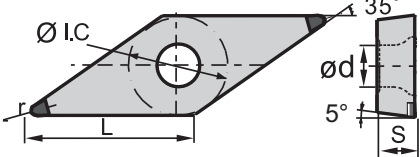









BL CBN with a low CBN content
BC CBN with coating
BH CBN with a high CBN content

Tool holder					
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
A283	A284	A285	A286	A341	A361

Turning CBN inserts

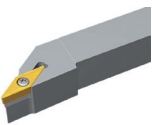
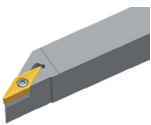
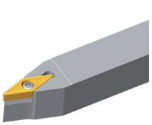
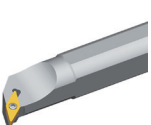
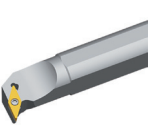

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

VBGW	L	I.C	S	d
16 04	16.6	9.525	4.76	4.4

VB** positive insert					BL (CBN)				BC (CBN)				BH (CBN)			
					P											
					M											
					K											
					N											
					S											
					H											
ISO					r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215	
	VBGW160404S01020-2				0.4	0.08-0.50	0.05-0.20			●			○		○	
	VBGW160404S01225-2				0.4	0.08-0.50	0.05-0.20	●				○				
	VBGW160408S01020-2				0.8	0.08-0.50	0.05-0.25								○	
	VBGW160408S01525-2				0.8	0.08-0.50	0.05-0.25	●				○				
	VBGW160408S02020-2				0.8	0.08-0.50	0.05-0.25		●			○				

● Ex stock ○ On demand

BL CBN with a low CBN content
 BC CBN with coating
 BH CBN with a high CBN content

Tool holder					
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

A

Turning

Turning CBN inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VCGW	L	I.C	S	d
11 03	11.1	6.35	3.18	2.8
16 04	16.6	9.525	4.76	4.4

VC** positive insert				BL (CBN)		BC (CBN)		BH (CBN)	
				P					
				M					
				K				●	
				N					
				S	●	●			
				H	○	○	○	○	○

B

Milling

ISO		r	a _p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	VCGW110302E-2	0.2	0.08-0.50	0.05-0.15	○		○					
	VCGW110304E-2	0.4	0.08-0.50	0.05-0.20	○		○					
	VCGW160404E-2	0.4	0.08-0.50	0.05-0.20	○		○					
	VCGW160404S01020-2	0.4	0.08-0.50	0.05-0.20		●			○			○
	VCGW160404S01225-2	0.4	0.08-0.50	0.05-0.20		●			○			
	VCGW160408E-2	0.8	0.08-0.50	0.05-0.25	○		○					
	VCGW160408S01020-2	0.8	0.08-0.50	0.05-0.25								○
	VCGW160408S01525-2	0.8	0.08-0.50	0.05-0.25		●			○			
	VCGW160408S02020-2	0.8	0.08-0.50	0.05-0.25		●			○			
	VCGW160412E-2	1.2	0.08-0.50	0.05-0.30	○		○					

● Ex stock ○ On demand

BL CBN with a low CBN content
BC CBN with coating
BH CBN with a high CBN content

C

Drilling

Tool holder						
SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
A277	A278	A312	A313	A343	A344	A363

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C***-SVUCR/L
Kr: 93°
A364

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System code > A158

Grade selection > A42

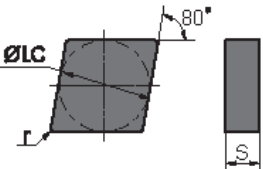





Technical info > A501

Cutting data > A366

Turning CBN inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

CNGN	L	I.C	S
09 03	9.7	9.525	3.18
12 04	12.9	12.7	4.76

CN** negative insert				BL (CBN)		BC (CBN)		BH (CBN)	
				P					
				M					
				K					
				N					
				S					
				H					
ISO				r	a _p	f	YZB630	YZB630C	YZB223
	CNGN090308S01525	0.8	0.5-2.0	0.3-0.5	○			○	
	CNGN090308T01525	0.8	0.5-2.0	0.3-0.5					○
	CNGN090312S01525	1.2	0.5-2.0	0.3-0.5	○			○	
	CNGN090312T01525	1.2	0.5-2.0	0.3-0.5					○
	CNGN120408S01525	0.8	0.5-2.0	0.3-0.5	○			○	
	CNGN120408T01525	0.8	0.5-2.0	0.3-0.5					●
	CNGN120412S01525	1.2	0.5-2.0	0.3-0.5	●			○	
	CNGN120412T01525	1.2	0.5-2.0	0.3-0.5					●
	CNGN120416S01525	1.6	0.5-2.0	0.3-0.5	○			○	
	CNGN120408T01525-M	0.8	0.5-2.0	0.3-0.5					○
	CNGN120412T01525-M	1.2	0.5-2.0	0.3-0.5					○
	CNGN120416T01525-M	1.6	0.5-2.0	0.3-0.5					○

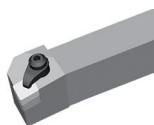
● Ex stock ○ On demand

BL CBN with a low CBN content
 BC CBN with coating
 BH CBN with a high CBN content

Tool holder

CCLNR/L

Kr: 95°






A292

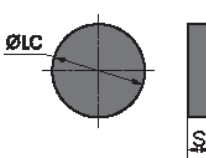










A

Turning

Turning CBN inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

RNGN	I.C	S
09 03	9.525	3.18
12 04	12.7	4.76

RN** negative insert				BL (CBN)	BC (CBN)	BH (CBN)
	P					
	M					
	K					
	N					
	S					
	H					
ISO		a _p	f	YZB630	YZB630C	YZB223
	RNGN090300S01525	0.5-2.0	0.3-0.5			
	RNGN090300T01525	0.5-2.0	0.3-0.5			
	RNGN120400S01525	0.5-2.0	0.3-0.5			
	RNGN120400T01525	0.5-2.0	0.3-0.5			

● Ex stock ○ On demand

BL CBN with a low CBN content
BC CBN with coating
BH CBN with a high CBN content

B

Milling

C

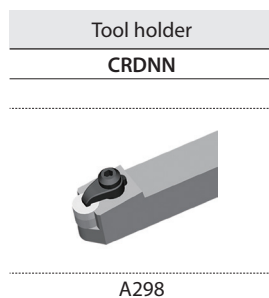
Drilling

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System code > A158

Grade selection > A42

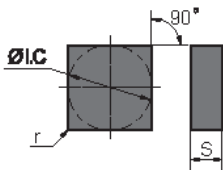





Technical info > A501

Cutting data > A366

Turning CBN inserts

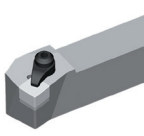
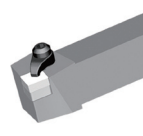
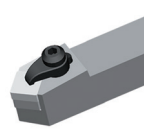
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

SNGN	L	I.C	S
12 04	12.7	12.7	4.76

SN** negative insert				BL (CBN)	BC (CBN)	BH (CBN)
				P		
				M		
				K		
				N		
				S		
				H		
ISO	r	a _p	f	YZB630	YZB630C	YZB223
	SNGN120408S01525	0.8	0.5-2.0	0.3-0.5	○	○
	SNGN120408T01525	0.8	0.5-2.0	0.3-0.5		●
	SNGN120412S01525	1.2	0.5-2.0	0.3-0.5	○	○
	SNGN120412T01525	1.2	0.5-2.0	0.3-0.5		○
	SNGN120416T01525	1.6	0.5-2.0	0.3-0.5		●
	SNGN120412T01525-M	1.2	0.5-2.0	0.3-0.5		○
	SNGN120416T01525-M	1.6	0.5-2.0	0.3-0.5		●

● Ex stock ○ On demand

BL CBN with a low CBN content
 BC CBN with coating
 BH CBN with a high CBN content

Tool holder		
CSKNR/L	CSNRN/L	CSDNN
Kr: 75°	Kr: 75°	Kr: 45°
		
A296	A297	A299

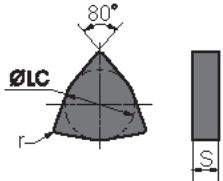
A

Turning

Turning CBN inserts



- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

WNGN	L	I.C	S
08 04	8.69	12.7	4.76

WN** negative insert				BL (CBN)	BC (CBN)	BH (CBN)			
				P					
				M					
				K					
				N					
				S					
				H					

B

Milling

ISO				r	a _p	f	YZB630	YZB630C	YZB223
	WNGN080408T01525	0.8	0.5-2.0	0.3-0.5					○
	WNGN080412T01525	1.2	0.5-2.0	0.3-0.5					○
	WNGN080416T01525	1.6	0.5-2.0	0.3-0.5					○
	WNGN080408T01525-M	0.8	0.5-2.0	0.3-0.5					○
	WNGN080412T01525-M	1.2	0.5-2.0	0.3-0.5					○
	WNGN080416T01525-M	1.6	0.5-2.0	0.3-0.5					○

● Ex stock ○ On demand

BL CBN with a low CBN content
BC CBN with coating
BH CBN with a high CBN content

C

Drilling

D

Technical Information

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System code > A158

Grade selection > A42

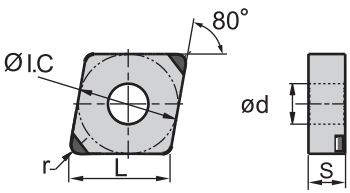


Technical info > A501

Cutting data > A366

Turning PCD inserts


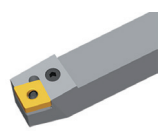
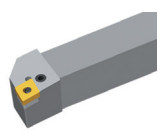
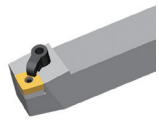
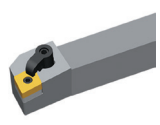
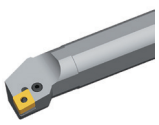
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

CNGA	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16

CN** negative insert				DP											
				P											
				M											
				K											
				N											
				S											
				H											
ISO		r	a _p	f	YCD421										
	CNGA120402F-1	0.2	0.08-0.50	0.05-0.15	○										
	CNGA120404F-1	0.4	0.08-0.50	0.05-0.20	○										
	CNGA120408F-1	0.8	0.08-0.50	0.05-0.25	○										
	CNGA120412F-1	1.2	0.08-0.50	0.05-0.30	○										

● Ex stock ○ On demand

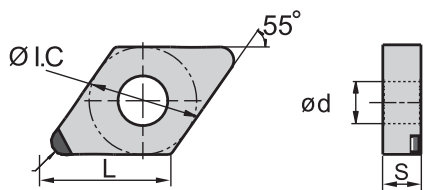
DP Polycrystalline diamond

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

- Ideal machining conditions
- ✿ Normal machining conditions
- ✿ Unfavourable machining conditions

DNGA	L	I.C	S	d
15 06	15.5	12.7	6.35	5.16

Turning PCD inserts










DN** negative insert				DP	
				P	
				M	
				K	
				N	
				S	
				H	
ISO	r	a _p	f	YCD421	
	DNGA150602F-1	0.2	0.08-0.50	0.05-0.15	○
	DNGA150604F-1	0.4	0.08-0.50	0.05-0.20	○
	DNGA150608F-1	0.8	0.08-0.50	0.05-0.25	○




● Ex stock ○ On demand

DP Polycrystalline diamond

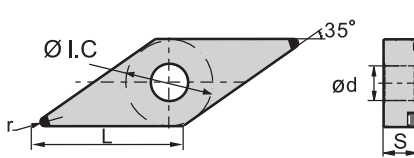


Tool holder

DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Turning PCD inserts


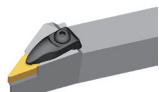


-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

VNGA	L	I.C	S	d
16 04	16.6	9.525	4.76	3.81

VN** negative insert				DP															
				P															
				M															
				K															
				N															
				S															
				H															
ISO		r	a _p	f	YCD421														
	VNGA160402F-1	0.2	0.08-0.50	0.05-0.15	○														
	VNGA160404F-1	0.4	0.08-0.50	0.05-0.20	○														

● Ex stock ○ On demand

DP Polycrystalline diamond

Tool holder			
DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CCGT	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

Turning PCD inserts

CC** positive insert				DP											
				P											
				M											
				K											
				N	○										
				S											
				H											
ISO	r	a _p	f	YCD421											
	CCGT060202F-1	0.2	0.05-0.50	0.05-0.15	○										
	CCGT060204F-1	0.4	0.08-0.50	0.05-0.20	●										
	CCGT060208F-1	0.8	0.08-0.50	0.05-0.25	○										
	CCGT09T302F-1	0.2	0.08-0.50	0.05-0.15	○										
	CCGT09T304F-1	0.4	0.08-0.50	0.05-0.20	○										
	CCGT09T308F-1	0.8	0.08-0.50	0.05-0.25	○										
	CCGT120402F-1	0.2	0.08-0.50	0.05-0.15	○										
	CCGT120404F-1	0.4	0.08-0.50	0.05-0.20	○										
	CCGT120408F-1	0.8	0.08-0.50	0.05-0.25	○										
	CCGT060204F-1MED	0.4	0.08-0.50	0.05-0.20	○										
	CCGT060208F-1MED	0.8	0.08-0.50	0.05-0.25	○										
	CCGT09T302F-1MED	0.2	0.08-0.50	0.05-0.15	○										
	CCGT09T304F-1MED	0.4	0.08-0.50	0.05-0.20	○										
	CCGT09T308F-1MED	0.8	0.08-0.50	0.05-0.25	○										

● Ex stock ○ On demand

DP Polycrystalline diamond

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
A269	A270	A306	A307	A334	A352	A353
E***-SCLCR/L						
Kr: 95°						

A355




System code > A158

Grade selection > A42

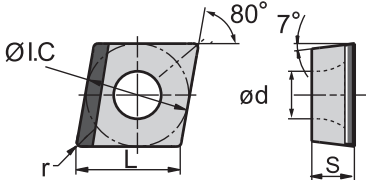


Technical info > A501

Cutting data > A366

Turning PCD inserts

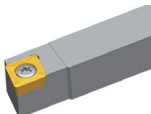
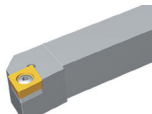
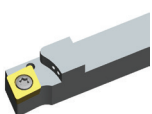
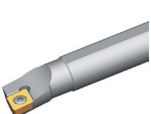



-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

CCGT	L	I.C	S	d
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

CC** positive insert				DP											
				P											
				M											
				K											
				N											
				S											
				H											
ISO		r	a _p	f	YCD421										
	CCGT09T308-LL	0.8	0.08-0.50	0.05-0.25	○										
	CCGT09T308-LR	0.8	0.08-0.50	0.05-0.25	○										
	CCGT120404-LL	0.4	0.08-0.50	0.05-0.20	○										
	CCGT120404-LR	0.4	0.08-0.50	0.05-0.20	○										
	CCGT120408-LL	0.8	0.08-0.50	0.05-0.25	○										
	CCGT120408-LR	0.8	0.08-0.50	0.05-0.25	○										

● Ex stock ○ On demand

DP Polycrystalline diamond

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353
E***-SCLCR/L						
Kr: 95°						
						
A355						

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- Normal machining conditions
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CCGW	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

Turning PCD inserts

CC** positive insert				DP															
				P															
				M															
				K															
				N	○														
				S															
				H															
ISO	r	a _p	f	YCD421															
	CCGW060202F-1	0.2	0.08-0.50	0.05-0.15	○														
	CCGW060204F-1	0.4	0.08-0.50	0.05-0.20	○														
	CCGW09T304F-1	0.4	0.08-0.50	0.05-0.20	●														
	CCGW09T308F-1	0.8	0.08-0.50	0.05-0.25	●														
	CCGW120404F-1	0.4	0.08-0.50	0.05-0.20	●														
	CCGW120408F-1	0.8	0.08-0.50	0.05-0.25	●														

● Ex stock ○ On demand

DP Polycrystalline diamond

D

Technical
Information

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°
A355




System code > A158

Grade selection > A42

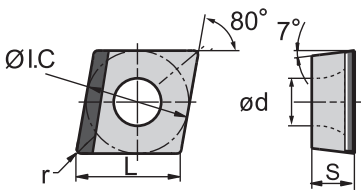


Technical info > A501

Cutting data > A366

Turning PCD inserts

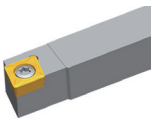
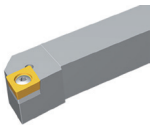
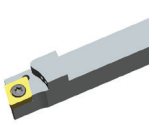
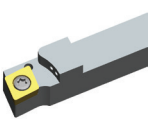
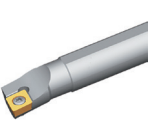
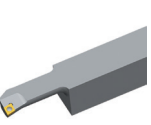
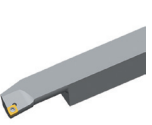
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions


CCGW	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

CC** positive insert				DP									
				P									
				M									
				K									
				N									
				S									
				H									
ISO	r	a _p	f	YCD421									
	CCGW060204-LL	0.2	0.08-0.50	0.05-0.20	○								
	CCGW060204-LR	0.4	0.08-0.50	0.05-0.20	○								
	CCGW09T304-LL	0.4	0.08-0.50	0.05-0.20	○								
	CCGW09T304-LR	0.4	0.08-0.50	0.05-0.20	○								
	CCGW09T308-LL	0.8	0.08-0.50	0.05-0.25	○								
	CCGW09T308-LR	0.8	0.08-0.50	0.05-0.25	○								
	CCGW120404-LL	0.4	0.08-0.50	0.05-0.20	○								
	CCGW120404-LR	0.4	0.08-0.50	0.05-0.20	○								
	CCGW120408-LL	0.8	0.08-0.50	0.05-0.25	○								
	CCGW120408-LR	0.8	0.08-0.50	0.05-0.25	○								

● Ex stock ○ On demand

DP Polycrystalline diamond

Tool holder						
SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

A355

A

Turning

Turning PCD inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DCGT	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** positive insert		DP									
	P										
	M										
	K										
	N	●									
	S										
	H										

B

Milling

ISO		r	a _p	f	YCD421										
	DCGT070202F-1	0.2	0.08-0.50	0.05-0.15	○										
	DCGT070204F-1	0.4	0.08-0.50	0.05-0.20	○										
	DCGT11T302F-1	0.2	0.08-0.50	0.05-0.15	●										
	DCGT11T304F-1	0.4	0.08-0.50	0.05-0.20	●										
	DCGT11T308F-1	0.8	0.08-0.50	0.05-0.25	○										

● Ex stock ○ On demand

DP Polycrystalline diamond

C

Drilling

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
A336	A337	A338	A357

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System code > A158

Grade selection > A42

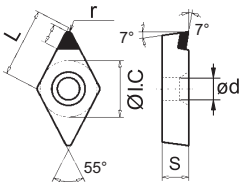


Technical info > A501

Cutting data > A366

Turning PCD inserts

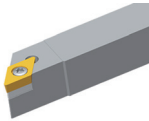
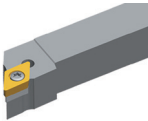
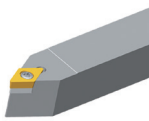
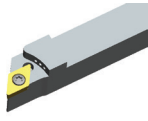
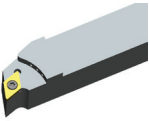
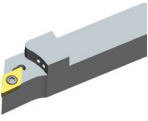
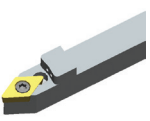
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

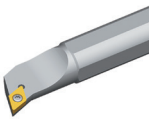

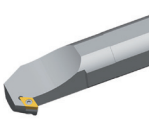

DCGT	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** positive insert				DP															
				P															
				M															
				K															
				N															
				S															
				H															
ISO		r	a _p	f	YCD421														
	DCGT070202F-1MED	0.2	0.08-0.50	0.05-0.15	○														
	DCGT070204F-1MED	0.4	0.08-0.50	0.05-0.20	○														
	DCGT070208F-1MED	0.8	0.08-0.50	0.05-0.25	○														
	DCGT11T302F-1MED	0.2	0.08-0.50	0.05-0.15	○														
	DCGT11T304F-1MED	0.4	0.08-0.50	0.05-0.20	○														
	DCGT11T308F-1MED	0.8	0.08-0.50	0.05-0.25	○														

● Ex stock ○ On demand

DP Polycrystalline diamond

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

A

Turning

Turning PCD inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DCGW	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** positive insert					DP									
					P									
					M									
					K									
					N	●								
					S									
					H									
ISO		r	a _p	f	YCD421									
	DCGW070202F-1	0.2	0.08-0.50	0.05-0.15	●									
	DCGW070204F-1	0.4	0.08-0.50	0.05-0.20	●									
	DCGW070208F-1	0.8	0.08-0.50	0.05-0.25	○									
	DCGW11T302F-1	0.2	0.08-0.50	0.05-0.15	●									
	DCGW11T304F-1	0.4	0.08-0.50	0.05-0.20	●									

● Ex stock ○ On demand

DP Polycrystalline diamond

B

Milling

C

Drilling

Tool holder						
SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
A336	A337	A338	A357

D

Technical Information

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System code > A158

Grade selection > A42

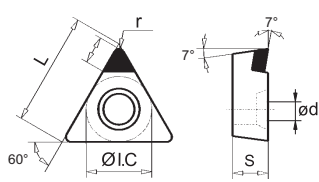


Technical info > A501

Cutting data > A366

Turning PCD inserts

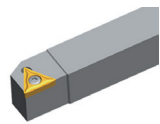
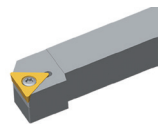
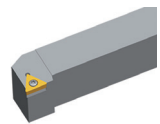
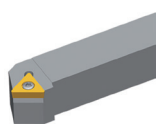


-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

TCGT	L	I.C	S	d
11 02	11	6.35	2.38	2.8
16 T3	16.5	9.525	3.97	4.4




TC** positive insert				DP															
				P															
				M															
				K															
				N															
				S															
				H															
ISO		r	a _p	f	YCD421														
	TCGT110202F-1	0.2	0.08-0.50	0.05-0.15	○														
	TCGT110204F-1	0.4	0.08-0.50	0.05-0.20	○														
	TCGT110208F-1	0.8	0.08-0.50	0.05-0.25	○														
	TCGT16T302F-1	0.2	0.08-0.50	0.05-0.15	○														
	TCGT16T304F-1	0.4	0.08-0.50	0.05-0.20	○														
	TCGT16T308F-1	0.8	0.08-0.50	0.05-0.25	○														
	TCGT110202F-1MED	0.2	0.08-0.50	0.05-0.15	○														
	TCGT110204F-1MED	0.4	0.08-0.50	0.05-0.20	○														
	TCGT110208F-1MED	0.8	0.08-0.50	0.05-0.25	○														
	TCGT16T302F-1MED	0.2	0.08-0.50	0.05-0.15	○														
	TCGT16T304F-1MED	0.4	0.08-0.50	0.05-0.20	○														
	TCGT16T308F-1MED	0.8	0.08-0.50	0.05-0.25	○														

● Ex stock ○ On demand

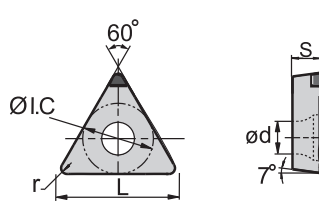

DP Polycrystalline diamond

Tool holder					
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

Turning PCD inserts

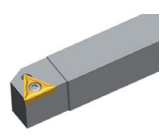
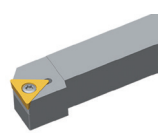
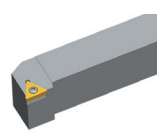
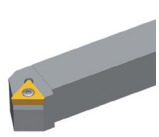


-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

TCGW	L	I.C	S	d
11 02	11	6.35	2.38	2.8
16 T3	16.5	9.525	3.97	4.4

TC** positive insert				DP									
				P									
				M									
				K									
				N	○								
				S									
				H									
ISO	r	a _p	f	YCD421									
	TCGW110202F-1	0.2	0.08-0.50	0.05-0.15	○								
	TCGW110204F-1	0.4	0.08-0.50	0.05-0.20	●								
	TCGW110208F-1	0.8	0.08-0.50	0.05-0.25	○								
	TCGW16T304F-1	0.4	0.08-0.50	0.05-0.20	●								
	TCGW16T308F-1	0.8	0.08-0.50	0.05-0.25	○								
	TCGW16T312F-1	1.2	0.08-0.50	0.05-0.30	○								

● Ex stock ○ On demand

DP Polycrystalline diamond

Tool holder					
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

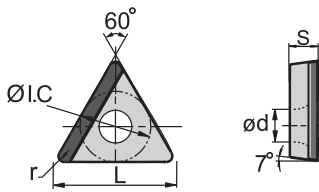
A

Turning

Turning PCD inserts


- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TCGW	L	I.C	S	d
11 02	11	6.35	2.38	2.8
16 T3	16.5	9.525	3.97	4.4

TC** positive insert				DP															
				P															
				M															
				K															
				N	●														
				S															
				H															

B

Milling

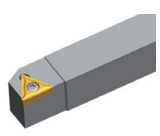
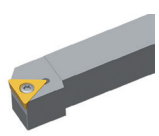
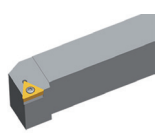
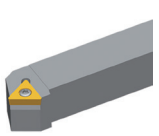


ISO		r	a _p	f	YCD421														
	TCGW110202-L	0.2	0.08-0.50	0.05-0.15	○														
	TCGW110204-L	0.4	0.08-0.50	0.05-0.20	○														
	TCGW110208-L	0.8	0.08-0.50	0.05-0.25	○														
	TCGW16T302-L	0.2	0.08-0.50	0.05-0.15	○														
	TCGW16T304-L	0.4	0.08-0.50	0.05-0.20	○														
	TCGW16T308-L	0.8	0.08-0.50	0.05-0.25	○														

● Ex stock ○ On demand

DP Polycrystalline diamond

C

Drilling

Tool holder					
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

D

Technical Information

E

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System code > A158

Grade selection > A42

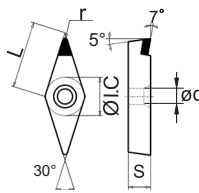


Technical info > A501

Cutting data > A366

Turning PCD inserts

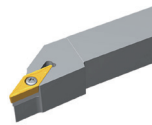
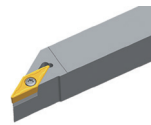
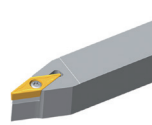



-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

VBGT	L	I.C	S	d
11 03	11	6.35	3.18	2.8
16 04	16.6	9.525	4.76	4.4

VB** positive insert				DP											
				P											
				M											
				K											
				N											
				S											
				H											
ISO	r	a _p	f	YCD421											
	VBGT110302F-1	0.2	0.08-0.50	0.05-0.15	○										
	VBGT110304F-1	0.4	0.08-0.50	0.05-0.20	○										
	VBGT110308F-1	0.8	0.08-0.50	0.05-0.25	○										
	VBGT160402F-1	0.2	0.08-0.50	0.05-0.15	○										
	VBGT160404F-1	0.4	0.08-0.50	0.05-0.20	○										
	VBGT160408F-1	0.8	0.08-0.50	0.05-0.25	○										
	VBGT160404F-1MED	0.4	0.08-0.50	0.05-0.20	○										
	VBGT160408F-1MED	0.8	0.08-0.50	0.05-0.25	○										

● Ex stock ○ On demand

DP Polycrystalline diamond

Tool holder					
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

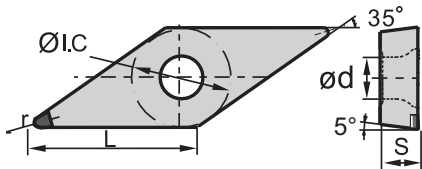

A

Turning

Turning PCD inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VBGW	L	I.C	S	d
11 03	11	6.35	3.18	2.8
16 04	16.6	9.525	4.76	4.4

VB** positive insert					DP									
					P									
					M									
					K									
					N	●								
					S									
					H									
ISO	r	a _p	f	YCD421										
	VBGW110302F-1	0.2	0.08-0.50	0.05-0.15	○									
	VBGW110304F-1	0.4	0.08-0.50	0.05-0.20	●									
	VBGW160402F-1	0.2	0.08-0.50	0.05-0.15	○									
	VBGW160404F-1	0.4	0.08-0.50	0.05-0.20	●									
	VBGW160408F-1	0.8	0.08-0.50	0.05-0.25	○									

● Ex stock ○ On demand

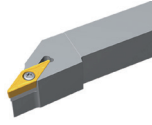
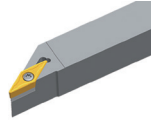
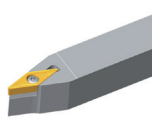
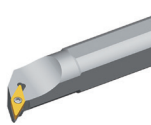


DP Polycrystalline diamond

B

Milling

C

Drilling

Tool holder					
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

D

Technical Information

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System code > A158

Grade selection > A42

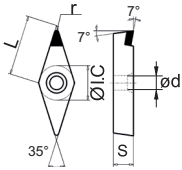

Technical info > A501

Cutting data > A366

Turning PCD inserts

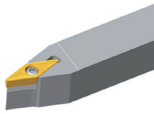
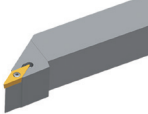
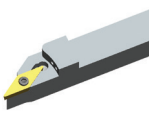
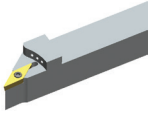
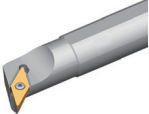

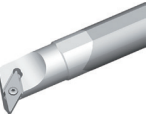
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

VCGT	L	I.C	S	d
11 02	11	6.35	2.38	2.8
16 04	16.6	9.525	4.76	4.4

VC** positive insert				DP															
				P															
				M															
				K															
				N															
				S															
				H															
ISO		r	a _p	f	YCD421														
	VCGT110202F-1	0.2	0.08-0.50	0.05-0.15	○														
	VCGT110204F-1	0.4	0.08-0.50	0.05-0.20	○														
	VCGT160402F-1	0.2	0.08-0.50	0.05-0.15	○														
	VCGT160404F-1	0.4	0.08-0.50	0.05-0.20	○														
	VCGT160408F-1	0.8	0.08-0.50	0.05-0.25	○														

● Ex stock ○ On demand




DP Polycrystalline diamond

Tool holder						
SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

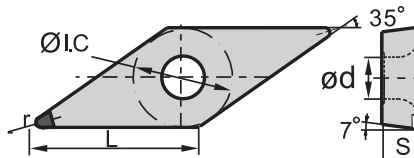

C***-SVUCR/L
Kr: 93°

A364

Turning PCD inserts

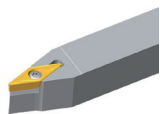
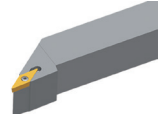
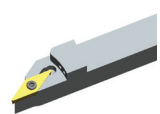
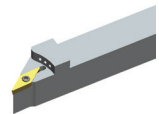


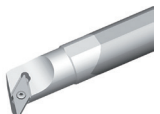
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

VCGW	L	I.C	S	d
11 03	11	6.35	3.18	2.8
16 04	16.6	9.525	4.76	4.4

VC** positive insert				DP															
				P															
				M															
				K															
				N															
				S															
				H															
ISO	r	a _p	f	YCD421															
	VCGW110302F-1	0.2	0.08-0.50	0.05-0.15	○														
	VCGW110304F-1	0.4	0.08-0.50	0.05-0.20	○														
	VCGW160404F-1	0.4	0.08-0.50	0.05-0.20	○														
	VCGW160408F-1	0.8	0.08-0.50	0.05-0.25	○														

● Ex stock ○ On demand

DP Polycrystalline diamond

Tool holder						
SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

A364

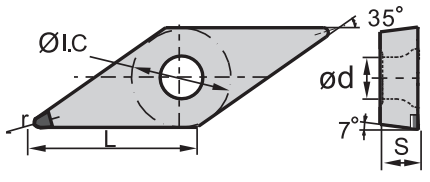

A

Turning

Turning PCD inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

VCGX	L	I.C	S	d
22 05	22	12.7	5.56	5.5

VC** positive insert				DP															
				P															
				M															
				K															
				N	●														
				S															
				H															
ISO	r	a _p	f	YCD421															
 VCGX220530-1	3	0.5-7.0	0.25-1.00	○															

● Ex stock ○ On demand

DP Polycrystalline diamond

C

Drilling

D

Technical Information

E

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System code > A158

Grade selection > A42

Technical info > A501

Cutting data > A366

This image shows a full page of a handwriting practice worksheet. It consists of multiple sets of three horizontal lines each: a solid top line, a dashed middle line, and a solid bottom line. These lines are evenly spaced across the entire page to guide letter formation and size. There is no text or other markings on the page.

Turning

Milling

Drilling

Technical Information

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T N G A 12 04 08 T 020 20

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Turning

B

Milling

C

Drilling

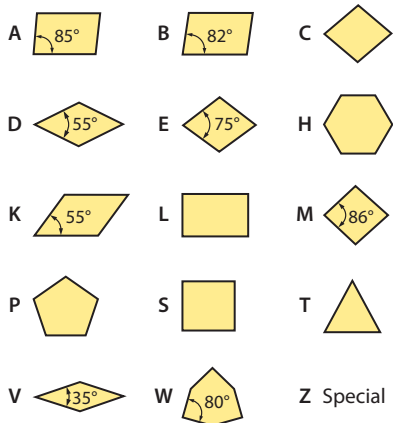
D

Technical Information

E

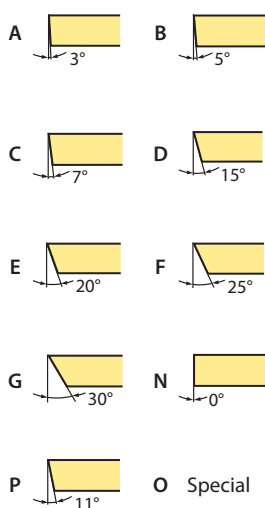
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Insert shape



1

Clearance angle



2

Tolerance class

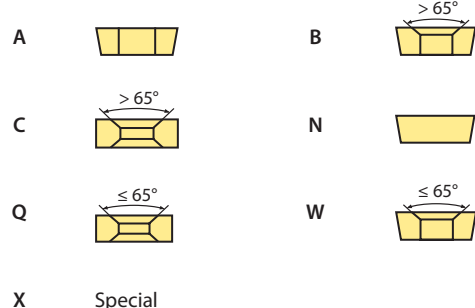


Code	I.C. [mm]	m [mm]	S [mm]
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C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,15	±0,005	±0,025
K	±0,05–0,15	±0,013	±0,025
L	±0,05–0,15	±0,025	±0,025
M	±0,05–0,15	±0,08–0,20	±0,130
N	±0,05–0,15	±0,08–0,20	±0,025
U	±0,08–0,25	±0,13–0,38	±0,130

3

Fastening features (metric)

Insert shape

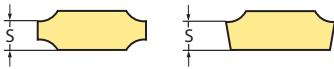


4


Cutting edge length l [mm]

I.C. [mm]	Insert shape					
	C	D	S	T	V	W
3,97	06					
5,0						
5,56	09					
6,0						
6,35	06	07		11	11	
8,0						
9,525	09	11	09	16	16	06
10,0						
12,0						
12,7	12	15	12	22	22	08
15,875	16		15	27		
16,0	19					
19,05	19		19	33		
20,0						
25,0	25	25				
25,4	25					
31,75						
32						





5

Insert thickness S [mm]			
			
Code	S	Code	S
02	2,38	06	6,35
T2	2,58	T6	6,75
03	3,18	07	7,94
T3	3,97	09	9,52
04	4,76	T9	9,72
T4	4,96	11	11,11
05	5,56	12	12,70
T5	5,95		

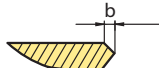
6

Nose radius r [mm]	
	
Code	r
00	–
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
32	3,2
X	Special
MO	Plaquettes rondes


7

Cutting edge profile		
Code	Cutting edge	Insert shape
E	Rounding	
F	Sharp edge	
T	Chamfer	
S	Chamfer + Rounding	

8

Chamfer width b [mm]	
	
Code	b
010	0,10
015	0,15
020	0,20
025	0,25
030	0,30
035	0,35
040	0,40
045	0,45
050	0,50
100	1,00
200	2,00

9

Angle du chanfrein α	
	
Code	α
05	5°
10	10°
15	15°
20	20°
25	25°
30	30°

10

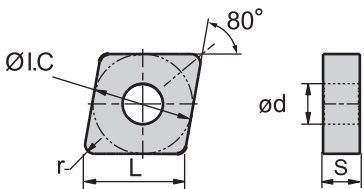








A

Turning

Turning ceramic inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

CNGA	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35

CN** negative insert				CM		CC		CN		CR		
				P								
				M								
				K								
				N								
				S							 	
				H								
ISO		r	a _p	f	CA1000		CM1000		CN1000 CS1000		CW1400 CW1800	
	CNGA120404S02020	0.4	0.1-0.3	0.08-0.25			●					
	CNGA120404T01020	0.4	0.1-0.3	0.08-0.25			○					
	CNGA120404T02020	0.4	0.1-0.3	0.08-0.25	○		●		●			
	CNGA120408S01520	0.8	0.1-0.25	0.5-2.5							○	
	CNGA120408S02020	0.8	0.1-0.4	0.1-0.3			●					
	CNGA120408T00520	0.8	0.1-0.25	0.5-2.5							○ ●	
	CNGA120408T01020	0.8	0.1-0.4	0.1-0.3			○					
	CNGA120408T02020	0.8	0.1-0.4	0.1-0.3	○		●		○			
	CNGA120412S01520	1.2	0.1-0.3	0.5-2.5							○	
	CNGA120412S02020	1.2	0.1-0.5	0.1-0.3			●					
	CNGA120412T00520	1.2	0.1-0.3	0.5-2.5							○	
	CNGA120412T02020	1.2	0.1-0.5	0.1-0.3	○		○		●			
	CNGA120416S01520	1.6	0.1-0.35	0.5-3.0							○	
	CNGA120416T00520	1.6	0.1-0.35	0.5-3.0							○ ○	
CNGA160612T02020	1.2	0.2-2.0	0.1-0.3					●				

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si₃N₄ Ceramic
CR Al₂O₃ cutting ceramic, reinforced

B

Milling

C

Drilling

D

Technical Information

Tool holder					
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
A230	A237	A238	A252	A253	A324

E

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System code > A198

Grade selection > A42

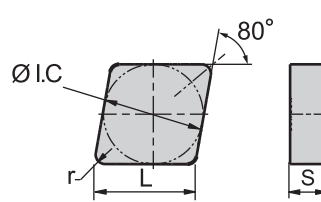










































Technical info > A501

Cutting data > A366

Turning ceramic inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

CNGN	L	I.C	S
12 07	12.9	12.7	7.94
12 04	12.9	12.7	4.76
16 06	16.1	15.875	6.35
16 07	16.1	15.875	7.94

CN** negative insert					CM		CC		CN		CR		
					P								
					M								
					K								
					N								
					S								
					H								
ISO		r	a _p	f	CA1000		CM1000		CN1000 CS1000		CW1400 CW1800		
	CNGN120404T00520	0.4	0.1-0.25	0.5-2.0									
	CNGN120404T02020	0.4	0.1-0.3	0.08-0.25									
	CNGN120408S01520	0.8	0.1-0.25	0.5-2.5									
	CNGN120408S02020	0.8	0.1-0.4	0.1-0.3									
	CNGN120408T00520	0.8	0.1-0.25	0.5-2.5									
	CNGN120408T02020	0.8	0.1-0.4	0.1-0.3									
	CNGN120412S01520	1.2	0.1-0.3	0.5-2.5									
	CNGN120412T00520	1.2	0.1-0.3	0.5-2.5									
	CNGN120412T02020	1.2	0.1-0.5	0.1-0.3									
	CNGN120416S01520	1.6	0.1-0.35	0.5-3.0									
	CNGN120416T00520	1.6	0.1-0.35	0.5-3.0									
	CNGN120416T02020	1.6	0.5-2.0	0.1-0.35									
	CNGN120708S01520	0.8	0.1-0.25	0.5-2.5									
	CNGN120708T00520	0.8	0.1-0.25	0.5-2.5									
	CNGN120708T02020	0.8	0.1-0.4	0.1-0.3									
	CNGN120712S01520	1.2	0.1-0.3	0.5-2.5									
	CNGN120712S02025	1.2	0.1-0.3	0.5-2.5									
	CNGN120712T00520	1.2	0.1-0.3	0.5-2.5									
	CNGN120712T00525	1.2	0.1-0.3	0.5-2.5									
	CNGN120712T02020	1.2	0.1-0.5	0.1-0.3									
	CNGN120716S01520	1.6	0.1-0.35	0.5-3.0									
	CNGN120716T00520	1.6	0.1-0.35	0.5-3.0									
	CNGN120716T01520	1.6	0.1-0.35	0.5-3.0									
	CNGN120716T02020	1.6	0.1-0.6	0.1-0.4									
	CNGN160616T02020	1.6	0.1-0.6	0.1-0.4									
	CNGN160712T01525	1.2	0.2-2.0	0.1-0.3									
	CNGN160716T01525	1.6	0.1-0.6	0.1-0.4									
	CNGN160716T02020	1.6	0.5-2.0	0.1-0.35									

● Ex stock ○ On demand

CM Mixed ceramic
 CC Mixed ceramic, coated
 CN Si3N4 Ceramic
 CR Al2O3 cutting ceramic, reinforced

A

Turning

B

Milling

C

Drilling

D

Technical
Information

E

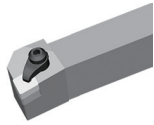
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A

Tool holder

CCLNR/L

Kr: 95°



A292

Turning

B

Milling

C

Drilling

D

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System code > A198

Grade selection > A42

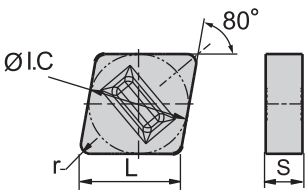

Technical info > A501

Cutting data > A366

Turning ceramic inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

CNGX	L	I.C	S
12 07	12.9	12.7	7.94

CN** negative insert					CM	CC	CN	CR
					P			
					M			
					K			
					N			
					S			
					H			
ISO	r	a _p	f		CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	CNGX120712T02020	1.2	0.2-2.0	0.1-0.3			●	
	CNGX120716T02020	1.6	0.5-2.0	0.1-0.35			○	

● Ex stock ○ On demand

CM Mixed ceramic
 CC Mixed ceramic, coated
 CN Si3N4 Ceramic
 CR Al2O3 cutting ceramic, reinforced

Tool holder

JCLNR/L

Kr: 95°



A300

A

Turning

Turning ceramic inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DNGA	L	I.C	S	d
15 06	15.5	12.7	6.35	5.16
15 04	15.5	12.7	4.76	5.16

DN** negative insert		CM	CC	CN	CR
	P	●			
	M				
	K	●		●	
	N				
	S			●	●
	H		○		

B

Milling

ISO	r	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
DNGA150404T02020	0.4	0.1-0.3	0.08-0.25		○		
DNGA150408S01520	0.8	0.1-0.25	0.5-2.5				○
DNGA150408T00520	0.8	0.1-0.25	0.5-2.5				●
DNGA150408T02020	0.8	0.1-0.4	0.1-0.3		○		
DNGA150412S01520	1.2	0.1-0.3	0.5-2.5				○
DNGA150412T00520	1.2	0.1-0.3	0.5-2.5				●
DNGA150412T02020	1.2	0.1-0.5	0.1-0.3		○	○	○
DNGA150416S01520	1.6	0.1-0.35	0.5-3.0				○
DNGA150416T00520	1.6	0.1-0.35	0.5-3.0				○
DNGA150604S02020	0.4	0.1-0.3	0.08-0.25		●		
DNGA150604T01020	0.4	0.1-0.3	0.08-0.25		○		
DNGA150604T02020	0.4	0.1-0.3	0.08-0.25		●	○	
DNGA150608S02020	0.8	0.1-0.4	0.1-0.3		●		
DNGA150608T02020	0.8	0.1-0.4	0.1-0.3		○	●	
DNGA150612S02020	1.2	0.1-0.5	0.1-0.3		●		
DNGA150612T01020	1.2	0.1-0.5	0.1-0.3		○		
DNGA150612T02020	1.2	0.1-0.5	0.1-0.3		●	○	
DNGA150616T02020	1.6	0.5-2.0	0.1-0.35			○	

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

D

Technical Information

Tool holder						
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
A231	A240	A241	A254	A255	A326	A327

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System code > A198

Grade selection > A42

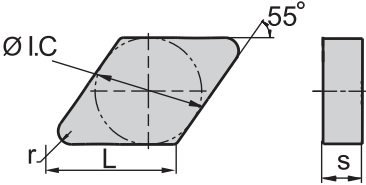

Technical info > A501

Cutting data > A366

Turning ceramic inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

DNGN	L	I.C	S
15 04	15.5	12.7	4.76
15 07	15.5	12.7	7.94

DN** negative insert					CM	CC	CN	CR
					P			
					M			
					K			
					N			
					S			
					H			
ISO	r	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800	
	DNGN150408S01520	0.8	0.1-0.25	0.5-2.5				
	DNGN150408T00520	0.8	0.1-0.25	0.5-2.5				
	DNGN150408T02020	0.8	0.1-0.4	0.1-0.3	○	○		
	DNGN150412S01520	1.2	0.1-0.3	0.5-2.5				
	DNGN150412T00520	1.2	0.1-0.3	0.5-2.5				
	DNGN150412T02020	1.2	0.1-0.5	0.1-0.3	○			
	DNGN150416S01520	1.6	0.1-0.35	0.5-3.0				
	DNGN150416T00520	1.6	0.1-0.35	0.5-3.0				
	DNGN150704T02020	0.4	0.1-0.3	0.08-0.25	○	○		
	DNGN150708T01520	0.8	0.1-0.25	0.5-2.5				
	DNGN150708T02020	0.8	0.1-0.4	0.1-0.3	●	○		
	DNGN150712T02020	1.2	0.1-0.5	0.1-0.3	○	○		
	DNGN150716T01520	1.6	0.1-0.35	0.5-3.0				
	DNGN150716T02020	1.6	0.1-0.6	0.1-0.4	○			

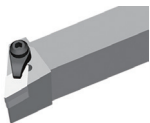
● Ex stock ○ On demand

CM Mixed ceramic
 CC Mixed ceramic, coated
 CN Si3N4 Ceramic
 CR Al2O3 cutting ceramic, reinforced

Tool holder

CDJNR/L

Kr: 93°



A294

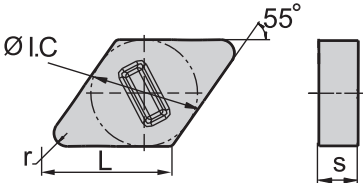











A

Turning

Turning ceramic inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DNGX	L	I.C	S
15 07	15.5	12.7	7.94

DN** negative insert				CM		CC		CN		CR		
				P								
				M								
				K								
				N								
				S								
				H								
ISO		r	a _p	f	CA1000	CM1000		CN1000 CS1000		CW1400 CW1800		
	DNGX150708T02020	0.8	0.15-1.5	0.1-0.25								
	DNGX150712T02020	1.2	0.2-2.0	0.1-0.3								
	DNGX150716T02020	1.6	0.5-2.0	0.1-0.35								

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

B

Milling

C

Drilling

Tool holder	
JDJNR/L	
Kr: 93°	
A301	

D

Technical Information

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System code > A198

Grade selection > A42

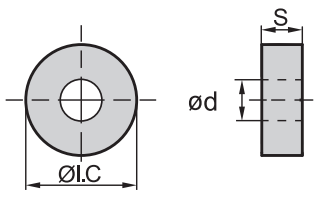









Technical info > A501

Cutting data > A366

Turning ceramic inserts

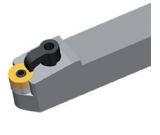
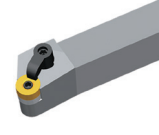
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

RNGA	I.C	S	d
12 04	12.7	4.76	

RN** negative insert				CM	CC	CN	CR
	P						
	M						
	K						
	N						
	S						
	H						
ISO	a_p	f		CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	RNGA120400T02020	0.1-0.6	0.1-0.4				

● Ex stock ○ On demand

CM Mixed ceramic
 CC Mixed ceramic, coated
 CN Si3N4 Ceramic
 CR Al2O3 cutting ceramic, reinforced

Tool holder	
MRDNN	MRGNN/L
	
A267	A268

A

Turning

B

Milling

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Drilling

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A

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Technical Information

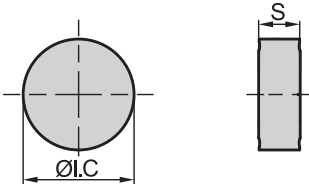








































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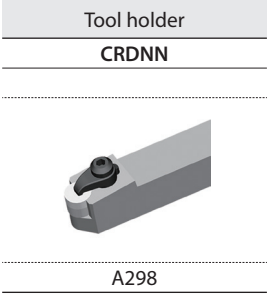
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RNGN	I.C	S
06 03	6.35	3.18
09 04	9.525	4.76
09 03	9.525	3.18
12 07	12.7	7.94
12 04	12.7	4.76
15 07	15.875	7.94
19 07	19.05	7.94
25 07	25.4	7.94
25 10	25.4	10.05

Turning ceramic inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

RN** negative insert				CM	CC	CN	CR
	P						
	M						
	K						
	N						
	S					 	
	H						
ISO	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800	
	RNGN060300T01020	0.1-0.3	0.08-0.25				
	RNGN090300S01520	0.1-0.3	0.5-2.5				
	RNGN090300T00520	0.1-0.3	0.5-2.5			 	
	RNGN090300T02020	0.1-0.3	0.1-0.3				
	RNGN090400S01520	0.1-0.3	0.5-2.5				
	RNGN090400T00520	0.1-0.3	0.5-2.5				
	RNGN090400T02020	0.1-0.3	0.1-0.3				
	RNGN120400S01520	0.1-0.35	0.5-3.0				
	RNGN120400S02020	0.1-0.6	0.1-0.4				
	RNGN120400T00520	0.1-0.35	0.5-3.0				
	RNGN120400T01020	0.5-2.0	0.1-0.2				
	RNGN120400T01525	0.1-0.6	0.1-0.4				
	RNGN120400T02020	0.1-0.6	0.1-0.4				
	RNGN120700S01520	0.1-0.35	0.5-3.0				
	RNGN120700S02020	0.1-0.6	0.1-0.4				
	RNGN120700T00520	0.1-0.35	0.5-3.0			 	
	RNGN120700T00525	0.1-0.35	0.5-3.0			 	
	RNGN120700T01520	0.1-0.35	0.5-3.0				
	RNGN120700T01525	0.2-2.0	0.1-0.3				
	RNGN120700T02020	0.2-2.0	0.1-0.3				
	RNGN150700T02020	0.1-0.6	0.1-0.5				
	RNGN190700S01520	0.1-0.4	0.5-3.0				
	RNGN190700T00520	0.1-0.4	0.5-3.0				
	RNGN190700T03020	0.1-0.7	0.1-0.5				
	RNGN250700T19015	0.1-0.7	0.1-0.8				
	RNGN251000T05020	0.1-0.7	0.1-0.5				



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Turning
B
Milling
C
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D
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E
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A

Turning

Turning ceramic inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SNGA	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16

SN** negative insert					CM	CC	CN	CR
					P			
					M			
					K			
					N			
					S			
					H			
ISO	r	a _p	f		CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
SNGA120404T02020	0.4	0.1-1.0	0.1-0.2				○	
SNGA120408S02020	0.8	0.1-0.4	0.1-0.3			○		
SNGA120408T02020	0.8	0.1-0.4	0.1-0.3	○		○	○	
SNGA120412T02020	1.2	0.2-2.0	0.1-0.3				○	

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

B

Milling

C

Drilling

Tool holder						
DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
A258	A259	A329

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System code > A198

Grade selection > A42

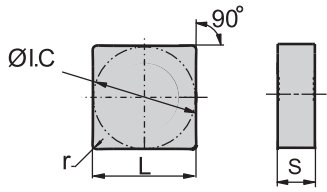












































Technical info > A501

Cutting data > A366

Turning ceramic inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

SNGN	L	I.C	S
12 04	12.7	12.7	4.76
12 07	12.7	12.7	7.94
15 07	15.875	15.875	7.94
19 07	19.05	19.05	7.94

SN** negative insert					CM	CC	CN	CR
				P				
				M				
				K				
				N				
				S				
				H				
ISO	r	a _p	f		CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	SNGN120404T02020	0.4	0.1-0.3	0.08-0.25				
	SNGN120408S01520	0.8	0.1-0.25	0.5-2.5				
	SNGN120408S02020	0.8	0.1-0.4	0.1-0.3				
	SNGN120408T00520	0.8	0.15-1.5	0.1-0.25				
	SNGN120408T02020	0.8	0.1-0.4	0.1-0.3				
	SNGN120412S01520	1.2	0.1-0.3	0.5-2.5				
	SNGN120412T00520	1.2	0.1-0.3	0.5-2.5				
	SNGN120412T02020	1.2	0.1-0.5	0.1-0.3				
	SNGN120416S01520	1.6	0.1-0.35	0.5-3.0				
	SNGN120416T00520	1.6	0.1-0.35	0.5-3.0				
	SNGN120416T02020	1.6	0.1-0.6	0.1-0.4				
	SNGN120704T02020	0.4	0.1-0.3	0.08-0.25				
	SNGN120708S01520	0.8	0.1-0.25	0.5-2.5				
	SNGN120708T00520	0.8	0.1-0.25	0.5-2.5				
	SNGN120708T02020	0.8	0.1-0.4	0.1-0.3				
	SNGN120712S01520	1.2	0.1-0.3	0.5-2.5				
	SNGN120712T00520	1.2	0.1-0.3	0.5-2.5				
	SNGN120712T02020	1.2	0.1-0.5	0.1-0.3				
	SNGN120716S01520	1.6	0.1-0.35	0.5-3.0				
	SNGN120716T00520	1.6	0.1-0.35	0.5-3.0				
	SNGN120716T01520	1.6	0.1-0.35	0.5-3.0				
	SNGN120716T02020	1.6	0.1-0.6	0.1-0.4				
	SNGN150708T02020	0.8	0.1-0.4	0.1-0.3				
	SNGN150712T02020	1.2	0.1-0.5	0.1-0.3				
	SNGN150716T02020	1.6	0.1-0.6	0.1-0.4				
	SNGN190716S02030	1.6	0.5-2.0	0.1-0.35				
	SNGN190716T03020	1.6	0.1-0.6	0.1-0.4				

● Ex stock ○ On demand

CM Mixed ceramic
 CC Mixed ceramic, coated
 CN Si3N4 Ceramic
 CR Al2O3 cutting ceramic, reinforced

A

Turning

B

Milling

C

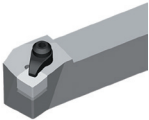
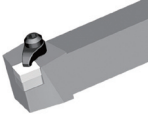
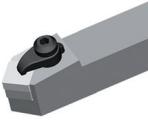
Drilling

D




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E

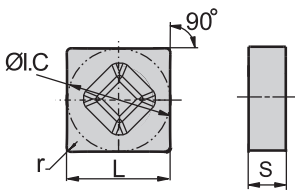

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Tool holder		
CSKNR/L	CSRNR/L	CSDNN
Kr: 75°	Kr: 75°	Kr: 45°
		
A296	A297	A299

Turning ceramic inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

SNGX	L	I.C	S
12 07	12.7	12.7	7.94

SN** negative insert					CM	CC	CN	CR
					P			
					M			
					K			
					N			
					S			
					H			
ISO	r	a _p	f		CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	SNGX120712T02020	1.2	0.2-2.0	0.1-0.3			○	
	SNGX120716T02020	1.6	0.5-2.0	0.1-0.35			○	

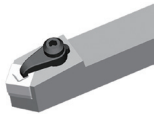
● Ex stock ○ On demand

CM Mixed ceramic
 CC Mixed ceramic, coated
 CN Si3N4 Ceramic
 CR Al2O3 cutting ceramic, reinforced

Tool holder

JSDNN

Kr: 45°



A302

A

Turning

Turning ceramic inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

TNGA	L	I.C	S	d
16 04	16.5	9.525	4.76	3.86
22 04	22	12.7	4.76	5.16

TN** negative insert		CM	CC	CN	CR
	P	●			
	M				
	K	●		●	
	N				
	S			●	●
	H		○		

B

Milling

ISO	r	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	TNGA160404S02020	0.4	0.1-0.3	0.08-0.25	●		
	TNGA160404T01020	0.4	0.1-0.3	0.08-0.25	○	●	
	TNGA160404T02020	0.4	0.1-0.3	0.08-0.25	○		
	TNGA160408S02020	0.8	0.1-0.4	0.1-0.3	●		
	TNGA160408T02020	0.8	0.1-0.4	0.1-0.3	○	●	
	TNGA160412T02020	1.2	0.1-0.5	0.1-0.3	○	●	
	TNGA220408T02020	0.8	0.15-1.5	0.1-0.25		○	
	TNGA220412T02020	1.2	0.2-2.0	0.1-0.3		○	
	TNGA220416T02020	1.6	0.5-2.0	0.1-0.35		○	

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

C

Drilling

Tool holder						
DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L-Z
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
A233	A247	A248	A249	A260	A261	A262

D

Technical Information

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
A263	A330

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System code > A198

Grade selection > A42

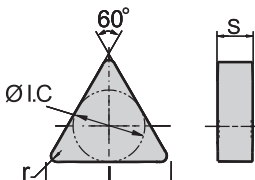

Technical info > A501

Cutting data > A366

Turning ceramic inserts

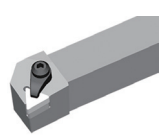
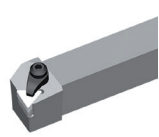
-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

TNGN	L	I.C	S
16 04	16.5	9.525	4.76
16 07	16.5	9.525	7.94
22 04	22	12.7	4.76

TN** negative insert				CM	CC	CN	CR
				P			
				M			
				K			
				N			
				S			
				H			
ISO	r	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	TNGN160404T02020	0.4	0.1-0.3	0.08-0.25	○		
	TNGN160408S02020	0.8	0.1-0.4	0.1-0.3		○	
	TNGN160408T02020	0.8	0.1-0.4	0.1-0.3	○		
	TNGN160412T02020	1.2	0.1-0.5	0.1-0.3	○		
	TNGN160416T02020	1.6	0.5-2.0	0.1-0.35		○	
	TNGN160708T02020	0.8	0.15-1.5	0.1-0.25		○	
	TNGN160712T02020	1.2	0.1-0.5	0.1-0.3	○		
	TNGN220408T02020	0.8	0.1-0.4	0.1-0.3	○		
	TNGN220412T02020	1.2	0.1-0.5	0.1-0.3	○		
	TNGN220416T02020	1.6	0.1-0.6	0.1-0.4	○		

● Ex stock ○ On demand

CM Mixed ceramic
 CC Mixed ceramic, coated
 CN Si3N4 Ceramic
 CR Al2O3 cutting ceramic, reinforced

Tool holder	
CTJNR/L	CTUNR/L
Kr: 93°	Kr: 93°
	
A293	A295

A

Turning

Turning ceramic inserts

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

VNGA	L	I.C	S	d
16 07	16.6	9.525	7.94	3.81
16 04	16.6	9.525	4.76	3.81

VN** negative insert		CM	CC	CN	CR
	P	●			
	M				
	K	●		⊗	
	N				
	S			●	⊗
	H		○		

B

Milling

ISO	r	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	VNGA160404S02020	0.4	0.1-0.3	0.08-0.25	●		
	VNGA160404T01020	0.4	0.1-0.3	0.08-0.25	○		
	VNGA160408S02020	0.4	0.1-0.4	0.1-0.3	●		
	VNGA160408T01020	0.8	0.1-0.4	0.1-0.3	○		
	VNGA160408T02020	0.8	0.1-0.4	0.1-0.3	●		
	VNGA160708S02020	0.8	0.1-0.4	0.1-0.3	●		

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

C

Drilling

Tool holder			
DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
A234	A235	A264	A265

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System code > A198

Grade selection > A42

Technical info > A501

Cutting data > A366

Turning ceramic inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

WNGA	L	I.C	S	d
08 04	8.69	12.7	4.76	5.16

WN** negative insert				CM	CC	CN	CR
				P			
				M			
				K			
				N			
				S			
				H			
ISO	r	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	WNGA080404T01020	0.4	0.1-0.3	0.08-0.25	○		
	WNGA080404T02020	0.4	0.1-0.3	0.08-0.25	○		
	WNGA080408S02020	0.8	0.1-0.4	0.1-0.3	○		
	WNGA080408T02020	0.8	0.1-0.4	0.1-0.3	○	●	
	WNGA080412S02020	1.2	0.1-0.5	0.1-0.3	○		
	WNGA080412T02020	1.2	0.1-0.5	0.1-0.3	○	●	
	WNGA080416T01525	1.6	0.5-2.0	0.1-0.35		○	
	WNGA080416T02020	1.6	0.5-2.0	0.1-0.35		●	

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

Tool holder			
DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
A236	A251	A266	A332

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RCGX	I.C	S	d
06 07	6	7.94	
06 04	6	4.76	
06 06	6	6.35	
09 07	9	7.94	
12 07	12	7.94	
19 10	19	10	

Turning ceramic inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

RC** positive insert			CM	CC	CN	CR
	P	●				
	M					
	K	●			●	
	N					
	S				●	●
	H			●		
ISO	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
RCGX060400S01520	0.1-0.25	0.5-2.5				○
RCGX060400T00520	0.1-0.25	0.5-2.5				○
RCGX060600S02020	0.1-0.3	0.08-0.25	○			
RCGX060600T01020	0.1-0.25	0.5-2.5				○
RCGX060700T00525	0.1-0.25	0.5-2.5			○	○ ○
RCGX090700S01520	0.1-0.3	0.5-2.5				○
RCGX090700T00520	0.1-0.3	0.5-2.5				○
RCGX090700T00525	0.1-0.3	0.5-2.5			○	○ ○
RCGX090700T20015	0.1-0.3	0.1-0.3	○			
RCGX120700E	0.5-2.0	0.1-0.2			○	
RCGX120700S01020	0.5-2.0	0.1-0.2			○	
RCGX120700S01520	0.1-0.35	0.5-3.0				○
RCGX120700T00520	0.1-0.35	0.5-3.0				○
RCGX120700T00525	0.1-0.35	0.5-3.0			○	○ ○
RCGX120700T01020	0.1-0.35	0.5-3.0		○		○
RCGX191000T02020	0.1-0.6	0.1-0.5		○		

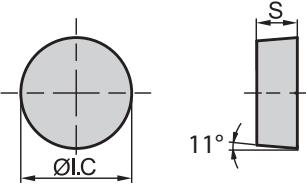

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

Turning ceramic inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

RPGN	I.C	S
12 04	12.7	4.76

RP** positive insert				CM	CC	CN	CR
	P	●					
	M						
	K	●				●	
	N						
	S					●	●
	H			○			
ISO	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800	
	RPGN120400S01520	0.1-0.35	0.5-3.0			○	
	RPGN120400T00520	0.1-0.35	0.5-3.0			○	

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

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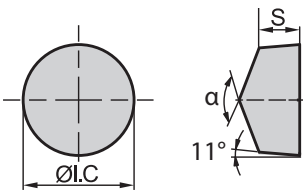
A

Turning

Turning ceramic inserts

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

RPGX	I.C	S
09 07	9.525	7.94

RP** positive insert				CM	CC	CN	CR
	P	M	K	N	S	H	
ISO	a _p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800	
RPGX090700T00525	0.1-0.3	0.5-2.5				○ ○	

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

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System code > A198

Grade selection > A42

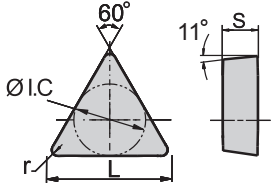











Technical info > A501

Cutting data > A366

Turning ceramic inserts

-  Ideal machining conditions
 Normal machining conditions
 Unfavourable machining conditions

TPGN	L	I.C	S
11 03	11	6.35	3.18
16 03	16.5	9.525	3.18

TP** positive insert				CM		CC		CN		CR	
	P										
	M										
	K										
	N										
	S										
	H										
ISO	r	a _p	f	CA1000		CM1000		CN1000 CS1000		CW1400 CW1800	
	TPGN110304T02020	0.4	0.1-0.3	0.08-0.25							
	TPGN160304T01020	0.4	0.1-0.3	0.08-0.25							
	TPGN160308T01020	0.8	0.1-0.4	0.1-0.3							

● Ex stock ○ On demand

CM Mixed ceramic
 CC Mixed ceramic, coated
 CN Si3N4 Ceramic
 CR Al2O3 cutting ceramic, reinforced

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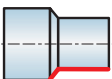

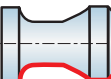
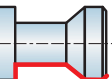
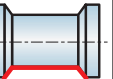
























































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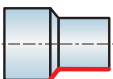

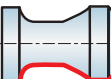
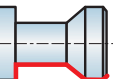
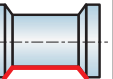


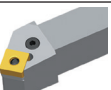






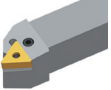


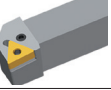


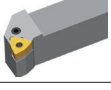















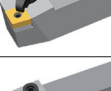


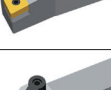


















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Tool holder	Application					Workpiece		Page
	External machining	Facing	Profiling	Profiling	Profiling	Stable	Unstable	
								
D	DCLNR/L 95° 							A230
	DDJNR/L 93° 							A231
	DSBNR/L 75° 							A232
	DTGNR/L 91° 							A233
	DVVNN 72.5° 							A234
	DVJNR/L 93° 							A235
	DWLNLR/L 95° 							A236
P	PCBNR/L 75° 							A237
	PCLNR/L 95° 							A238
	PDJNR/L 93° 							A240
	PDNNR/L 63° 							A241
	PSBNR/L 75° 							A242
	PSDNN 45° 							A244
	PSKNR/L 75° 							A245

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Tool holder		Application					Workpiece		Page
		External machining	Facing	Profiling	Profiling	Profiling	Stable	Unstable	
									
P	PSSNR/L 45° 								A246
	PTFNR/L 91° 								A247
	PTTNR/L 60° 								A248
	PTGNR/L 90° 								A249
	PWLNRL/L 95° 								A251
	PLANR/L 90° 								A316
	PLFNR/L 90° 								A317
	PCLNR/L 95° 								A318
M	MCBNR/L 75° 								A252
	MCLNR/L 95° 								A253
	MDJNR/L 93° 								A254
	MDPNN 62.5° 								A255
	MSBNR/L 75° 								A256
	MSRNR/L 75° 								A257

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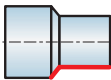

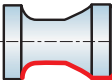
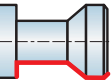
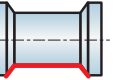





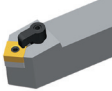





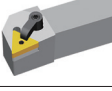


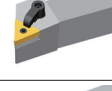


















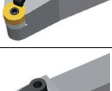


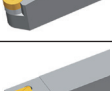















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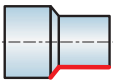

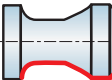
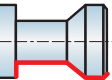
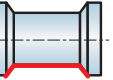


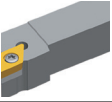




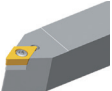



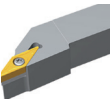




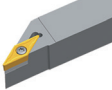




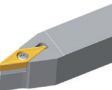



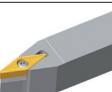



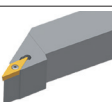




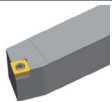


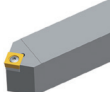


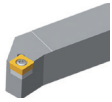


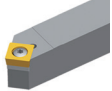


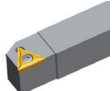






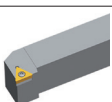



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Tool holder	Application					Workpiece		Page
	External machining	Facing	Profiling	Profiling	Profiling	Stable	Unstable	
								
M	MSKNR/L 75° 							A258
	MSDNN 45° 							A259
	MTGNR/L 90° 							A260
	MTJNR/L 93° 							A261
	MTJNR/L-Z 93° 							A262
	MTFNR/L 91° 							A263
	MVVNN 72,5° 							A264
	MVJNR/L 93° 							A265
	MWLNR/L 95° 							A266
	MRGNR/L — 							A268
	MRDNN — 							A267
S	SCACR/L 90° 							A269
	SCLCR/L 95° 							A270
	SDACR/L 90° 							A271

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Tool holder		Application					Workpiece		Page
		External machining	Facing	Profiling	Profiling	Profiling	Stable	Unstable	
									
S	SDJCR/L 93° 								A272
	SDNCN 63° 								A273
	SVJBR/L 93° 								A274
	SVABR/L 90° 								A275
	SVVBN 72,5° 								A276
	SVVCN 72,5° 								A277
	SVJCR/L 93° 								A278
	SSBCR/L 75° 								A279
	SSDCN 45° 								A280
	SSKCR/L 75° 								A281
	SSSCR/L 45° 								A282
	STACR/L 90° 								A283
	STFCR/L 91° 								A284
	STGCR/L 91° 								A285

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Tool holder	Application					Workpiece		Page
	External machining	Facing	Profiling	Profiling	Profiling	Stable	Unstable	
								
S	STTCR/L 60° 							A286
	SWACR/L 90° 							A287
	SRDCN — 							A288
	SRGCR/L — 							A289
	SCACR/L-SC 90° 							A306
	SCLCR/L-SC 95° 							A307
	SDACR/L-SC 90° 							A308
	SDHCR/L-SC 107°30' 							A309
	SDJCR/L-SC 93° 							A310
	SDNCN-SC 62°30' 							A311
	SVACR/L-SC 90° 							A312
	SVJCR/L-SC 93° 							A313
C	CKJNR/L 93° 							A290
	CKNNR/L 63° 							A291

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[illegible]

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D













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








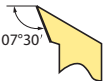
















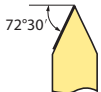


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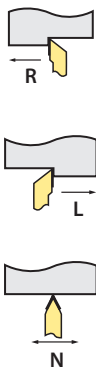
P C L N L 25 25 M 12

1 2 3 4 5 6 7 8 9

Clamping system			Insert shape	
Code	Description			
P	Lever lock clamping		C	
M	Wedge/pin lock clamping		D	
S	Screw-on clamping		R	
C/J	Wedge clamping		S	
D	Dual wedge clamping		T	
			V	
			W	
1			2	

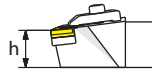
Tool holder type and entering angle					Clearance angle	
					B	
A	B	C	D	E	C	
					D	
F	G	H	J	K	E	
					N	
L	M	N	O	P	P	
						
Q	R	S	T	U		
						
V	W	X				
3					4	

Cutting direction



5

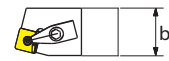
Shank height h [mm]



Code	h
12	12
16	16
20	20
25	25
32	32
40	40
50	50

6

Shank width b [mm]



Code	b
12	12
16	16
20	20
25	25
32	32
40	40
50	50

7

Holder length L [mm]










Code	L
H	100
K	125
M	150
P	170
Q	180
R	200
S	250
T	300

8

Cutting edge length l [mm]

Insert shape

I.C [mm]	Insert shape						
							
	C	D	R	S	T	V	W
5,56	09						
6,35	06	07	11				
9,525	09	11	09	09	16	16	06
12,7	12	15	12	12	22	22	08
15,875	16	19	15	15	27		
19,05	19	19		19	33		
25,4	25	25		25	44		
32	32						

9

A

Turning

B

Milling

C

Drilling

D

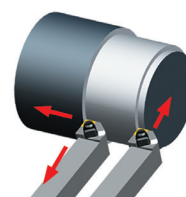
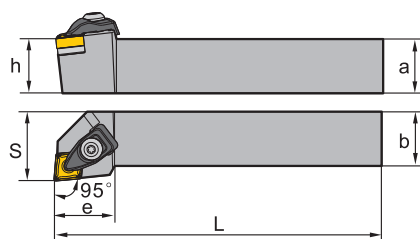
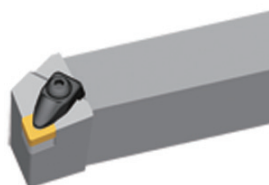
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
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CN** holder (external) D-Clamping

DCLNR/L Kr: 95°



Article		Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
DCLNR/L1616H09		●	○	16	16	100	16	20	24	CN**0903**
DCLNR/L2020K09		●	●	20	20	125	20	25	24	CN**0903**
DCLNR/L2525M09		●	●	25	25	150	25	32	24	CN**0903**
DCLNR/L2020K12		●	●	20	20	125	20	25	28	CN**1204**
DCLNR/L2525M12		●	●	25	25	150	25	32	28	CN**1204**
DCLNR/L3225P12		●	●	32	25	170	32	32	28	CN**1204**

● Ex stock ○ On demand

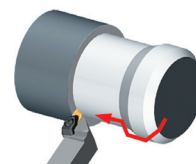
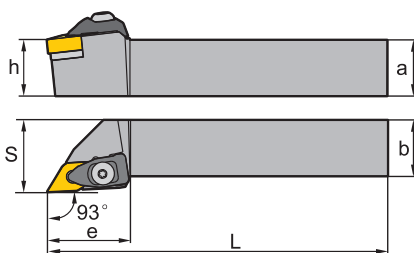
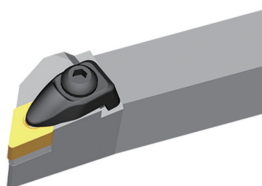
* With internal cooling

Spare parts			
	Insert	CN**0903**	CN**1204**
	h	16-25	20-32
	Clamp	C1RA	C2RA
	Screw (clamp)	CM5×22C (4.0 Nm)	CM6×25C (7.0 Nm)
	Screw (shim)	SM5×8.65XA1	SM6×10XA1
	Shim	C09BM	C12BM
	Spring	SPR6	SPR4
	Wrench (shim)	WH30L	WH40L
	Wrench (clamp)	WH30L	WH40L

Insert					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A51	A52	A53	A57	A61	A177

DN** holder (external) D-Clamping

DDJNR/L Kr: 93°



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
DDJNR/L1616H11	•	•	16	16	100	16	20	30	30	DN**1104**
DDJNR/L2020K11	•	•	20	20	125	20	25	30	30	DN**1104**
DDJNR/L2525M11	•	•	25	25	150	25	32	30	30	DN**1104**
DDJNR/L3225P11	○	○	32	25	170	32	32	30	30	DN**1104**
DDJNR/L2020K15	•	•	20	20	125	20	25	35	35	DN**1506**
DDJNR/L2525M15	•	•	25	25	150	25	32	35	35	DN**1506**
DDJNR/L3232P15	•	•	32	32	170	32	40	35	35	DN**1506**

• Ex stock ○ On demand

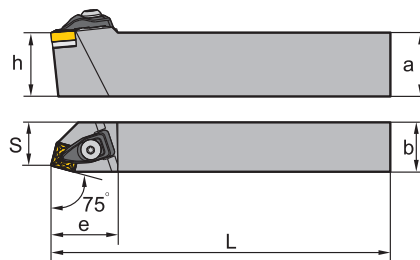
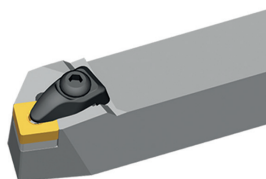
* With internal cooling

Spare parts			
	Insert	DN**1104**	DN**1506**
	h	16-32	20-32
	Clamp	C1RA	C2RA
	Screw (clamp)	CM5×22C (4.0 Nm)	CM6×25C (7.0 Nm)
	Screw (shim)	SM5×8.65XA1	SM6×10XA1
	Shim	D11BM	D15BM
	Spring	SPR6	SPR4
	Wrench (shim)	WH30L	WH40L
	Wrench (clamp)	WH30L	WH40L

Insert					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A62	A63	A63	A68	A69	A178

SN** holder (external) D-Clamping

DSBNR/L Kr: 75°



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
DSBNR/L1616H09	○			16	16	100	16	13	26	SN**0903**
DSBNR/L2020K12	●	●		20	20	125	20	17	34	SN**1204**
DSBNR/L2525M12	●	●		25	25	150	25	22	34	SN**1204**
DSBNR/L3225P12	●	●		32	25	170	32	22	34	SN**1204**
DSBNR/L3232P15	●	●		32	32	170	32	27	41	SN**1506**

● Ex stock ○ On demand

* With internal cooling

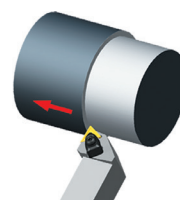
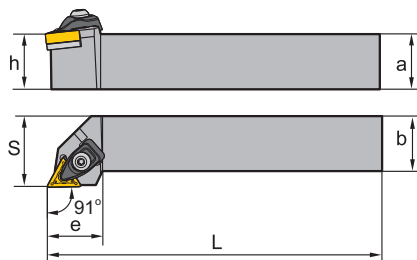
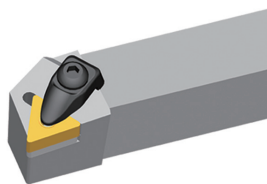
Spare parts				
	Insert	SN**0903**	SN**1204**	SN**1506**
	h	16	20-32	32
	Clamp	C1RA	C2RA	C3RA
	Screw (clamp)	CM5×22C (4.0 Nm)	CM6×25C (7.0 Nm)	CM6×25C (7.0 Nm)
	Screw (shim)	SM5×8.65XA1	SM6×10XA1	SM6×10XA2
	Shim	S09BM	S12BM	S15BM
	Spring	SPR6	SPR4	SPR4
	Wrench (shim)	WH30L	WH40L	WH40L
	Wrench (clamp)	WH30L	WH40L	WH40L

Insert				
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

TN** holder (external)

D-Clamping

DTGNR/L Kr: 91°



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
DTGNR/L1616H16	●	●	16	16	100	16	20	25	25	TN**1604**
DTGNR/L2020K16	●	●	20	20	125	20	25	25	25	TN**1604**
DTGNR/L2525M16	●	●	25	25	150	25	32	25	25	TN**1604**

● Ex stock ○ On demand

* With internal cooling

Spare parts

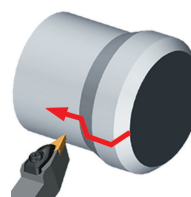
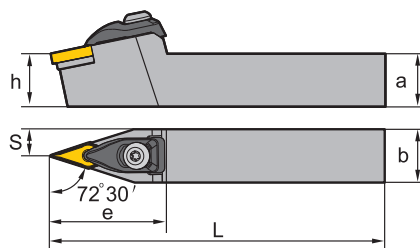
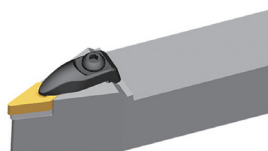
	Insert h	TN**1604**
		16-25
	Clamp	C1RA
	Screw (clamp)	CM5×22C (4.0 Nm)
	Screw (shim)	SM5×8.65XA1
	Shim	T16BM
	Spring	SPR6
	Wrench (shim)	WH30L
	Wrench (clamp)	WH30L

Insert

Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A87	A88	A90	A92	A99	A163

VN** holder (external) D-Clamping

DVVNN Kr: 72°30'



Article	✱	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
DVVNN2020K16	●		20	20	125	20	10	44	VN**1604**
DVVNN2525M16	●		25	25	150	25	12.5	44	VN**1604**

● Ex stock ○ On demand

✱ With internal cooling

Spare parts

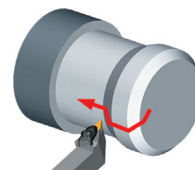
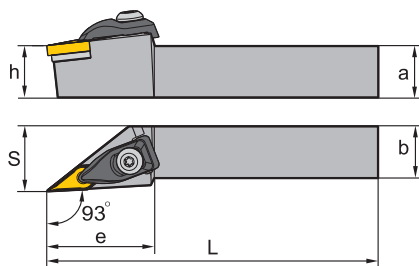
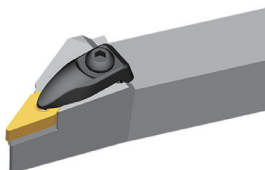
	Insert	VN**1604**
	h	20-25
	Clamp	C6RA
	Screw (clamp)	CM5×22C (4.0 Nm)
	Screw (shim)	SM5×8.65XA1
	Shim	V16BM
	Spring	SPR6
	Wrench (shim)	WH30L
	Wrench (clamp)	WH30L

Insert

Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A102	A102	A104	A103	A179

VN** holder (external) D-Clamping

DVJNR/L Kr: 93°



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
DVJNR/L2020K16	●	●		20	20	125	20	25	41	VN**1604**
DVJNR/L2525M16	●	●		25	25	150	25	32	41	VN**1604**

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		VN**1604**
h		20-25
	Clamp	C6RA
	Screw (clamp)	CM5×22C (4.0 Nm)
	Screw (shim)	SM5×8.65XA1
	Shim	V16BM
	Spring	SPR6
	Wrench (clamp)	WH30L
	Wrench (shim)	WH30L

Insert

Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A102	A102	A104	A103	A179

A

Turning

B

Milling

C

Drilling

D

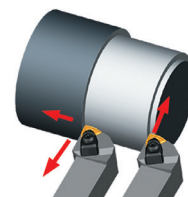
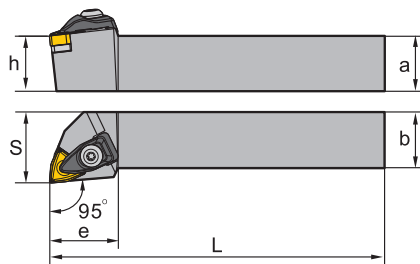
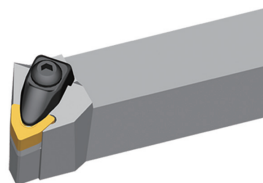
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WN** holder (external) D-Clamping

DWLNLR/L Kr: 95°



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
DWLNLR/L1616H06	•	•		16	16	100	16	25	24	WN**0604**
DWLNLR/L2020K06	•	•		20	20	125	20	25	24	WN**0604**
DWLNLR/L2525M06	•	•		25	25	150	25	32	24	WN**0604**
DWLNLR/L2020K08	•	•		20	20	125	20	25	31	WN**0804**
DWLNLR/L2525M08	•	•		25	25	150	25	32	31	WN**0804**
DWLNLR/L3225P08	•	•		32	25	170	32	32	31	WN**0804**

• Ex stock ○ On demand

* With internal cooling

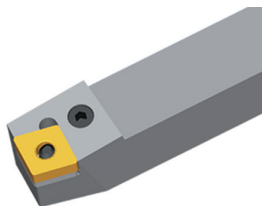
Spare parts			
	Insert	WN**0604**	WN**0804**
	h	16-25	20-32
	Clamp	C1RA	C2RA
	Screw (clamp)	CM5×22C (4.0 Nm)	CM6×25C (7.0 Nm)
	Screw (shim)	SM5×8.65XA1	SM6×10XA1
	Shim	W06BM	W08BM
	Spring	SPR6	SPR4
	Wrench (shim)	WH30L	WH40L
	Wrench (clamp)	WH30L	WH40L

Insert					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A106	A107	A107	A109	A111	A165

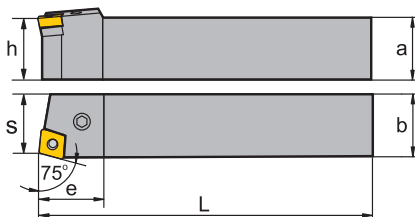
CN** holder (external)

P-Clamping

PCBNR/L Kr: 75°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PCBNR/L2020K12	•	•		20	20	125	20	17	27	CN**1204**
PCBNR/L2525M12	•	•		25	25	150	25	22	27	CN**1204**
PCBNR/L3232P12	•	•		32	32	170	32	27	27	CN**1204**
PCBNR/L2525M16	•	•		25	25	150	25	22	33	CN**1606**
PCBNR/L3232P16	•	•		32	32	170	32	27	33	CN**1606**
PCBNR/L3232P19	•	•		32	32	170	32	27	38	CN**1906**
PCBNR/L4040S19	•	•		40	40	250	40	35	38	CN**1906**
PCBNR/L4040S2507	•	•		40	40	250	40	35	50	CN**2507**
PCBNR/L4040S2509	•	•		40	40	250	40	35	50	CN**2509**

• Ex stock ○ On demand

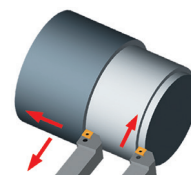
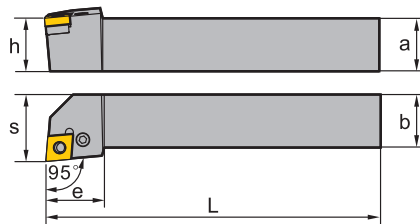
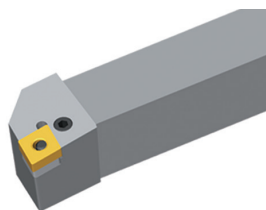
* With internal cooling

Spare parts						
	Insert	CN**1204**	CN**1606**	CN**1906**	CN**2507**	CN**2509**
	h	20-32	25-32	32-40	40	40
	Knee lever	L4	L5	L6	L8	L8
	Screw	LEM8×21 (10.2 Nm)	LEM8×25 (10.2 Nm)	LEM10×27 (16.6 Nm)		
	Screw				LEM12×36A (25.2 Nm)	LEM12×36A (25.2 Nm)
	Shim	C12AP	C16AP	C19AP	C25AP-07	C25AP
	Shim pin (shim)	SP4	SP5	SP6	SP8	SP8
	Wrench	WH30L	WH30L	WH40L	WH50L	WH50L

Insert					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A51	A52	A53	A57	A61	A177

CN** holder (external) P-Clamping

PCLNR/L Kr: 95°



Right hand style

Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PCLNR/L1616H09	●	●		16	16	100	16	20	20	CN**0903**
PCLNR/L2020K09	●	●		20	20	125	20	25	22	CN**0903**
PCLNR/L2525M09	○	●		25	25	150	25	32	22	CN**0903**
PCLNR/L1616H12	○	○		16	16	100	16	20	20	CN**1204**
PCLNR/L2020K12	●	●		20	20	125	20	25	28	CN**1204**
PCLNR/L2525M12	●	●		25	25	150	25	32	28	CN**1204**
PCLNR/L3232P12	●	●		32	32	170	32	40	28	CN**1204**
PCLNR/L2525M16	●	●		25	25	150	25	32	33	CN**1606**
PCLNR/L3232P16	●	●		32	32	170	32	40	33	CN**1606**
PCLNR/L3232P19	●	●		32	32	170	32	40	38	CN**1906**
PCLNR/L4040S19	●	●		40	40	250	40	50	38	CN**1906**
PCLNR/L4040S2507	●	●		40	40	250	40	50	49	CN**2507**
PCLNR/L4040S2509	●	●		40	40	250	40	50	49	CN**2509**







● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	CN**0903**	CN**1204**	CN**1606**	CN**1906**	CN**2507**	CN**2509**
	h	16-25	16-32	25-32	32-40	40	40
	Knee lever	L3	L4	L5	L6	L8	L8
	Screw		LEM8×21 (10.2 Nm)	LEM8×25 (10.2 Nm)	LEM10×27 (16.6 Nm)		
	Screw	LEM6×13.4A (7.0 Nm)				LEM12×36A (25.2 Nm)	LEM12×36A (25.2 Nm)
	Shim	C09AP	C12AP	C16AP	C19AP	C25AP-07	C25AP
	Shim pin (shim)	SP10	SP4	SP5	SP6	SP8	SP8
	Wrench	WH25L	WH30L	WH30L	WH40L	WH50L	WH50L

CN** holder (external)

Insert					
					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A51	A52	A53	A57	A61	A177

A

Turning

B

Milling

C

Drilling

D

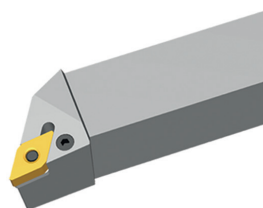
Technical
Information

E

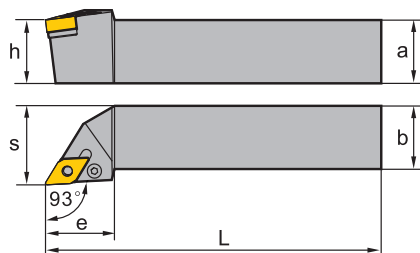
Index

DN** holder (external) P-Clamping

PDJNR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PDJNR/L1616H11	•	•		16	16	100	16	20	25	DN**1104**
PDJNR/L2020K11	•	•		20	20	125	20	25	25	DN**1104**
PDJNR/L2525M11	•	•		25	25	150	25	32	30	DN**1104**
PDJNR/L2020K15-3	•	○		20	20	125	20	25	35	DN**1504**
PDJNR/L2525M15-3	•	•		25	25	150	25	32	35	DN**1504**
PDJNR/L3232P15-3	•	•		32	32	170	32	40	35	DN**1504**
PDJNR/L2020K15	•	○		20	20	125	20	25	35	DN**1506**
PDJNR/L2525M15	•	•		25	25	150	25	32	35	DN**1506**
PDJNR/L3232P15	•	•		32	32	170	32	40	35	DN**1506**

• Ex stock ○ On demand

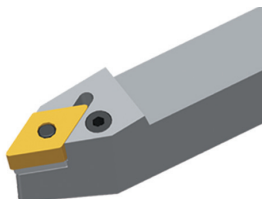
* With internal cooling

Spare parts				
	Insert	DN**1104**	DN**1504**	DN**1506**
	h	16-32	20-32	20-32
	Knee lever	L3	L4	L4B
	Screw		LEM8x21 (10.2 Nm)	LEM8x21 (10.2 Nm)
	Screw	LEM6x13.4A (7.0 Nm)		
	Shim	D11AP	D15AP	D15AP
	Shim pin (shim)	SP3	SP4	SP4
	Wrench	WH25L	WH30L	WH30L

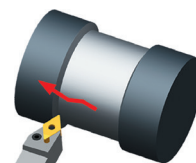
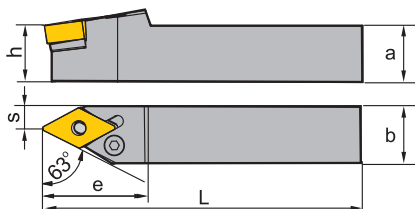
Insert					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A62	A63	A63	A68	A69	A178

DN** holder (external) P-Clamping

PDNNR/L Kr: 63°



Left hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PDNNR/L2020K15-3	●	○		20	20	125	20	8	37	DN**1504**
PDNNR/L2525M15-3	●	○		25	25	150	25	12.5	37	DN**1504**
PDNNR/L3232P15-3	●	●		32	32	170	32	16	37	DN**1504**
PDNNR/L2020K15	●	●		20	20	125	20	8	37	DN**1506**
PDNNR/L2525M15	●	●		25	25	150	25	12.5	37	DN**1506**
PDNNR/L3232P15	●	●		32	32	170	32	16	37	DN**1506**

● Ex stock ○ On demand

* With internal cooling

Spare parts

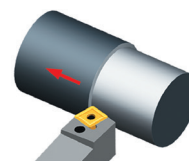
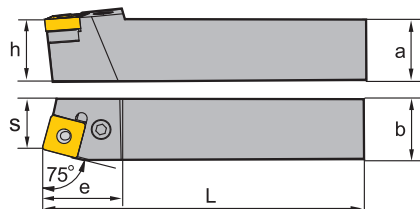
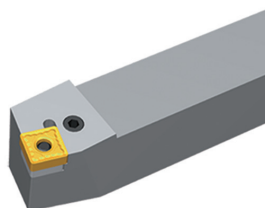
	Insert	DN**1504**	DN**1506**
	hh	20-32	20-32
	Knee lever	L4	L4B
	Screw	LEM8×21 (10.2 Nm)	LEM8×21 (10.2 Nm)
	Shim	D15AP	D15AP
	Shim pin (shim)	SP4	SP4
	Wrench	WH30L	WH30L

Insert

Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A62	A63	A63	A68	A69	A178

SN** holder (external) P-Clamping

PSBNR/L Kr: 75°



Right hand style

Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PSBNR/L1616H09	●	○		16	16	100	16	13	21	SN**0903**
PSBNR/L2020K09	●	○		20	20	125	20	17	23	SN**0903**
PSBNR/L2020K12	●	●		20	20	125	20	17	28	SN**1204**
PSBNR/L2525M12	●	●		25	25	125	25	22	28	SN**1204**
PSBNR/L3225P12	●	○		32	25	170	32	22	28	SN**1204**
PSBNR/L3232P12	●	○		32	32	170	32	27	28	SN**1204**
PSBNR/L2525M15	●	○		25	25	150	25	22	35	SN**1506**
PSBNR/L3232P15	●	●		32	32	170	32	27	35	SN**1506**
PSBNR/L3232P19	●	●		32	32	170	32	27	40	SN**1906**
PSBNR/L4040S19	●	●		40	40	250	40	35	40	SN**1906**
PSBNR/L4040S2507	○	○		40	40	250	40	35	48	SN**2507**
PSBNR/L4040S2509	○	○		40	40	250	40	35	48	SN**2509**






● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	SN**0903**	SN**1204**	SN**1506**	SN**1906**	SN**2507**	SN**2509**
		h	h	h	h	h	h
	Knee lever	L3	L4	L5	L6	L8	L8
	Screw		LEM8×21 (10.2 Nm)	LEM8×25 (10.2 Nm)	LEM10×27 (16.6 Nm)		
	Screw	LEM6×13.4A (7.0 Nm)				LEM12×36A (25.2 Nm)	LEM12×36A (25.2 Nm)
	Shim	S09AP	S12AP	S15AP	S19AP	S25AP	
	Shim						S25AP-09
	Shim pin (shim)	SP10	SP4	SP5	SP6	SP8	SP8
	Wrench	WH25L	WH30L	WH30L	WH40L	WH50L	WH50L

SN** holder (external)

Insert				
				
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

A

Turning

B

Milling

C

Drilling

D

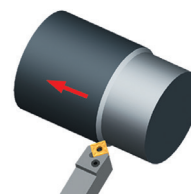
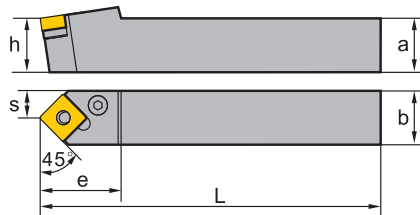
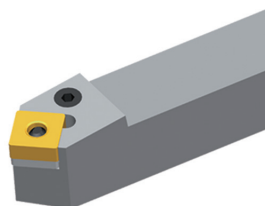
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SN** holder (external) P-Clamping

PSDNN Kr: 45°



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
PSDNN1212F09	○	○	12	12	80	12	6	21	SN**0903**
PSDNN1616H09	●	●	16	16	100	16	8	23	SN**0903**
PSDNN2020K12	●	●	20	20	125	20	10	30	SN**1204**
PSDNN2525M12	●	●	20	20	150	20	12.5	30	SN**1204**
PSDNN3232P12	●	●	32	32	170	32	16	40	SN**1204**
PSDNN2525M15	●	●	25	25	150	25	12.5	40	SN**1506**
PSDNN3232P15	●	●	32	32	170	32	16	40	SN**1506**
PSDNN3232P19	●	●	32	32	170	32	16	40	SN**1906**
PSDNN4040S19	●	●	40	40	250	40	20	40	SN**1906**

● Ex stock ○ On demand

* With internal cooling

Spare parts						
	Insert	SN**0903**	SN**0903**	SN**1204**	SN**1506**	SN**1906**
	h	12	16	20-32	25-32	32-40
	Knee lever	L3B	L3	L3	L5	L6
	Screw	LEM5×12B (4.0 Nm)				
	Screw				LEM8×25 (10.2 Nm)	LEM10×27 (16.6 Nm)
	Screw		LEM6×13.4A (7.0 Nm)	LEM6×13.4A (7.0 Nm)		
	Shim		S09AP	S12AP	S15AP	S19AP
	Shim pin (shim)		SP10	SP10	SP5	SP6
	Wrench		WH25L	WH25L	WH30L	WH40L
	Wrench	WT09IP				

Insert				
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

System code > A228

Grade selection > A42

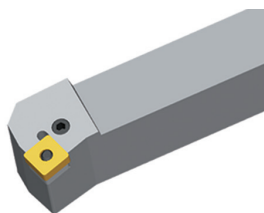
Technical info > A501

Cutting data > A366

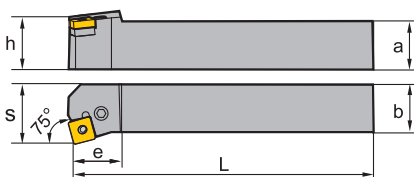
SN** holder (external)

P-Clamping

PSKNR/L Kr: 75°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PSKNR/L1616H09		○	○	16	16	100	16	20	17	SN**0903**
PSKNR/L2020K09		●	○	20	20	125	20	25	20	SN**0903**
PSKNR/L2020K12		●	●	20	20	125	20	25	26	SN**1204**
PSKNR/L2525M12		●	●	25	25	150	25	32	26	SN**1204**
PSKNR/L3232P12		●	●	32	32	170	32	40	26	SN**1204**
PSKNR/L2525M15		●	○	25	25	150	25	32	32	SN**1506**
PSKNR/L3232P15		●	●	32	32	170	32	40	32	SN**1506**
PSKNR/L3232P19		●	●	32	32	170	32	40	36	SN**1906**
PSKNR/L4040S19		○	○	40	40	250	40	50	40	SN**1906**

● Ex stock ○ On demand

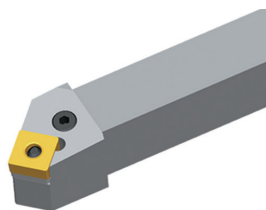
* With internal cooling

Spare parts					
	Insert	SN**0903**	SN**1204**	SN**1506**	SN**1906**
	h	16-20	20-32	25-32	32-40
	Knee lever	L3	L4	L5	L6
	Screw		LEM8×21 (10.2 Nm)	LEM8×25 (10.2 Nm)	LEM10×27 (16.6 Nm)
	Screw	LEM6×13.4A (7.0 Nm)			
	Shim	S09AP	S12AP	S15AP	S19AP
	Shim pin (shim)	SP10	SP4	SP5	SP6
	Wrench	WH25L	WH30L	WH30L	WH40L

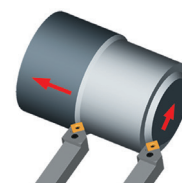
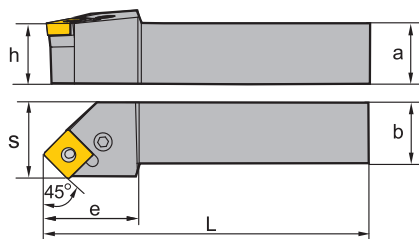
Insert				
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

SN** holder (external) P-Clamping

PSSNR/L Kr: 45°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PSSNR/L1616H09	•	•		16	16	100	16	20	25	SN**0903**
PSSNR/L2020K12	•	•		20	20	125	20	25	30	SN**1204**
PSSNR/L2525M12	•	•		25	25	150	25	32	30	SN**1204**
PSSNR/L3232P12	•	•		32	32	170	32	40	40	SN**1204**
PSSNR/L2525M15	•	•		25	25	150	25	32	30	SN**1506**
PSSNR/L3232P15	•	•		32	32	170	32	40	40	SN**1506**
PSSNR/L3232P19	•	•		32	32	170	32	40	40	SN**1906**
PSSNR/L4040S19	•	•		40	40	250	40	50	50	SN**1906**
PSSNR/L4040S2507	•	•		40	40	250	40	50	50	SN**2507**
PSSNR/L4040S2509	•	•		40	40	250	40	50	50	SN**2509**

• Ex stock ○ On demand

* With internal cooling

Spare parts							
	Insert	SN**0903**	SN**1204**	SN**1506**	SN**1906**	SN**2507**	SN**2509**
	h	16	20-32	25-32	32-40	40	40
	Knee lever	L3	L4	L5	L6	L8	L8
	Screw		LEM8x21 (10.2 Nm)	LEM8x25 (10.2 Nm)	LEM10x27 (16.6 Nm)		
	Screw	LEM6x13.4A (7.0 Nm)				LEM12x36A (25.2 Nm)	LEM12x36A (25.2 Nm)
	Shim	S09AP	S12AP	S15AP	S19AP	S25AP	
	Shim						S25AP-09
	Shim pin (shim)	SP10	SP4	SP5	SP6	SP8	SP8
	Wrench	WH25L	WH30L	WH30L	WH40L	WH50L	WH50L

Insert				
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

System code > A228

Grade selection > A42

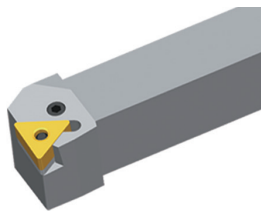
Technical info > A501

Cutting data > A366

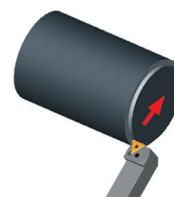
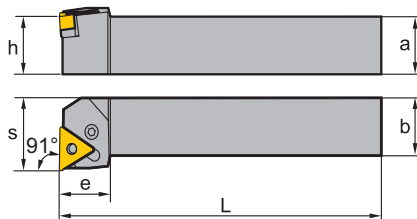
TN** holder (external)

P-Clamping

PTFNR/L Kr: 91°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PTFNR/L1616H16	•	•	16	16	100	16	20	20	20	TN**1604**
PTFNR/L2020K16	•	•	20	20	125	20	25	20	20	TN**1604**
PTFNR/L2525M16	•	•	25	25	150	25	32	20	20	TN**1604**
PTFNR/L2525M22	•	•	25	25	150	25	32	25	25	TN**2204**
PTFNR/L3232P22	•	•	32	32	170	32	40	25	25	TN**2204**
PTFNR/L3232P27	•	○	32	32	170	32	40	34	34	TN**2706**
PTFNR/L4040S27	○	○	40	40	250	40	50	34	34	TN**2706**

• Ex stock ○ On demand

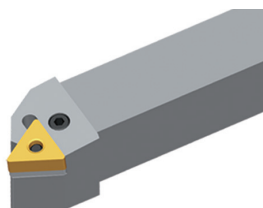
* With internal cooling

Spare parts				
	Insert	TN**1604**	TN**2204**	TN**2706**
	h	16-25	25-32	32-40
	Knee lever	L3	L4	L5
	Screw		LEM8x21 (10.2 Nm)	LEM8x25 (10.2 Nm)
	Screw	LEM6x13.4A (7.0 Nm)		
	Shim	T16AP	T22AP	T27AP
	Shim pin (shim)	SP3	SP4	SP5
	Wrench	WH25L	WH30L	WH30L

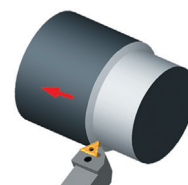
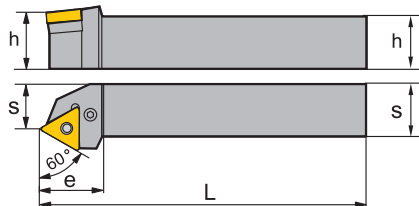
Insert						
Wiper	Finishing	Medium Cut	Roughing	Heavy Turning	Cast Iron	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

TN** holder (external) P-Clamping

PTTNR/L Kr: 60°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PTTNR/L1616H16	•			16	16	100	16	13	25	TN**1604**
PTTNR/L2020K16	•	○		20	20	125	20	17	25	TN**1604**
PTTNR/L2525M22	•	•		25	25	150	20	22	32	TN**2204**

• Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	TN**1604**	TN**2204**
	h	16-25	20
	Knee lever	L3	L4
	Screw		LEM8×21 (10.2 Nm)
	Screw	LEM6×13.4A (7.0 Nm)	
	Shim	T16AP	T22AP
	Shim pin (shim)	SP3	SP4
	Wrench	WH25L	WH30L

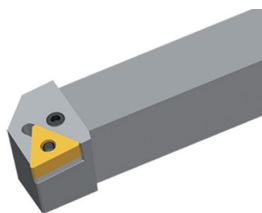
Insert

Wiper	Finishing	Medium Cut	Roughing	Heavy Turning	Cast Iron	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

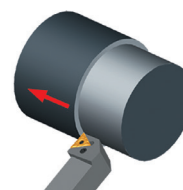
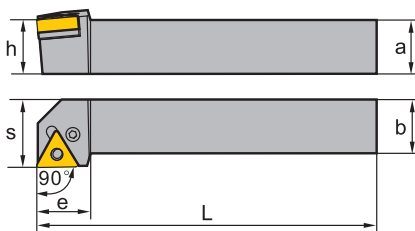
TN** holder (external)

P-Clamping

PTGNR/L Kr: 90°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PTGNR/L1010E11	●			10	10	70	10	14	16	TN**1103**
PTGNR/L1212F11	●	●		12	12	80	12	16	14	TN**1103**
PTGNR/L1616H11	●			16	16	100	16	20	18	TN**1103**
PTGNR/L2020K11	●	○		20	20	125	20	25	19	TN**1103**
PTGNR/L2525M11	○	○		25	25	150	25	32	20	TN**1103**
PTGNR/L1616H16	●	●		16	16	100	16	20	20	TN**1604**
PTGNR/L2020K16	●	●		20	20	125	20	25	20	TN**1604**
PTGNR/L2525M16	●	●		25	25	150	25	32	20	TN**1604**
PTGNR/L3232P16	●	○		32	32	170	32	40	20	TN**1604**
PTGNR/L2525M22	●	●		25	25	150	25	32	28	TN**2204**
PTGNR/L3232P22	●	●		32	32	170	32	40	28	TN**2204**
PTGNR/L3232P27	●	○		32	32	170	32	40	33	TN**2706**
PTGNR/L4040S27	○	○		40	40	250	40	50	33	TN**2706**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	TN**1103**	TN**1604**	TN**2204**	TN**2706**
	h	10-25	16-32	25-32	32-40
	Knee lever	L2	L3	L4	L5
	Screw	LEM5×9B (4.0 Nm)			
	Screw			LEM8×21 (10.2 Nm)	LEM8×25 (10.2 Nm)
	Screw		LEM6×13.4A (7.0 Nm)		
	Shim		T16AP	T22AP	T27AP
	Shim pin (shim)		SP3	SP4	SP5
	Wrench		WH25L	WH30L	WH30L
	Wrench	WT09IP			

A

Turning

B

Milling

C

Drilling








D

Technical
Information

E

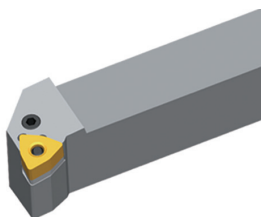
Index

TN** holder (external)

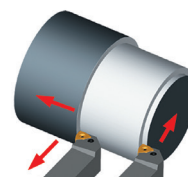
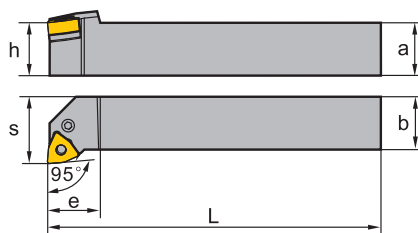
Insert						
						
Wiper	Finishing	Medium Cut	Roughing	Heavy Turning	Cast Iron	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

WN** holder (external) P-Clamping

PWLNR/L Kr: 95°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
PWLNR/L1616H06	•	•	16	16	100	16	20	20	20	WN**0604**
PWLNR/L2020K06	•	•	20	20	125	20	25	25	20	WN**0604**
PWLNR/L2525M06	•	•	25	25	150	25	32	32	20	WN**0604**
PWLNR/L2020K08	•	•	20	20	125	20	25	25	26	WN**0804**
PWLNR/L2525M08	•	•	25	25	150	25	32	32	26	WN**0804**

• Ex stock ○ On demand

* With internal cooling

Spare parts

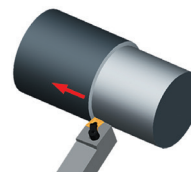
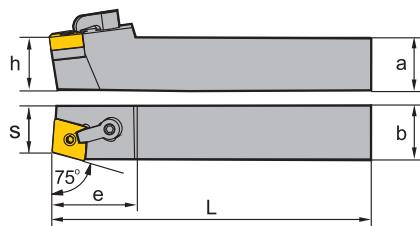
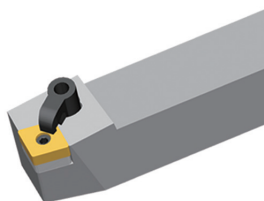
	Insert	WN**0604**	WN**0804**
	h	16-25	20-25
	Knee lever	L3	L4
	Screw		LEM8x21 (10.2 Nm)
	Screw	LEM6x13.4A (7.0 Nm)	
	Shim	W06AP	W08AP
	Shim pin (shim)	SP3	SP4
	Wrench	WH25L	WH30L

Insert

Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A106	A107	A107	A109	A111	A165

CN** holder (external) M-Clamping

MCBNR/L Kr: 75°



Right hand style

Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MCBNR/L2020K12	●	○		20	20	125	20	17	32	CN**1204**
MCBNR/L2525M12	●	●		25	25	150	20	22	32	CN**1204**
MCBNR/L3225P12	●	●		32	25	170	32	22	32	CN**1204**
MCBNR/L2525M16	○	○		25	25	150	25	22	40	CN**1606**
MCBNR/L3232P16	●	●		32	32	170	32	27	40	CN**1606**
MCBNR/L3232P19	○	○		32	32	170	32	27	45	CN**1906**
MCBNR/L4040R19	○	●		40	40	200	40	35	45	CN**1906**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	CN**1204**	CN**1204**	CN**1606**	CN**1906**
	h	20	25-32	25-32	32-40
	Clamp	C1RD	C1RD	C2RD	C5RD
	Dowel pin	TM6×17	TM6×17	TM8×21	TM10×21
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)	
	Screw (clamp)				DM8×30X (10.2 Nm)
	Shim	C12BM	C12BM	C16BM	C19BM
	Wrench (dowel pin)	WH30L	WH30L	WH30L	WH40L
	Wrench (clamp)	WH30L	WH30L	WH30L	WH40L

Insert

Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A51	A52	A53	A57	A61	A177

System code > A228

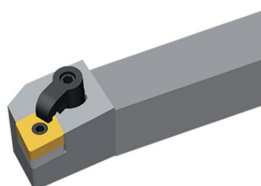
Grade selection > A42

Technical info > A501

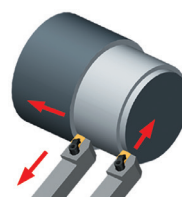
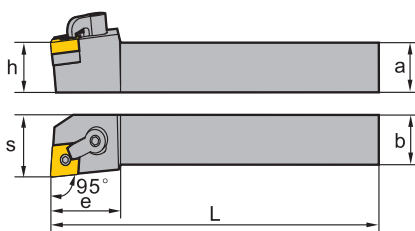
Cutting data > A366

CN** holder (external) M-Clamping

MCLNR/L Kr: 95°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MCLNR/L2020K12	•	•		20	20	125	20	25	32	CN**1204**
MCLNR/L2525M12	•	•		25	25	150	25	32	32	CN**1204**
MCLNR/L3225P12	•	•		32	25	170	32	32	32	CN**1204**
MCLNR/L2525M16	•	•		25	25	150	25	32	38	CN**1606**
MCLNR/L3232P16	•	•		32	32	170	32	40	38	CN**1606**
MCLNR/L3232P19	•	•		32	32	170	32	40	45	CN**1906**
MCLNR/L4040R19	•	○		40	40	200	40	50	45	CN**1906**
MCLNR/L4040S25	○	○		40	40	250	40	50	38	CN**2509**

• Ex stock ○ On demand

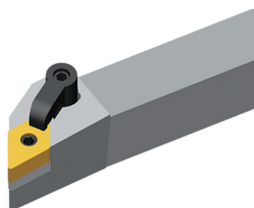
* With internal cooling

Spare parts						
	Insert	CN**1204**	CN**1204**	CN**1606**	CN**1906**	CN**2509**
	h	20	25-32	25-32	32-40	40
	Clamp	C1RD	C1RD	C2RD	C5RD	C6RD
	Dowel pin	TM6×17	TM6×17	TM8×21	TM10×21	TM12×29 (25.2 Nm)
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)		
	Screw (clamp)				DM8×30X (10.2 Nm)	DM10×35X (16.6 Nm)
	Shim	C12BM	C12BM	C16BM	C19BM	
	Shim					C25BM-09
	Wrench (clamp)	WH30L	WH30L	WH30L	WH40L	WH50L
	Wrench (dowel pin)	WH30L	WH30L	WH30L	WH40L	WH40L

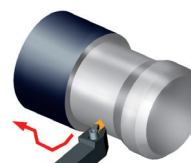
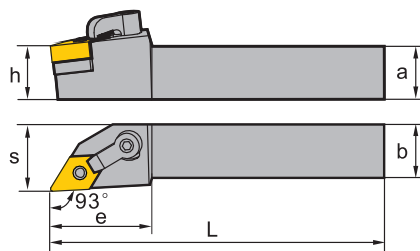
Insert					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A51	A52	A53	A57	A61	A177

DN** holder (external) M-Clamping

MDJNR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MDJNR/L2020K11	●	●		20	20	125	20	25	32	DN**1104**
MDJNR/L2525M11	●	●		25	25	150	25	32	32	DN**1104**
MDJNR/L3225P11	●	○		32	25	170	32	32	32	DN**1104**
MDJNR/L2020K15	●	●		20	20	125	20	25	38	DN**1506**
MDJNR/L2525M15	●	●		25	25	150	25	32	38	DN**1506**
MDJNR/L3225P15	●	●		32	25	170	32	32	38	DN**1506**

● Ex stock ○ On demand

* With internal cooling

Spare parts

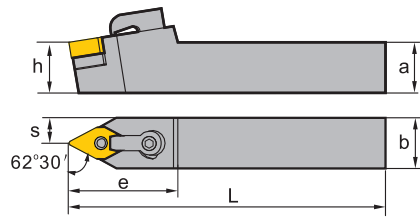
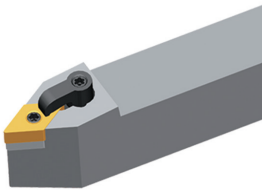
	Insert	DN**1104**	DN**1104**	DN**1506**	DN**1506**
	h	20	25-32	20	25-32
	Clamp	C1RD	C1RD	C2RD	C2RD
	Dowel pin	TM5×13	TM5×13	TM6×19	TM6×19
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	D11BM	D11BM	D15BM	D15BM
	Wrench (clamp)	WH30L	WH30L	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L	WH30L	WH30L

Insert

Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A62	A63	A63	A68	A69	A178

DN** holder (external) M-Clamping

MDPNN Kr: 62°30'



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
MDPNN2020K11	●		20	20	125	20	10	35	DN**1104**
MDPNN2525M11	●		25	25	150	25	12.5	35	DN**1104**
MDPNN2020K15	●		20	20	125	20	10	40	DN**1506**
MDPNN2525M15	●		25	25	150	25	12.5	40	DN**1506**
MDPNN3225P15	●		32	25	170	32	12.5	40	DN**1506**

● Ex stock ○ On demand

* With internal cooling

Spare parts

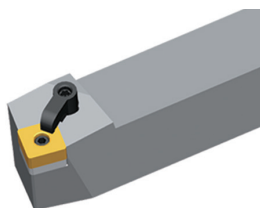
	Insert	DN**1104**	DN**1104**	DN**1506**	DN**1506**
	h	20	25-32	20	25-32
	Clamp	C1RD	C1RD	C2RD	C2RD
	Dowel pin	TM5×13	TM5×13	TM6×19	TM6×19
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	D11BM	D11BM	D15BM	D15BM
	Wrench (clamp)	WH30L	WH30L	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L	WH30L	WH30L

Insert

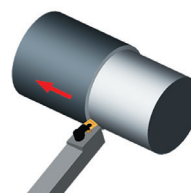
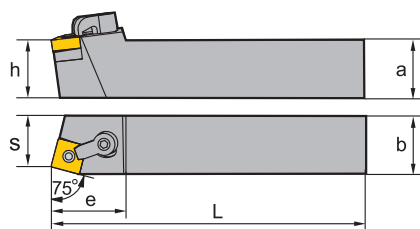
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A62	A63	A63	A68	A69	A178

SN** holder (external) M-Clamping

MSBNR/L Kr: 75°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MSBNR/L2020K12	●	●		20	20	125	20	17	32	SN**1204**
MSBNR/L2525M12	●	○		25	25	150	25	22	32	SN**1204**
MSBNR/L3225P12		●		32	25	170	32	22	32	SN**1204**
MSBNR/L2525M15	●	○		25	25	150	25	22	38	SN**1506**
MSBNR/L3232P15	●	●		32	32	170	32	29	38	SN**1506**
MSBNR/L4032R15	○			40	32	200	40	27	38	SN**1506**
MSBNR/L3232P19	●	●		32	32	170	32	27	45	SN**1906**
MSBNR/L4040R19	○	●		40	40	200	40	35	45	SN**1906**
MSBNR/L4040R25	●	○		40	40	200	40	35	50	SN**2507**
MSBNR/L4040S2509	○	○		40	40	250	40	35	50	SN**2509**

● Ex stock ○ On demand

* With internal cooling

Spare parts							
	Insert	SN**1204**	SN**1204**	SN**1506**	SN**1906**	SN**2507**	SN**2509**
	h	20	25-32	25-40	32-40	40	40
	Clamp	C1RD	C1RD	C2RD	C5RD	C6RD	C6RD
	Dowel pin	TM6×17	TM6×17	TM8×21	TM10×21	TM12×29	TM12×29
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)			
	Screw (clamp)				DM8×30X (10.2 Nm)	DM10×35X (16.6 Nm)	DM10×35X (16.6 Nm)
	Shim	S12BM	S12BM	S15BM	S19BM	S25BM	S25BM
	Wrench (clamp)	WH30L	WH30L	WH30L	WH40L	WH40L	WH40L
	Wrench (dowel pin)	WH31L	WH31L	WH30L	WH40L	WH50L	WH50L

Insert				
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

System code > A228

Grade selection > A42

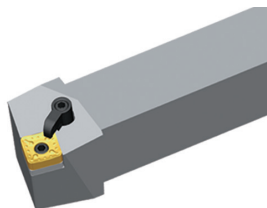
Technical info > A501

Cutting data > A366

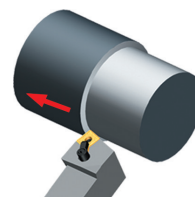
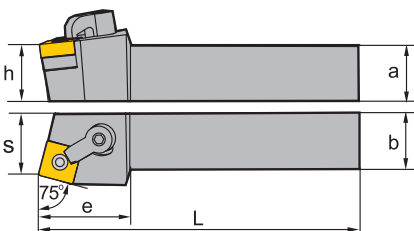
SN** holder (external)

M-Clamping

MSRNR/L Kr: 75°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MSRNR/L2020K12	●	●		20	20	125	20	22	36	SN**1204**
MSRNR/L2525M12	●	●		25	25	150	25	27	36	SN**1204**
MSRNR/L3225P12		○		32	25	170	32	27	36	SN**1204**
MSRNR/L2525M15	●	○		25	25	150	25	27	40	SN**1506**
MSRNR/L3232P15	●	●		32	32	170	32	35	40	SN**1506**
MSRNR/L4032R15	○			40	32	200	40	35	40	SN**1506**
MSRNR/L3232P19	○	○		32	32	170	32	35	45	SN**1906**
MSRNR/L4040R19	○			40	40	200	40	43	45	SN**1906**
MSRNR/L4040R2509	○	○		40	40	200	40	43	50	SN**2509**
MSRNR/L4040S2509	○	○		40	40	250	40	43	50	SN**2509**

● Ex stock ○ On demand

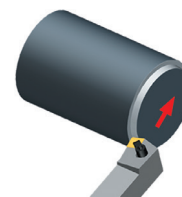
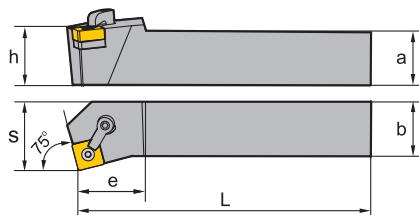
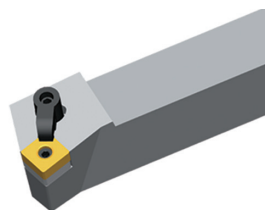
* With internal cooling

Spare parts						
	Insert	SN**1204**	SN**1204**	SN**1506**	SN**1906**	SN**2509**
	h	20	25-32	25-40	32-40	40
	Clamp	C1RD	C1RD	C2RD	C5RD	C6RD
	Dowel pin	TM6×17	TM6×17	TM8×21	TM10×21	TM12×29
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)		
	Screw (clamp)				DM8×30X (10.2 Nm)	DM10×35X (16.6 Nm)
	Shim	S12BM	S12BM	S15BM	S19BM	S25BM
	Wrench (clamp)	WH30L	WH30L	WH30L	WH40L	WH40L
	Wrench (dowel pin)	WH31L	WH31L	WH30L	WH40L	WH50L

Insert				
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

SN** holder (external) M-Clamping

MSKNR/L Kr: 75°










Right hand style

Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MSKNR/L2020K12	●	●		20	20	125	20	25	32	SN**1204**
MSKNR/L2525M12	●	●		25	25	150	25	32	32	SN**1204**
MSKNR/L3225P12	●	○		32	25	170	32	32	32	SN**1204**
MSKNR/L2525M15	●	○		25	25	150	25	32	28	SN**1506**
MSKNR/L3232P15	●	○		32	32	170	32	40	38	SN**1506**
MSKNR/L4032R15		○		40	32	200	40	40	38	SN**1506**
MSKNR/L3232P19	●	●		32	32	170	32	40	45	SN**1906**
MSKNR/L4040R19		○	○	40	40	200	40	50	45	SN**1906**
MSKNR/L4040S2509		○	●	40	40	250	40	50	50	SN**2509**

● Ex stock ○ On demand

* With internal cooling

Spare parts

		Spare parts				
	Insert	SN**1204**	SN**1204**	SN**1506**	SN**1906**	SN**2509**
	h	20	25-32	25-40	32-40	40
	Clamp	C1RD	C1RD	C2RD	C5RD	C6RD
	Dowel pin	TM6×17	TM6×17	TM8×21	TM10×21	TM12×29
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)		
	Screw (clamp)				DM8×30X (10.2 Nm)	DM10×35X (16.6 Nm)
	Shim	S12BM	S12BM	S15BM	S19BM	S25BM
	Wrench (clamp)	WH30L	WH30L	WH30L	WH40L	WH40L
	Wrench (dowel pin)	WH30L	WH30L	WH30L	WH40L	WH50L

Insert

Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

System code > A228

Grade selection > A42

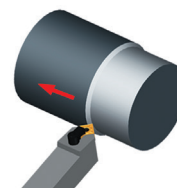
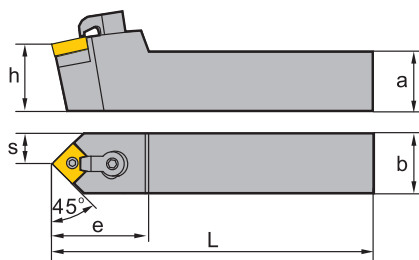
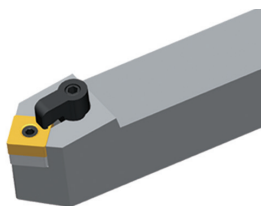
Technical info > A501

Cutting data > A366

SN** holder (external)

M-Clamping

MSDNN Kr: 45°



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
MSDNN2020K12	●		20	20	125	20	10	35	SN**1204**
MSDNN2525M12	●		25	25	150	25	12.5	35	SN**1204**
MSDNN3225P12	●		32	25	170	32	12.5	35	SN**1204**
MSDNN2525M15	●		25	25	150	25	12.5	42	SN**1506**
MSDNN3232P15	○		32	32	170	32	16	42	SN**1506**
MSDNN4032R15	○		40	32	200	40	16	42	SN**1506**

● Ex stock ○ On demand

* With internal cooling

Spare parts

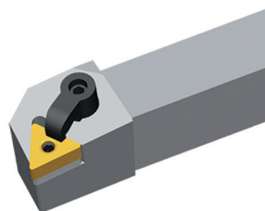
	Insert	SN**1204**	SN**1204**	SN**1506**
	h	20	25-32	25-40
	Clamp	C1RD	C1RD	C2RD
	Dowel pin	TM6×17	TM6×17	TM8×21
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	S12BM	S12BM	S15BM
	Wrench (clamp)	WH30L	WH30L	WH30L
	Wrench (dowel pin)	WH30L	WH30L	WH30L

Insert

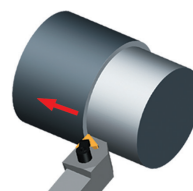
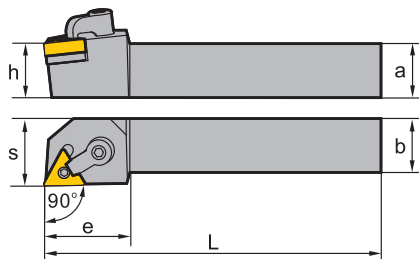
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

TN** holder (external) M-Clamping

MTGNR/L Kr: 90°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MTGNR/L2020K16		●	○	20	20	125	20	25	33	TN**1604**
MTGNR/L2525M16		●	●	25	25	150	25	32	33	TN**1604**
MTGNR/L3225P16		●	○	32	25	170	32	32	33	TN**1604**
MTGNR/L2525M22		●	○	25	25	150	25	32	35	TN**2204**
MTGNR/L3225P22		○	○	32	25	170	32	32	35	TN**2204**

● Ex stock ○ On demand

* With internal cooling

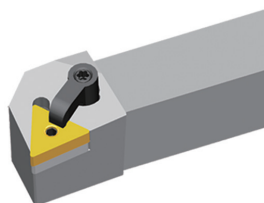
Spare parts				
	Insert h	TN**1604** 20	TN**1604** 25-32	TN**2204** 25-32
	Clamp	C1RD	C1RD	C2RD
	Dowel pin	TM5×13	TM5×13	TM6×17
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	T16BM	T16BM	T22BM
	Wrench (clamp)	WH30L	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L	WH30L

Insert						
Wiper A87	Finishing A88	Medium Cut A90	Roughing A92	Heavy Turning A97	Cast Iron A99	PCBN/PCD A163

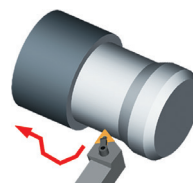
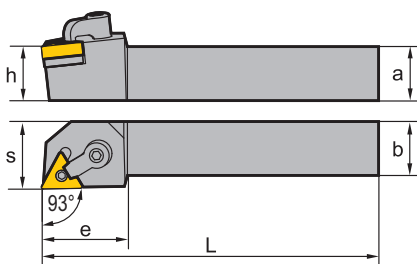
TN** holder (external)

M-Clamping

MTJNR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MTJNR/L2020K16	●			20	20	125	20	25	32	TN**1604**
MTJNR/L2525M16	○	○		25	25	150	25	32	32	TN**1604**
MTJNR/L3225P16	○			32	25	170	32	32	32	TN**1604**
MTJNR/L2525M22	○			25	25	150	25	32	36	TN**2204**
MTJNR/L3225P22	○	●		32	25	170	32	32	36	TN**2204**

● Ex stock ○ On demand

* With internal cooling

Spare parts

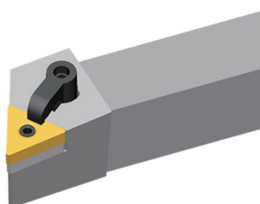
	Insert	TN**1604**	TN**1604**	TN**2204**
	h	20	25-32	25-32
	Clamp	C1RD	C1RD	C2RD
	Dowel pin	TM5×13	TM5×13	TM6×17
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	T16BM	T16BM	T22BM
	Wrench (clamp)	WH30L	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L	WH30L

Insert

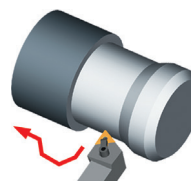
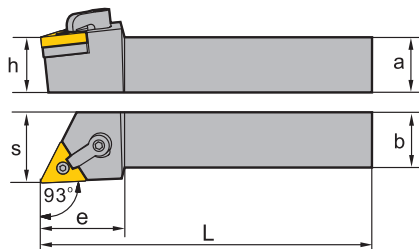
Wiper	Finishing	Medium Cut	Roughing	Heavy Turning	Cast Iron	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

TN** holder (external) M-Clamping

MTJNR/L-Z Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MTJNR/L2020K16-Z	●	●		20	20	125	20	25	32	TN**1604**
MTJNR/L2525M16-Z	●	●		25	25	150	25	32	32	TN**1604**
MTJNR/L3225P16-Z	●	○		32	25	170	32	32	32	TN**1604**
MTJNR/L2525M22-Z	●	●		25	25	150	25	32	36	TN**2204**
MTJNR/L3225P22-Z	●	○		32	25	170	32	32	36	TN**2204**

● Ex stock ○ On demand

* With internal cooling

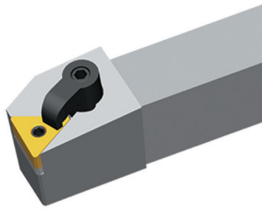
Spare parts				
	Insert h	TN**1604** 20	TN**1604** 25-32	TN**2204** 25-32
	Clamp	C1RD	C1RD	C2RD
	Dowel pin	TM5×13	TM5×13	TM6×17
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	T16BM	T16BM	T22BM
	Wrench (clamp)	WH30L	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L	WH30L

Insert						
Wiper A87	Finishing A88	Medium Cut A90	Roughing A92	Heavy Turning A97	Cast Iron A99	PCBN/PCD A163

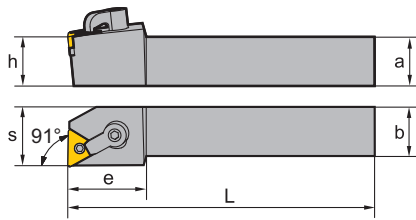
TN** holder (external)



M-Clamping

MTFNR/L Kr: 91°



Right hand style



Article		Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MTFNR/L2020K16		●	○	20	20	125	20	25	32	TN**1604**
MTFNR/L2525M16		●	●	25	25	150	25	32	32	TN**1604**
MTFNR/L3225P16		●		32	25	170	32	32	32	TN**1604**
MTFNR/L2525M22		●	○	25	25	150	25	32	36	TN**2204**
MTFNR/L3225P22		●	○	32	25	170	32	32	36	TN**2204**

● Ex stock ○ On demand

* With internal cooling

Spare parts

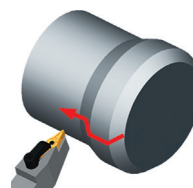
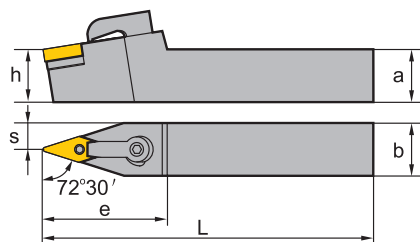
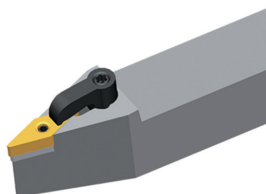
	Insert	TN**1604**	TN**1604**	TN**2204**
	h	20	25-32	25-32
	Clamp	C1RD	C1RD	C2RD
	Dowel pin	TM5×13	TM5×13	TM6×17
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	T16BM	T16BM	T22BM
	Wrench (clamp)	WH30L	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L	WH30L

Insert

Wiper	Finishing	Medium Cut	Roughing	Heavy Turning	Cast Iron	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

VN** holder (external) M-Clamping

MVVNN Kr: 72°30'



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
MVVNN2020K16	●		20	20	125	20	10	45	VN**1604**
MVVNN2525M16	●		25	25	150	25	12.5	45	VN**1604**
MVVNN3225P16	○		32	25	170	32	12.5	45	VN**1604**
MVVNN3232P16	●		32	32	170	32	16	45	VN**1604**

● Ex stock ○ On demand

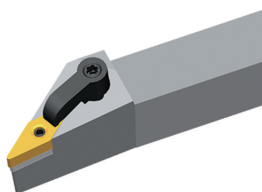
* With internal cooling

Spare parts			
	Insert	VN**1604**	VN**1604**
	h	20	25-32
	Clamp	C3RD	C3RD
	Dowel pin	TM5×13	TM5×13
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	V16BM	V16BM
	Wrench (clamp)	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L

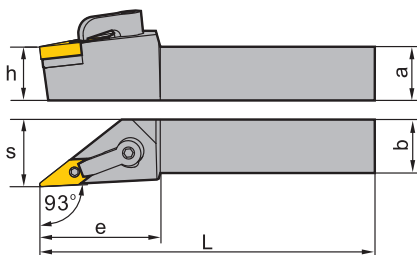
Insert				
Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A102	A102	A104	A103	A179

VN** holder (external) M-Clamping

MVJNR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MVJNR/L2020K16		●	●	20	20	125	20	25	45	VN**1604**
MVJNR/L2525M16		●	●	25	25	150	25	32	45	VN**1604**
MVJNR/L3225P16		●	●	32	25	170	32	32	45	VN**1604**
MVJNR/L3232P16		●	●	32	32	170	32	40	45	VN**1604**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	VN**1604**	VN**1604**
	h	20	25-32
	Clamp	C3RD	C3RD
	Dowel pin	TM5×13	TM5×13
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	V16BM	V16BM
	Wrench (clamp)	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L

Insert

Finishing A102	Medium Cut A102	Roughing A104	Cast Iron A103	PCBN/PCD A179

A

Turning

B

Milling

C

Drilling

D

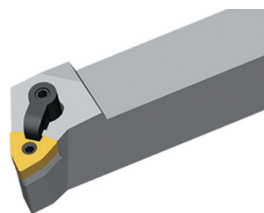
Technical
Information

E

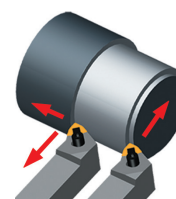
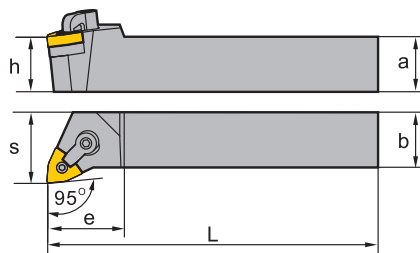
Index

WN** holder (external) M-Clamping

MWLNLR/L Kr: 95°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MWLNLR/L2020K06	●	●		20	20	125	20	25	30	WN**0604**
MWLNLR/L2525M06	●	●		25	25	150	25	32	30	WN**0604**
MWLNLR/L2020K08	●	●		20	20	125	20	25	30	WN**0804**
MWLNLR/L2525M08	●	●		25	25	150	25	32	35	WN**0804**
	○			25	25	170	25	32	35	WN**0804**
MWLNLR/L3232P08	●	●		32	32	170	32	40	35	WN**0804**

● Ex stock ○ On demand

* With internal cooling

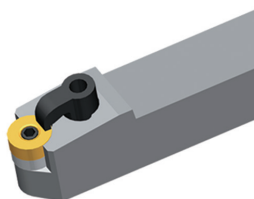
Spare parts					
	Insert	WN**0604**	WN**0604**	WN**0804**	WN**0804**
	h	20	25	20	25-32
	Clamp	C1RD	C1RD	C1RD	C1RD
	Dowel pin	TM5×13	TM5×13	TM6×17	TM6×17
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	W06BM	W06BM	W08BM	W08BM
	Wrench (clamp)	WH30L	WH30L	WH30L	WH30L
	Wrench (dowel pin)	WH20L	WH20L	WH30L	WH30L

Insert					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A106	A107	A107	A109	A111	A165

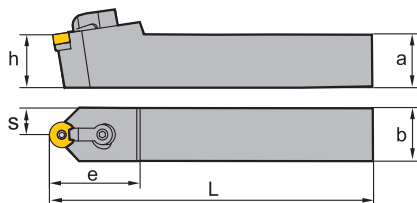
RN** holder (external)

M-Clamping

MRDNN



Right hand style



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
MRDNN2020K12		○	20	20	125	20	10	35	RN**1204**
MRDNN2525M12		○	25	25	150	25	12.5	35	RN**1204**
MRDNN3225P12		○	32	25	170	32	12.5	35	RN**1204**
MRDNN3232P12		○	32	32	170	32	16	35	RN**1204**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	RN**1204**	RN**1204**
	h	20	25-32
	Clamp	C1RD	C1RD
	Dowel pin	TM6×17	TM6×17
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	R12BM	R12BM
	Wrench (clamp)	WH30L	WH30L
	Wrench (dowel pin)	WH30L	WH30L

Insert

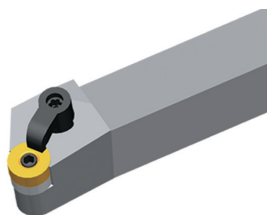


Cast Iron

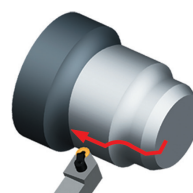
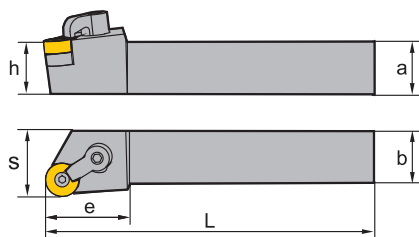
A112

RN** holder (external) M-Clamping

MRGNR/L



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
MRGNR/L2020K12		○	○	20	20	125	20	25	32	RN**1204**
MRGNR/L2525M12		○	●	25	25	150	25	32	32	RN**1204**
MRGNR/L3225P12		○	○	32	25	170	32	32	32	RN**1204**
MRGNR/L3232P12		○	○	32	32	170	32	40	32	RN**1204**

● Ex stock ○ On demand

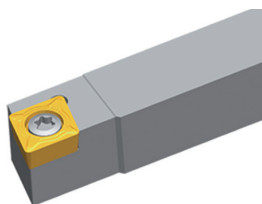
* With internal cooling

Spare parts			
	Insert	RN**1204**	RN**1204**
	h	20	25-32
	Clamp	C1RD	C1RD
	Dowel pin	TM6×17	TM6×17
	Screw (clamp)	DM6×25 (7.0 Nm)	DM6×30 (7.0 Nm)
	Shim	R12BM	R12BM
	Wrench (clamp)	WH30L	WH30L
	Wrench (dowel pin)	WH30L	WH30L

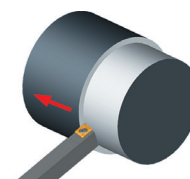
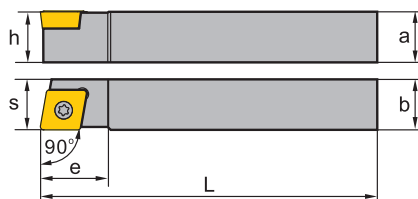
Insert
Cast Iron
A112


CC holder (external)** **S-Clamping**

SCACR/L Kr: 90°





Right hand style









Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SCACR/L1010E06		●	●	10	10	70	10	10.5	10	CC**0602**
SCACR/L1212F09		●	●	12	12	80	12	12.7	16	CC**09T3**

● Ex stock ○ On demand

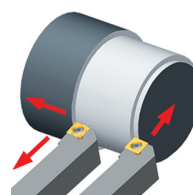
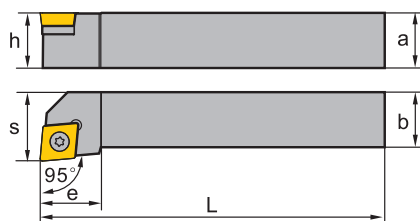
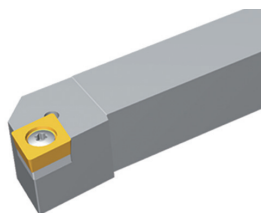
* With internal cooling

Spare parts			
	Insert	CC**0602**	CC**09T3**
	h	10	12
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench (screw)	WT07IP	WT15IP

Insert					
					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A116	A119	A121	A122	A121	A180

CC** holder (external) S-Clamping

SCLCR/L Kr: 95°



Right hand style

Article	*	Stock		Dimensions [mm]							Inserts	
		R	L	a	b	L	h	s	L ₂	e		
SCLCR/L0808D06	•	•	8	8	60	8	10	10	10	10	CC**0602**	
SCLCR/L1010E06	•	•	10	10	70	10	12	10	10	10	CC**0602**	
SCLCR/L1212F09	•	•	12	12	80	12	16	16	16	16	CC**09T3**	
SCLCR/L1616H09	•	•	16	16	100	16	20	16	16	16	CC**09T3**	
SCLCR/L2020K09	•	•	20	20	125	20	25	25	25	25	CC**09T3**	
SCLCR/L1616H12	•	•	16	16	100	16	20	18	18	18	CC**1204**	
SCLCR/L2020K12	•	•	20	20	125	20	25	25	25	25	CC**1204**	
SCLCR/L2525M12	•	•	25	25	150	25	32	26	26	26	CC**1204**	
SCLCR/L3225P12	○	○	32	25	170	32	32	26	26	26	CC**1204**	
SCLCR/L3232P12	•	•	32	32	170	32	40	28	28	28	CC**1204**	

• Ex stock ○ On demand

* With internal cooling

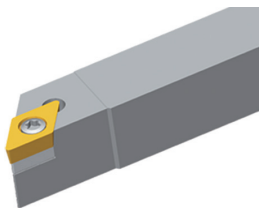
Spare parts				
	Insert	CC**0602**	CC**09T3**	CC**1204**
	h	8-10	12-20	16-32
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)	
	Screw			I60M4×11X (3.4 Nm)
	Screw (shim)			SM6×10XA
	Shim			C12BS
	Wrench (screw)	WT07IP	WT15IP	WT15IP
	Wrench (shim)			WH40L

Insert					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A116	A119	A121	A122	A121	A180

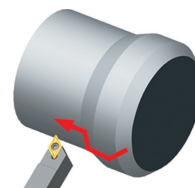
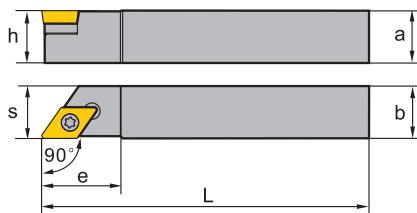
DC** holder (external)

S-Clamping

SDACR/L Kr: 90°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SDACR/L1010E07		●	●	10	10	70	10	10.5	15	DC**0702**
SDACR/L1212F11		●	●	12	12	80	12	12.5	15	DC**11T3**
SDACR/L1616H11		●	●	16	16	100	16	16.7	24	DC**11T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

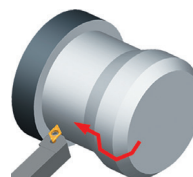
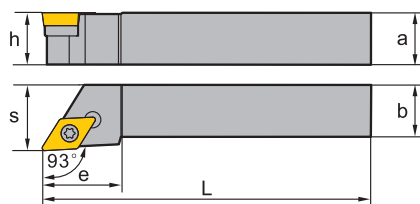
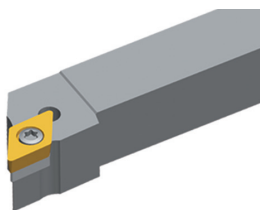
	Insert	DC**0702**	DC**11T3**	DC**11T3**
	h	10	12	16
	Screw	I60M2.5x6.5 (1.0 Nm)	I60M3.5x8 (2.7 Nm)	I60M3.5x12 (2.7 Nm)
	Screw (shim)			SM5x8.65XA
	Shim			D11BS
	Wrench (screw)	WT07IP	WT15IP	WT15IP
	Wrench (shim)			WH35L

Insert

Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

DC** holder (external) S-Clamping

SDJCR/L Kr: 93°



Right hand style

Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SDJCR/L1010E07		•	•	10	10	70	10	12	15	DC**0702**
SDJCR/L1212F07		•	•	12	12	80	12	16	15	DC**0702**
SDJCR/L1616H07		•	•	16	16	100	16	20	18	DC**0702**
SDJCR/L1616H11		•	•	16	16	100	16	20	24	DC**11T3**
SDJCR/L2020K11		•	•	20	20	125	20	25	24	DC**11T3**
SDJCR/L2525M11		•	•	25	25	150	25	32	29	DC**11T3**
SDJCR/L3225P11		•	•	32	25	170	32	32	29	DC**11T3**

• Ex stock ○ On demand

* With internal cooling

Spare parts

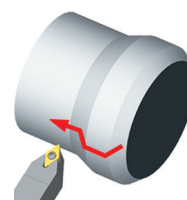
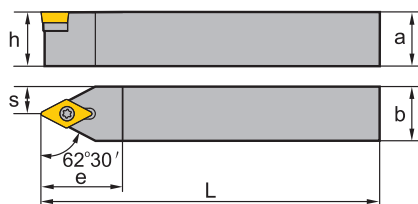
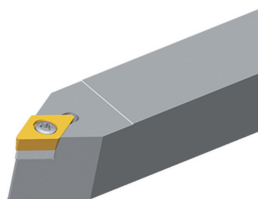
	Insert	DC**0702**	DC**11T3**
	h	10-16	16-32
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		D11BS
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

Insert

Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

DC** holder (external) S-Clamping

SDNCN Kr: 62°30'



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
SDNCN1010E07		●	10	10	70	10	5	20	DC**0702**
SDNCN1212F07		●	12	12	80	12	6	20	DC**0702**
SDNCN1212H11		●	12	12	100	12	6	30	DC**11T3**
SDNCN1616H11		●	16	16	100	16	8	30	DC**11T3**
SDNCN2020K11		●	20	20	125	20	10	30	DC**11T3**
SDNCN2525M11		●	25	25	150	25	12.5	30	DC**11T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

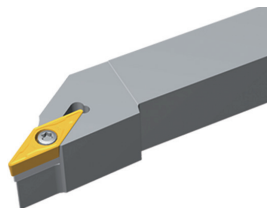
	Insert	DC**0702**	DC**11T3**	DC**11T3**
	h	10-12	12	16-25
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)			SM5×8.65XA
	Shim			D11BS
	Wrench (screw)	WT07IP	WT15IP	WT15IP
	Wrench (shim)			WH35L

Insert

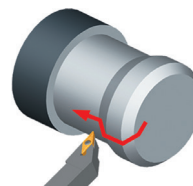
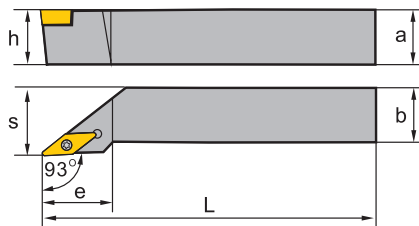
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

VB** holder (external) S-Clamping

SVJBR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SVJBR/L1212F11		•		12	12	80	12	16	27	VB**1103**
SVJBR/L1616H11		•	•	16	16	100	16	20	27	VB**1103**
SVJBR/L2525M11		•	•	25	25	150	25	32	27	VB**1103**
SVJBR/L1616H16		•	•	16	16	100	16	20	36	VB**1604**
SVJBR/L2020K16		•	•	20	20	125	20	25	41	VB**1604**
SVJBR/L2525M16		•	•	25	25	150	25	32	41	VB**1604**
SVJBR/L3225P16		•	•	32	25	170	32	32	41	VB**1604**

• Ex stock ○ On demand

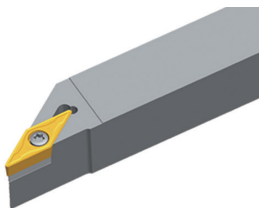
* With internal cooling

Spare parts			
	Insert	VB**1103**	VB**1604**
	h	12-25	16-32
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		V16BS
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

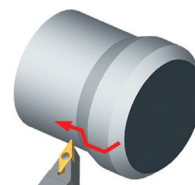
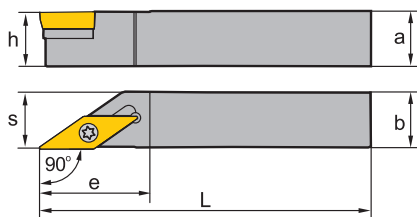
Insert			
Finishing	Medium Cut	Roughing	PCBN/PCD
A148	A151	A152	A191

VB** holder (external) S-Clamping

SVABR/L Kr: 90°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SVABR/L1010F11		●	●	10	10	80	10	10.5	28	VB**1103**
SVABR/L1616H16		●	○	16	16	100	16	16.5	28	VB**1604**
SVABR/L2020K16		●	○	20	20	125	20	20.5	28	VB**1604**
SVABR/L2525M16		●	●	25	25	150	25	25.5	28	VB**1604**

● Ex stock ○ On demand

* With internal cooling

Spare parts

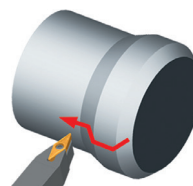
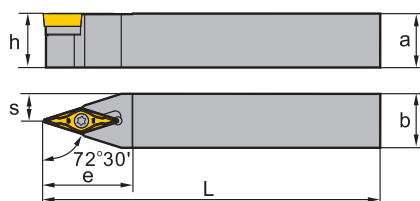
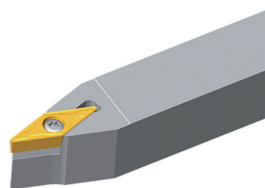
	Insert	VB**1103**	VB**1604**
	h	10	16-32
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		V16BS
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

Insert

Finishing A148	Medium Cut A151	Roughing A152	PCBN/PCD A191

VB** holder (external) S-Clamping

SVVBN Kr: 72°30'



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
SVVBN1616H11	●		16	16	100	16	8	27	VB**1103**
SVVBN2020K11	●		20	20	125	20	10	30	VB**1103**
SVVBN1616H16	●		16	16	100	16	8	33	VB**1604**
SVVBN2020K16	●		20	20	125	20	10	33	VB**1604**
SVVBN2525M16	●		25	25	150	25	12.5	38	VB**1604**

● Ex stock ○ On demand

* With internal cooling

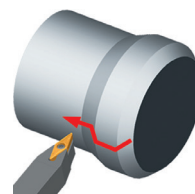
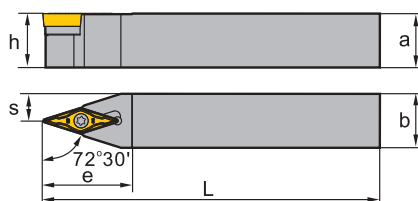
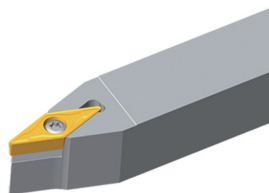
Spare parts			
	Insert h	VB**1103** 12-25	VB**1604** 16-32
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		V16BS
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

Insert			
Finishing A148	Medium Cut A151	Roughing A152	PCBN/PCD A191

VC** holder (external)

S-Clamping

SVVCN Kr: 72°30'



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
SVVCN1212F11		●	12	12	80	12	6	27	VC**1103**
SVVCN1616H11		●	16	16	100	16	8	27	VC**1103**
SVVCN2020K11		●	20	20	125	20	10	30	VC**1103**
SVVCN1212M11		●	12	12	150	12	6	27	VC**1103**
SVVCN2525M11		●	25	25	150	25	12.5	38	VC**1103**
SVVCN1616H16		●	16	16	100	16	8	33	VC**1604**
SVVCN2020K16		●	20	20	125	20	10	33	VC**1604**
SVVCN2525M16		●	25	25	150	25	12.5	38	VC**1604**

● Ex stock ○ On demand

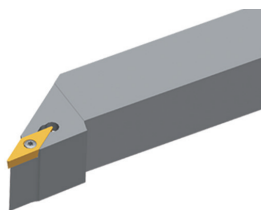
* With internal cooling

Spare parts			
	Insert	VC**1103**	VC**1604**
	h	12-25	16-32
	Screw	I60M2.5x6.5 (1.0 Nm)	I60M3.5x12 (2.7 Nm)
	Screw (shim)		SM5x8.65XA
	Shim		V16BSC
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

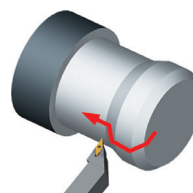
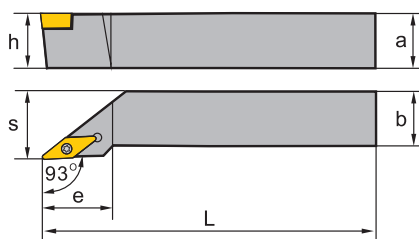
Insert			
Finishing	Medium Cut	Alum Machining	PCBN/PCD
A156	A156	A154	A193

VC** holder (external) S-Clamping

SVJCR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SVJCR/L1010E11	●			10	10	70	10	12	22	VC**1103**
SVJCR/L1212F11	●	●		12	12	80	12	16	27	VC**1103**
SVJCR/L1616H11	●	●		16	16	100	16	20	27	VC**1103**
SVJCR/L2020K11	●	●		20	20	125	20	25	27	VC**1103**
SVJCR/L2525M11	●	●		25	25	150	25	32	27	VC**1103**
SVJCR/L1616H16	●	●		16	16	100	16	20	36	VC**1604**
SVJCR/L2020K16	●	●		20	20	125	20	25	41	VC**1604**
SVJCR/L2020M16	●	●		20	20	150	20	25	41	VC**1604**
SVJCR/L2525M16	●	●		25	25	150	20	32	41	VC**1604**
SVJCR/L3225P16	○	○		32	25	170	32	32	41	VC**1604**

● Ex stock ○ On demand

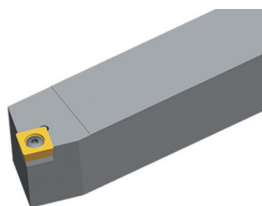
* With internal cooling

Spare parts			
	Insert	VC**1103**	VC**1604**
	h	10-25	16-32
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		V16BSC
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

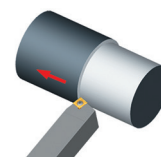
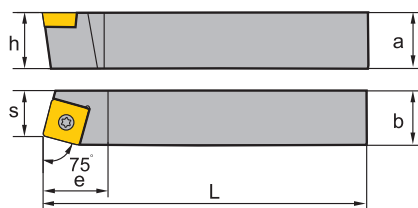
Insert			
Finishing	Medium Cut	Alum Machining	PCBN/PCD
A156	A156	A154	A193

SC steel boring bar S-Clamping**

SSBCR/L Kr: 75°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SSBCR/L1212F09	•	•		12	12	80	12	11	16	SC**09T3**
SSBCR/L1616H09	•	•		16	16	100	16	13	16	SC**09T3**
SSBCR/L2020K12	•	•		20	20	125	20	17	25	SC**1204**

• Ex stock ○ On demand

* With internal cooling

Spare parts

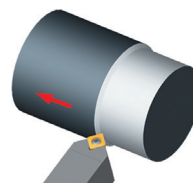
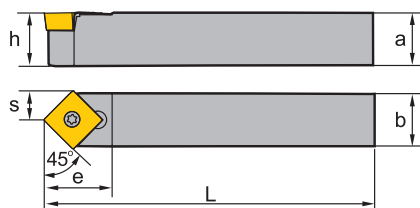
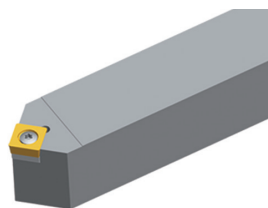
	Insert	SC**09T3**	SC**09T3**	SC**1204**
	h	12	16	20
	Screw	I60M3.5x8 (2.7 Nm)	I60M3.5x8 (2.7 Nm)	
	Screw			I60M4x11X (3.4 Nm)
	Screw (shim)		SM5x8.65XA	SM6x10XA
	Shim		S09BS	S12BS
	Wrench (screw)	WT15IP	WT15IP	WT15IP
	Wrench (shim)		WH35L	WH40L

Insert

Finishing A134	Medium Cut A135	Roughing A136	Alum Machining A136

SC** steel boring bar S-Clamping

SSDCN Kr: 45°



Right hand style

Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
SSDCN1212F09	●		12	12	80	12	6	15.5	SC**09T3**
SSDCN1616H09	●		16	16	100	16	8	15.5	SC**09T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

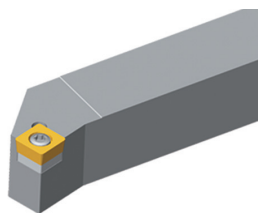
	Insert	SC**09T3**	SC**09T3**
	h	12	16
	Screw	I60M3.5×8 (2.7 Nm)	I60M3.5×8 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		S09BS
	Wrench (screw)	WT15IP	WT15IP
	Wrench (shim)		WH35L

Insert

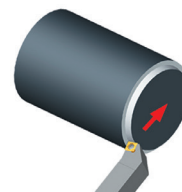
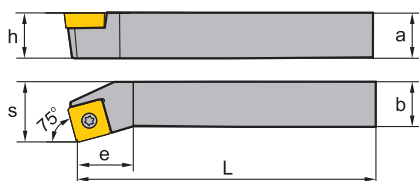
Finishing	Medium Cut	Roughing	Alum Machining
A134	A135	A136	A136

SC** steel boring bar S-Clamping

SSKCR/L Kr: 75°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SSKCR/L1616H09		●	●	16	16	100	16	20	13	SC**09T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

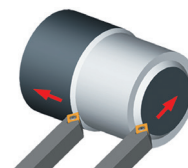
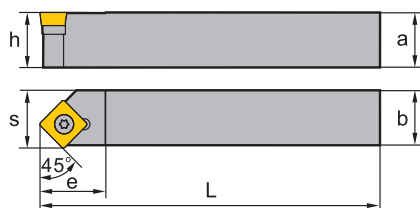
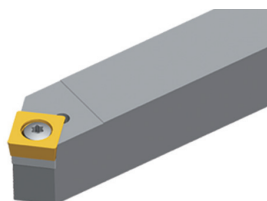
	Insert	SC**09T3**
	h	16
	Screw	I60M3.5×8 (2.7 Nm)
	Screw (shim)	SM5×8.65XA
	Shim	S09BS
	Wrench (screw)	WT15IP
	Wrench (shim)	WH35L

Insert

Finishing	Medium Cut	Roughing	Alum Machining
A134	A135	A136	A136

SC** steel boring bar S-Clamping

SSSCR/L Kr: 45°



Right hand style

Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SSSCR/L1616H09	●	●		16	16	100	16	17	17	SC**09T3**
SSSCR/L2020K12	●	●		20	20	125	20	21	21	SC**1204**

● Ex stock ○ On demand

* With internal cooling

Spare parts

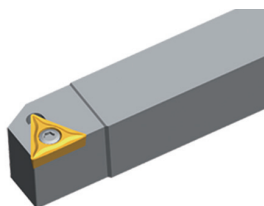
	Insert	SC**09T3**	SC**1204**
	h	16	20
	Screw	I60M3.5×12 (2.7 Nm)	
	Screw		I60M4×11X (3.4 Nm)
	Screw (shim)		SM6×10XA
	Shim		S12BS
	Wrench (screw)	WT15IP	WT15IP
	Wrench (shim)		WH40L

Insert

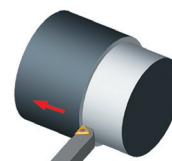
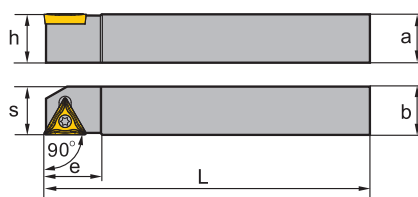
Finishing	Medium Cut	Roughing	Alum Machining
A134	A135	A136	A136

TC** holder (external) S-Clamping

STACR/L Kr: 90°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
STACR/L1212F11		●	●	12	12	80	12	12.5	14	TC**1102**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	TC**1102**
	h	12
	Screw	I60M2.5×6.5 (1.0 Nm)
	Wrench (screw)	WT07IP

Insert

Finishing	Medium Cut	Roughing	Alum Machining	PCBN/PCD
A141	A142	A143	A145	A187

A

Turning

B

Milling

C

Drilling

D

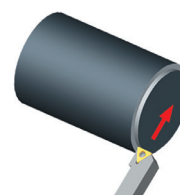
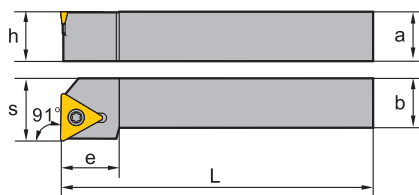
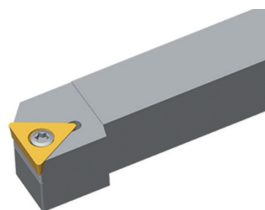
Technical
Information

E

Index

TC** holder (external) S-Clamping

STFCR/L Kr: 91°



Right hand style

Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
STFCR/L1212F11	● ○			12	12	80	12	16	14	TC**1102**
STFCR/L1616H11	● ○			16	16	100	16	20	14	TC**1102**
STFCR/L1616H16	● ○			16	16	100	16	20	19	TC**16T3**
STFCR/L2020K16	● ●			20	20	125	20	25	19	TC**16T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

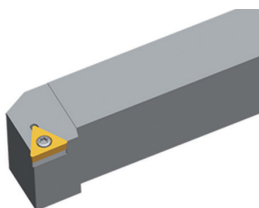
	Insert	TC**1102**	TC**16T3**
	h	12-16	16-20
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		T16BS
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

Insert

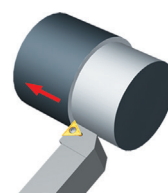
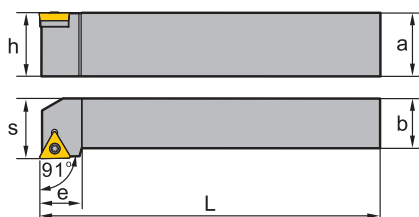
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A141	A142	A143	A145	A143	A187

TC** holder (external) S-Clamping

STGCR/L Kr: 91°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
STGCR/L0808D09	○			8	8	60	8	10	11	TC**0902**
STGCR/L1010E09	● ○			10	10	70	10	12	11	TC**0902**
STGCR/L1212F11	● ●			12	12	80	12	16	14	TC**1102**
STGCR/L1616H11	● ●			16	16	100	16	20	16	TC**1102**
STGCR/L2020K16	● ●			20	20	125	20	25	21	TC**16T3**
STGCR/L2525M16	● ●			25	25	150	25	25	21	TC**16T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	TC**0902**	TC**1102**	TC**16T3**
	h	8-10	12-16	20-25
	Screw	I60M2.2x5.5 (0.8 Nm)	I60M2.5x6.5 (1.0 Nm)	I60M3.5x12 (2.7 Nm)
	Screw (shim)			SM5x8.65XA
	Shim			T16BS
	Wrench (screw)	WT06IP	WT07IP	WT15IP
	Wrench (shim)			WH35L

Insert

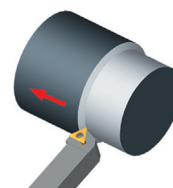
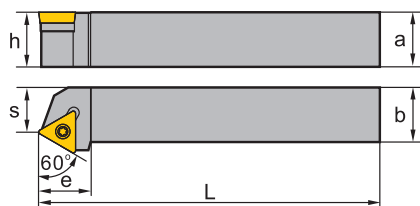
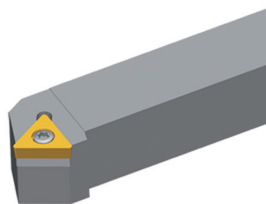
Finishing A141	Medium Cut A142	Roughing A143	Alum Machining A145	Cast Iron A143	PCBN/PCD A187

A

Turning

TC** holder (external) S-Clamping

STTCR/L Kr: 60°



Right hand style

B

Milling

Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
STTCR/L1616H11	● ○	●	○	16	16	100	16	13	14	TC**1102**
STTCR/L1616H16	● ●	●	●	16	16	100	16	13	19	TC**16T3**
STTCR/L2020K16	● ●	●	●	20	20	125	20	17	19	TC**16T3**

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Spare parts			
	Insert	TC**1102**	TC**16T3**
	h	16	16-20
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		T16BS
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

D

Technical
Information

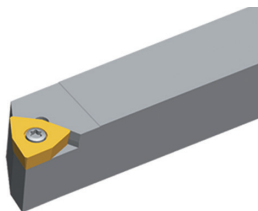
Insert					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A141	A142	A143	A145	A143	A187

E

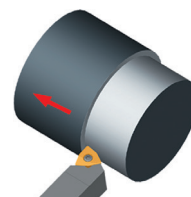
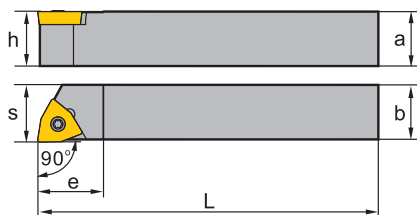
Index

WC** holder (external) S-Clamping

SWACR/L Kr: 90°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
SWACR/L1010E04	● ○	10	10	70	10	10.5	10	10	10	WC**0402**
SWACR/L1212F04	● ○	12	12	80	12	12	12	14	14	WC**0402**
SWACR/L1616H06	● ●	16	16	100	16	16.5	20	20	20	WC**06T3**
SWACR/L2020K08	● ●	20	20	125	20	20.5	24	24	24	WC**0804**

● Ex stock ○ On demand

* With internal cooling

Spare parts				
	Insert	WC**0402**	WC**06T3**	WC**0804**
	h	10-12	16	20
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3×7 (1.8 Nm)	I60M3.5×12 (2.7 Nm)
	Wrench (screw)	WT07IP	WT10IP	WT15IP

Insert

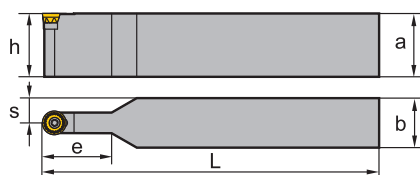
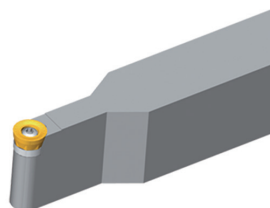




Medium Cut

C35

RC** holder (external) S-Clamping








SRDCN





Article	*	Stock	Dimensions [mm]						Inserts	
			a	b	L	h	s	e		
SRDCN1616H08		○	16	16	100	16	8	16	RCGX0803MO	RCMT0803MO
SRDCN2020K08		●	20	20	125	20	10	16	RCGX0803MO	RCMT0803MO
SRDCN2020K12		●	20	20	125	20	10	35	RCGX1204MO	RCMT1204MO
SRDCN2525M12		●	25	25	150	25	12.5	35	RCGX1204MO	RCMT1204MO
SRDCN3225P12		●	32	25	170	32	12.5	35	RCGX1204MO	RCMT1204MO
SRDCN2020K10		●	20	20	125	20	10	25	RCMT10T3MO	
SRDCN2525M10		●	25	25	150	25	12.5	25	RCMT10T3MO	
SRDCN3225P16		●	32	25	170	32	12.5	35	RCMT1606MO	
SRDCN3232P16		●	32	32	170	32	16	40	RCMT1606MO	
SRDCN4040S16		●	40	40	250	40	20	50	RCMT1606MO	
SRDCN4040S20		●	40	40	250	40	20	50	RCMT2006MO	

● Ex stock ○ On demand

* With internal cooling

Spare parts						
	Insert	RCGX0803MO	RCGX1204MO	RCMT10T3MO	RCMT1606MO	RCMT2006MO
	h	16-20	20-32	20-25	32-40	40
	Screw	I60M3×7 (1.8 Nm)	I60M3.5×12 (2.7 Nm)	I60M3.5×10 (2.7 Nm)		I43M6×16 (9.1 Nm)
	Screw				I60M4×15X (3.4 Nm)	
	Screw (shim)		SM5×8.65XA		SM6×10XA	
	Shim		R12BS		R16BS	
	Wrench (screw)	WT10IP	WT15IP	WT15IP	WT15IP	
	Wrench (screw)					WT25IT
	Wrench (shim)		WH35L		WH40L	

Insert	
	
Alum Machining	Cast Iron
A132	A132

System code > A228

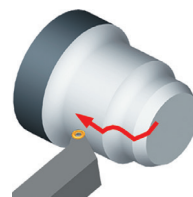
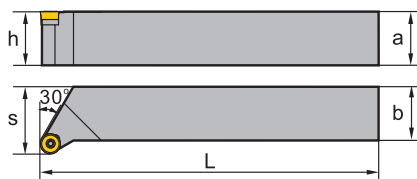
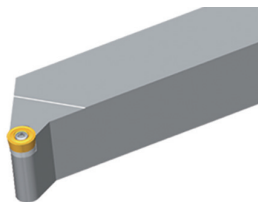
Grade selection > A42

Technical info > A501



Cutting data > A366

RC** holder (external) S-Clamping

SRGCR/L










Right hand style

Article	*	Stock		Dimensions [mm]					Inserts	
		R	L	a	b	L	h	s		
SRGCR/L1616H08		●	●	16	16	100	16	20	RCGX0803MO-LH	RCMT0803MO
SRGCR/L2020K12		●	○	20	20	125	20	27	RCGX1204MO	RCMT1204MO
SRGCR/L2525M12		●	○	25	25	150	25	32	RCGX1204MO	RCMT1204MO
SRGCR/L2525M10		●	○	25	25	100	25	32	RCMT10T3MO	
SRGCR/L2020K10		●	○	20	20	125	20	25	RCMT10T3MO	

● Ex stock ○ On demand

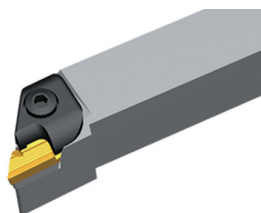
* With internal cooling

Spare parts				
	Insert h	RCGX0803MO-LH 16	RCGX1204MO 20-25	RCMT10T3MO 16-25
	Screw	I60M3.5×10 (2.7 Nm)	I60M3.5×12 (2.7 Nm)	I60M3.5×10 (2.7 Nm)
	Screw (shim)		SM5×8.65XA	
	Shim		R12BS	
	Wrench (screw)	WT15IP	WT15IP	WT15IP
	Wrench (shim)		WH35L	

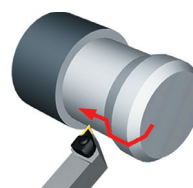
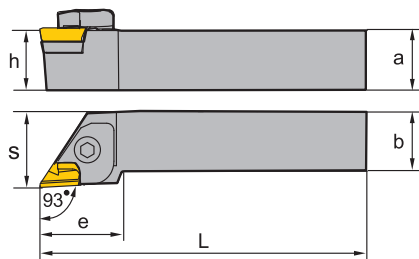
Insert	
	
Alum Machining A132	Cast Iron A132

KNUX** holder C-Clamping

CKJNR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
CKJNL2525M16		●		25	25	150	25	32	32	KNUX1604**L
CKJNL3232P16		●		32	32	170	32	40	32	KNUX1604**L
CKJNL4040R16		●		40	40	200	40	50	32	KNUX1604**L
CKJNR2525M16		●		25	25	150	25	32	32	KNUX1604**R
CKJNR3232P16		●		32	32	170	32	40	32	KNUX1604**R
CKJNR4040R16		○		40	40	200	40	50	32	KNUX1604**R

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert	KNUX1604**L	KNUX1604**R
	h	25-40	25-40
	Clamp	C6L1T	C6R1T
	Dowel pin	P0515	P0515
	Screw (clamp)	CM6×25A (7.0 Nm)	CM6×25A (7.0 Nm)
	Screw (shim)	SM3×10B	SM3×10B
	Shim		K16CC
	Shim	K16CCL	
	Spring (clamp)	SPR1	SPR1
	Spring (dowel pin)	SPR2	SPR2
	Wrench (clamp)	WH40L	WH40L
	Wrench (shim)	WH20L	WH20L

Insert



Finishing

A113

System code > A228

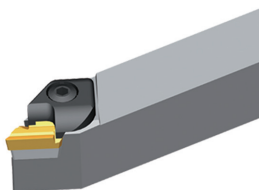
Grade selection > A42

Technical info > A501

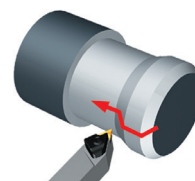
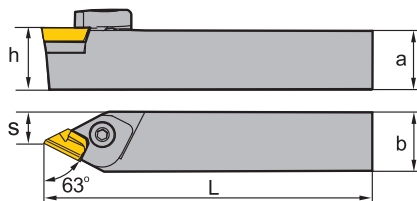
Cutting data > A366

KNUX** holder C-Clamping

CKNNR/L Kr: 63°



Right hand style



Article	*	Stock		Dimensions [mm]					Inserts
		R	L	a	b	L	h	s	
CKNNL2525M16	●			25	25	150	25	14.3	KNUX1604**L
CKNNL3232P16	○			32	32	170	32	16.8	KNUX1604**L
CKNNR2525M16	●			25	25	150	25	14.3	KNUX1604**R

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert	KNUX1604**L	KNUX1604**R
	h	25-32	25-32
	Clamp	C6L1T	C6R1T
	Dowel pin	P0515	P0515
	Screw (clamp)	CM6×25A (7.0 Nm)	CM6×25A (7.0 Nm)
	Screw (shim)	SM3×10B	SM3×10B
	Shim		K16CC
	Shim	K16CCL	
	Spring (clamp)	SPR1	SPR1
	Spring (dowel pin)	SPR2	SPR2
	Wrench (clamp)	WH40L	WH40L
	Wrench (shim)	WH20L	WH20L

Insert

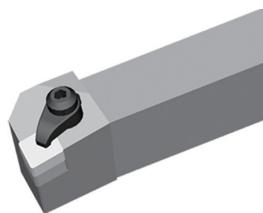


Finishing

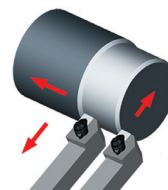
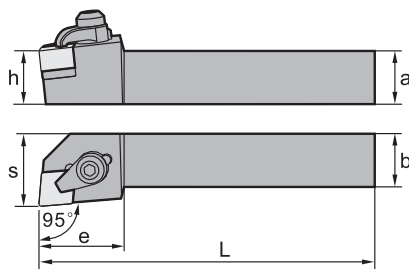
A113

CN** holder (external) C-Clamping

CCLNR/L Kr: 95°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts	
		R	L	a	b	L	h	s	e		
CCLNR/L2020K12		○	○	20	20	125	20	27	32	CNGN1204**	CNGN1207**
CCLNR/L2525M12		○	●	25	20	100	25	27	36	CNGN1204**	CNGN1207**
CCLNR/L2525M16		○	○	25	25	150	25	32	36	CNGN1604**	CNGN1606**
CCLNR/L3225P16		○	○	32	25	170	32	32	36	CNGN1604**	CNGN1606**

● Ex stock ○ On demand

* With internal cooling

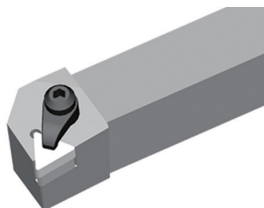
Spare parts					
	Insert	CNGN1204**	CNGN1207**	CNGN1604**	CNGN1606**
	h	20-25	20-25	25-32	25-32
	Clamp	C1RC	C1RC	C2RC	C2RC
	Screw (clamp)	CM6×30B (7.0 Nm)	CM6×30B (7.0 Nm)	CM8×30B (10.2 Nm)	CM8×30B (10.2 Nm)
	Screw (shim)	SM3×10B	SM3×10B	SM4×12B	SM4×12B
	Shim	C12CC-04	C12CC-07	C16CC-04	C16CC-06
	Spring	SPR1	SPR1	SPR3	SPR3
	Wrench (clamp)	WH40L	WH40L	WH50L	WH50L
	Wrench (shim)	WH20L	WH20L	WH30L	WH30L

Insert
PCBN/PCD
A173

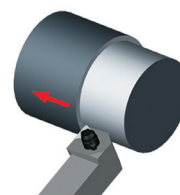
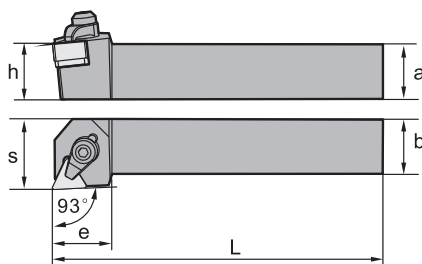
TN** holder (external)



C-Clamping

CTJNR/L Kr: 93°



Right hand style










Article	*	Stock		Dimensions [mm]						Inserts	
		R	L	a	b	L	h	s	e		
CTJNR/L2020K16		○	○	20	20	125	20	25	30	TNGN1604**	TNGN1607**
CTJNR/L2525M16		○	○	25	25	150	25	32	30	TNGN1604**	TNGN1607**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	TNGN1604**	TNGN1607**
	h	20-25	20-25
	Clamp	C1RC	C1RC
	Screw (clamp)	CM6×30B (7.0 Nm)	CM6×30B (7.0 Nm)
	Screw (shim)	SM3×10B	SM3×10B
	Shim	T16CC-04	T16CC-07
	Spring	SPR1	SPR1
	Wrench (clamp)	WH40L	WH40L
	Wrench (shim)	WH20L	WH20L

Insert

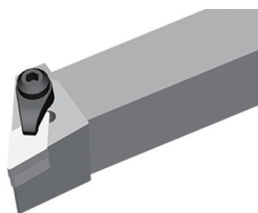


Medium Cut

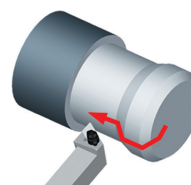
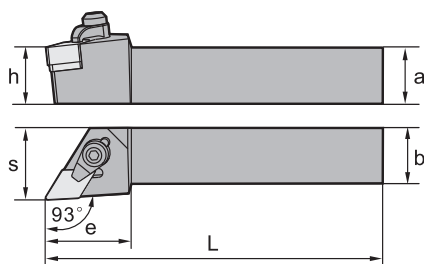
A218



DN** holder (external) C-Clamping

CDJNR/L Kr: 93°



Right hand style










Article	*	Stock		Dimensions [mm]						Inserts	
		R	L	a	b	L	h	s	e		
CDJNR/L2525M15		●	●	25	25	150	25	32	32	DNGN1504**	DNGN1507**
CDJNR/L3225P15		○	○	32	25	170	32	32	32	DNGN1504**	DNGN1507**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	DNGN1504**	DNGN1507**
	h	25-32	25-32
	Clamp	C1RC	C1RC
	Screw (clamp)	CM6×30B (7.0 Nm)	CM6×30B (7.0 Nm)
	Screw (shim)	SM3×10B	SM3×10B
	Shim	D15CC-04	D15CC-07
	Spring	SPR1	SPR1
	Wrench (clamp)	WH40L	WH40L
	Wrench (shim)	WH20L	WH20L

Insert



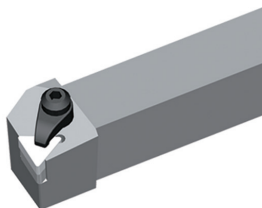
Medium Cut

A205

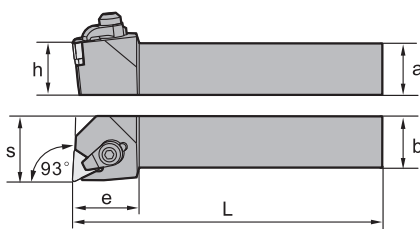
TN** holder (external)



C-Clamping

CTUNR/L Kr: 93°



Right hand style










Article	*	Stock		Dimensions [mm]						Inserts	
		R	L	a	b	L	h	s	e		
CTUNR/L2525M16		○	○	25	25	150	25	32	27	TNGN1604**	TNGN1607**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	TNGN1604**	TNGN1607**
	h	20-25	20-25
	Clamp	C1RC	C1RC
	Screw (clamp)	CM6×30B (7.0 Nm)	CM6×30B (7.0 Nm)
	Screw (shim)	SM3×10B	SM3×10B
	Shim	T16CC-04	T16CC-07
	Spring	SPR1	SPR1
	Wrench (clamp)	WH40L	WH40L
	Wrench (shim)	WH20L	WH20L

Insert

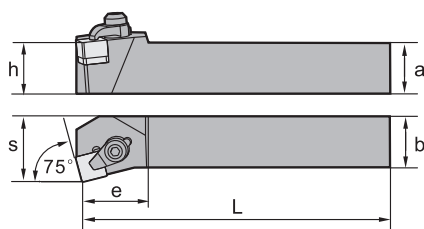
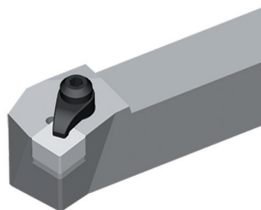


Medium Cut

A218

SN** holder (external) C-Clamping

CSKNR/L Kr: 75°



Right hand style

Article	*	Stock		Dimensions [mm]						Inserts	
		R	L	a	b	L	h	s	e		
CSKNR/L2020K12		○	○	20	20	125	20	25	25	SNGN1204**	SNGN1207**
CSKNR/L2525M12		○	○	25	25	170	25	32	25	SNGN1204**	SNGN1207**
CSKNR/L3225P12		○	○	32	25	170	32	32	25	SNGN1204**	SNGN1207**
CSKNR/L3225P15		○	○	32	25	170	32	32	32	SNGN1507**	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	SNGN1204**	SNGN1207**	SNGN1507**
	h	20-32	20-32	32
	Clamp	C1RC	C1RC	C2RC
	Screw (clamp)	CM6×30B (7.0 Nm)	CM6×30B (7.0 Nm)	CM8×30B (10.2 Nm)
	Screw (shim)	SM3×10B	SM3×10B	SM4×12B
	Shim	S12CC-04	S12CC-07	S15CC-07
	Spring	SPR1	SPR1	SPR3
	Wrench (clamp)	WH40L	WH40L	WH50L
	Wrench (shim)	WH20L	WH20L	WH30L

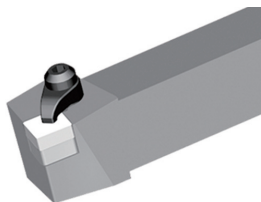
Insert

Cast Iron	PCBN/PCD
A86	A175

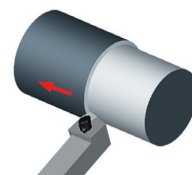
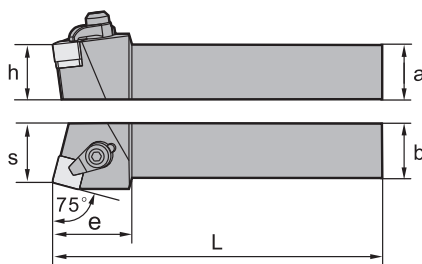
SN** holder (external)



C-Clamping

CSRRN/L Kr: 75°










Right hand style





Article	*	Stock		Dimensions [mm]						Inserts	
		R	L	a	b	L	h	s	e		
CSRRN/L2020K12		○	○	20	20	125	20	22	32	SNGN1204**	SNGN1207**
CSRRN/L2525M12		○	○	25	20	100	25	27	32	SNGN1204**	SNGN1207**
CSRRN/L3225P12		○	○	32	25	170	32	27	32	SNGN1204**	SNGN1207**
CSRRN/L3225P15		○		32	25	170	32	32	40	SNGN1507**	
CSRRN/L4040R15		○	○	40	40	200	40	43	40	SNGN1507**	

● Ex stock ○ On demand

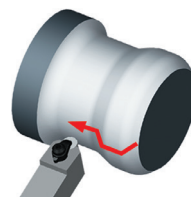
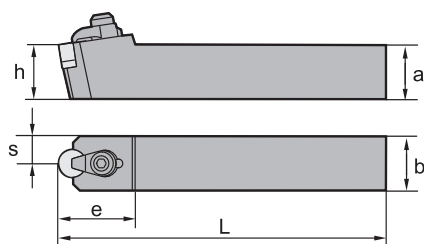
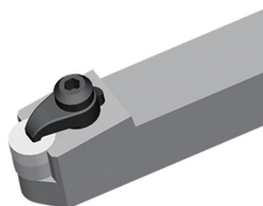
* With internal cooling

Spare parts				
	Insert h	SNGN1204** 20-32	SNGN1207** 20-32	SNGN1507** 32-40
	Clamp	C1RC	C1RC	C2RC
	Screw (clamp)	CM6×30B (7.0 Nm)	CM6×30B (7.0 Nm)	CM8×30B (10.2 Nm)
	Screw (shim)	SM3×10B	SM3×10B	SM4×12B
	Shim	S12CC-04	S12CC-07	S15CC-07
	Spring	SPR1	SPR1	SPR3
	Wrench (clamp)	WH40L	WH40L	WH50L
	Wrench (shim)	WH20L	WH20L	WH30L

Insert	
	
Cast Iron A86	PCBN/PCD A175

RN** holder (external) C-Clamping

CRDNN



Article	*	Stock	Dimensions [mm]						Inserts	
			a	b	L	h	s	e		
CRDNN2020K12		○	20	20	125	20	10	32	RNGN1204**	RNGN1207**
CRDNN2525M12		○	25	25	150	25	12.5	32	RNGN1204**	RNGN1207**
CRDNN3225P12		○	32	25	170	32	12.5	32	RNGN1204**	RNGN1207**
CRDNN3232P15		○	32	32	170	32	17.5	40	RNGN1507**	
CRDNN4040R15		○	40	40	200	40	20	40	RNGN1507**	

● Ex stock ○ On demand

* With internal cooling

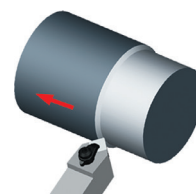
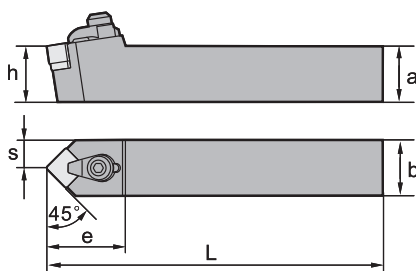
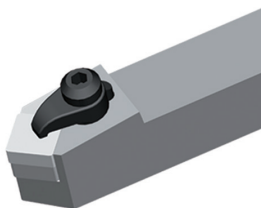
Spare parts				
	Insert	RNGN1204**	RNGN1207**	RNGN1507**
	h	20-32	20-32	32-40
	Clamp	C1RC	C1RC	C2RC
	Screw (clamp)	CM6×30B (7.0 Nm)	CM6×30B (7.0 Nm)	CM8×30B (10.2 Nm)
	Screw (shim)	SM3×10B	SM3×10B	SM4×12B
	Shim	R12CC-04	R12CC-07	R15CC-07
	Spring	SPR1	SPR1	SPR3
	Wrench (clamp)	WH40L	WH40L	WH50L
	Wrench (shim)	WH20L	WH20L	WH30L



Insert
PCBN/PCD
A174

SN** holder (external)

C-Clamping

CSDNN Kr: 45°










Article	*	Stock	Dimensions [mm]						Inserts	
			a	b	L	h	s	e		
CSDNN2020K12		○	20	20	125	20	10	35	SNGN1204**	SNGN1207**
CSDNN2525M12		●	25	25	150	25	12.5	30	SNGN1204**	SNGN1207**
CSDNN3225P12		○	32	25	170	32	12.5	35	SNGN1204**	SNGN1207**



● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert h	SNGN1204**	SNGN1207**
		20-32	20-32
	Clamp	C1RC	C1RC
	Screw (clamp)	CM6×30B (7.0 Nm)	CM6×30B (7.0 Nm)
	Screw (shim)	SM3×10B	SM3×10B
	Shim	S12CC-04	S12CC-07
	Spring	SPR1	SPR1
	Wrench (clamp)	WH40L	WH40L
	Wrench (shim)	WH20L	WH20L

Insert

	
Cast Iron A86	PCBN/PCD A175

A

Turning

B

Milling

C

Drilling

D

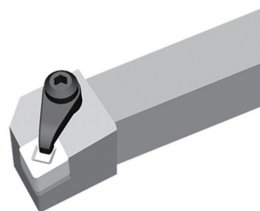
Technical
Information

E

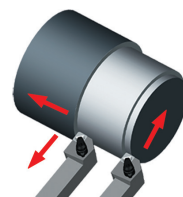
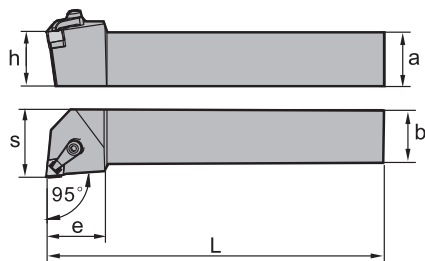
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CN** holder (external) J-Clamping

JCLNR/L Kr: 95°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
JCLNR/L2020K12	○	○		20	20	125	20	29	32	CNGX1207**
JCLNR/L2525M12	○	○		25	25	150	25	32	32	CNGX1207**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	CNGX1207**
	h	20-25
	Clamp	C1RJ
	Screw (clamp)	CM6×30B (7.0 Nm)
	Screw (shim)	SM3×10B
	Shim	C12CC-07
	Spring	SPR1
	Wrench (clamp)	WH40L
	Wrench (shim)	WH20L

Insert

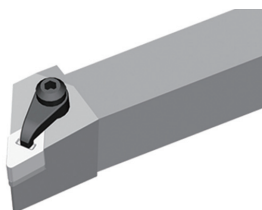


Medium Cut

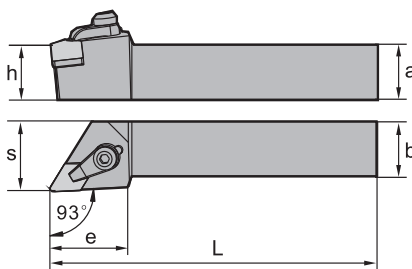
A203

DN** holder (external) J-Clamping

JDJNR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]						Inserts
		R	L	a	b	L	h	s	e	
JDJNR/L2525M15	●	○		25	25	150	25	32	38	DNGX1507**
JDJNR/L3225P15	○	○		32	25	170	32	32	38	DNGX1507**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	DNGX1507**
	h	25-32
	Clamp	C1RJ
	Screw (clamp)	CM6×30B (7.0 Nm)
	Screw (shim)	SM3×10B
	Shim	D15CC-07
	Spring	SPR1
	Wrench (clamp)	WH40L
	Wrench (shim)	WH20L

Insert

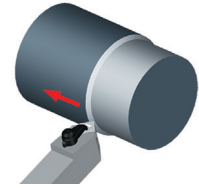
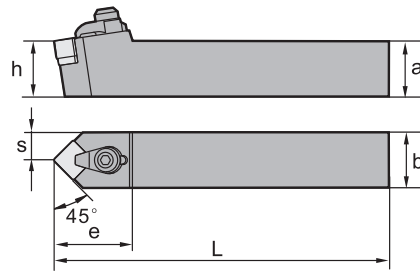
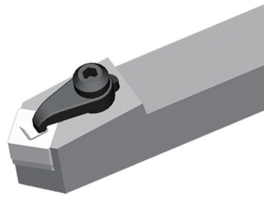


Medium Cut

A206

SN** holder (external) J-Clamping

JSDNN Kr: 45°



Article	*	Stock	Dimensions [mm]						Inserts
			a	b	L	h	s	e	
JSDNN2525M12	○	○	25	25	150	25	12.5	40	SNGX1207**
JSDNN3225P12	○	○	32	25	170	32	12.5	40	SNGX1207**

● Ex stock ○ On demand

* With internal cooling

Spare parts		
	Insert	SNGX1207**
	h	20-32
	Clamp	C1RJ
	Screw (clamp)	CM6×30B (7.0 Nm)
	Screw (shim)	SM3×10B
	Shim	S12CC-07
	Spring	SPR1
	Wrench (clamp)	WH40L
	Wrench (shim)	WH20L

Insert
Medium Cut
A216

[illegible]

Turning

Milling


Drilling








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S C L N L 25 25 M 12 – S C
























1 2 3 4 5 6 7 8 9 10 11

Clamping system	
Code	Description
S	Knee lever clamping 







Insert shape	
C	
D	
R	
S	
T	
V	
W	

1

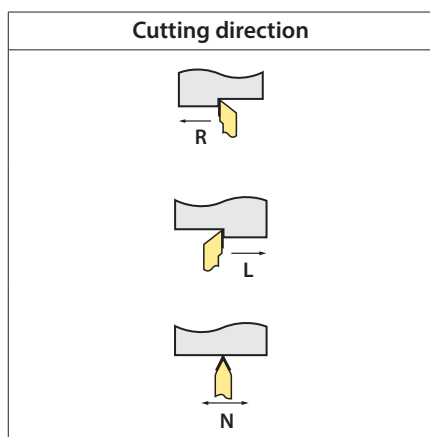
2

Tool holder type and entering angle					
					
A	B	C	D	E	
					
F	G	H	J	K	
					
L	M	N	O	P	
					
Q	R	S	T	U	
					
V	W	X			

3

Clearance angle	
B 	C 
D 	E 
N 	P 

4

**5**

Shank height h [mm]

Code	h
12	12
16	16
20	20
25	25
32	32
40	40
50	50

6

Shank width b [mm]

Code	b
12	12
16	16
20	20
25	25
32	32
40	40
50	50

7

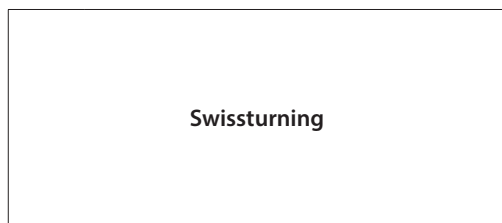
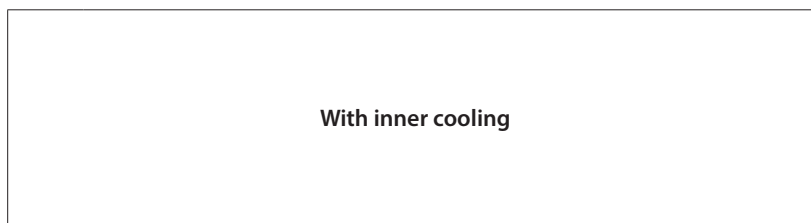
Holder length L [mm]

Code	L
H	100
K	125
M	150
P	170
Q	180
R	200
S	250
T	300

8

Cutting edge length l [mm]

I.C [mm]	Insert shape						
	C	D	R	S	T	V	W
5,56					09		
6,35	06	07			11		
9,525	09	11	09	09	16	16	06
12,7	12	15	12	12	22	22	08
15,875	16	19	15	15	27		
19,05	19		19	19	33		
25,4	25		25	25	44		
32			32				

9**10****11****A**

Turning

B

Milling

C

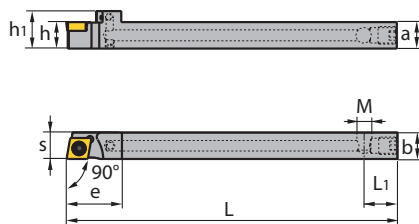
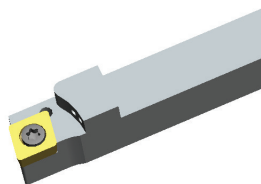
Drilling

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CC** holder S-Clamping

SCACR/L-SC Kr: 90°



Article	*	Stock		Dimensions [mm]									kg	Inserts
		R	L	a	b	L	h	h ₁	s	L ₁	e	M		
SCACR/L1212M09-SC	*	●	●	12	12	150	12	17	12	15	25	M8X1	0.14	CC**09T3**
SCACR/L1616H09-SC	*	●	●	16	16	100	16	21	16	15	28	M8X1	0.21	CC**09T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

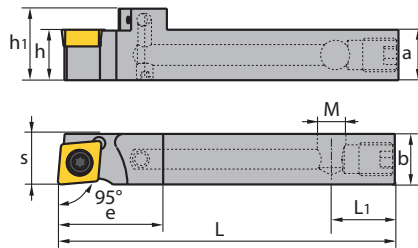
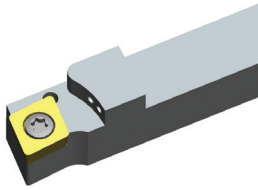
	Insert	CC**09T3**
	h	12-16
	Screw	I60M3.5x8 (2.7 Nm)
	Wrench	WT15IP





Insert

Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A117	A119	A121	A122	A121	A180

CC** holder S-Clamping

SCLCR/L-SC Kr: 95°



Article		Stock		Dimensions [mm]									Inserts	
		R	L	a	b	L	h	h ₁	s	L ₁	e		M	
SCLCR/L1010F06-S		●	●	10	10	80	10	15	10	15	10		0.06	CC**0602**
SCLCR/L1212F09-SC		●	●	12	12	80	12	17	12	15	25	M8X1	0.07	CC**09T3**

• Ex stock ○ On demand

* With internal cooling

Spare parts

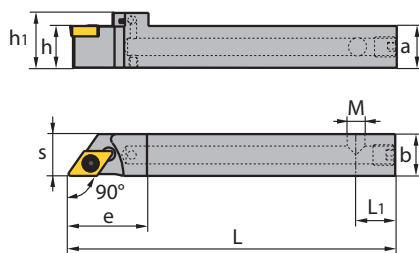
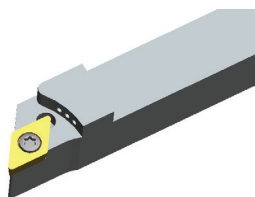
	Insert	CC**0602**	CC**09T3**
	h	10	12
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench	WT07IP	WT15IP

Insert

Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A116	A119	A121	A122	A121	A180

DC** holder S-Clamping

SDACR/L-SC Kr: 90°



Article	*	Stock		Dimensions [mm]									kg	Inserts
		R	L	a	b	L	h	h ₁	s	L ₁	e	M		
SDACR/L1212M07-SC	*	●	●	12	12	150	12	17	12	15	25	M8X1	0.15	DC**0702**
SDACR/L1212H11-SC	*	○		12	12	100	12	17	12	15	30	M8X1	0.1	DC**11T3**
SDACR/L1616K11-SC	*	●	●	16	16	125	16	21	16	15	30	M8X1	0.21	DC**11T3**
SDACR/L1212M11-SC	*	●	●	12	12	150	12	17	12	15	30	M8X1	0.14	DC**11T3**

● Ex stock ○ On demand

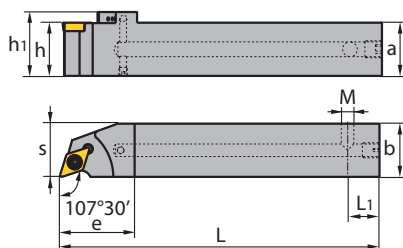
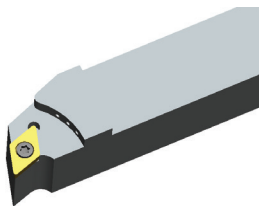
* With internal cooling






Spare parts				
	Insert	DC**0702**	DC**11T3**	DC**11T3**
	h	12	12-16	12
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench	WT07IP	WT15IP	WT15IP

Insert					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

DC** holder S-Clamping

SDHCR/L-SC Kr: 107°30'



Article		Stock	Dimensions [mm]										Inserts
			a	b	L	h	h ₁	s	L ₁	e	M		
SDHCR/L2020K11-SC		○	20	20	125	20	25	20	15	30	M8X1	0.35	DC**11T3**
SDHCR/L2525M11-SC		●	25	25	150	25	30	25	15	35	M8X1	0.66	DC**11T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

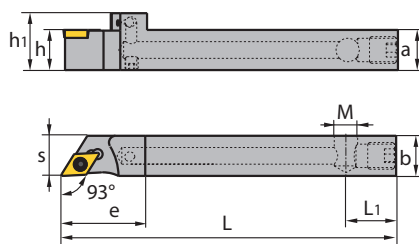
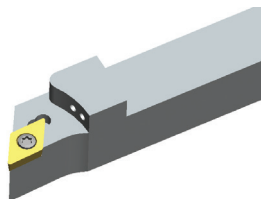
Insert		DC**11T3**
h		20-25
	Screw	I60M3.5x8 (2.7 Nm)
	Wrench	WT15IP

Insert

Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

DC** holder S-Clamping

SDJCR/L-SC Kr: 93°



Article	*	Stock		Dimensions [mm]									kg	Inserts
		R	L	a	b	L	h	h ₁	s	L ₁	e	M		
SDJCR/L1212H07-SC	*	●	●	12	12	100	12	17	12	15	25	M8X1	0.1	DC**0702**
SDJCR/L1212H11-SC	*	●	●	12	12	100	12	17	12	15	30	M8X1	0.1	DC**11T3**
SDJCR/L1616K11-SC	*	●	●	16	16	125	16	21	16	15	30	M8X1	0.21	DC**11T3**

● Ex stock ○ On demand

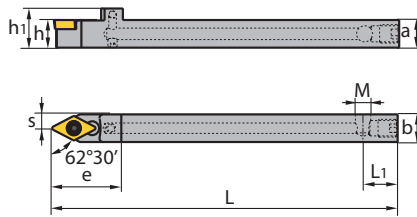
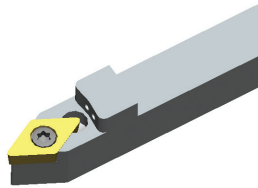
* With internal cooling

Spare parts			
	Insert	DC**0702**	DC**11T3**
	h	12	12-16
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench	WT07IP	WT15IP

Insert					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

DC** holder S-Clamping

SDNCN-SC Kr: 62°30'



Article	*	Stock	Dimensions [mm]									kg	Inserts
			a	b	L	h	h ₁	s	L ₁	e	M		
SDNCN1212H11-SC	*	○	12	12	100	12	17	6	15	30	M8X1	0.09	DC**11T3**
SDNCN1212M11-SC	*	●	12	12	150	12	17	6	15	30	M8X1	0.1	DC**11T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

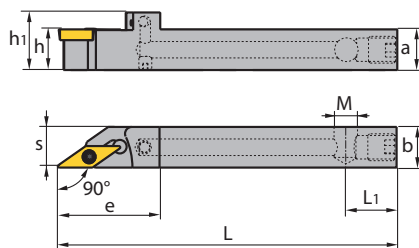
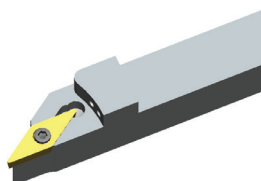
Insert		DC**11T3**
h		12
	Screw	I60M3.5×8 (2.7 Nm)
	Wrench	WT15IP

Insert

Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

VC** holder S-Clamping

SVACR/L-SC Kr: 90°



Article	*	Stock		Dimensions [mm]									kg	Inserts
		R	L	a	b	L	h	h ₁	s	L ₁	e	M		
SVACR/L1212H11-SC	*	●	●	12	12	100	12	17	12	15	30	M8X1	0.1	VC**1103**

● Ex stock ○ On demand

* With internal cooling

Spare parts

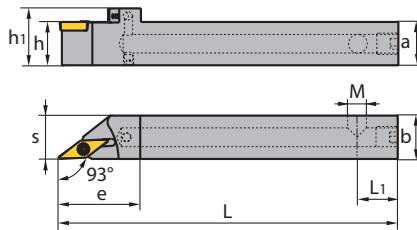
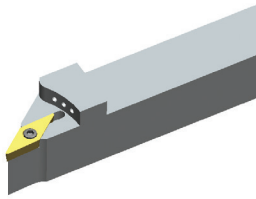
Insert		VC**1103**
h		12
	Screw	I60M2.5×6.5 (1.0 Nm)
	Wrench	WT07IP



Insert

Finishing	Alum Machining	PCBN/PCD
A156	A154	A193

VC** holder S-Clamping

SVJCR/L-SC Kr: 93°



Article	✿	Stock		Dimensions [mm]									Inserts 	
		R	L	a	b	L	h	h ₁	s	L ₁	e			M
SVJCR/L0808H11-S		●	●	8	8	100	8	13	8	15	22	M8X1	0.044	VC**1103**
SVJCR/L1212H11-SC	✿	●	●	12	12	100	12	17	12	15	30	M8X1	0.095	VC**1103**
SVJCR/L1616K11-SC	✿	●	●	16	16	125	16	21	16	15	30	M8X1	0.2	VC**1103**

● Ex stock ○ On demand

* With internal cooling

Spare parts













	Insert	VC**1103**
	h	8-16
	Screw	I60M2.5×6.5 (1.0 Nm)
	Wrench	WT07IP

Insert

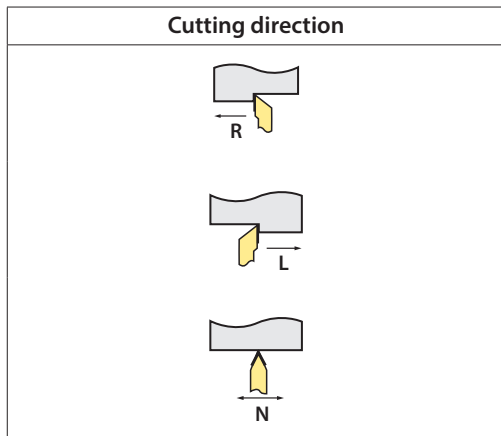
Finishing	Alum Machining	PCBN/PCD
A156	A154	A193

RW P L F N L/R 19

1 2 3 4 5 6 7

<p>(RW = Rail Way)</p> <p>Tool holders for rail applications</p>	Clamping system		
	Code	Description	
	P	Lever lock clamping	
	M	Wedge/pin lock clamping	
	S	Screw-on clamping	
	C/J	Wedge clamping	
	D	Duel wedge clamping	
Insert shape			
C			
D			
R			
S			
T			
V			
L			

Tool holder type and entering angle										Clearance angle	
										B	
										C	
										D	
										E	
										N	
										P	
4										5	

**6**

Cutting edge length l [mm]							
I.C [mm]	Insert shape						
	C	D	R	S	T	V	W
5,56	09						
6,35	06	07			11		
9,525	09	11	09	09	16	16	06
12,7	12	15	12	12	22	22	08
15,875	16	19	15	15	27		
19,05	19		19	19	33		
25,4	25		25	25	44		
32			32				

7**A**

Turning

B

Milling

C

Drilling

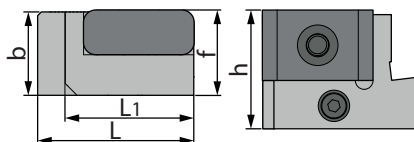
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LN** holder (external)

P-Clamping

RW-PLANR/L Kr: 90°



Right hand style

Article	*	Stock		Dimensions [mm]					Inserts
		R	L	b	L	h	L ₁	f	
RW-PLANR/L-19	*	○	○	22.5	43	32	35	23	LNUX1919**
RW-PLANR/L-30	*	○	○	22.5	43	32	35	23	LNUX3019**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	LNUX1919**	LNUX3019**
	h	25-32	25-32
	Knee lever	L5 RWL	L5 RWL
	Screw	LEM8×25 RWL (10.2 Nm)	LEM8×25 RWL (10.2 Nm)
	Wrench	WH30L	WH30L

Insert



Heavy Turning

A115

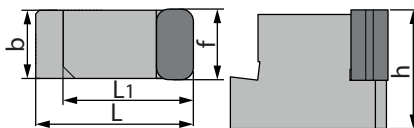
LN** holder (external)

P-Clamping

RW-PLFNR/L Kr: 90°



Right hand style






Article	*	Stock		Dimensions [mm]					Inserts
		R	L	b	L	h	L ₁	f	
RW-PLFNR/L-19	*	○	○	18.6	43	32	35	19.1	LNUX1919**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	LNUX1919**
	h	25-32
	Knee lever	L5 RWL
	Screw	LEM8×25 RWL (10.2 Nm)
	Wrench	WH30L

Insert



Heavy Turning

A115

A

Turning

B

Milling

C

Drilling

D

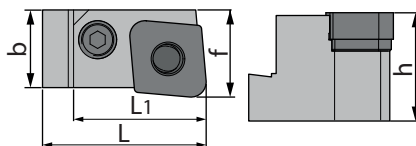
Technical
Information

E

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CN** holder (external) P-Clamping

RW-PCLNR/L Kr: 95°



Right hand style

Article	*	Stock		Dimensions [mm]					Inserts
		R	L	b	L	h	L ₁	f	
RW-PCLNR/L-1907	*	○	○	24.8	43	32	35	19.1	CNMM1907**
RW-PCLNR/L-1911	*	○	○	24.8	43	32	35	19.1	CNMM1911**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	CNMM1907**	CNMM1911**
	h	25-32	25-32
	Knee lever	L5 RWC	L5 RWC
	Screw	LEM8×25 RWC (10.2 Nm)	LEM8×25 RWC (10.2 Nm)
	Shim pin (shim)	SP5 RWC	SP5 RWC
	Shim	C19 RWC	C19 RWC
	Wrench	WH30L	WH30L

Insert

Finishing	Roughing
A114	A114

[illegible]

Turning

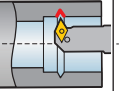










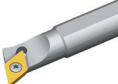




Milling

Drilling

Technical Information

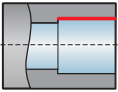
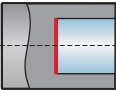
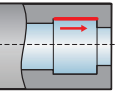
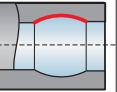
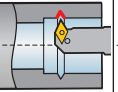
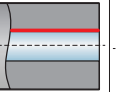
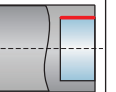







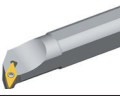






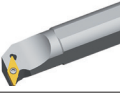

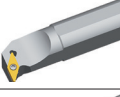



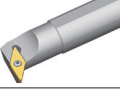







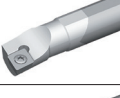


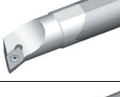





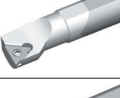









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Boring bars

Boring bar	Application					Workpiece		Page
	Longitudinal turning	Facing	Undercut	Contouring	Profiling	Stable	Unstable	
								
P	PDSNR/L 62°30'							A326
	PCLNR/L 95°							A324
	PDUNR/L 93°							A327
	PSKNR/L 75°							A329
	PTFNR/L 91°							A330
	PWLNR/L 95°							A332
S	SCFCR/L 90°							A352
	SCLCR/L 95°							A352
	SCLPR/L 95°							A354
	SDQCR/L 107°30'							A357
	SDQPR/L 107°30'							A356
	SDUCR/L 93°							A359
	SDUPR/L 93°							A358
	SDZCR/L 95°							A338

 Recommended

Boring bars

Boring bar		Application					Workpiece		Page
		Longitudinal turning	Facing	Undercut	Contouring	Profiling	Stable	Unstable	
									
S	SSKCR/L 75° 								A339
	STFCR/L 91° 								A361
	STUPR/L 93° 								A360
	SVQBR/L 107°30' 								A345
	SVXBR/L 93° 								A347
	SVQCR/L 107°30' 								A363
	SVUBR/L 93° 								A346
	SVUCR/L 93° 								A364
	SZLNR/L 95° 								A365
Antivibration	SCLPR/L 95° 								A348
	SDQPR/L 107°30' 								A349
	SDUPR/L 93° 								A350
	STUPR/L 93° 								A351
	SVQCR/L 107°30' 								A343
	SVUCR/L 93° 								A344

 Recommended

S 16 R – S D U C R 07 – KR93

1

2

3

4

5

6

7

8

9

10

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

Shank type

Code	Description
A	Steel shank (IC)
C	Solid carbide shank
E	Solid carbide shank (IC)
S	Steel shank
X	Special application

1

Shank diameter d [mm]

Code	d
16	16
20	20
25	25
32	32
40	40
50	50

2

Clamping system

Code	L
H	100
K	125
M	150
N	160
P	170
Q	180
R	200
S	250
T	300
U	350
V	400

3

Clamping system

Code	Description
P	Knee lever clamping
S	Screw clamping

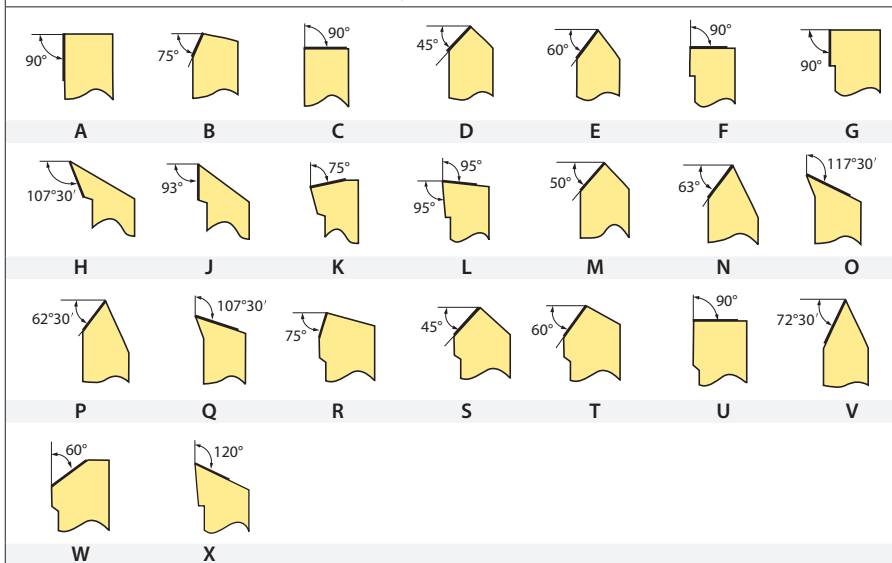
4

Insert shape

C		D	
R		S	
T		V	
W			

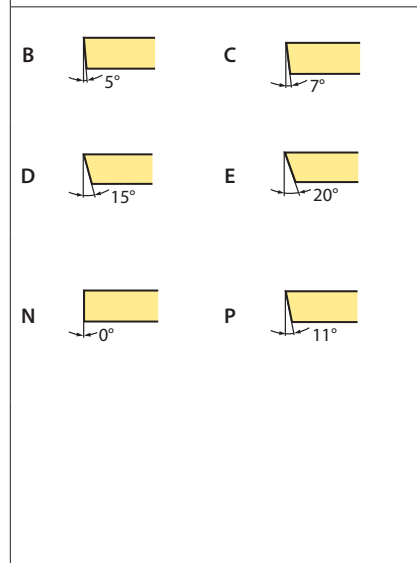
5

Tool holder type and entering angle



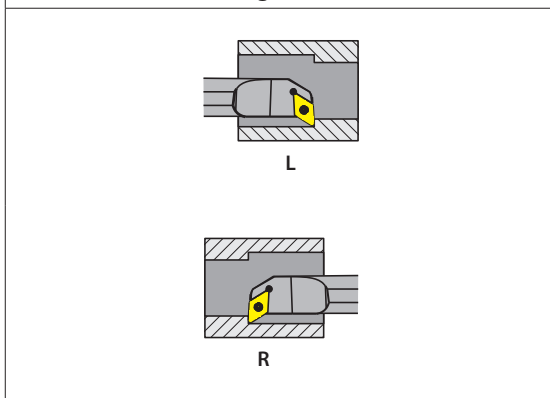
6

Clearance angle



7

Cutting direction



8

Cutting edge length l [mm]

I.C [mm]	Insert shape					
5,56	09					
6,35	06	07			11	
9,525	09	11	09	09	16	16
12,7	12	15	12	12	22	22
15,875	16	19	15	15	27	
19,05	19		19	19	33	
25,4	25		25	25	44	
32			32			

9

Entering angle

10

A

Turning

B

Milling

C

Drilling

D

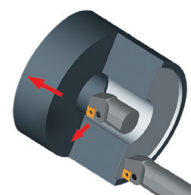
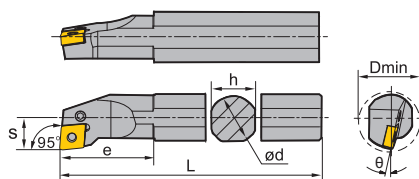
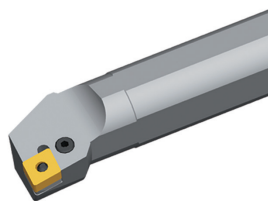
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CN** steel boring bar P-Clamping

PCLNR/L Kr: 95°



Right hand style










Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	S	e	D _{min}	θ	
S16M-PCLNR/L09	●	●	16	150	15	11	28	20	-12		CN**0903**
S16R-PCLNR/L09	●	●	16	200	15	11	28	20	-12		CN**0903**
S20Q-PCLNR/L09	●	●	20	180	18	13	31	25	-11		CN**0903**
S20S-PCLNR/L09	●	●	20	250	18	13	31	25	-11		CN**0903**
S25Q-PCLNR/L09	○	○	25	180	23	17	35	32	-10		CN**0903**
S25T-PCLNR/L09	●	○	25	300	23	17	35	32	-10		CN**0903**
A16M-PCLNR/L09	*	○	16	150	14	11		20	-12		CN**0903**
S25Q-PCLNR/L12	○	○	25	180	23	17	40	32	-12		CN**1204**
S25T-PCLNR/L12	●	●	25	300	23	17	40	32	-12		CN**1204**
S32R-PCLNR/L12	●	●	32	200	30	22	50	44	-10		CN**1204**
S32U-PCLNR/L12	●	●	32	350	30	22	50	44	-10		CN**1204**
S40S-PCLNR/L12	○	●	40	250	37	27	55	54	-10		CN**1204**
S40V-PCLNR/L12	●	●	40	400	37	27	55	54	-10		CN**1204**
S50S-PCLNR/L12	○	○	50	250	47	35	56	63	-10		CN**1204**
S50W-PCLNR/L12	●	●	50	450	47	35	56	63	-10		CN**1204**
A25R-PCLNR/L12	*	●	25	200	24	17	40	32	-12		CN**1204**
A32S-PCLNR/L12	*	●	32	250	31	22	50	44	-10		CN**1204**
S50S-PCLNR/L19	○	○	50	250	47	35	63	63	-10		CN**1906**
S50W-PCLNR/L19	●	○	50	450	47	35	63	63	-10		CN**1906**

● Ex stock ○ On demand

* With internal cooling

CN** steel boring bar

Spare parts

	Insert ød	CN**0903** 16-25	CN**1204** 25	CN**1204** 32-50	CN**1906** 50
	Knee lever	L3C	L4A	L4A	L6
	Screw	LEM5×9B (4.0 Nm)			
	Screw				LEM10×27 (16.6 Nm)
	Screw		LEM6×13.4A (7.0 Nm)	LEM6×13.4A (7.0 Nm)	
	Shim pin (shim)			SP4	SP6
	Shim				C19AP
	Shim			C12APB	
	Wrench		WH25L	WH25L	WH40L
	Wrench	WT09IP			

Insert

					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A51	A52	A53	A57	A61	A177

A

Turning

B

Milling

C

Drilling

D

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System code > A322

Grade selection > A42

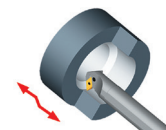
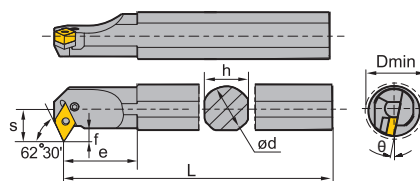
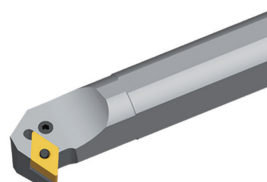
Technical info > A501

Cutting data > A366




DN** steel boring bar P-Clamping

PDSNR/L Kr: 62°30'








Right hand style

Article	*	Stock		Dimensions [mm]								Inserts	
		R	L	ød	L	h	s	e	f	D _{min}	θ		
S32R-PDSNR/L15-3		○	○	32	200	30	22	45	8.5	40	-11	DN**1504**	
S40V-PDSNR/L15-3		●		40	400	37	27	43	9.4	50	-11	DN**1504**	
A32S-PDSNR/L15-3	*	○	○	32	250	31	22	45	8.5	40	-11	DN**1504**	
S32R-PDSNR/L15		●	●	32	200	30	22	45	8.5	40	-11	DN**1506**	
S32U-PDSNR/L15		●	●	32	350	30	22	45	8.5	40	-11	DN**1506**	
S40S-PDSNR/L15		○	○	40	250	37	27	43	9.4	50	-11	DN**1506**	
S40V-PDSNR/L15		○	○	40	400	37	27	43	9.4	50	-11	DN**1506**	
A32S-PDSNR/L15	*	●	●	32	250	31	22	45	8.5	40	-11	DN**1506**	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	DN**1504**	DN**1506**
	ød	32-40	32-40
	Knee lever	L4	L4B
	Screw	LEM8×21 (10.2 Nm)	LEM8×21 (10.2 Nm)
	Shim pin (shim)	SP4	SP4
	Shim	D15AP	D15AP
	Wrench	WH30L	WH30L

Insert

					
Wiper A62	Finishing A63	Medium Cut A63	Roughing A68	Cast Iron A69	PCBN/PCD A178

System code > A322

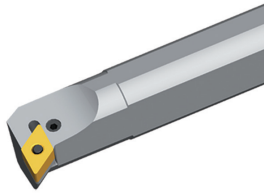
Grade selection > A42

Technical info > A501

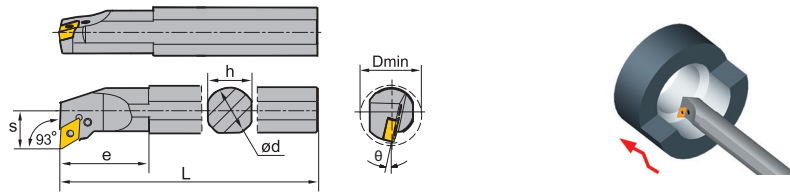
Cutting data > A366


DN steel boring bar P-Clamping**

PDUNR/L Kr: 93°



Right hand style



Article	✱	Stock		Dimensions [mm]							Inserts	
		R	L	ød	L	h	s	e	D _{min}	θ		
S20Q-PDUNR/L11		●	○	20	180	18	13	30	25	-16	DN**1104**	
S20S-PDUNR/L11		●	●	20	250	18	13	30	25	-16	DN**1104**	
S25Q-PDUNR/L11		●	●	25	180	23	17	35	32	-13	DN**1104**	
S25T-PDUNR/L11		●	●	25	300	23	17	35	32	-13	DN**1104**	
S32R-PDUNR/L11		○	○	32	200	30	22	40	40	-16	DN**1104**	
S32U-PDUNR/L11		●	●	32	350	30	22	40	40	-16	DN**1104**	
A25R-PDUNR/L11	✱	●		25	200	24	17	35	32	-13	DN**1104**	
S32R-PDUNR/L15-3		○	○	32	200	30	22	50	40	-16	DN**1504**	
S32U-PDUNR/L15-3		●	●	32	350	30	22	50	40	-16	DN**1504**	
S40S-PDUNR/L15-3		○	○	40	250	37	27	50	50	-11	DN**1504**	
S40V-PDUNR/L15-3		●	●	40	400	37	27	50	50	-11	DN**1504**	
A32S-PDUNR/L15-3	✱	●	●	32	250	31	22	50	40	-16	DN**1504**	
S32R-PDUNR/L15		○	○	32	200	30	22	50	40	-16	DN**1506**	
S32U-PDUNR/L15		●	●	32	350	30	22	50	40	-16	DN**1506**	
S40S-PDUNR/L15		○	○	40	250	37	27	50	50	-11	DN**1506**	
S40V-PDUNR/L15		●	●	40	400	37	27	50	50	-11	DN**1506**	
A32S-PDUNR/L15	✱	●	●	32	250	31	22	50	40	-16	DN**1506**	

● Ex stock ○ On demand

* With internal cooling

Spare parts					
	Insert	DN**1104**	DN**1104**	DN**1504**	DN**1506**
	ød	20-25	32	32-40	32-40
	Knee lever	L3D	L3	L4	L4B
	Screw	LEM5×12B (4.0 Nm)	LEM6×17 (7.0 Nm)		
	Screw			LEM8×21 (10.2 Nm)	LEM8×21 (10.2 Nm)
	Shim pin (shim)		SP3	SP4	SP4
	Shim		D11AP	D15AP	D15AP
	Wrench		WH25L	WH30L	WH30L
	Wrench	WT09IP			

System code > A322

Grade selection > A42

Technical info > A501

Cutting data > A366



A

Turning

B

Milling

C

Drilling

D

Technical
Information







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A

Turning

DN** steel boring bar

Insert					
					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A62	A63	A63	A68	A69	A178

B

Milling

C

Drilling

D

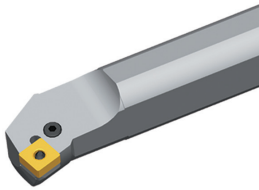
Technical
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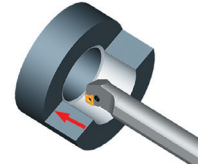
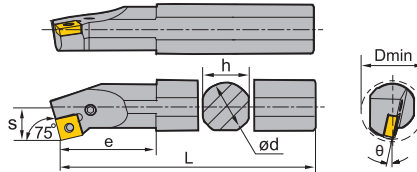
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SN steel boring bar** **P-Clamping**

PSKNR/L Kr: 75°



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S25Q-PSKNR/L12		○	●	25	180	23	17	42	32	-12	SN**1204**
S25T-PSKNR/L12		●	○	25	300	23	17	42	32	-12	SN**1204**
S32R-PSKNR/L12		○	○	32	200	30	22	45	44	-10	SN**1204**
S32U-PSKNR/L12		●	●	32	350	30	22	45	44	-10	SN**1204**
S40S-PSKNR/L12		○	○	40	250	37	27	50	54	-10	SN**1204**
S40V-PSKNR/L12		●	○	40	400	37	27	50	54	-10	SN**1204**
A25R-PSKNR/L12	*	●	●	25	200	24	17	42	32	-12	SN**1204**
A32S-PSKNR/L12	*	●	●	32	250	31	22	50	44	-12	SN**1204**

● Ex stock ○ On demand

* With internal cooling

Spare parts

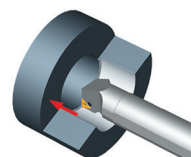
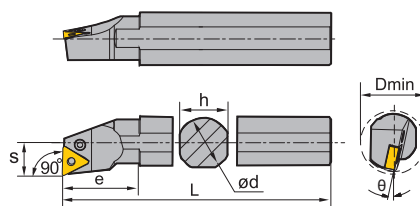
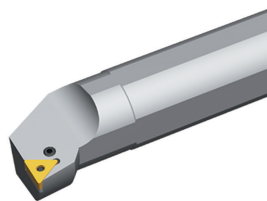
	Insert	SN**1204**	SN**1204**
	ød	25	32-40
	Knee lever	L4A	L4
	Screw		LEM8×21 (10.2 Nm)
	Screw	LEM6×13.4A (7.0 Nm)	
	Shim pin (shim)		SP4
	Shim		S12APB
	Wrench	WH25L	WH30L

Insert

Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A73	A73	A78	A84	A162

TN** steel boring bar P-Clamping

PTFNR/L Kr: 90°



Right hand style







Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S16M-PTFNR/L11		○	○	16	150	15	11	28	20	-14	TN**1103**
S16R-PTFNR/L11		●	●	16	200	15	11	28	20	-14	TN**1103**
S20Q-PTFNR/L11		●	●	20	180	18	13	31	25	-12	TN**1103**
S20S-PTFNR/L11		●	●	20	250	18	13	31	25	-12	TN**1103**
S25Q-PTFNR/L11		○	○	25	180	23	17	35	32	-10	TN**1103**
S25T-PTFNR/L11		○	○	25	300	23	17	35	32	-10	TN**1103**
S25Q-PTFNR/L16		○	○	25	180	23	17	42	32	-12	TN**1604**
S25T-PTFNR/L16		●	●	25	300	23	17	42	32	-12	TN**1604**
S32R-PTFNR/L16		○	○	32	200	30	22	50	44	-10	TN**1604**
S32U-PTFNR/L16		●	●	32	350	30	22	50	44	-10	TN**1604**
S40S-PTFNR/L16		○	○	40	250	37	27	55	54	-10	TN**1604**
S40V-PTFNR/L16		●	●	40	400	37	27	55	54	-10	TN**1604**
A25R-PTFNR/L16	*	●	○	25	200	24	17	40	32	-12	TN**1604**
A32S-PTFNR/L16	*	●	●	32	250	31	22	50	44	-10	TN**1604**

● Ex stock ○ On demand

* With internal cooling

Spare parts				
	Insert	TN**1103**	TN**1604**	TN**1604**
	ød	16-25	25	32-40
	Knee lever	L2	L3B	L3
	Screw	LEM5×9B (4.0 Nm)	LEM5×12B (4.0 Nm)	LEM6×17 (7.0 Nm)
	Shim pin (shim)			SP3
	Shim			T16APB
	Wrench		WH20L	WH25L
	Wrench	WT09IP		

TN** steel boring bar

Insert					
					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A87	A88	A90	A92	A99	A163

A

Turning

B

Milling

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Drilling

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System code > A322

Grade selection > A42

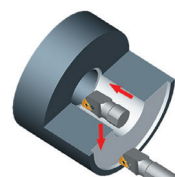
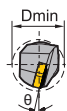
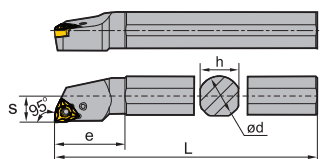
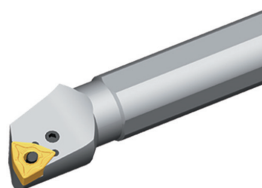
Technical info > A501

Cutting data > A366



WN** steel boring bar P-Clamping

PWLNR/L Kr: 95°



Right hand style

Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S16M-PWLNR/L06	●	●	16	150	15	11	25	20	-13		WN**0604**
S16M-PWLNR/L06	●	●	16	150	15	11	25	20	-13		WN**0604**
S16R-PWLNR/L06	○	○	16	200	15	11	25	20	-13		WN**0604**
S20Q-PWLNR/L06	●	●	20	180	18	13	35	25	-13		WN**0604**
S20S-PWLNR/L06	●	○	20	250	18	13	35	25	-13		WN**0604**
S25Q-PWLNR/L06	○	○	25	180	23	17	35	32	-13		WN**0604**
S25T-PWLNR/L06	○	○	25	300	23	17	35	32	-13		WN**0604**
S20Q-PWLNR/L08	●	●	20	180	18	13	32	25	-13		WN**0804**
S20S-PWLNR/L08	●	○	20	250	18	13	32	25	-13		WN**0804**
S25Q-PWLNR/L08	●	○	25	180	23	17	45	32	-13		WN**0804**
S25T-PWLNR/L08	●	●	25	300	23	17	45	32	-13		WN**0804**
S32R-PWLNR/L08	●	●	32	200	30	22	50	40	-15		WN**0804**
S32U-PWLNR/L08	●	●	32	350	30	22	50	40	-15		WN**0804**
S50W-PWLNR/L08	○	○	50	450	47	35	50	63	-15		WN**0804**

● Ex stock ○ On demand

* With internal cooling

Spare parts					
	Insert	WN**0604**	WN**0804**	WN**0804**	WN**0804**
	ød	16-25	20-25	32	50
	Knee lever	L3B	L4A	L4	L4
	Screw	LEM5×12B (4.0 Nm)			
	Screw			LEM8×21 (10.2 Nm)	LEM8×21 (10.2 Nm)
	Screw		LEM6×13.4A (7.0 Nm)		
	Shim pin (shim)			SP4	SP4
	Shim			W08AP	W08AP
	Wrench		WH25L	WH30L	WH30L
	Wrench	WT09IP			

System code > A322

Grade selection > A42

Technical info > A501

Cutting data > A366

WN** steel boring bar

Insert					
					
Wiper	Finishing	Medium Cut	Roughing	Cast Iron	PCBN/PCD
A106	A107	A107	A109	A111	A165

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Turning

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System code > A322

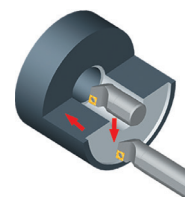
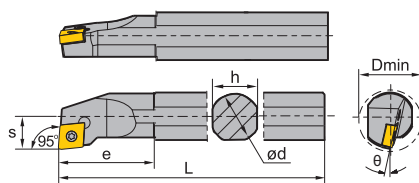
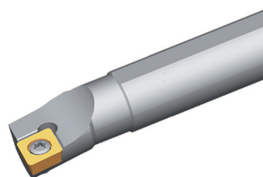
Grade selection > A42

Technical info > A501

Cutting data > A366

CC** steel boring bar S-Clamping

SCLCR/L Kr: 95°



Right hand style

Article	*	Stock		Dimensions [mm]								Inserts	
		R	L	ød	L	h	s	L ₂	e	D _{min}	θ		
S08K-SCLCR/L06		●	●	8	125	7	5	14	14	10	-15	CC**0602**	
S10K-SCLCR/L06		●	●	10	125	7	5	14	14	10	-15	CC**0602**	
S10M-SCLCR/L06		●	●	10	150	9	6	14	14	12	-13	CC**0602**	
S12M-SCLCR/L06		●	●	12	150	11	9	25	25	16	-10	CC**0602**	
A08F-SCLCR/L06	*	●	●	8	80	7.5	5	14	14	10	-15	CC**0602**	
A10H-SCLCR/L06	*	●	●	10	100	9.5	6	14	14	12	-13	CC**0602**	
A12K-SCLCR/L06	*	●	●	12	125	11.5	9	25	25	16	-10	CC**0602**	
S12M-SCLCR/L09		●	●	12	150	11	9	25	25	16	-10	CC**09T3**	
S16M-SCLCR/L09		●	○	16	150	15	11	32.5	32.5	20	-12	CC**09T3**	
S16R-SCLCR/L09		●	●	16	200	15	11	32.5	32.5	20	-12	CC**09T3**	
S20Q-SCLCR/L09		●	●	20	180	18	13	38	38	25	-8	CC**09T3**	
S20S-SCLCR/L09		●	●	20	250	18	13	38	38	25	-8	CC**09T3**	
S25Q-SCLCR/L09		●	○	25	180	23	17	45	45	32	-6	CC**09T3**	
S25T-SCLCR/L09		●	●	25	300	23	17	45	45	32	-6	CC**09T3**	
A12K-SCLCR/L09	*	●	●	12	125	11.5	9	25	25	16	-10	CC**09T3**	
A16M-SCLCR/L09	*	●	●	16	150	15.5	11	32.5	32.5	20	-12	CC**09T3**	
A20Q-SCLCR/L09	*	●	●	20	180	19	13	38	38	25	-8	CC**09T3**	
A25R-SCLCR/L09	*	●	●	25	200	24	17	45	45	32	-6	CC**09T3**	
S25Q-SCLCR/L12		●	○	25	180	23	17	45	45	32	-6	CC**1204**	
S25T-SCLCR/L12		●	●	25	300	23	17	45	45	32	-6	CC**1204**	
S32R-SCLCR/L12		●	●	32	200	30	22	50	50	40	-10	CC**1204**	
S32U-SCLCR/L12		●	●	32	350	30	22	50	50	40	-10	CC**1204**	
S40S-SCLCR/L12		○		40	250	37	27	60	60	50	-8	CC**1204**	
S40V-SCLCR/L12		●	●	40	400	37	27	60	60	50	-8	CC**1204**	
A25R-SCLCR/L12	*	●	●	25	200	24	17	45	45	32	-6	CC**1204**	
A32T-SCLCR/L12	*	○		32	300	30	22			40	-10	CC**1204**	
A32S-SCLCR/L12	*	●	●	32	250	31	22	50	50	40	-10	CC**1204**	

● Ex stock ○ On demand

* With internal cooling

System code > A322







Grade selection > A42

Technical info > A501







Cutting data > A366

CC steel boring bar**

Spare parts

	Insert ød	CC**0602** 8-12	CC**09T3** 12-20	CC**09T3** 25	CC**1204** 25	CC**1204** 32-40
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)	I60M3.5×10 (2.7 Nm)		
	Screw				I60M4×11X (3.4 Nm)	I60M4×11X (3.4 Nm)
	Screw (shim)					SM6×10XA
	Shim					C12B5
	Wrench (screw)	WT07IP	WT15IP	WT15IP	WT15IP	WT15IP
	Wrench (shim)					WH40L

Insert

					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A116	A119	A121	A122	A121	A180

A

Turning

B

Milling

C

Drilling

D

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System code > A322

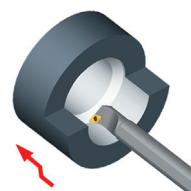
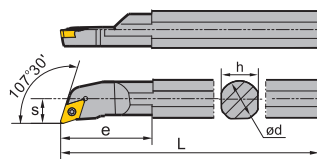
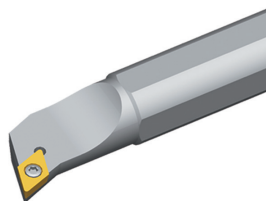
Grade selection > A42

Technical info > A501

Cutting data > A366

DC** steel boring bar S-Clamping

SDQCR/L Kr: 107°30'



Right hand style

Article	*	Stock		Dimensions [mm]								Inserts	
		R	L	ød	L	h	s	L ₂	e	D _{min}	θ		
S10M-SDQCR/L07		●	●	10	150	9	7	20	20	13	-8	DC**0702**	
S12M-SDQCR/L07		●	●	12	150	11	9	22	22	16	-8	DC**0702**	
S16M-SDQCR/L07		○	●	16	150	15	11	27	27	20	-6	DC**0702**	
S16Q-SDQCR/L07		●	●	16	180	15	11	27	27	20	-6	DC**0702**	
S16R-SDQCR/L07		●	●	16	200	15	11	27	27	20	-6	DC**0702**	
A10H-SDQCR/L07	*	●	●	10	100	9.5	7	20	20	13	-8	DC**0702**	
A12K-SDQCR/L07	*	●	●	12	125	11.5	9	22	22	16	-8	DC**0702**	
S20Q-SDQCR/L11		●	○	20	180	18	13	32	32	25	-6	DC**11T3**	
S20S-SDQCR/L11		●	●	20	250	18	13	32	32	25	-6	DC**11T3**	
S25Q-SDQCR/L11		●	○	25	180	23	17	32	32	32	-6	DC**11T3**	
S25T-SDQCR/L11		●	●	25	300	23	17	32	32	32	-6	DC**11T3**	
A16M-SDQCR/L11	*	●	●	16	150	15.5	11	27	27	20	-6	DC**11T3**	
A20Q-SDQCR/L11	*	●	●	20	180	19	13	32	32	25	-6	DC**11T3**	
A25R-SDQCR/L11	*	●	●	25	200	24	17	32	32	32	-6	DC**11T3**	

● Ex stock ○ On demand

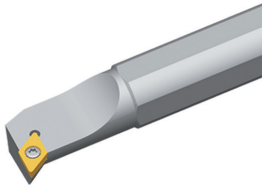
* With internal cooling

Spare parts						
	Insert	DC**0702**	DC**0702**	DC**11T3**	DC**11T3**	DC**11T3**
	ød	10	12-16	16-20	20	25
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)	I60M3.5×8 (2.7 Nm)	I60M3.5×10 (2.7 Nm)
	Wrench (screw)	WT07IP	WT07IP	WT15IP	WT15IP	WT15IP

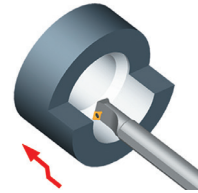
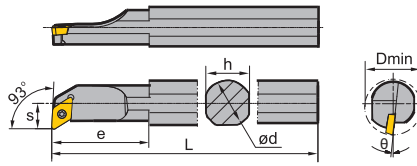
Insert					
Finishing A126	Medium Cut A127	Roughing A129	Alum Machining A129	Cast Iron A129	PCBN/PCD A184

DC steel boring bar S-Clamping**

SDUCR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]								Inserts
		R	L	ød	L	h	s	L ₂	e	D _{min}	θ	
S10M-SDUCR/L07	•	•	10	150	9	7	-	0	13	-8	-8	DC**0702**
S12M-SDUCR/L07	•	•	12	150	11	9	22	22	16	-8	-8	DC**0702**
S16M-SDUCR/L07	•	•	16	150	15	11	27	27	20	-6	-6	DC**0702**
S16R-SDUCR/L07	•	•	16	200	15	11	27	27	20	-6	-6	DC**0702**
A10H-SDUCR/L07	*	•	•	10	100	9.5	7	-	0	13	-8	DC**0702**
A12K-SDUCR/L07	*	•	•	12	125	11.5	9	22	22	16	-8	DC**0702**
A16M-SDUCR/L07	*	•	•	16	150	15.5	11	27	27	20	-6	DC**0702**
S20Q-SDUCR/L11	•	•	20	180	18	13	40	40	25	-6	-6	DC**11T3**
S20S-SDUCR/L11	•	•	20	250	18	13	40	40	25	-6	-6	DC**11T3**
S25Q-SDUCR/L11	•	○	25	180	23	17	46	46	32	-6	-6	DC**11T3**
S25T-SDUCR/L11	•	•	25	300	23	17	46	46	32	-6	-6	DC**11T3**
A16R-SDUCR/L11	*	○	16	200	15	14.5	27	27	23	-6	-6	DC**11T3**
A20Q-SDUCR/L11	*	•	•	20	180	19	13	40	40	25	-6	DC**11T3**
A25R-SDUCR/L11	*	•	•	25	200	24	17	46	46	32	-6	DC**11T3**

• Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	DC**0702**	DC**11T3**
	ød	10-16	16-25
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench	WT07IP	WT15IP

Insert

Finishing A126	Medium Cut A127	Roughing A129	Alum Machining A129	Cast Iron A129	PCBN/PCD A184

System code > A322

Grade selection > A42

Technical info > A501

Cutting data > A366



A

Turning

B

Milling

C

Drilling

D

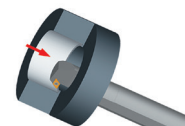
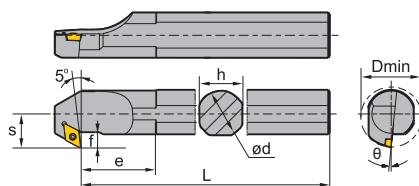
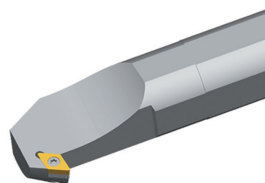
Technical
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DC** steel boring bar S-Clamping

SDZCR/L Kr: 85°



Right hand style

Article	*	Stock		Dimensions [mm]								Inserts	
		R	L	ød	L	h	s	e	f	D _{min}	θ		
S25Q-SDZCR/L11		●	●	25	180	23	17	30	6.9	32	-6	DC**11T3**	
S25T-SDZCR/L11		●	●	25	300	23	17	30	6.9	32	-6	DC**11T3**	
S32R-SDZCR/L11		○		32	200	30	22	39	8.4	40	-6	DC**11T3**	
S32U-SDZCR/L11		●	●	32	350	30	22	39	8.4	40	-6	DC**11T3**	
S40S-SDZCR/L11		○	●	40	250	37	27	47	9.4	50	-4	DC**11T3**	
S40V-SDZCR/L11		●	●	40	400	37	27	47	9.4	50	-4	DC**11T3**	
A25R-SDZCR/L11	*	●	●	25	200	24	17	30	4.5	32	-6	DC**11T3**	
A32S-SDZCR/L11	*	●	●	32	250	31	22	39	6	40	-6	DC**11T3**	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	DC**11T3**	
	ød	25	32-40
	Screw	I60M3.5×10 (2.7 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA
	Shim		D11BS
	Wrench (screw)	WT15IP	WT15IP
	Wrench (shim)		WH35L

Insert

Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

System code > A322

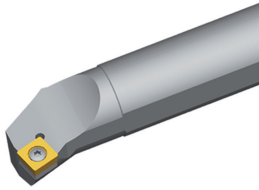
Grade selection > A42

Technical info > A501

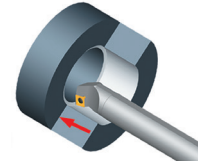
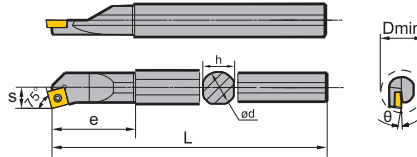
Cutting data > A366

SC steel boring bar** **S-Clamping**

SSKCR/L Kr: 75°



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S12M-SSKCR/L09	●	●	12	150	11	9	26	16	-10		SC**09T3**
S16M-SSKCR/L09	○	○	16	150	15	11	32.5	20	-11		SC**09T3**
S16R-SSKCR/L09	○	○	16	200	15	11	32.5	20	-11		SC**09T3**
S20Q-SSKCR/L09	○	○	20	180	18	13	34.5	25	-6		SC**09T3**
S20S-SSKCR/L09	●	○	20	250	18	13	34.5	25	-6		SC**09T3**
A12K-SSKCR/L09	*	●	○	12	125	11	9	26	-10		SC**09T3**
A16M-SSKCR/L09	*	●	○	16	150	15	11	32.5	-11		SC**09T3**
A20Q-SSKCR/L09	*	●	○	20	180	19	13	34.5	-6		SC**09T3**
S25Q-SSKCR/L12	○	○	25	180	23	17	36.3	32	-8		SC**1204**
S25T-SSKCR/L12	●	○	25	300	23	17	36.3	32	-8		SC**1204**
S32R-SSKCR/L12	○	○	32	200	30	22	43.5	40	-10		SC**1204**
S32U-SSKCR/L12	●		32	350	30	22	43.5	40	-10		SC**1204**
A25R-SSKCR/L12	*	●	○	25	200	24	17	41.3	-8		SC**1204**
A32S-SSKCR/L12	*	●		32	250	31	22	42.8	-10		SC**1204**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	SC**09T3**	SC**1204**	SC**1204**
	ød	12-20	25	32
	Screw	I60M3.5x8 (2.7 Nm)		
	Screw		I60M4x11X (3.4 Nm)	I60M4x11X (3.4 Nm)
	Screw (shim)			SM6x10XA
	Shim			S12BS
	Wrench (screw)	WT15IP	WT15IP	WT15IP
	Wrench (shim)			WH40L

A

Turning

B

Milling

C

Drilling





D

Technical
Information

E

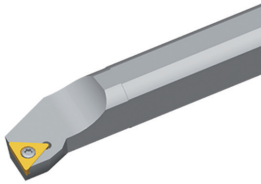
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SC** steel boring bar

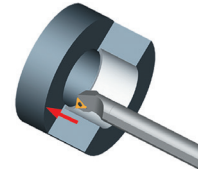
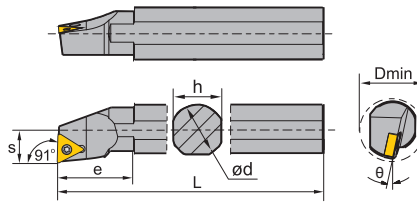
Insert			
			
Finishing	Medium Cut	Roughing	Alum Machining
A134	A135	A136	A136

TC steel boring bar S-Clamping**

STFCR/L Kr: 91°



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S12M-STFCR/L11		●	●	12	150	11	9	30	16	-10	TC**1102**
S16M-STFCR/L11		○	●	16	150	15	11	35	20	-6	TC**1102**
S16R-STFCR/L11		●	●	16	200	15	11	35	20	-6	TC**1102**
S20Q-STFCR/L11		○	○	20	180	18	13	36	25	-3	TC**1102**
S20S-STFCR/L11		●	●	20	250	18	13	36	25	-3	TC**1102**
A12K-STFCR/L11	*	●	●	12	125	11.5	9	26	16	-10	TC**1102**
A16M-STFCR/L11	*	●	●	16	150	15.5	11	30	20	-6	TC**1102**
A20Q-STFCR/L11	*	●	●	20	180	19	13	36	25	-3	TC**1102**
S25Q-STFCR/L16		●	○	25	180	23	17	49	32	-6	TC**16T3**
S25T-STFCR/L16		●	●	25	300	23	17	49	32	-6	TC**16T3**
S32R-STFCR/L16		●	●	32	200	30	22	50	40	-10	TC**16T3**
S32U-STFCR/L16		●	●	32	350	30	22	50	40	-10	TC**16T3**
S40S-STFCR/L16		○	○	40	250	37	27	60	50	-8	TC**16T3**
S40V-STFCR/L16		●	●	40	400	37	27	60	50	-8	TC**16T3**
A25R-STFCR/L16	*	●	●	25	200	24	17	45	32	-6	TC**16T3**
A32S-STFCR/L16	*	●	○	32	250	31	22	49	40	-10	TC**16T3**

● Ex stock ○ On demand

* With internal cooling







Spare parts

	Insert ød	TC**1102**	TC**16T3**	TC**16T3**
		12-20	25	32-40
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×10 (2.7 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)			SM5×8.65XA
	Shim			T16BS
	Wrench (screw)	WT07IP	WT15IP	WT15IP
	Wrench (shim)			WH35L

A

Turning

TC** steel boring bar

Insert					
					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A141	A142	A143	A145	A143	A187

B

Milling

C

Drilling

D

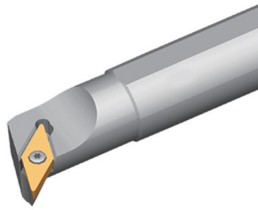
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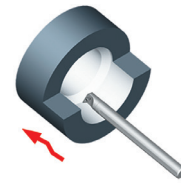
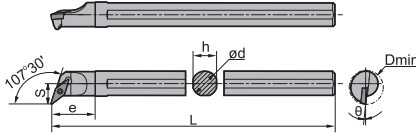
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VC steel boring bar S-Clamping**

SVQCR/L Kr: 107°30'



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S16Q-SVQCR/L11	●	●	16	180	15	13	28	22	-6	-6	VC**1103**
S20R-SVQCR/L11	●	○	20	200	18	15	32	26	-4	-4	VC**1103**

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert	VC**1103**
ød	16-20
Screw	I60M2.5×6.5 (1.0 Nm)
Wrench (screw)	WT07IP

Insert

Finishing	Alum Machining	PCBN/PCD
A156	A154	A193

A

Turning

B

Milling

C

Drilling

D

Technical
Information

E

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System code > A322

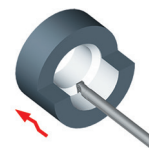
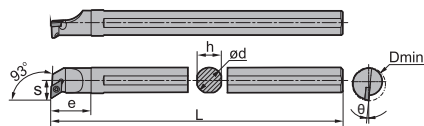
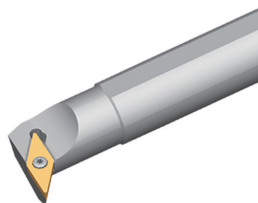
Grade selection > A42

Technical info > A501


Cutting data > A366

VC** steel boring bar S-Clamping

SVUCR/L Kr: 93°



Right hand style

Article	✱	Stock		Dimensions [mm]								Inserts	
		R	L	ød	L	h	s	L ₂	e	D _{min}	θ		
S16Q-SVUCR/L11		●	○	16	180	15	15	25	25	24	-6	VC**1103**	
S20R-SVUCR/L11		●	●	20	200	18	17	30	30	28	-4	VC**1103**	
S40U-SVUCR/L16			○	40	350	37	27	56	56	50	-8	VC**1604**	

● Ex stock ○ On demand

* With internal cooling

Spare parts

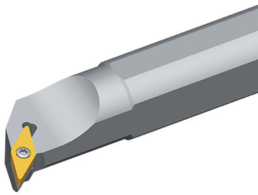
	Insert	VC**1103**	VC**1604**
	ød	16-20	40
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw (shim)		SM5×8.65XA (4.0 Nm)
	Shim		V16BSC
	Wrench (screw)	WT07IP	WT15IP
	Wrench (shim)		WH35L

Insert

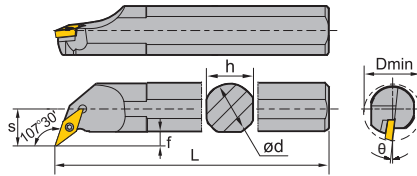
Finishing	Medium Cut	Alum Machining	PCBN/PCD
A156	A156	A154	A193

VB steel boring bar S-Clamping**

SVQBR/L Kr: 107°30'



Right hand style



Article	*	Stock		Dimensions [mm]								Inserts
		R	L	ød	L	h	s	e	f	D _{min}	θ	
S32R-SVQBR/L16	●	●	32	200	30	22	56	8.4	40	-8		VB**1604**
S32U-SVQBR/L16	●	●	32	350	30	22	56	8.4	40	-8		VB**1604**
S40V-SVQBR/L16	●	●	40	400	37	27	64	9.4	50	-8		VB**1604**
A32S-SVQBR/L16	*	○	○	32	250	31	22	56	8.4	40	-8	VB**1604**

● Ex stock ○ On demand

* With internal cooling

Spare parts

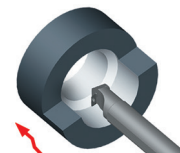
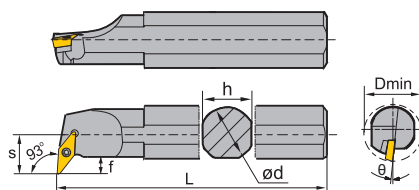
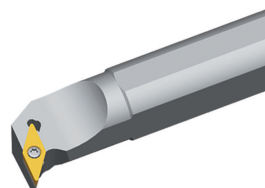
Insert		VB**1604**
ød		32-40
	Screw	I60M3.5×12 (2.7 Nm)
	Screw (shim)	SM5×8.65XA
	Shim	V16BS
	Wrench (screw)	WT15IP
	Wrench (shim)	WH35L

Insert

Finishing	Medium Cut	Roughing	PCBN/PCD
A148	A151	A152	A191

VB** steel boring bar S-Clamping

SVUBR/L Kr: 93°



Right hand style

Article	*	Stock		Dimensions [mm]								Inserts	
		R	L	ød	L	h	s	e	f	D _{min}	θ		
S32R-SVUBR/L16	●	○	32	200	30	22	49	8.4	40	-8		VB**1604**	
S32U-SVUBR/L16	●	●	32	350	30	22	49	8.4	40	-8		VB**1604**	
S40S-SVUBR/L16	●	○	40	250	37	27	56.5	9.4	50	-8		VB**1604**	
S40V-SVUBR/L16	●	●	40	400	37	27	56.5	9.4	50	-8		VB**1604**	
A32S-SVUBR/L16	*	●	●	32	250	31	22	49	8.4	40	-8	VB**1604**	

● Ex stock ○ On demand

* With internal cooling

Spare parts

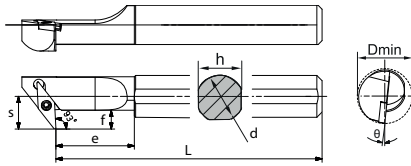
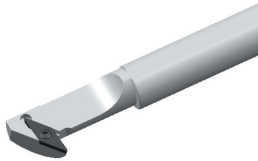
	Insert	VB**1604**
	ød	32-40
	Screw	I60M3.5×12 (2.7 Nm)
	Screw (shim)	SM5×8.65XA
	Shim	V16BS
	Wrench (screw)	WT15IP
	Wrench (shim)	WH35L

Insert

Finishing	Medium Cut	Roughing	PCBN/PCD
A148	A151	A152	A191

VB steel boring bar** **S-Clamping**

SVXBR/L Kr: 93°



Right hand style

Article	*	Stock		Dimensions [mm]								Inserts
		R	L	ød	L	h	s	e	f	D _{min}	θ	
S16P-SVXBR/L1102-KR93	○	○	16	170	15	12.5	30	72	21	-8		VB**1102**
S16P-SVXBR/L11-KR93	○	○	16	170	15	12.5	30	72	21	-8		VB**1103**
S20R-SVXBR/L11-KR93	○	○	20	187	20	13	22	5.7	25	-8		VB**1103**
S25S-SVXBR/L16-KR93	○	○	25	235	25	19	26	10.2	32	-8		VB**1604**
S32T-SVXBR/L16-KR93	○	○	32	280	32	22	80	11.7	40	-8		VB**1604**
S40M-SVXBR/L16-KR93	○	○	40	130	40	27	40	14.3	50	-8		VB**1604**
S40U-SVXBR/L16-KR93	○	○	40	330	40	27	90	14.3	50	-8		VB**1604**

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ød	VB**1102** 16-20	VB**1103** 16-20	VB**1604** 25-40
		I60M2.5×6.5 (1.0 Nm)	I60M2.5×6.5 (1.0 Nm)	I60M3.5×12 (2.7 Nm)
	Screw			
	Screw (shim)			SM5×8.65XA (4.0 Nm)
	Shim			V16BS
	Wrench (screw)			WT15IP
	Wrench (shim)			WH35L
	Wrench	WT07IP	WT07IP	WT15IP

Insert

Finishing A148	Medium Cut A151	Roughing A152	PCBN/PCD A191

System code > A322

Grade selection > A42

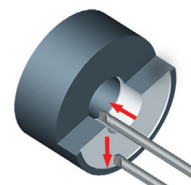
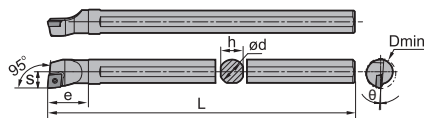
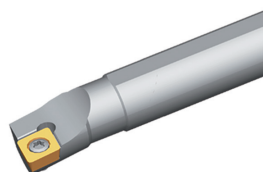
Technical info > A501

Cutting data > A366



CP** steel boring bar S-Clamping

SCLPR/L Kr: 95°



Right hand style

Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S10K-SCLPR/L06	●	●	10	125	9	6	17	12	-7		CP**0602**
S12M-SCLPR/L06	●	●	12	150	11	8	20	16	-4		CP**0602**
S16Q-SCLPR/L09	●	●	16	180	15	10	29	20	-4		CP**09T3**
S20R-SCLPR/L09	○	○	20	200	18	13	35	25	-4		CP**09T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

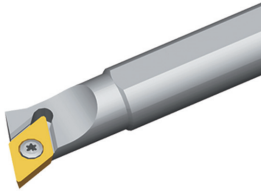
	Insert	CP**0602**	CP**09T3**
	ød	10-12	20-25
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench (screw)	WT07IP	WT15IP

Insert

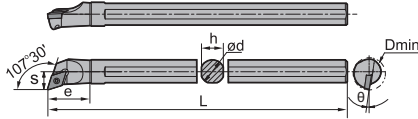
Finishing	Medium Cut	Cast Iron
A124	A124	A124

DP steel boring bar** **S-Clamping**

SDQPR/L Kr: 107°30'



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S10K-SDQPR/L07	●	●	10	125	9	7	20	13	-8	-	DP**0702**
S12M-SDQPR/L07	●	●	12	150	11	9	22	16	-8	-	DP**0702**
S16Q-SDQPR/L07	●	●	16	180	15	11	27	20	-6	-	DP**0702**
S16Q-SDQPR/L11	●	●	16	180	15	11	32	20	-6	-	DP**11T3**
S20R-SDQPR/L11	○	○	20	200	18	13	33	25	-6	-	DP**11T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts				
	Insert	DP**0702**	DP**0702**	DP**11T3**
	ød	10-12	16	16-20
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench (screw)	WT07IP	WT07IP	WT15IP

Insert

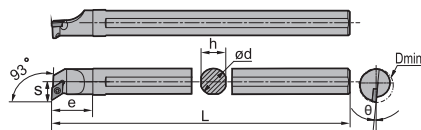
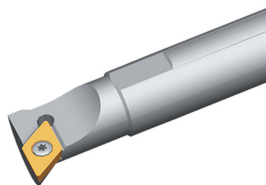


Finishing


A131

DP** steel boring bar S-Clamping

SDUPR/L Kr: 93°





Right hand style

Article	*	Stock		Dimensions [mm]							Inserts	
		R	L	ød	L	h	s	e	D _{min}	θ		
S10K-SDUPR/L07	●	●	10	125	9	9	18	15	-8		DP**0702**	
S12M-SDUPR/L07	●	●	12	150	11	9	19	16	-8		DP**0702**	
S16Q-SDUPR/L07	●	●	16	180	15	11	25	20	-6		DP**0702**	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	DP**0702**	DP**0702**
	ød	10-12	16
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M2.5×6.5 (1.0 Nm)
	Wrench (screw)	WT07IP	WT07IP

Insert

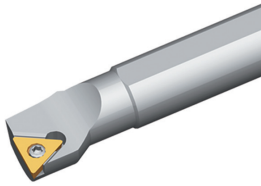


Finishing

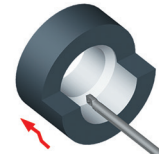
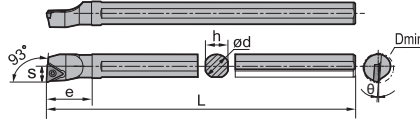
A131


TP steel boring bar S-Clamping**

STUPR/L Kr: 93°





Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ød	L	h	s	e	D _{min}	θ	
S10K-STUPR/L09	•	•	10	125	9	6	20	12	-6	-	TP**0902**
S12M-STUPR/L09	•	•	12	150	11	8	22	16	-4	-	TP**0902**
S12M-STUPR/L11	•	•	12	150	11	8	25	16	-4	-	TP**1103**
S16Q-STUPR/L11	•	•	16	180	15	10	27	20	-3	-	TP**1103**

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert	TP**0902**	TP**1103**
	ød	10-12	12-16
	Screw	I60M2.2×5.5 (0.8 Nm)	I60M2.5×6.5 (1.0 Nm)
	Wrench	WT07IP	WT07IP

Insert



Finishing

A147

A

Turning

B

Milling

C

Drilling

D

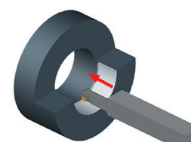
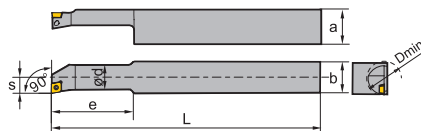
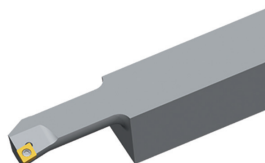
Technical
Information



E

Index

CC** steel boring bar S-Clamping

SCFCR/L Kr: 90°



Article		Stock		Dimensions [mm]							Inserts
		R	L	ød	a	b	L	s	e	D _{min}	
S10M-SCFCR/L06S25		●	○	10	27	25	150	7	30	13	CC**0602**
S12P-SCFCR/L06S25		●		12	27	25	170	9	35	16	CC**0602**
S16Q-SCFCR/L09S25		●	○	16	27	25	180	11	40	20	CC**09T3**
S20R-SCFCR/L09S25		●		20	27	25	200	13	45	25	CC**09T3**
S25R-SCFCR/L12S25		●	●	25	27	25	200	17	50	32	CC**1204**

● Ex stock ○ On demand

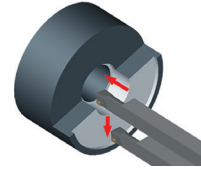
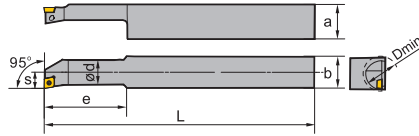
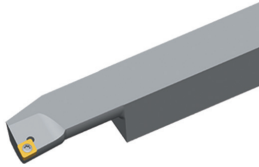
* With internal cooling

Spare parts				
	Insert	CC**0602**	CC**09T3**	CC**1204**
	ød	10-12	16-20	25
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)	I60M4×12 (3.4 Nm)
	Wrench	WT07IP	WT15IP	WT20IP

Insert					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A116	A119	A121	A122	A121	A180

CC steel boring bar S-Clamping**

SCLCR Kr: 95°



Article	*	Stock	Dimensions [mm]							Inserts
			ød	a	b	L	s	e	D _{min}	
S10M-SCLCR06S20	○	○	10	22	20	150	7	30	13	CC**0602**
S12P-SCLCR06S20	○	○	12	22	20	170	9	35	16	CC**0602**
S16Q-SCLCR09S20	●	●	16	22	20	180	11	40	20	CC**09T3**
S20R-SCLCR09S20	●	●	20	22	20	200	13	60	25	CC**09T3**

● Ex stock ○ On demand

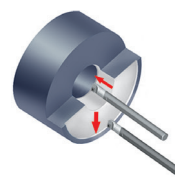
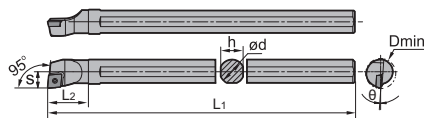
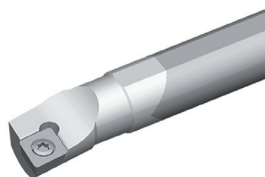
* With internal cooling

Spare parts			
	Insert	CC**0602**	CC**09T3**
	ød	10-12	16-20
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench	WT07IP	WT15IP

Insert					
Finishing A116	Medium Cut A119	Roughing A121	Alum Machining A122	Cast Iron A121	PCBN/PCD A180

CP** solid carbide boring bar S-Clamping

SCLPR/L Kr: 95°



Right hand style

Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
C10M-SCLPR/L06	●	●		12	10	9	6	150	17	7	CP**0602**
C12Q-SCLPR/L06	●	○		16	12	11	8	180	20	4	CP**0602**
C16R-SCLPR/L09	●	●		20	16	15	10	200	29	4	CP**09T3**
E16R-SCLPR/L09	*	○	○	19	16	15.5	10	200	-	-2	CP**09T3**
C20S-SCLPR/L09	●	○		25	20	18	13	250	35	4	CP**09T3**
E20S-SCLPR/L09	*	○		24	20	19.5	13	250	-	-2	CP**09T3**

● Ex stock ○ On demand

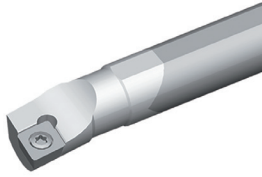
* With internal cooling

Spare parts			
	Insert	CP**0602**	CP**09T3**
	ød	10-12	16-20
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×10 (2.7 Nm)
	Wrench (screw)	WT07IP	WT15IP

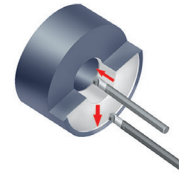
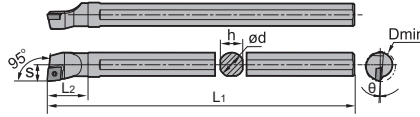
Insert		
Finishing	Medium Cut	Cast Iron
A124	A124	A124

CC solid carbide boring bar** **S-Clamping**

SCLCR/L Kr: 95°



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
E08K-SCLCR/L06-09	*	●	●	9	8	7.5	5	125	-	-12	CC**0602**
E08K-SCLCR/L06-10	*	●	●	10	8	7.5	6	125	-	-12	CC**0602**
E10M-SCLCR/L06	*	●	●	12	10	9.5	7	150	-	-10	CC**0602**
E12Q-SCLCR/L06	*	●	●	15	12	11.5	9	180	-	-10	CC**0602**
E16R-SCLCR/L06	*	●	●	18	16	15.5	10	200	-	-8	CC**0602**
E12Q-SCLCR/L09	*	●	●	15	12	11.5	9	180	-	-9	CC**09T3**
E16R-SCLCR/L09	*	●	●	18	16	15.5	10	200	-	-10	CC**09T3**
E20S-SCLCR/L09	*	●	●	24	20	19.5	13	250	-	-8	CC**09T3**
E25T-SCLCR/L09	*	●	●	31	25	24	17	300	-	-6	CC**09T3**

● Ex stock ○ On demand

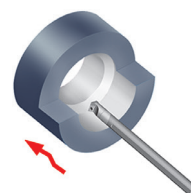
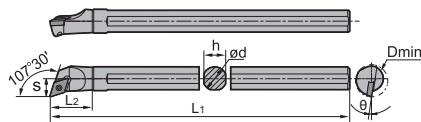
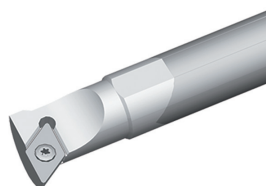
* With internal cooling

Spare parts				
	Insert	CC**0602**	CC**09T3**	CC**09T3**
	ød	8-16	12	16-25
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)	I60M3.5×10 (2.7 Nm)
	Wrench (screw)	WT07IP	WT15IP	WT15IP

Insert					
Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A116	A119	A121	A122	A121	A180

DP** solid carbide boring bar S-Clamping

SDQPR/L Kr: 107°30'



Right hand style

Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
C10M-SDQPR/L07	●	●	13	10	9	7	150	20	8		DP**0702
C12Q-SDQPR/L07	○	●	16	12	11	9	180	22	8		DP**0702
C16R-SDQPR/L07	○	○	20	16	15	11	200	27	6		DP**0702
C16R-SDQPR/L11	○	○	20	16	15	11	200	32	6		DP**11T3**
C20S-SDQPR/L11	●	○	25	20	18	13	250	33	6		DP**11T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts				
	Insert	DP**0702	DP**0702	DP**11T3**
	ød	10-12	16	16-20
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M2.5×6.5 (1.0 Nm)	I60M3.5×8 (2.7 Nm)
	Wrench (screw)	WT07IP	WT07IP	WT15IP

Insert

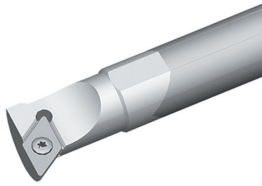


Finishing

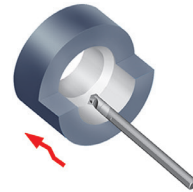
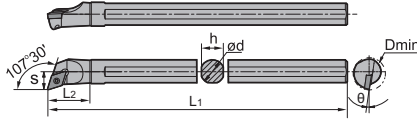
A131

DC solid carbide boring bar S-Clamping**

SDQCR/L Kr: 107°30'



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
E08K-SDQCR/L07	*	●	●	11	8	7.5	6.5	125	-	-12	DC**0702**
E10M-SDQCR/L07	*	●	●	12	10	9.5	7	150	-	-10	DC**0702**
E12Q-SDQCR/L07	*	●	●	15	12	11.5	9	180	-	-10	DC**0702**
E16R-SDQCR/L07	*	●	○	18	16	15.5	10	200	27-	-6	DC**0702**
E20S-SDQCR/L07	*	●	○	24	20	19.5	13	250	33-	-4	DC**0702**
E16R-SDQCR/L11	*	●	●	18	16	15.5	10	200	-	-8	DC**11T3**
E20S-SDQCR/L11	*	●	○	24	20	19.5	13	250	-	-8	DC**11T3**
E25T-SDQCR/L11	*	●	○	31	25	24	17	300	-	-6	DC**11T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

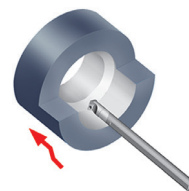
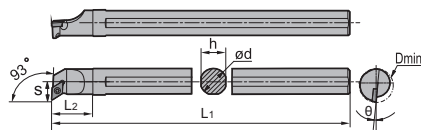
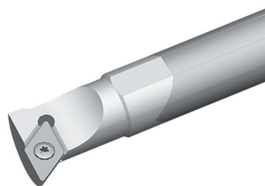
	Insert	DC**0702**	DC**11T3**
	ød	8-20	16-25
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×10 (2.7 Nm)
	Wrench (screw)	WT07IP	WT15IP

Insert


Finishing	Medium Cut	Roughing	Alum Machining	Cast Iron	PCBN/PCD
A126	A127	A129	A129	A129	A184

DP** solid carbide boring bar S-Clamping

SDUPR/L Kr: 93°





Right hand style

Article	*	Stock		Dimensions [mm]							Inserts	
		R	L	ØD	ød	h	s	L ₁	L ₂	θ		
C10M-SDUPR/L07	●	●	15	10	9	9	150	18	8	DP**0702**		
C12Q-SDUPR/L07	●	○	16	12	11	9	180	19	8	DP**0702**		
C16R-SDUPR/L07	○	○	20	16	15	11	200	25	6	DP**0702**		

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		DP**0702**
ød		15-20
	Screw	I60M2.5×5.5 (1.0 Nm)
	Wrench	WT07IP

Insert

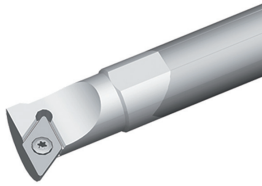


Finishing

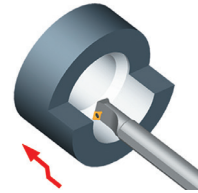
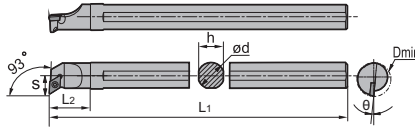
A131

DC solid carbide boring bar S-Clamping**

SDUCR/L Kr: 93°



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
E10M-SDUCR/L07	*	●	○	12	10	9.5	7	150	-	-10	DC**0702**
E12Q-SDUCR/L07	*	●	●	15	12	11.5	9	180	-	-10	DC**0702**
E16R-SDUCR/L07	*	●	○	18	16	15.5	10	200	-	-6	DC**0702**
E20S-SDUCR/L07	*	○	○	24	20	19.5	13	250	-	-4	DC**0702**
E16R-SDUCR/L11	*	●	○	18	16	15.5	10	200	-	-8	DC**11T3**
E20S-SDUCR/L11	*	●	●	24	20	19.5	13	250	-	-8	DC**11T3**
E25T-SDUCR/L11	*	○	○	31	25	24	17	300	-	-6	DC**11T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

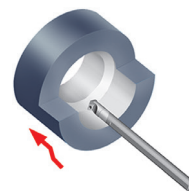
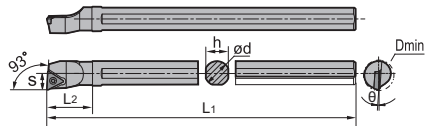
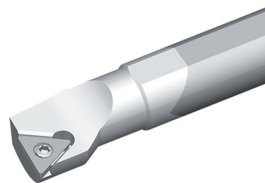
	Insert	DC**0702**	DC**11T3**
	ød	10-20	16-25
	Screw	I60M2.5×5.5 (1.0 Nm)	I60M3.5×10 (2.7 Nm)
	Wrench (screw)	WT07IP	WT15IP

Insert

Finishing A126	Medium Cut A127	Roughing A129	Alum Machining A129	Cast Iron A129	PCBN/PCD A184

TP** solid carbide boring bar S-Clamping

STUPR/L Kr: 93°



Right hand style

Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
C10M-STUPR/L09	○	○		12	10	9	6	150	20	6	TP**0902**
C12Q-STUPR/L09	●			16	12	11	8	180	22	4	TP**0902**
C12Q-STUPR/L11	●			16	12	11	8	180	25	4	TP**1103
C16R-STUPR/L11	○	○		20	16	15	10	200	27	3	TP**1103

● Ex stock ○ On demand

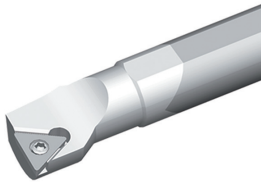
* With internal cooling

Spare parts			
	Insert	TP**0902**	TP**1103
		10-12	12-16
	Screw	I60M2.2×5.5 (0.8 Nm)	I60M2.5×6.5 (1.0 Nm)
	Wrench (screw)	WT07IP	WT07IP

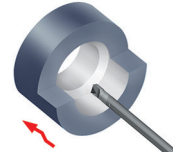
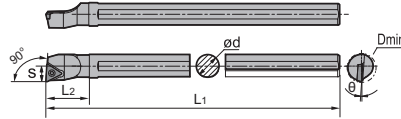
Insert
Finishing
A147

TC solid carbide boring bar** **S-Clamping**

STFCR/L Kr: 90°



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
E08K-STFCR/L09	*	○	●	11	8	7.5	6	125	-	-12	TC**0902**
E10M-STFCR/L09	*	○	○	12	10	9.5	7	150	-	-10	TC**0902**
E12Q-STFCR/L11	*	○	○	15	12	11.5	9	180	-	-10	TC**1102**
E16R-STFCR/L11	*	○	○	18	16	15.5	10	200	-	-8	TC**1102**
E20S-STFCR/L11	*	○	○	24	20	19.5	13	250	-	-8	TC**1102**
E20S-STFCR/L16	*	○	○	24	20	19.5	13	250	-	-8	TC**16T3**
E25T-STFCR/L16	*	○	○	31	25	24	17	300	-	-6	TC**16T3**

● Ex stock ○ On demand

* With internal cooling

Spare parts

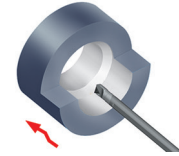
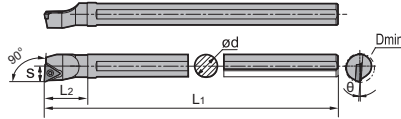
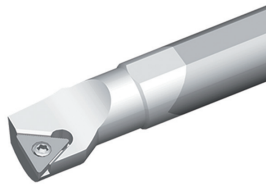
	Insert	TC**0902**	TC**1102**	TC**16T3**
		8-10	12-20	20-25
	Screw	I60M2.2×5.5 (0.8 Nm)	I60M2.5×5.5 (1.0 Nm)	I60M3.5×10 (2.7 Nm)
	Wrench (screw)	WT07IP	WT07IP	WT15IP

Insert

Finishing A141	Medium Cut A142	Roughing A143	Alum Machining A145	Cast Iron A143	PCBN/PCD A187

TC** solid carbide boring bar S-Clamping

STFPR/L Kr: 90°



Right hand style

Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
E10M-STFPR/L11	*	○	○	12	10	9.5	6	150	-	-5	TP**1103**
E12Q-STFPR/L11	*	○	○	15	12	11.5	8	180	-	-4	TP**1103**
E16R-STFPR/L11	*	○	○	19	16	15.5	10	200	-	-2	TP**1103**
E20S-STFPR/L11	*	○	○	24	20	19	13	250	-	-2	TP**1103**

● Ex stock ○ On demand

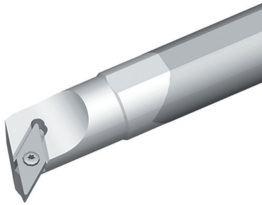
* With internal cooling

Spare parts		
	Insert	TP**1103**
		10-20
	Screw	I60M3.0×7.0 (1.8 Nm)
	Wrench (screw)	WT08IP

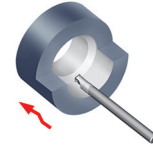
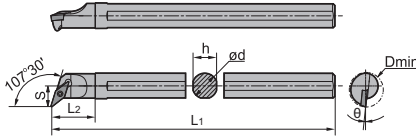
Insert
Finishing
A147

VC solid carbide boring bar** **S-Clamping**

SVQCR/L Kr: 107°30'



Right hand style



Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
C16R-SVQCR/L11	○	○	22	16	15	13	200	28	-6		VC**1103**
C20S-SVQCR/L11	○	○	26	20	18	15	250	32	-4		VC**1103**

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		VC**1103**
		16-20
	Screw	I60M2.5×6.5 (1.0 Nm)
	Wrench (screw)	WT07IP

Insert

Finishing	Alum Machining	PCBN/PCD
A156	A154	A193

System code > A322

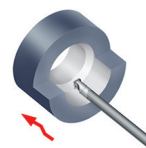
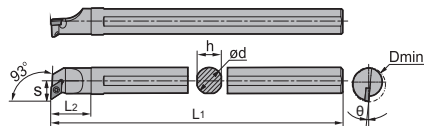
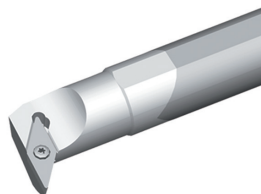
Grade selection > A42

Technical info > A501

Cutting data > A366

VC** solid carbide boring bar S-Clamping

SVUCR/L Kr: 93°



Right hand style

Article	*	Stock		Dimensions [mm]							Inserts
		R	L	ØD	ød	h	s	L ₁	L ₂	θ	
C16R-SVUCR/L11		○		24	16	15	15	200	25	6	VC**1103**
E16R-SVUCR/L11	*	○	○	22	16	15	13	200	-	-6.5	VC**1103**
C20S-SVUCR/L11		●	●	28	20	18	17	250	30	4	VC**1103**
E20S-SVUCR/L11	*	○	○	27	20	18	13	250	-	-6.5	VC**1103**
E25T-SVUCR/L16	*	○	○	35	25	23	20.5	300	-	-6.5	VC**1604**

● Ex stock ○ On demand

* With internal cooling

Spare parts

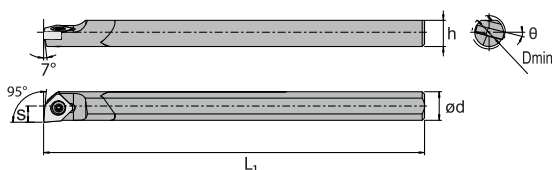
	Insert	VC**1103**	VC**1604**
		16-20	25
	Screw	I60M2.5×6.5 (1.0 Nm)	I60M3.5×10 (2.7 Nm)
	Wrench (screw)	WT07IP	WT15IP



Insert

Finishing	Medium Cut	Alum Machining	PCBN/PCD
A156	A156	A154	A193

ZNEX solid carbide boring bar **S clamping**

SZLNR Kr: 95°



Article		Stock		Dimensions [mm]							Insert
		R	L	D _{min}	ød	h	s	L ₁	L ₂	θ	
C06X-SZLNR04	●			7	6	5,5	3,4	80	-	-14	ZNEX0401**

• Ex stock ○ On demand

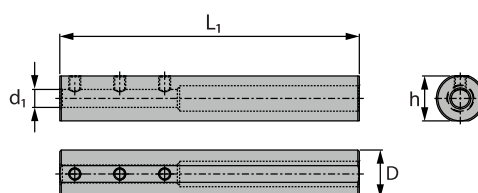
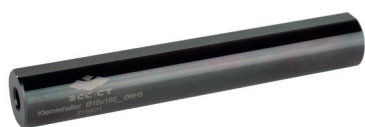
* With internal cooling

Spare parts

	Insert	ZNEX0401**
	ød	6
	Screw	I60M2x3,7 (0,5 Nm)
	Wrench (Screw)	WT06IP

C06X holder**

SZLNR Kr: 95°



Article	Stock	Dimensions [mm]			
		D	d ₁	L ₁	h
SHSZ1600.06.100	•	16	6	100	15

• Ex stock ○ On demand

* With internal cooling

Spare parts

	Screw	M4x5SH
	Wrench (Screw)	WH20L

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Turning insert, negative

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]											
						HC (CVD)											
						YBC103			YB6315			YBC152					
						Feed rate [mm]			Feed rate [mm]			Feed rate [mm]					
						0,1	0,2	0,6	0,1	0,2	0,6	0,1	0,2	0,6			
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1	520	420	280	500	400	270	500	400	270			
		approx. 0,45 % C	annealed	190	2	440	360	250	420	340	230	420	340	230			
		approx. 0,45 % C	tempered	250	3	350	300	220	330	280	200	330	280	200			
		approx. 0,75 % C	annealed	270	4	340	290	210	320	270	190	320	270	190			
		approx. 0,75 % C	tempered	300	5	300	260	190	280	240	170	280	240	170			
B	Low-alloyed steel		annealed	180	6	420	320	200	400	300	180	400	300	180			
			tempered	275	7	300	250	170	280	230	150	280	230	150			
			tempered	300	8	280	240	170	260	220	150	260	220	150			
			tempered	350	9	250	210	140	230	190	120	230	190	120			
	High-alloyed steel and high-alloyed tool steel		annealed	200	10	380	310	210	360	290	190	360	290	190			
			hardened and tempered	325	11	210	180	150	190	160	130	190	160	130			
M	Stainless steel	ferritic/martensitic	annealed	200	12												
		martensitic	tempered	240	13												
		austenitic	quench hardened	180	14												
		austenitic-ferritic		230	15												
K	Grey cast iron	perlitic/ferritic		180	16												
		perlitic (martensitic)		260	17												
	Cast iron with spheroidal graphite	ferritic		160	18												
		perlitic		250	19												
	Malleable cast iron	ferritic		130	20												
		perlitic		230	21												
N	Aluminium wrought alloys	cannot be hardened		60	22												
		hardenable	hardened	100	23												
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24												
		≤ 12% Si, hardenable	hardened	90	25												
		> 12% Si, cannot be hardened		130	26												
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27												
		CuZn, CuSnZn		90	28												
		CuSn, Pb-free copper, electrolytic copper		100	29												
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30												
			hardened	280	31												
		Ni or Co bass	annealed	250	32												
			hardened	350	33												
			cast	320	34												
	Titanium alloys	pure titanium		R _m 400	35												
H	Hardened steel		hardened and tempered	55 HRC	37												
			hardened and tempered	60 HRC	38												
	Hard cast iron		cast	400	39												
	Hardened cast iron		hardened and tempered	55 HRC	40												
X	Non-metallic materials	Thermoplastics			41												
		Thermosetting plastics			42												
		Plastic, glass-fibre reinforced GFRP			43												
		Plastic, carbon fibre reinforced CFRP			44												
		Graphite			45												
		Wood			46												

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.
For examples of material for cutting tool groups view page D11.

HC	Coated carbide
HT	Uncoated carbide, primary component (TiC) or (TiN), cermet
HW	Uncoated carbide, primary component (WC)
BL	Cubic boron nitride with low BN content
BH	Cubic boron nitride with high BN content
CN	Si ₃ N ₄ ceramic
CM	Mixed ceramic
HC ₁	Coated cermet
BC	CBN with coating
CC	Coated cutting ceramic
CR	Cutting ceramic, primary component aluminium oxide (Al ₂ O ₃), reinforced
DP	Polycrystalline diamond

Index

Turning insert, negative

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]								
						HC (CVD)			HC (PVD)					
						YBD152C			YBG101			YBG102		
						Feed rate [mm]			Feed rate [mm]			Feed rate [mm]		
						0,1	0,3	0,5	0,1	0,3	0,6	0,1	0,3	0,6
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1									
		approx. 0,45 % C	annealed	190	2									
		approx. 0,45 % C	tempered	250	3									
		approx. 0,75 % C	annealed	270	4									
		approx. 0,75 % C	tempered	300	5									
B	Low-alloyed steel		annealed	180	6									
			tempered	275	7									
			tempered	300	8									
			tempered	350	9									
	High-alloyed steel and high-alloyed tool steel		annealed	200	10									
			hardened and tempered	325	11									
M	Stainless steel	ferritic/martensitic	annealed	200	12							360	290	200
		martensitic	tempered	240	13							180	150	110
		austenitic	quench hardened	180	14							240	190	140
		austenitic-ferritic		230	15							190	150	110
K	Grey cast iron	perlitic/ferritic		180	16	570	395	220						
		perlitic (martensitic)		260	17	310	230	150						
	Cast iron with spheroidal graphite	ferritic		160	18	310	230	150						
		perlitic		250	19	230	170	110						
	Malleable cast iron	ferritic		130	20	340	280	220						
		perlitic		230	21	250	180	110						
N	Aluminium wrought alloys	cannot be hardened		60	22				2000	1200	–	2000	1200	–
		hardenable	hardened	100	23				610	420	–	610	420	–
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24				550	300	–	550	300	–
		≤ 12% Si, hardenable	hardened	90	25				360	190	–	360	190	–
		> 12% Si, cannot be hardened		130	26				320	170	–	320	170	–
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27				730	350	–	730	350	–
		CuZn, CuSnZn		90	28				370	330	–	370	330	–
		CuSn, Pb-free copper, electrolytic copper		100	29				270	200	–	270	200	–
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30							65	45	–
			hardened	280	31							60	40	–
		Ni or Co bass	annealed	250	32							60	40	–
			hardened	350	33							55	35	–
	Titanium alloys	cast		320	34							55	35	–
		pure titanium		R _m 400	35							100	60	–
H	Hardened steel	α and β alloys	hardened	R _m 1050	36							80	40	–
			hardened and tempered	55 HRC	37									
	Hard cast iron		hardened and tempered	60 HRC	38									
			cast	400	39									
X	Non-metallic materials		hardened and tempered	55 HRC	40									
		Thermoplastics			41									
		Thermosetting plastics			42									
		Plastic, glass-fibre reinforced GFRP			43									
		Plastic, carbon fibre reinforced CFRP			44									
		Graphite			45									
		Wood			46									

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BH	Cubic boron nitride with high BN content
CN	Si ₃ N ₄ ceramic
CM	Mixed ceramic
HC ₁	Coated cermet
BC	CBN with coating
CC	Coated cutting ceramic
CR	Cutting ceramic, primary component aluminium oxide (Al ₂ O ₃), reinforced
DP	Polycrystalline diamond

Index

Turning insert, negative

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]								
						HW						BL		
						YD101			YD201			YCB112		
						Feed rate [mm]			Feed rate [mm]			Feed rate [mm]		
						0,05	0,2	0,35	0,1	0,2	0,3	0,1	0,2	0,3
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1									
		approx. 0,45 % C	annealed	190	2									
		approx. 0,45 % C	tempered	250	3									
		approx. 0,75 % C	annealed	270	4									
		approx. 0,75 % C	tempered	300	5									
B	Low-alloyed steel		annealed	180	6									
			tempered	275	7									
			tempered	300	8									
			tempered	350	9									
	High-alloyed steel and high-alloyed tool steel		annealed	200	10									
			hardened and tempered	325	11									
M	Stainless steel	ferritic/martensitic	annealed	200	12									
		martensitic	tempered	240	13									
		austenitic	quench hardened	180	14									
		austenitic-ferritic		230	15									
K	Grey cast iron	perlitic/ferritic		180	16									
		perlitic (martensitic)		260	17									
	Cast iron with spheroidal graphite	ferritic		160	18									
		perlitic		250	19									
	Malleable cast iron	ferritic		130	20									
		perlitic		230	21									
N	Aluminium wrought alloys	cannot be hardened		60	22	1750	1200	800	1750	1200	800			
		hardenable	hardened	100	23	510	380	250	510	380	250			
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24	460	320	175	460	320	175			
		≤ 12% Si, hardenable	hardened	90	25	300	205	110	300	205	110			
		> 12% Si, cannot be hardened		130	26	270	185	100	270	185	100			
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27	610	410	205	610	410	205			
		CuZn, CuSnZn		90	28	310	250	195	310	250	195			
		CuSn, Pb-free copper, electrolytic copper		100	29	225	170	115	225	170	115			
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30									
			hardened	280	31									
		Ni or Co bass	annealed	250	32							180	160	140
			hardened	350	33							160	140	120
		cast		320	34							120	100	80
H	Titanium alloys	pure titanium		R _m 400	35									
		α and β alloys	hardened	R _m 1050	36									
	Hardened steel		hardened and tempered	55 HRC	37							220	170	130
			hardened and tempered	60 HRC	38							200	160	120
	Hard cast iron		cast	400	39							200	150	100
	Hardened cast iron		hardened and tempered	55 HRC	40							200	150	100
X	Non-metallic materials	Thermoplastics			41									
		Thermosetting plastics			42									
		Plastic, glass-fibre reinforced GFRP			43									
		Plastic, carbon fibre reinforced CFRP			44									
		Graphite			45									
		Wood			46									

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.
For examples of material for cutting tool groups view page D11.

HC	Coated carbide
HT	Uncoated carbide, primary component (TiC) or (TiN), cermet
HW	Uncoated carbide, primary component (WC)
BL	Cubic boron nitride with low BN content
BH	Cubic boron nitride with high BN content
CN	Si ₃ N ₄ ceramic
CM	Mixed ceramic
HC ₁	Coated cermet
BC	CBN with coating
CC	Coated cutting ceramic
CR	Cutting ceramic, primary component aluminium oxide (Al ₂ O ₃), reinforced
DP	Polycrystalline diamond

Index

Turning insert, negative

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]								
						BC			BH			CM		
						YZB630C			YZB233			CA1000		
						Feed rate [mm]			Feed rate [mm]			Feed rate [mm]		
						0,1	0,3	0,5	0,3	0,9	1,5	0,1	0,6	1,5
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1									
		approx. 0,45 % C	annealed	190	2									
		approx. 0,45 % C	tempered	250	3									
		approx. 0,75 % C	annealed	270	4									
		approx. 0,75 % C	tempered	300	5									
B	Low-alloyed steel		annealed	180	6									
			tempered	275	7									
			tempered	300	8									
			tempered	350	9									
	High-alloyed steel and high-alloyed tool steel		annealed	200	10									
			hardened and tempered	325	11									
M	Stainless steel	ferritic/martensitic	annealed	200	12									
		martensitic	tempered	240	13									
		austenitic	quench hardened	180	14									
		austenitic-ferritic		230	15									
K	Grey cast iron	perlitic/ferritic		180	16				1500	950	400			
		perlitic (martensitic)		260	17				1250	780	320			
	Cast iron with spheroidal graphite	ferritic		160	18				–	–	–			
		perlitic		250	19				500	300	100			
	Malleable cast iron	ferritic		130	20				–	–	–			
		perlitic		230	21				500	300	100			
N	Aluminium wrought alloys	cannot be hardened		60	22									
		hardenable	hardened	100	23									
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24									
		≤ 12% Si, hardenable	hardened	90	25									
		> 12% Si, cannot be hardened		130	26									
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27									
		CuZn, CuSnZn		90	28									
		CuSn, Pb-free copper, electrolytic copper		100	29									
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30									
			hardened	280	31									
		Ni or Co bass	annealed	250	32									
			hardened	350	33									
			cast	320	34									
	Titanium alloys	pure titanium		R _m 400	35									
H	Hardened steel		hardened and tempered	55 HRC	37	220	170	130				180	150	120
			hardened and tempered	60 HRC	38	200	160	120				140	120	80
	Hard cast iron		cast	400	39	200	150	100				80	60	40
	Hardened cast iron		hardened and tempered	55 HRC	40	200	150	100				–	–	–
X	Non-metallic materials	Thermoplastics			41									
		Thermosetting plastics			42									
		Plastic, glass-fibre reinforced GFRP			43									
		Plastic, carbon fibre reinforced CFRP			44									
		Graphite			45									
		Wood			46									

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.
For examples of material for cutting tool groups view page D11.

HC	Coated carbide
HT	Uncoated carbide, primary component (TiC) or (TiN), cermet
HW	Uncoated carbide, primary component (WC)
BL	Cubic boron nitride with low BN content
BH	Cubic boron nitride with high BN content
CN	Si ₃ N ₄ ceramic
CM	Mixed ceramic
HC ₁	Coated cermet
BC	CBN with coating
CC	Coated cutting ceramic
CR	Cutting ceramic, primary component aluminium oxide (Al ₂ O ₃), reinforced
DP	Polycrystalline diamond

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Turning insert, positive

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]											
						HC (CVD)											
						YBC103			YB6315			YBC152					
						Feed rate [mm]			Feed rate [mm]			Feed rate [mm]					
						0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4			
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1	460	400	280	450	390	270	450	390	270			
		approx. 0,45 % C	annealed	190	2	390	340	240	380	330	230	380	330	230			
		approx. 0,45 % C	tempered	250	3	310	275	210	300	265	200	300	265	200			
		approx. 0,75 % C	annealed	270	4	300	265	200	290	255	190	290	255	190			
		approx. 0,75 % C	tempered	300	5	260	235	180	250	225	170	250	225	170			
P	Low-alloyed steel		annealed	180	6	370	310	190	360	300	180	360	300	180			
			tempered	275	7	260	220	160	250	210	150	250	210	150			
			tempered	300	8	240	210	160	230	200	150	230	200	150			
			tempered	350	9	210	180	130	200	170	120	200	170	120			
	High-alloyed steel and high-alloyed tool steel		annealed	200	10	330	285	200	320	275	190	320	275	190			
			hardened and tempered	325	11	170	160	140	160	150	130	160	150	130			
M	Stainless steel	ferritic/martensitic	annealed	200	12												
		martensitic	tempered	240	13												
		austenitic	quench hardened	180	14												
		austenitic-ferritic		230	15												
K	Grey cast iron	perlitic/ferritic		180	16												
		perlitic (martensitic)		260	17												
	Cast iron with spheroidal graphite	ferritic		160	18												
		perlitic		250	19												
	Malleable cast iron	ferritic		130	20												
		perlitic		230	21												
N	Aluminium wrought alloys	cannot be hardened		60	22												
		hardenable	hardened	100	23												
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24												
		≤ 12% Si, hardenable	hardened	90	25												
		> 12% Si, cannot be hardened		130	26												
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27												
		CuZn, CuSnZn		90	28												
		CuSn, Pb-free copper, electrolytic copper		100	29												
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30												
			hardened	280	31												
		Ni or Co bass	annealed	250	32												
			hardened	350	33												
	Titanium alloys		cast	320	34												
		pure titanium		R _m 400	35												
H	Hardened steel		hardened	R _m 1050	36												
			hardened and tempered	55 HRC	37												
	Hard cast iron		hardened and tempered	60 HRC	38												
			cast	400	39												
X	Non-metallic materials		hardened and tempered	55 HRC	40												
		Thermoplastics			41												
		Thermosetting plastics			42												
		Plastic, glass-fibre reinforced GFRP			43												
		Plastic, carbon fibre reinforced CFRP			44												
		Graphite			45												
		Wood			46												

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For examples of material for cutting tool groups view page D11.

HC	Coated carbide
HT	Uncoated carbide, primary component (TiC) or (TiN), cermet
HW	Uncoated carbide, primary component (WC)
BL	Cubic boron nitride with low BN content
BH	Cubic boron nitride with high BN content
CN	Si ₃ N ₄ ceramic
CM	Mixed ceramic
HC ₁	Coated cermet
BC	CBN with coating
CC	Coated cutting ceramic
CR	Cutting ceramic, primary component aluminium oxide (Al ₂ O ₃), reinforced
DP	Polycrystalline diamond

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Turning insert, positive

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]											
						HC (CVD)						HC (PVD)					
						YBD152C			YBG101			YBG102					
						Feed rate [mm]			Feed rate [mm]			Feed rate [mm]					
						0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4			
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1												
		approx. 0,45 % C	annealed	190	2												
		approx. 0,45 % C	tempered	250	3												
		approx. 0,75 % C	annealed	270	4												
		approx. 0,75 % C	tempered	300	5												
B	Low-alloyed steel		annealed	180	6												
			tempered	275	7												
			tempered	300	8												
			tempered	350	9												
	High-alloyed steel and high-alloyed tool steel		annealed	200	10												
			hardened and tempered	325	11												
M	Stainless steel	ferritic/martensitic	annealed	200	12							305	245	205			
		martensitic	tempered	240	13							150	125	100			
		austenitic	quench hardened	180	14							200	165	145			
		austenitic-ferritic		230	15							160	130	115			
K	Grey cast iron	perlitic/ferritic		180	16	520	360	200									
		perlitic (martensitic)		260	17	280	210	135									
	Cast iron with spheroidal graphite	ferritic		160	18	280	220	135									
		perlitic		250	19	210	160	100									
	Malleable cast iron	ferritic		130	20	280	245	180									
		perlitic		230	21	210	160	100									
N	Aluminium wrought alloys	cannot be hardened		60	22				1800	880	–	1800	880	–			
		hardenable	hardened	100	23				540	380	–	540	380	–			
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24				500	270	–	500	270	–			
		≤ 12% Si, hardenable	hardened	90	25				320	170	–	320	170	–			
		> 12% Si, cannot be hardened		130	26				290	150	–	290	150	–			
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27				660	320	–	660	320	–			
		CuZn, CuSnZn		90	28				330	300	–	330	300	–			
		CuSn, Pb-free copper, electrolytic copper		100	29				220	175	–	220	175	–			
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30							60	45	–			
			hardened	280	31							55	40	–			
		Ni or Co bass	annealed	250	32							55	40	–			
			hardened	350	33							50	35	–			
		cast		320	34							50	35	–			
T	Titanium alloys	pure titanium		R _m 400	35							95	60	–			
		α and β alloys	hardened	R _m 1050	36							75	40	–			
H	Hardened steel		hardened and tempered	55 HRC	37												
			hardened and tempered	60 HRC	38												
	Hard cast iron		cast	400	39												
	Hardened cast iron		hardened and tempered	55 HRC	40												
X	Non-metallic materials	Thermoplastics			41												
		Thermosetting plastics			42												
		Plastic, glass-fibre reinforced GFRP			43												
		Plastic, carbon fibre reinforced CFRP			44												
		Graphite			45												
		Wood			46												

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For examples of material for cutting tool groups view page D11.

HC	Coated carbide
HT	Uncoated carbide, primary component (TiC) or (TiN), cermet
HW	Uncoated carbide, primary component (WC)
BL	Cubic boron nitride with low BN content
BH	Cubic boron nitride with high BN content
CN	Si ₃ N ₄ ceramic
CM	Mixed ceramic
HC ₁	Coated cermet
BC	CBN with coating
CC	Coated cutting ceramic
CR	Cutting ceramic, primary component aluminium oxide (Al ₂ O ₃), reinforced
DP	Polycrystalline diamond

HC	Coated carbide
HT	Uncoated carbide, primary component (TiC) or (TiN), cermet
HW	Uncoated carbide, primary component (WC)
BL	Cubic boron nitride with low BN content
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HC ₁	Coated cermet
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CC	Coated cutting ceramic
CR	Cutting ceramic, primary component aluminium oxide (Al ₂ O ₃), reinforced
DP	Polycrystalline diamond

Turning insert, positive

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]								
						HW						BL		
						YD101			YD201			YCB112		
						Feed rate [mm]			Feed rate [mm]			Feed rate [mm]		
						0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,2	0,3
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1									
		approx. 0,45 % C	annealed	190	2									
		approx. 0,45 % C	tempered	250	3									
		approx. 0,75 % C	annealed	270	4									
		approx. 0,75 % C	tempered	300	5									
B	Low-alloyed steel		annealed	180	6									
			tempered	275	7									
			tempered	300	8									
			tempered	350	9									
	High-alloyed steel and high-alloyed tool steel		annealed	200	10									
			hardened and tempered	325	11									
M	Stainless steel	ferritic/martensitic	annealed	200	12									
		martensitic	tempered	240	13									
		austenitic	quench hardened	180	14									
		austenitic-ferritic		230	15									
K	Grey cast iron	perlitic/ferritic		180	16									
		perlitic (martensitic)		260	17									
	Cast iron with spheroidal graphite	ferritic		160	18									
		perlitic		250	19									
	Malleable cast iron	ferritic		130	20									
		perlitic		230	21									
N	Aluminium wrought alloys	cannot be hardened		60	22	1550	1050	700	1550	1050	700			
		hardenable	hardened	100	23	450	320	200	450	320	200			
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24	400	270	150	400	270	150			
		≤ 12% Si, hardenable	hardened	90	25	250	170	95	250	170	95			
		> 12% Si, cannot be hardened		130	26	230	150	85	230	150	85			
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27	550	370	170	550	370	170			
		CuZn, CuSnZn		90	28	260	210	160	260	210	160			
		CuSn, Pb-free copper, electrolytic copper		100	29	190	145	95	190	145	95			
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30	55	30	–	55	30	–	–	–	–
			hardened	280	31	55	25	–	55	25	–	–	–	–
		Ni or Co bass	annealed	250	32	45	25	–	45	25	–	180	160	140
			hardened	350	33	35	20	–	35	20	–	160	140	120
	Titanium alloys	cast		320	34	40	20	–	40	20	–	120	100	80
		pure titanium		R _m 400	35	60	40	–	60	40	–	–	–	–
H	Hardened steel	α and β alloys	hardened	R _m 1050	36	30	–	–	30	–	–	–	–	–
			hardened and tempered	55 HRC	37							220	170	130
	Hard cast iron		hardened and tempered	60 HRC	38							200	160	120
			cast	400	39							200	150	100
X	Non-metallic materials		hardened and tempered	55 HRC	40							200	150	100
		Thermoplastics			41									
		Thermosetting plastics			42									
		Plastic, glass-fibre reinforced GFRP			43									
		Plastic, carbon fibre reinforced CFRP			44									
		Graphite			45									
		Wood			46									

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.
For examples of material for cutting tool groups view page D11.

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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- | | |
|-----------------|--|
| HC | Coated carbide |
| HT | Uncoated carbide, primary component (TiC) or (TiN), cermet |
| HW | Uncoated carbide, primary component (WC) |
| BL | Cubic boron nitride with low BN content |
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| DP | Polycrystalline diamond |