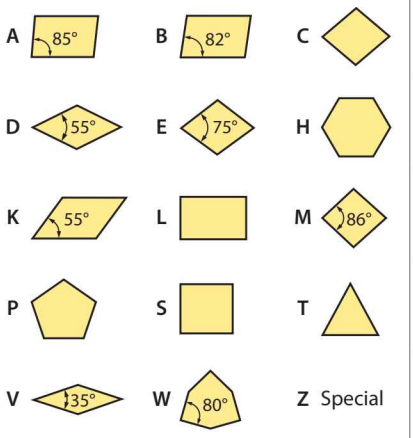
General turning ISO code – PCBN & PCD inserts

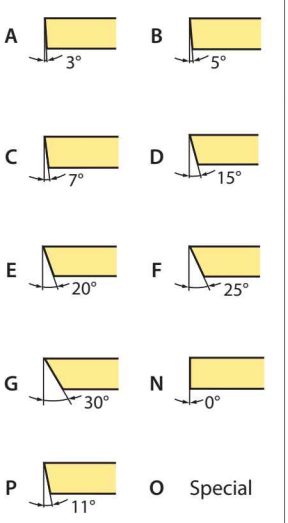
C	N	G	A	12	04	08	T	020	20	–	2	(W)
1	2	3	4	5	6	7	8	9	10		11	12

Insert shape



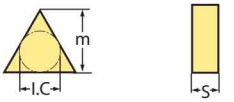
1

Clearance angle



2

Tolerance class

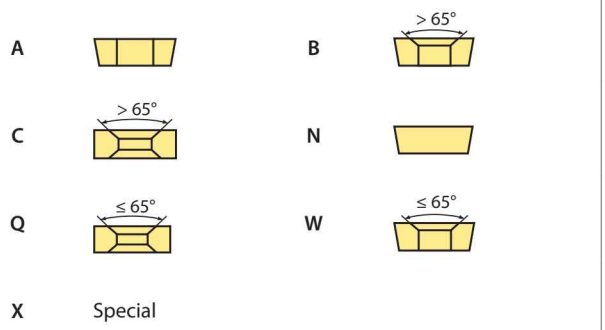


Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,15	±0,005	±0,025
K	±0,05–0,15	±0,013	±0,025
L	±0,05–0,15	±0,025	±0,025
M	±0,05–0,15	±0,08–0,20	±0,130
N	±0,05–0,15	±0,08–0,20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

3

Fastening features (metric)

Insert shape



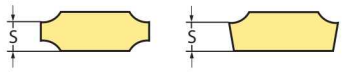
4

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

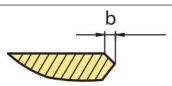
7

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)

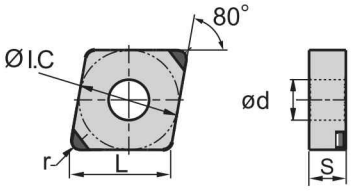
12

Turning CBN 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



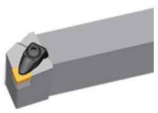
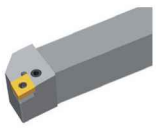
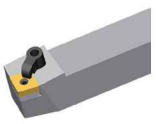
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			●
N			
S	○ ❁		
H	○ ❁ ❁	○ ❁ ❁	

	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

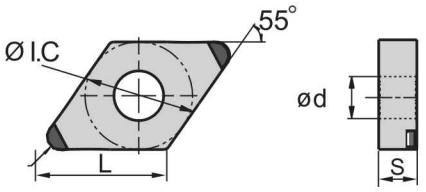
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

Turning CBN inserts

Ideal machining conditions
Normal machining conditions
Unfavourable machining conditions

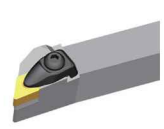
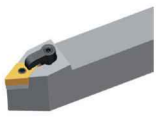


DN** negative insert					BL (CBN)				BC (CBN)			BH (CBN)
					YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	ISO	r	a_p	f								
	DNGA150604E-2	0.4	0.08-0.50	0.05-0.20	○			○				
	DNGA150604S01020-2	0.4	0.08-0.50	0.05-0.20			○			○		○
	DNGA150604S01225-2	0.4	0.08-0.50	0.05-0.20		○		○	○			
	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

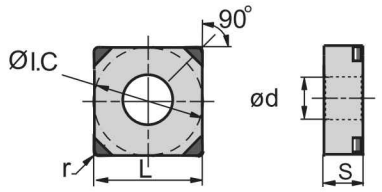
System code A158 Grade selection A42 Technical info A501 Cutting data A366

- 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



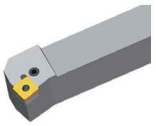
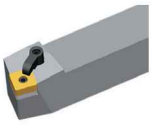
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			●
N			
S	○ ❁		
H	○ ❁ ❁	○ ❁ ❁	

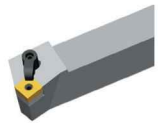
ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
SNGA120408S01020-4	0.8	0.08-0.50	0.05-0.25								○
SNGA120408S01525-4	0.8	0.08-0.50	0.05-0.25		○		○	○			
SNGA120408S02020-4	0.8	0.08-0.50	0.05-0.25			○			○		
SNGA120412S01020-4	1.2	0.08-0.50	0.05-0.30								○
SNGA120412S01525-4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

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

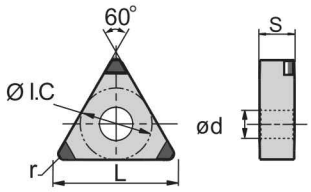
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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



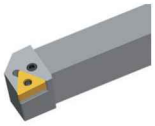
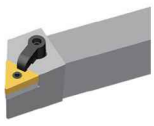
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			○
N			
S	○	◉	
H	○ ◉ ◉	○ ◉ ◉	

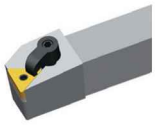
ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
TNGA160404S01020-3	0.4	0.08-0.50	0.05-0.20			○			○		○
TNGA160404S01225-3	0.4	0.08-0.50	0.05-0.20		○			○			
TNGA160408S01020-3	0.8	0.08-0.50	0.05-0.25								○
TNGA160408S01525-3	0.8	0.08-0.50	0.05-0.25		○		○	○			
TNGA160408S02020-3	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

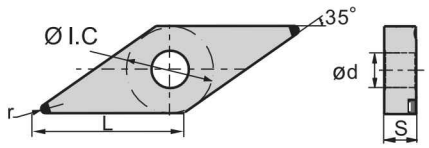
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

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



		ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
P													
M													
K													○
N													
S						○		⊛					
H							○	⊛	⊛	○	⊛	⊛	
	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

Tool holder

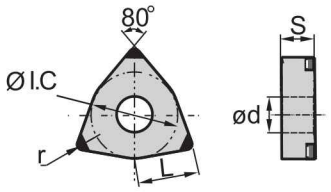
DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

System code A158 Grade selection A42 Technical info A501 Cutting data A366

- 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

Turning CBN inserts

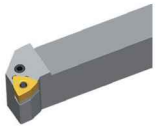


WN** negative insert					BL (CBN)				BC (CBN)			BH (CBN)
					YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
P												
M												
K												●
N												
S					○			◔				
H						○	◔	◉	○	◔	◉	
ISO		r	a_p	f								
	**WNGA080404S01020-3**	0.4	0.08-0.50	0.05-0.20			○			○		○
	WNGA080404S01225-3	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

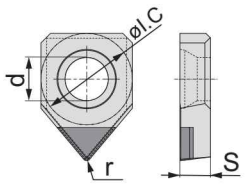
DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

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

Tool holder
C*-SZLNR/L**
Kr: 95°

A365

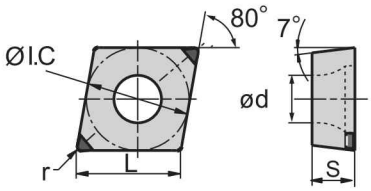
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

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		○	◉	◉	○	◉	◉	

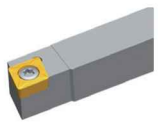
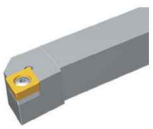
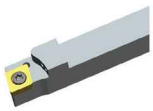
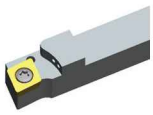
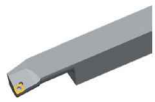
ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
CCGW060202S01020-2	0.2	0.08-0.50	0.05-0.20			○			○		○
CCGW060202S01225-2	0.2	0.08-0.50	0.05-0.150.05-0.20		○			○			
CCGW060204S01020-2	0.4	0.08-0.50	0.05-0.20			○			○		○
CCGW060204S01225-2	0.4	0.08-0.50	0.05-0.20		○			○			
CCGW060208S01020-2	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			○			○		

● Ex stock ○ On demand

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

System code A158 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

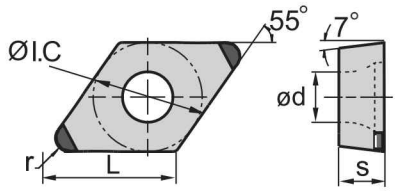
System code > A158 Grade selection > A42 Technical info > A501 Cutting data > A366

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



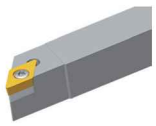
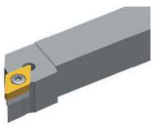
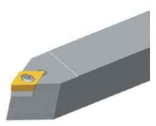
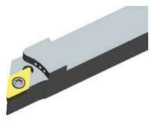
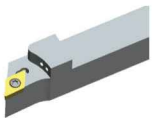
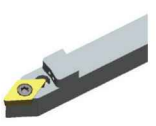
	BL (CBN)				BC (CBN)			BH (CBN)
	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
P								
M								
K								○
N								
S	○		◉					
H		○	◉	◉	○	◉	◉	

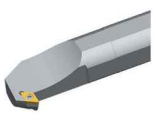
ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
DCGW070202S01020-2	0.2	0.08-0.50	0.05-0.15			●			○		
DCGW070202S01225-2	0.2	0.08-0.50	0.05-0.15		○			○			
DCGW070204S01020-2	0.4	0.08-0.50	0.05-0.20			●			○		○
DCGW070204S01225-2	0.4	0.08-0.50	0.05-0.20		●			○			
DCGW070208S01020-2	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

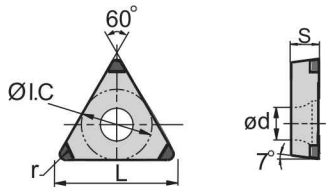
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

Turning CBN inserts

- 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

TC** positive insert



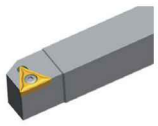
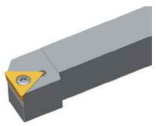
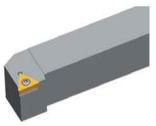
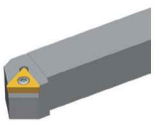
	BL (CBN)				BC (CBN)			BH (CBN)
	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
P								
M								
K								●
N								
S	○			◉				
H		○	◉	◉	○	◉	◉	

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

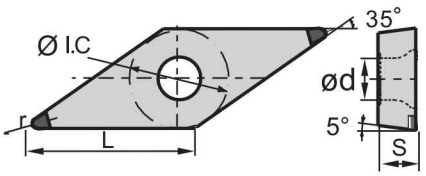
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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



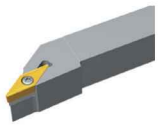
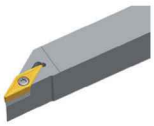
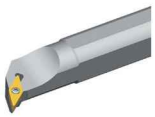
	BL (CBN)				BC (CBN)			BH (CBN)
	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
P								
M								
K								○
N								
S	○		◍					
H		○	◍	◍	○	◍	◍	

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

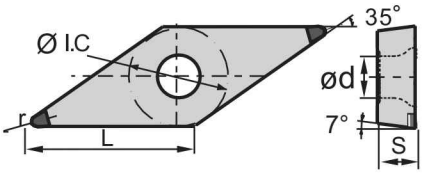
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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



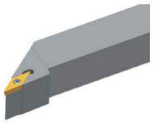
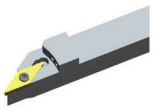
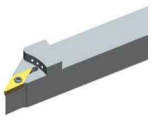
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			●
N			
S	○	◎	
H	◯ ◎ ◉	◯ ◎ ◉	

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

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°

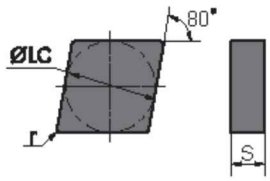
A364

Turning 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°

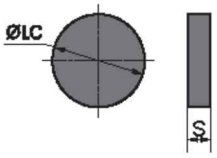
A292

System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

Tool holder
CRDNN

A298

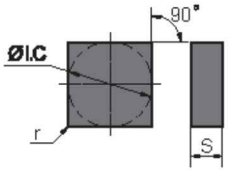
System code > A158 | Grade selection > A42 | Technical info > A501 | Cutting data > A366

Ideal machining conditions
Normal machining conditions
Unfavourable machining conditions

SNGN	L	I.C	S
12 04	12.7	12.7	4.76

Turning CBN inserts

SN** negative insert

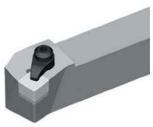


					BL (CBN)	BC (CBN)	BH (CBN)
					YZB630	YZB630C	YZB223
	ISO	r	a_p	f			
	SNGN120408S01525	0.8	0.5-2.0	0.3-0.5	○	○	
	SNGN120408T01525	0.8	0.5-2.0	0.3-0.5			●
	SNGN120412S01525	1.2	0.5-2.0	0.3-0.5	○	○	
	SNGN120412T01525	1.2	0.5-2.0	0.3-0.5			○
	SNGN120416T01525	1.6	0.5-2.0	0.3-0.5			●
	SNGN120412T01525-M	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

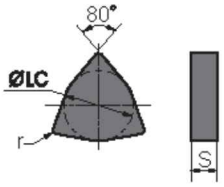
CSKNR/L	CSRNR/L	CSDNN
Kr: 75°	Kr: 75°	Kr: 45°
		
A296	A297	A299

System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

WNGN	L	I.C	S
08 04	8.69	12.7	4.76

Turning CBN inserts

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

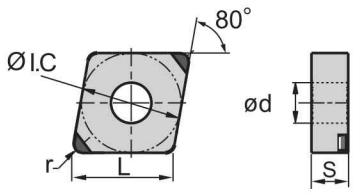
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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



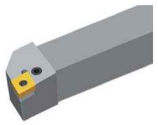
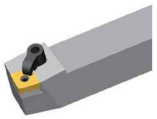
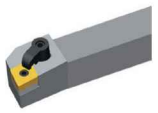
	P	M	K	N	S	H
DP				○		

	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

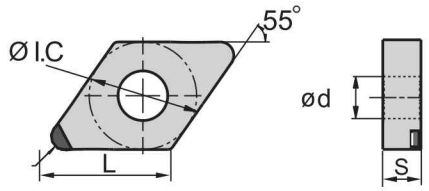
System code A158 Grade selection A42 Technical info A501 Cutting data A366

Turning PCD 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



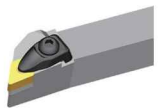
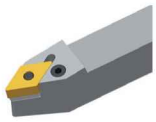
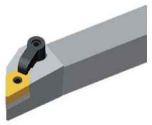
	ISO	r	a_p	f	DP YCD421
	**DNGA150602F-1**	0.2	0.08-0.50	0.05-0.15	○
	DNGA150604F-1	0.4	0.08-0.50	0.05-0.20	○
	DNGA150608F-1	0.8	0.08-0.50	0.05-0.25	○

P M K N S H

● 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

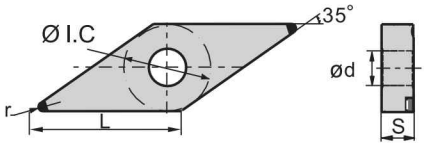
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

- 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 PCD inserts

VN** negative insert



	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	○

P M K **N** S H — DP

● 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

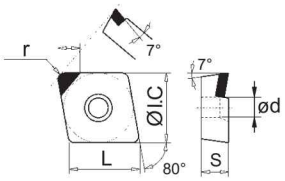
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

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

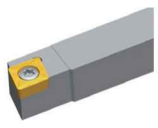
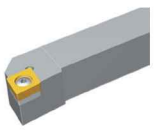
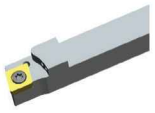
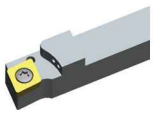
P
M
K
N ○
S
H

	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

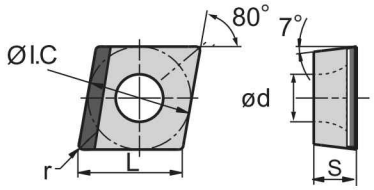
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

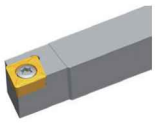
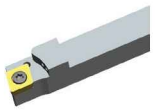
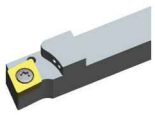


		ISO	r	a_p	f	YCD421
P						DP
M						
K						
N						
S						
H						
	**CCGT09T308-LL**		0.8	0.08-0.50	0.05-0.25	○
	CCGT09T308-LR		0.8	0.08-0.50	0.05-0.25	○
	CCGT120404-LL		0.4	0.08-0.50	0.05-0.20	○
	CCGT120404-LR		0.4	0.08-0.50	0.05-0.20	○
	CCGT120408-LL		0.8	0.08-0.50	0.05-0.25	○
	CCGT120408-LR		0.8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

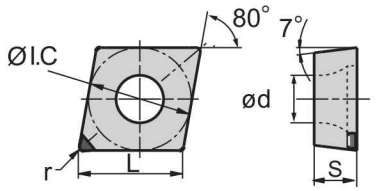
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

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

Turning PCD inserts

CC** positive insert



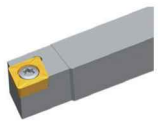
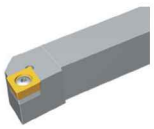
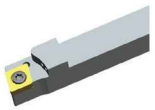
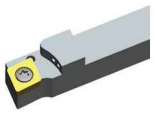
	ISO	r	a_p	f	YCD421
	**CCGW060202F-1**	0.2	0.08-0.50	0.05-0.15	○
	CCGW060204F-1	0.4	0.08-0.50	0.05-0.20	○
	CCGW09T304F-1	0.4	0.08-0.50	0.05-0.20	●
	CCGW09T308F-1	0.8	0.08-0.50	0.05-0.25	●
	CCGW120404F-1	0.4	0.08-0.50	0.05-0.20	●
	CCGW120408F-1	0.8	0.08-0.50	0.05-0.25	●

P M K N S H — DP

● 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

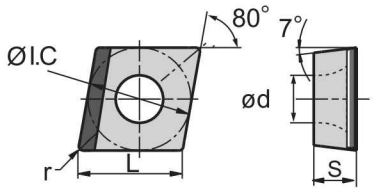
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

Turning PCD inserts

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

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



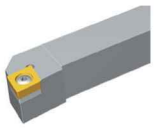
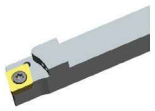
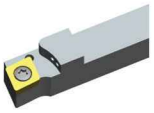
DP

	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°

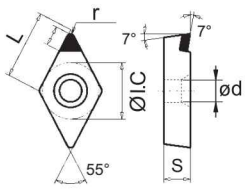
A355

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



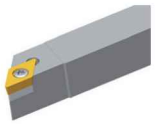
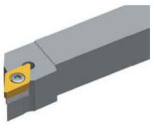
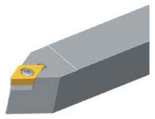
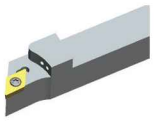
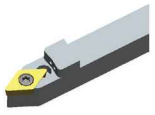
	DP
P	
M	
K	
N	○
S	
H	

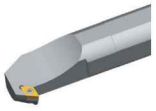
	ISO	r	a_p	f	YCD421
	**DCGT070202F-1**	0.2	0.08-0.50	0.05-0.15	○
	DCGT070204F-1	0.4	0.08-0.50	0.05-0.20	○
	DCGT11T302F-1	0.2	0.08-0.50	0.05-0.15	●
	DCGT11T304F-1	0.4	0.08-0.50	0.05-0.20	●
	DCGT11T308F-1	0.8	0.08-0.50	0.05-0.25	○

● Ex stock ○ On demand

DP Polycrystalline diamond

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

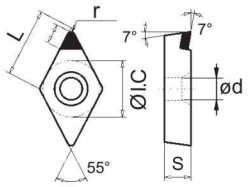
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

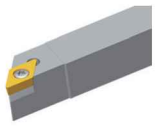
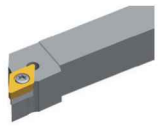
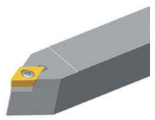
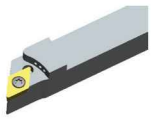
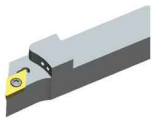


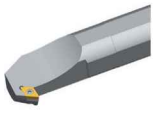
					DP
					YCD421
P					
M					
K					
N					○
S					
H					
ISO		r	a_p	f	
	**DCGT070202F-1MED**	0.2	0.08-0.50	0.05-0.15	○
	DCGT070204F-1MED	0.4	0.08-0.50	0.05-0.20	○
	DCGT070208F-1MED	0.8	0.08-0.50	0.05-0.25	○
	**DCGT11T302F-1MED**	0.2	0.08-0.50	0.05-0.15	○
	DCGT11T304F-1MED	0.4	0.08-0.50	0.05-0.20	○
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

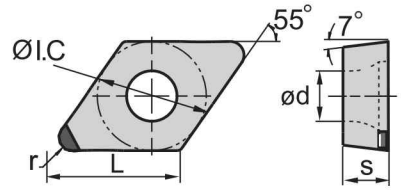
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

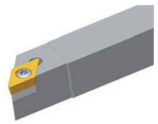
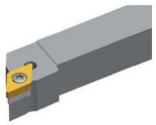
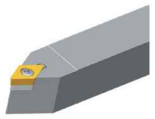
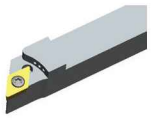
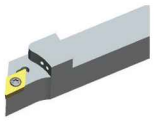
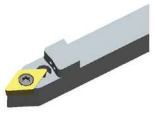


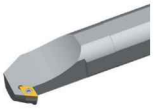
	ISO	r	a_p	f	YCD421
P					
M					
K					
N					○
S					
H					
	**DCGW070202F-1**	0.2	0.08-0.50	0.05-0.15	●
	DCGW070204F-1	0.4	0.08-0.50	0.05-0.20	●
	DCGW070208F-1	0.8	0.08-0.50	0.05-0.25	○
	DCGW11T302F-1	0.2	0.08-0.50	0.05-0.15	●
	DCGW11T304F-1	0.4	0.08-0.50	0.05-0.20	●

● Ex stock ○ On demand

DP Polycrystalline diamond

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

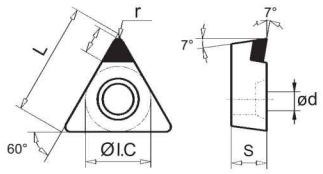
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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



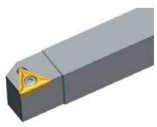
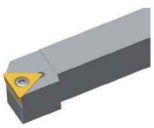
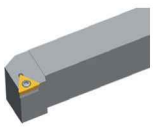
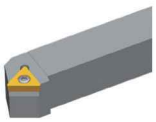
DP

	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

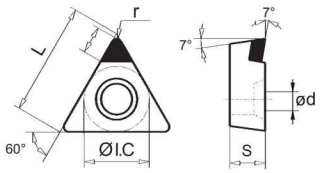
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

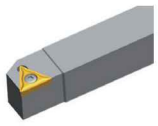
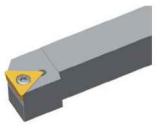
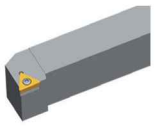
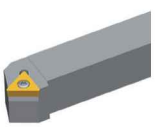


					DP
					P
					M
					K
					N ○
					S
					H
	ISO	r	a_p	f	YCD421
	**TCGT110202-L**	0.2	0.08-0.50	0.05-0.15	○
	TCGT110204-L	0.4	0.08-0.50	0.05-0.20	○
	TCGT110208-L	0.8	0.08-0.50	0.05-0.25	○
	TCGT16T302-L	0.2	0.08-0.50	0.05-0.15	○
	TCGT16T304-L	0.4	0.08-0.50	0.05-0.20	○
	TCGT16T308-L	0.8	0.08-0.50	0.05-0.25	○

● 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

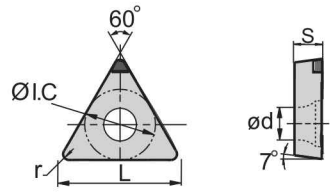
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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



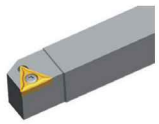
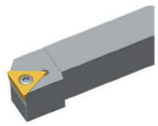
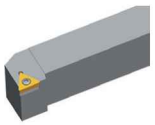
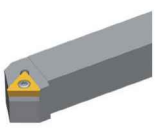
	ISO	r	a_p	f	YCD421
	**TCGW110202F-1**	0.2	0.08-0.50	0.05-0.15	○
	TCGW110204F-1	0.4	0.08-0.50	0.05-0.20	●
	TCGW110208F-1	0.8	0.08-0.50	0.05-0.25	○
	TCGW16T304F-1	0.4	0.08-0.50	0.05-0.20	●
	TCGW16T308F-1	0.8	0.08-0.50	0.05-0.25	○
	TCGW16T312F-1	1.2	0.08-0.50	0.05-0.30	○

DP: P, M, K, N (●), S, H

● 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

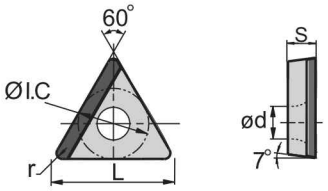
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

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



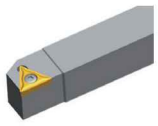
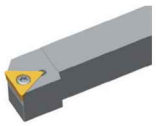
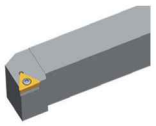
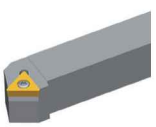
DP

	ISO	r	a_p	f	YCD421
P					
M					
K					
N					○
S					
H					
	**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

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

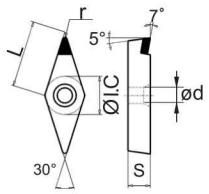
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

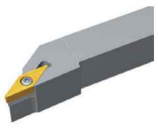
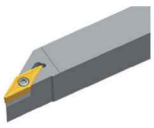
	P
	M
	K
	N ○
	S
	H

	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

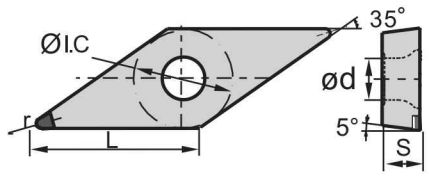
System code A158 Grade selection A42 Technical info A501 Cutting data A366

- 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

Turning PCD inserts

VB** positive insert

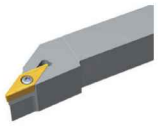
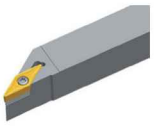
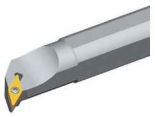


		ISO	r	a_p	f	YCD421
		**VBGW110302F-1**	0.2	0.08-0.50	0.05-0.15	○
		VBGW110304F-1	0.4	0.08-0.50	0.05-0.20	●
		VBGW160402F-1	0.2	0.08-0.50	0.05-0.15	○
		VBGW160404F-1	0.4	0.08-0.50	0.05-0.20	●
		VBGW160408F-1	0.8	0.08-0.50	0.05-0.25	○

● Ex stock ○ On demand

DP Polycrystalline diamond

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

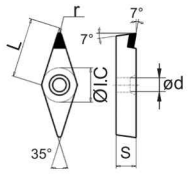
System code A158 Grade selection A42 Technical info A501 Cutting data A366

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

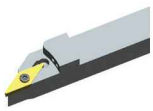
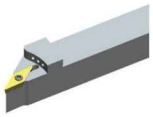


					DP
					P
					M
					K
					N
					S
					H
ISO		r	a_p	f	YCD421
	**VCGT110202F-1**	0.2	0.08-0.50	0.05-0.15	○
	VCGT110204F-1	0.4	0.08-0.50	0.05-0.20	○
	VCGT160402F-1	0.2	0.08-0.50	0.05-0.15	○
	VCGT160404F-1	0.4	0.08-0.50	0.05-0.20	○
	VCGT160408F-1	0.8	0.08-0.50	0.05-0.25	○

● 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

A Turning
B Milling
C Drilling
D Technical Information
E Index

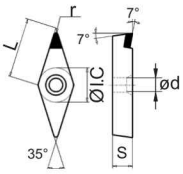
System code A158 Grade selection A42 Technical info A501 Cutting data A366

Turning PCD inserts

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

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

VC** positive insert



DP

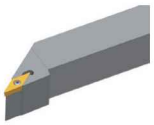
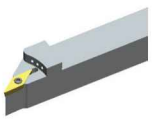
P
M
K
N
S
H

ISO	r	a_p	f	YCD421
VCGT110302F-1MED	0.2	0.08-0.50	0.05-0.15	○
VCGT110304F-1MED	0.4	0.08-0.50	0.05-0.20	○
VCGT160404F-1MED	0.4	0.08-0.50	0.05-0.20	○
VCGT160408F-1MED	0.8	0.08-0.50	0.05-0.25	○
VCGT160412F-1MED	1.2	0.08-0.50	0.05-0.30	○

● 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

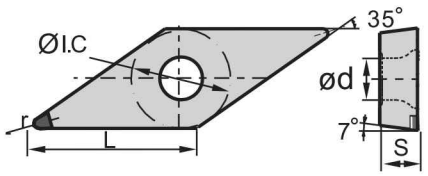
System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

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



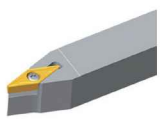
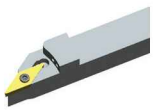
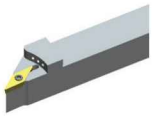
	ISO	r	a_p	f	YCD421
	VCGW110302F-1	0.2	0.08-0.50	0.05-0.15	○
	VCGW110304F-1	0.4	0.08-0.50	0.05-0.20	○
	VCGW160404F-1	0.4	0.08-0.50	0.05-0.20	○
	VCGW160408F-1	0.8	0.08-0.50	0.05-0.25	○

P M K N S H — DP

● 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°

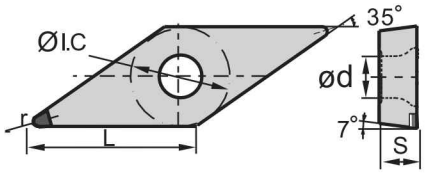
A364

System code A158 | Grade selection A42 | Technical info A501 | Cutting data A366

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

VCGX	L	I.C	S	d
22 05	22	12.7	5.56	5.5

Turning PCD inserts

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

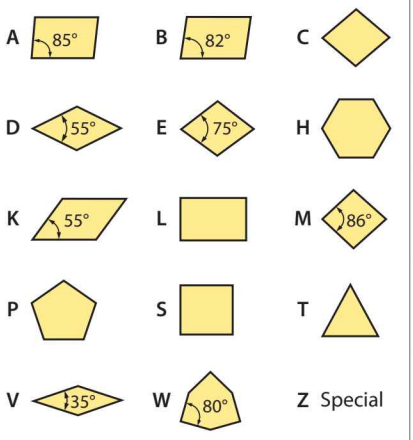
System code > A158 Grade selection > A42 Technical info > A501 Cutting data > A366

Notes

General turning ISO code – ceramic inserts

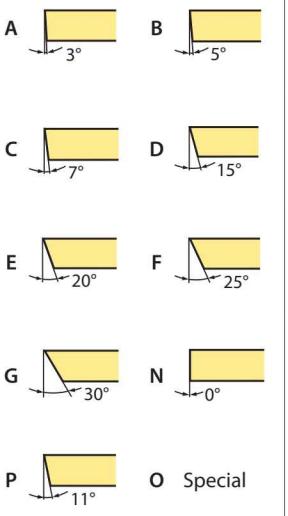
T	N	G	A	12	04	08	T	020	20
1	2	3	4	5	6	7	8	9	10

Insert shape



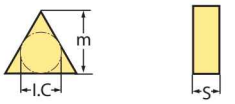
1

Clearance angle



2

Tolerance class

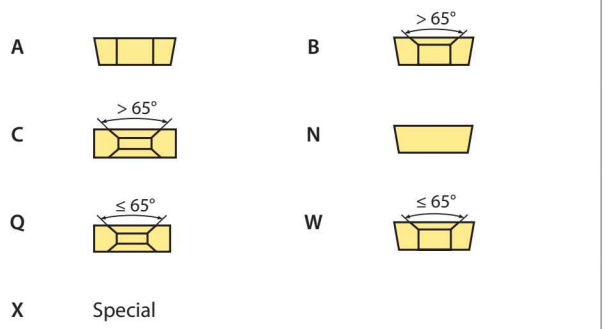


Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,15	±0,005	±0,025
K	±0,05–0,15	±0,013	±0,025
L	±0,05–0,15	±0,025	±0,025
M	±0,05–0,15	±0,08–0,20	±0,130
N	±0,05–0,15	±0,08–0,20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

3

Fastening features (metric)

Insert shape



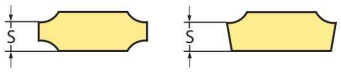
4

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

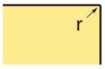
Insert thickness S [mm]



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

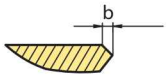
7

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°

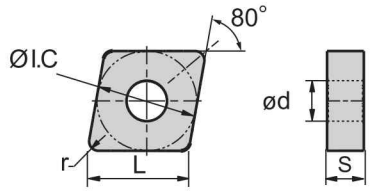
10

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



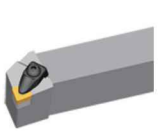
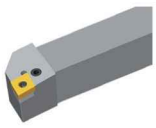
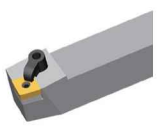
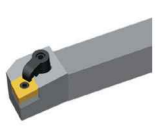
	CM	CC	CN	CR
P	○			
M				
K	○		◉	
N				
S			◉	◉ ◉
H		○		

	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

Tool holder

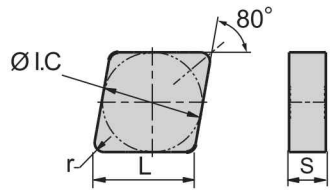
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

System code A198 Grade selection A42 Technical info A501 Cutting data A366

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

Turning ceramic inserts

● Ideal machining conditions
❁ Normal machining conditions
❁ Unfavourable machining conditions

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

System code A198 Grade selection A42 Technical info A501 Cutting data A366

Tool holder
CCLNR/L
Kr: 95°

A292

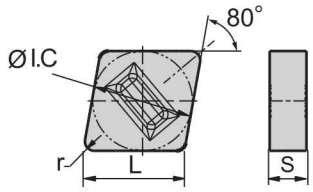
System code > A198 Grade selection > A42 Technical info > A501 Cutting data > A366

CNGX	L	I.C	S
12 07	12.9	12.7	7.94

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

Turning ceramic inserts

CN** negative insert



	ISO	r	a_p	f	CM: CA1000	CC: CM1000	CN: CN1000	CN: CS1000	CR: CW1400	CR: CW1800
P					○					
M										
K					○		◆			
N										
S								●	◆	◆
H						○				
	**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°

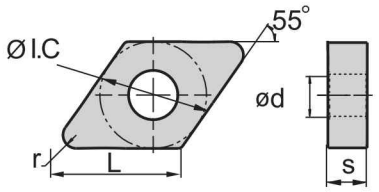
A300

System code A198 | Grade selection A42 | Technical info A501 | Cutting data A366

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

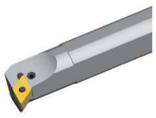


DN** negative insert					CM	CC	CN	CR
					P			
					M			
					K			
					N			
					S			
					H			
	ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	DNGA150404T02020	0.4	0.1-0.3	0.08-0.25		○		
	DNGA150408S01520	0.8	0.1-0.25	0.5-2.5				○
	DNGA150408T00520	0.8	0.1-0.25	0.5-2.5				●
	DNGA150408T02020	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

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

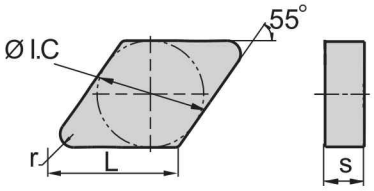
System code A198 | Grade selection A42 | Technical info A501 | Cutting data A366

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°

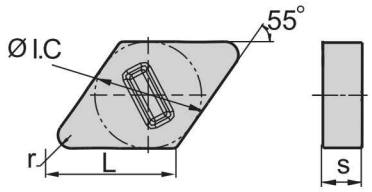
A294

System code A198 | Grade selection A42 | Technical info A501 | Cutting data A366

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

DNGX	L	I.C	S
15 07	15.5	12.7	7.94

Turning ceramic inserts



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	0.1-025			○			
	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

Tool holder
JDJNR/L
Kr: 93°

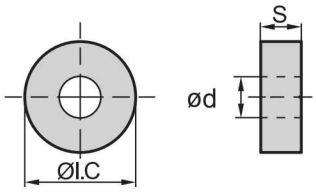
A301

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	

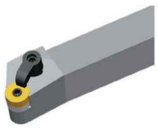


RN** negative insert				CM	CC	CN	CR
			P	○			
			M				
			K	○		⊛	
			N				
			S			○	⊛ ⊛
			H		○		
ISO		a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	RNGA120400T02020	0.1-0.6	0.1-0.4	○	○		

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

Tool holder

MRDNN	MRGNR/L
	
A267	A268

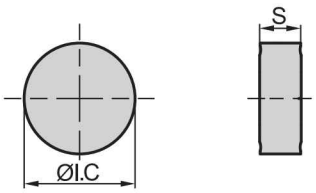
System code A198 | Grade selection A42 | Technical info A501 | Cutting data A366

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



	ISO	a_p	f	CM CA1000	CC CM1000	CN CN1000	CN CS1000	CR CW1400	CR CW1800
P				○					
M									
K				○		○			
N									
S							○	○	○
H					○				
	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	○					

● Ex stock ○ On demand

CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

System code > A198 Grade selection > A42 Technical info > A501 Cutting data > A366

Tool holder
CRDNN

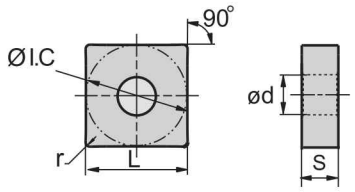
A298

System code > A198 Grade selection > A42 Technical info > A501 Cutting data > A366

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

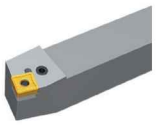
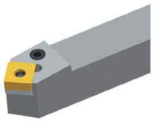
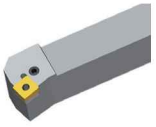
Turning ceramic inserts

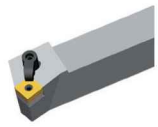
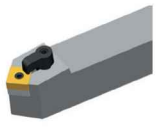
SN** negative insert					CM	CC	CN	CR
				P	○			
				M				
				K	○		◉	
				N				
				S			●	◉ ◉
				H		○		
ISO		r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	**SNGA120404T02020**	0.4	0.1-1.0	0.1-0.2			○	
	SNGA120408S02020	0.8	0.1-0.4	0.1-0.3		○		
	SNGA120408T02020	0.8	0.1-0.4	0.1-0.3	○	○	○	
	SNGA120412T02020	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

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

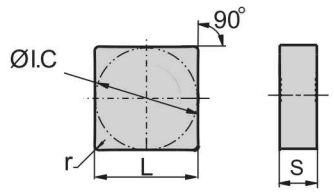
System code A198 | Grade selection A42 | Technical info A501 | Cutting data A366

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

Turning ceramic inserts

Ideal machining conditions
Normal machining conditions
Unfavourable machining conditions

SN** negative insert



	CM	CC	CN	CR
P	●			
M				
K	●		◍	
N				
S			◉	◍ ◍
H		○		

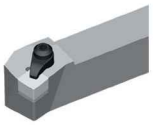
	ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	SNGN120404T02020	0.4	0.1-0.3	0.08-0.25	○			
	SNGN120408S01520	0.8	0.1-0.25	0.5-2.5				○
	SNGN120408S02020	0.8	0.1-0.4	0.1-0.3		○		
	SNGN120408T00520	0.8	0.15-1.5	0.1-025			○	●
	SNGN120408T02020	0.8	0.1-0.4	0.1-0.3	○		●	
	SNGN120412S01520	1.2	0.1-0.3	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

System code > A198 Grade selection > A42 Technical info > A501 Cutting data > A366

Tool holder

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

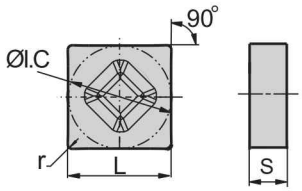
System code A198 Grade selection A42 Technical info A501 Cutting data A366

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

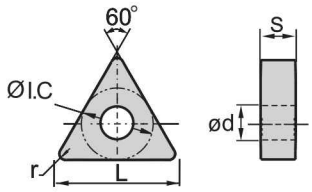
System code A198 | Grade selection A42 | Technical info A501 | Cutting data A366

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



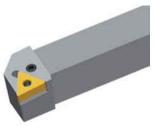
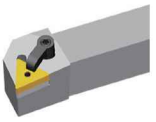
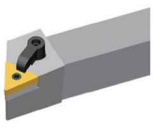
	CM	CC	CN	CR
P	○			
M				
K	○		◉	
N				
S			○	◉ ◉
H		○		

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	0.1-025			○	
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

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

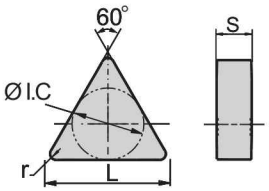
MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

System code A198 Grade selection A42 Technical info A501 Cutting data A366

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

Turning ceramic inserts

● Ideal machining conditions
✱ Normal machining conditions
✱ Unfavourable machining conditions

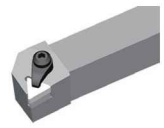
TN** negative insert		CM	CC	CN	CR
	P	●			
	M				
	K	●		✱	
	N				
	S			●	✱ ✱
	H		○		

	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	0.1-025			○	
	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

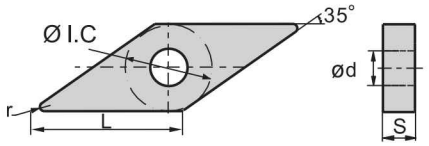
System code A198 Grade selection A42 Technical info A501 Cutting data A366

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		○		

	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

Tool holder

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

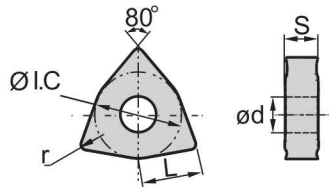
System code A198 Grade selection A42 Technical info A501 Cutting data A366

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

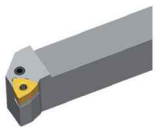
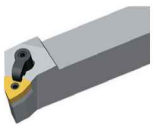


	ISO	r	a_p	f	CM: CA1000	CC: CM1000	CN: CN1000	CN: CS1000	CR: CW1400	CR: CW1800
P					○					
M										
K					○		◆			
N										
S								○	◆	◆
H						○				
	**WNGA080404T01020**	0.4	0.1-0.3	0.08-0.25		○				
	WNGA080404T02020	0.4	0.1-0.3	0.08-0.25		○				
	WNGA080408S02020	0.8	0.1-0.4	0.1-0.3		○				
	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

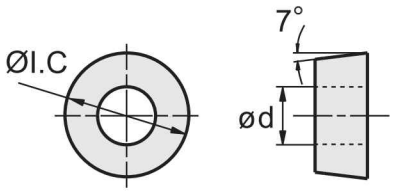
DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

System code A198 | Grade selection A42 | Technical info A501 | Cutting data A366

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

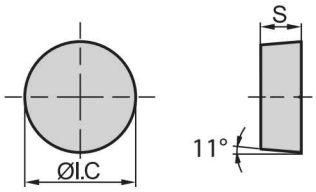
CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

System code A198 Grade selection A42 Technical info A501 Cutting data A366

RPGN	I.C	S
12 04	12.7	4.76

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

Turning ceramic inserts



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

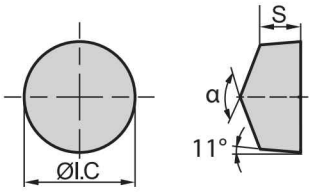
CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

System code > A198 Grade selection > A42 Technical info > A501 Cutting data > A366

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

RPGX	I.C	S
09 07	9.525	7.94

Turning ceramic inserts

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

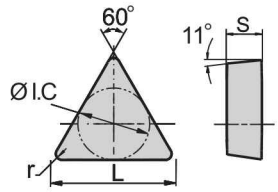
CM Mixed ceramic
CC Mixed ceramic, coated
CN Si3N4 Ceramic
CR Al2O3 cutting ceramic, reinforced

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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D Technical Information
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System code A198 Grade selection A42 Technical info A501 Cutting data A366