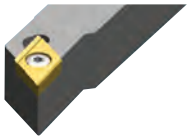
Excellent for precision machining

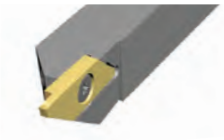
Auto Tools

- High precision machining of small parts and complex forms, etc.
- High quality products through stable machining
- Exclusive insert for automatic lathes

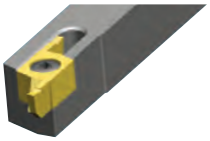
Type



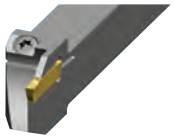
ISO



Blade



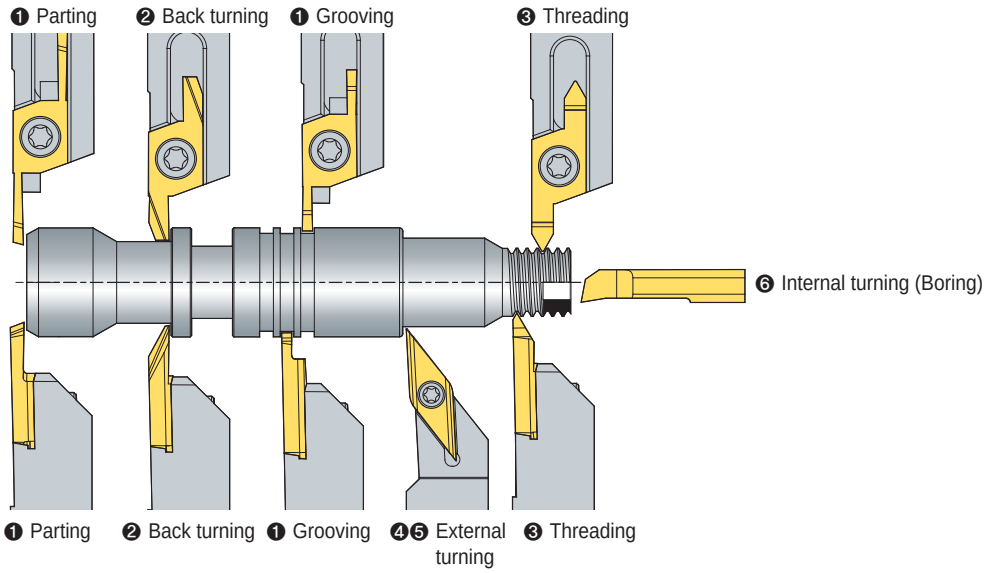
Multi utility



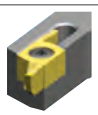
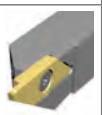
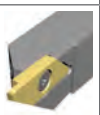
MGT

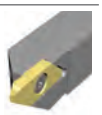
MSB tools

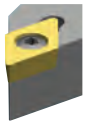
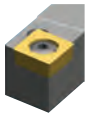
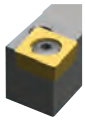
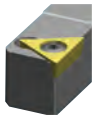
Application example



Index

Specification	❶ Parting and Grooving						❷ Back turning		
Holder	SXGNR/L	SXGNR/L	SBHR/L	SBHR/L	MGEHR/L	KGEHR/L	SXGNR/L	SXGNR/L	SBHR/L
Insert	SG	SC	SBG	SBC	MGMN	KGMN	SB	SGB	SBB
Holder size	10~20mm	10~20mm	10~16mm	10~16mm	10~16mm	10~16mm	10~20mm	10~20mm	10~16mm
Insert shape									
Cutting width	1~3mm	1~3mm	0.7~2.0mm	0.7~2.0mm	1.5~2.5mm	1.5~2.5mm	2~4mm	2~3mm	3.18mm
ØDmax	Ø18	Ø18	Ø16	Ø16	Ø32	Ø32	Tmax 8.0	Tmax 8.5	Tmax 8.0
Page	B140	B140	B137	B137	B144	B143	B140	B140	B137

Specification	❸ Threading	
Holder	SXGNR/L	SBHR/L
Insert	ST	SBT
Shank diameter	10~20mm	10~16mm
Insert shape		
ØDmin	Pitch ranges 0.5~1.5 / 1.5~3.0	Pitch ranges 0.2~1.5 / 1.0~2.0
Page	B140	B137

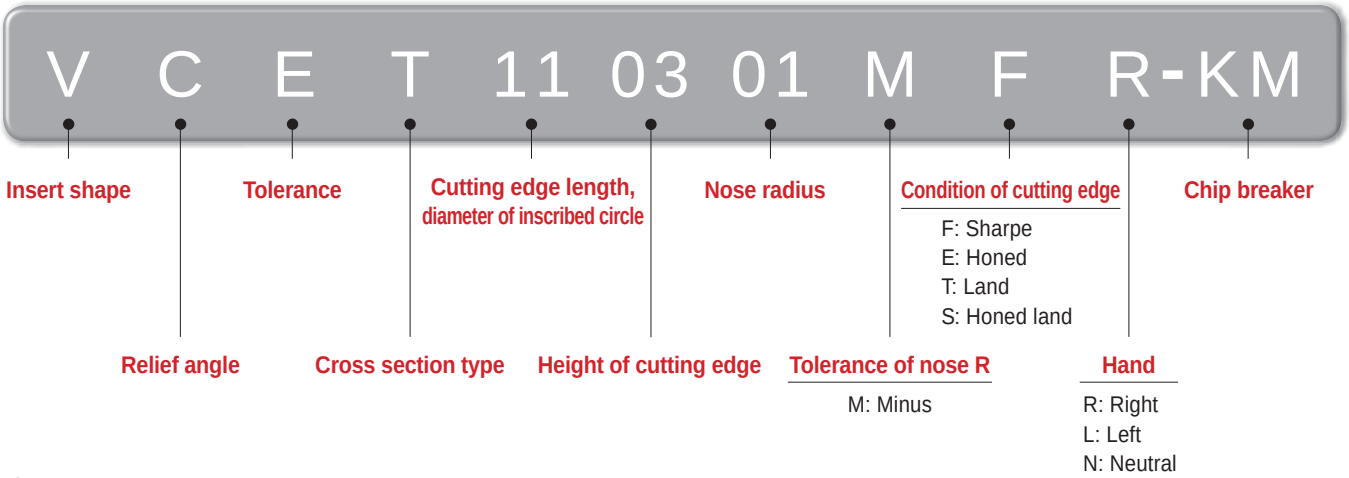
Specification	❹ External turning and Copy machining				❺ External turning and Facing		
Holder	SDJCR/L	SDNCN	SVJBR/L	SVJCR/L	SCACR/L	SCLCR/L	STACR/L
Insert	DC□T	DC□T	VB□T	VC□T	CC□T	CC□T	TC□T
Holder size	8~16mm	8~16mm	10~16mm	10~16mm	8~16mm	8~16mm	8~10mm
Insert shape							
Feature	Offset "0"				Offset "0"		
Page	B123	B124	B125	B125	B123	B123	B124

Specification	❻ Internal turning (Boring)				
Holder	SCLCR/L	STUBR/L	STUPR/L	SWUBR/L	MSB
Insert	CC□T	TB□T	TP□T	WB□T	-
Shank diameter	Ø4~Ø10	Ø8	Ø8	Ø5~Ø8	Ø4~Ø6
Insert shape					
ØDmin	Ø5	Ø8	Ø10	Ø5.5	Ø3.2
Page	B225	B225	B226	B227	B147~B151

Auto Tools (ISO type)

- ISO inserts for automatic lathes
- Precise R shape with the use of minus tolerance of nose R
- Tolerance class precise enough in no need for adjusting tools with the use of accurate cutting edge height
- Sharp blade for excellent chip control and surface roughness with low cutting force
- High precision tools for electrical/ electronics instruments and medical instruments

Code system (ISO type)



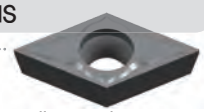
VP1/MS/FS chip breaker

- Exclusive chip breaker for hard-to-cut materials such as titanium alloy, Inconel, stainless steel, etc.
- Minimized cutting heat by reducing contact area between chips and rake surface with the use of high positive blade

VP1

- Hard cutting edge for medium cutting
- Optimal width of chip breaker by each depth of cuts realizes wide workpiece machining

MS



- Good surface finish for medium cutting
- Preventing welding in titanium machining
- Increasing chip evacuation in high feed machining
- Protecting cutting edge due to structure for good chip evacuation

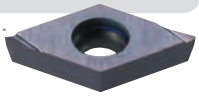
FS

- For finishing (for surface roughness)
- 1st recommended chip breaker for chip control
- Better surface roughness, surface finish and chip control

KF/KM chip breaker, ground type for grooving

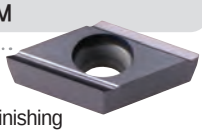
- Ground chip breaker with sharp cutting edge
- High precision insert of E-class tolerance with accurate nose radius

KF



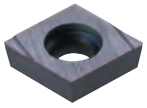
- For finishing
- Low cutting loads with sharp cutting edges
- Longer tool life due to lower chip evacuation resistance at high speed
- Excellent surface roughness

KM

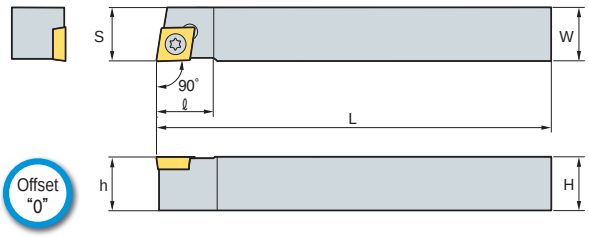


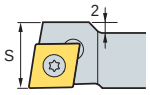
- For medium cutting to finishing
- Better chip flow due to wide chip pockets
- Longer tool life and better cutting action due to improved chip evacuation
- Excellent surface roughness

SCACR/L

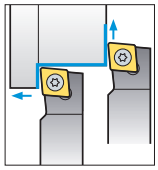


CC□T





※ Only SCACR/L1010-X09A is designed as above picture.



90°

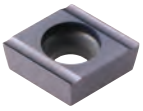
• R type insert

(mm)

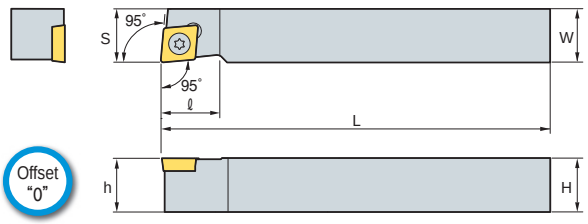
Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SCACR/L	0808-X06A	8	8	120	8	8	10	CC□T0602□□	FTKA02565	TW07P
	1010-X06A	10	10	120	10	10	10			
	1010-X09A	10	10	120	12	10	13	CC□T09T3□□	FTKA0410	TW15P
	1212-X09A	12	12	120	12	12	16			
	1616-X09A	16	16	120	16	16	16			

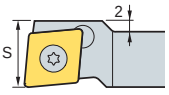
Applicable inserts **B73~B77, B103**

SCLCR/L

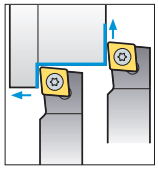


CC□T





※ Only SCLCR/L1010-X09A is designed as above picture.



95°

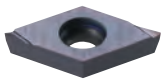
• R type insert

(mm)

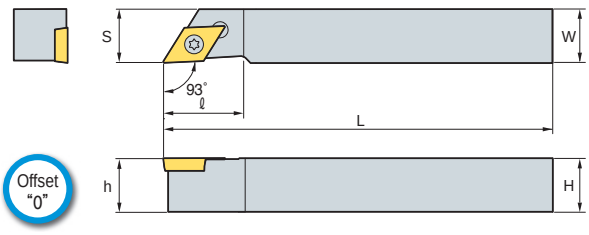
Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SCLCR/L	0808-X06A	8	8	120	8	8	10	CC□T0602□□	FTKA02565	TW07P
	1010-X06A	10	10	120	10	10	10			
	1010-X09A	10	10	120	12	10	13	CC□T09T3□□	FTKA0410	TW15P
	1212-X09A	12	12	120	12	12	16			
	1616-X09A	16	16	120	16	16	16			

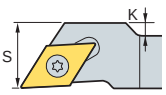
Applicable inserts **B73~B77, B103**

SDJCR/L

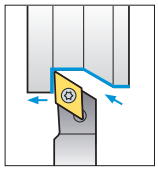


DC□T





※ Only SDJCR/L0808-X07A, 1010-X11A, 1212-X11A is designed as above picture.



93°

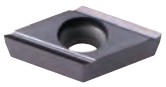
• R type insert

(mm)

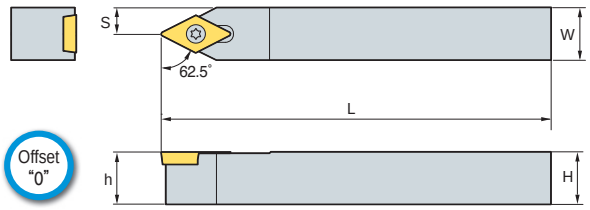
Designation		H	W	L	S	h	K	ℓ	Insert	Screw	Wrench
SDJCR/L	0808-X07A	8	8	120	10	8	2	18	DC□T0702□□	FTKA02565	TW07P
	1010-X07A	10	10	120	10	10	-	15			
	1010-X11A	10	10	120	14	10	4	18	DC□T11T3□□	FTKA0410	TW15P
	1212-X11A	12	12	120	14	12	2	18			
	1616-X11A	16	16	120	16	16	-	22			

Applicable inserts **B79~B82, B104**

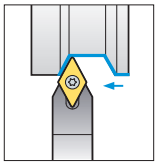
SDNCN



DC□T



※ Only SDNCN1010-X11A is designed as above picture.



62.5°

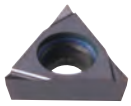
• R type insert

(mm)

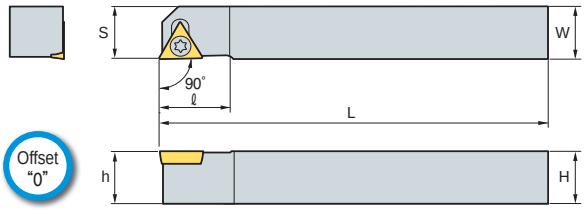
Designation		H	W	L	S	h	Insert	Screw	Wrench
SDNCN	0808-X07A	8	8	120	4	8	DC□T0702□□	FTKA02565	TW 07P
	1010-X07A	10	10	120	5	10			
	1010-X11A	10	10	120	7	10	DC□T11T3□□	FTKA0410	TW 15P
	1212-X11A	12	12	120	6	12			
	1616-X11A	16	16	120	8	16			

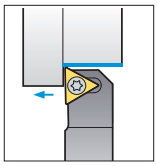
Applicable inserts **B79~B82, B104**

STACR/L



TC□T





90°

• R type insert

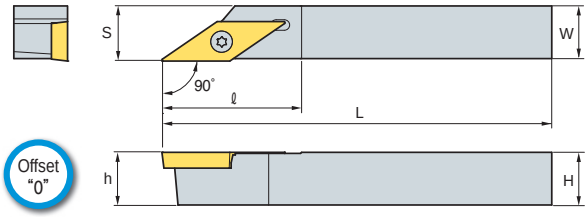
(mm)

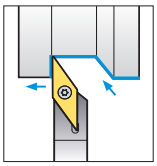
Designation		H	W	L	S	h	K	ℓ	Insert	Screw	Wrench
STACR/L	0808-X08A	8	8	120	8	8	1	12	TC□T0802□□	FTNA0206	TW06P
	1010-X08A	10	10	120	10	10	3	12			

Applicable inserts **B88~B89, B107**

SVACR/L

VC□□





90°

• R type insert

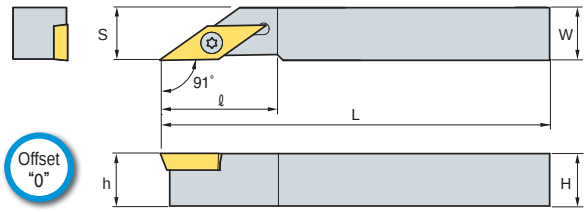
(mm)

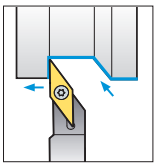
Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SVACR/L	0808-X12A	8	8	120	8.5	8	26	VC□□ T1203□□	FTKA02565	TW07P
	1010-X12A	10	10	120	10.5	10	26			
	1212-X12A	12	12	120	12.5	12	26			
	1616-X12A	16	16	120	16.5	16	26			
SVACR/L	0808-X12C	8	8	120	8.5	8	26	VC□□ X1203□□	FTKA02565	TW07P
	1010-X12C	10	10	120	10.5	10	26			
	1212-X12C	12	12	120	12.5	12	26			
	1616-X12C	16	16	120	16.5	16	26			

Applicable inserts **B97~B99, B109**

SVAPR/L

VP□T





91°

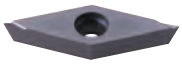
• R type insert

(mm)

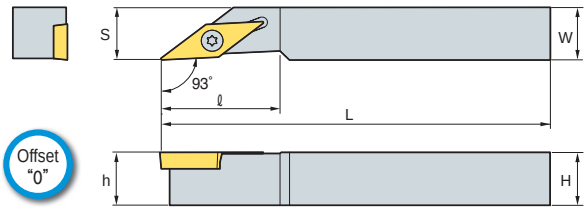
Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SVAPR/L	0808-X11A	8	8	120	8	8	22	VP□□T1103□□	FTKA02565	TW07P
	1010-X11A	10	10	120	10	10	22			
	1212-X11A	12	12	120	12	12	22			
	1616-X11A	16	16	120	16	16	24			

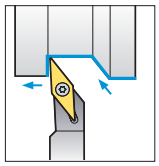
Applicable inserts **B100**

SVJBR/L



VB□T





93°

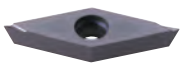
• R type insert

(mm)

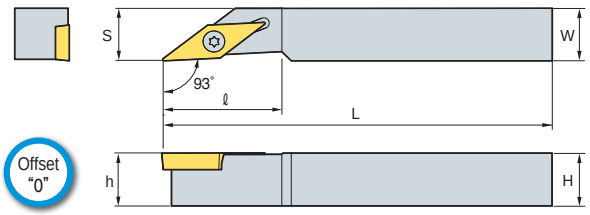
Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SVJBR/L	1010-X11A	10	10	120	10	10	22	VB□T1103□□	FTKA02565	TW07P
	1212-X11A	12	12	120	12	12	22			
	1616-X11A	16	16	120	16	16	24			

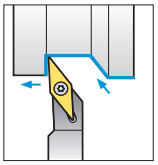
Applicable inserts **B94~B96, B108**

SVJCR/L



VC□□





93°

• R type insert

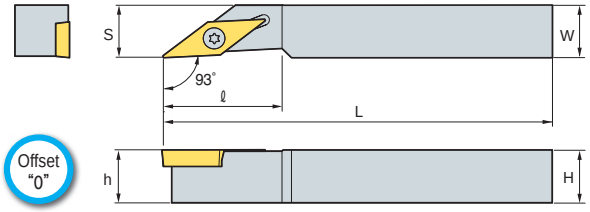
(mm)

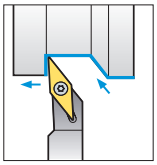
Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SVJCR/L	1010-X11A	10	10	120	10	10	22	VC□T1103□□	FTKA02565	TW07P
	1212-X11A	12	12	120	12	12	22			
	1616-X11A	16	16	120	16	16	24			
	0810-X12A	8	10	120	10	8	26	VC□T1203□□	FTKA02565	TW07P
	1010-X12A	10	10	120	10	10	26			
	1212-X12A	12	12	120	12	12	26			
	1616-X12A	16	16	120	16	16	26			
SVJCR/L	0810-X12C	8	10	120	10	8	26	VC□X1203□□	FTKA02565	TW07P
	1010-X12C	10	10	120	10	10	26			
	1212-X12C	12	12	120	12	12	26			
	1616-X12C	16	16	120	16	16	26			

Applicable inserts **B97~B99, B109**

SVJPR/L

VP□T





93°

• R type insert

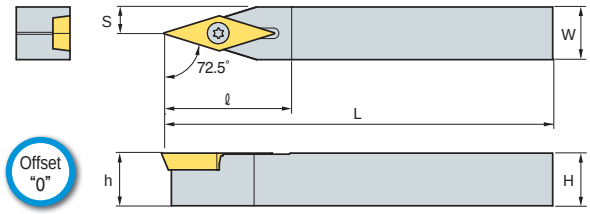
(mm)

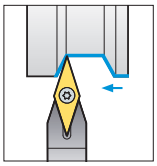
Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SVJPR/L	0810-X11A	8	10	120	8	10	22	VP□T1103□□	FTKA02565	TW07P
	1010-X11A	10	10	120	10	10	22			
	1212-X11A	12	12	120	12	12	22			
	1616-X11A	16	16	120	16	16	24			

Applicable inserts **B100**

SVVPN

VP□T





72.5°

• R type insert

(mm)

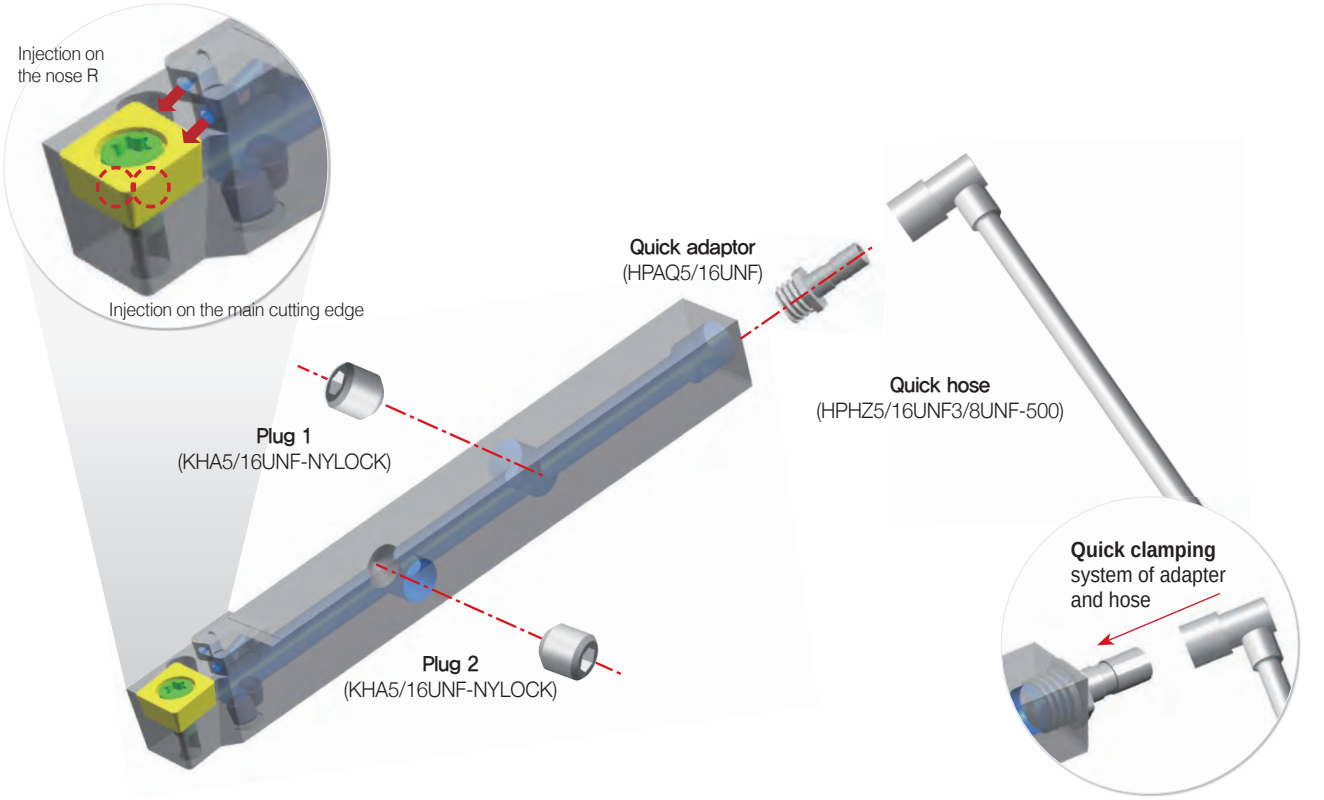
Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SVVPN	0808-X11A	8	8	120	4	8	24	VP□T1103□□	FTKA02565	TW07P
	1010-X11A	10	10	120	5	10	24			
	1212-X11A	12	12	120	6	12	24			
	1616-X11A	16	16	120	8	16	28			

Applicable inserts **B100**

Auto Tools (KHP Coolant)

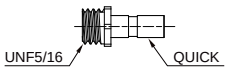
- KORLOY High pressure coolant for high productivity of automatic lathe
- High pressure coolant holder for high productivity of precise parts machining on automatic lathe
- Improved cooling and chip control due to injecting coolant through two holes to the main cutting edge and nose R concentrically
- Two holes with different injection angles each other increase chip control
- Easy clamping system of quick hose adapter and quick hose provides convenient using

Structure of holder

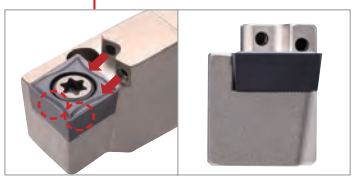


※ Quick adapter and quick hose are sold separately

Parts

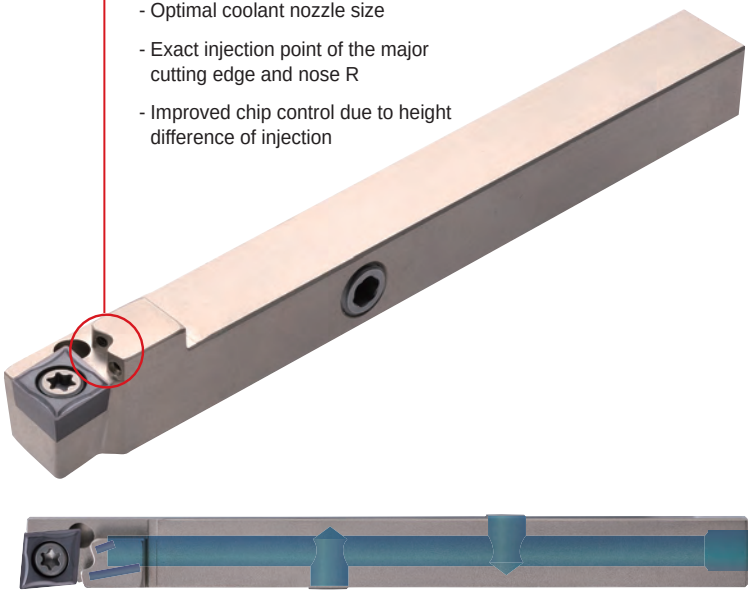
Shape		Configuration	Length	Q clamping dimensions	S clamping dimensionss
Quick to straight	HPHZ5/16UNF3/8UNF-500 	Q  S	500 mm	UNF5/16	-
Quick adaptor	HPAQ5/16UNF 		18.5 mm	UNF5/16	

Features



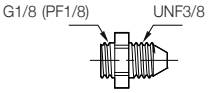
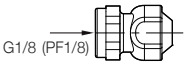
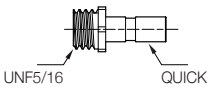
Injection nozzle

- Optimal coolant nozzle size
- Exact injection point of the major cutting edge and nose R
- Improved chip control due to height difference of injection



Max 300 bar		
Workpiece	**The minimum pressure**	**The maximum pressure**
P	100	300
M	120	
K	110	
N	100	
S	120	

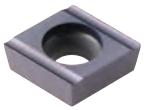
Parts

Devision	Designation	Shape	
Adaptor	**HPA3/8UNF1/8PF**		
Blank	**HPB1/8PF**		
Quick adaptor	**HPAQ5/16UNF**		

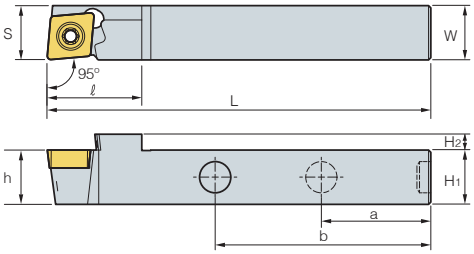
High pressure hose

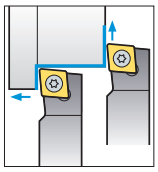
Shape		length	Q clamping dimensions	S clamping dimensionss
Quick to straight (HPHZ5/16UNF3/8UNF-500)		500 mm	UNF5/16	-

SCLCR/L



CC□T





95°

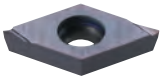
• R type insert

(mm)

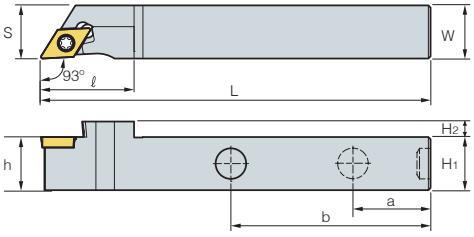
Designation		H1	H2	W	L	S	h	ℓ	a	b	Insert	Screw	Plug	Wrench
SCLCR/L	1212-X09A-KHP	12	3.5	12	120	12	12	21	40	70	CC□T09T3□□	FTKA0410	KHA0404-NYLOCK	TW15P

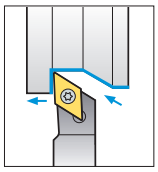
Applicable inserts **B66-69, B91**

SDJCR/L



DC□T





93°

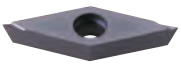
• R type insert

(mm)

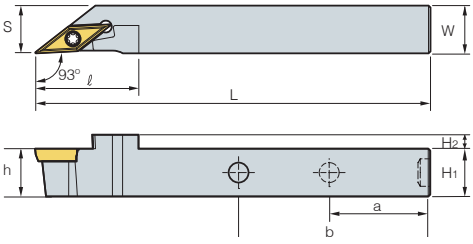
Designation		H1	H2	W	L	S	h	ℓ	a	b	Insert	Screw	Plug	Wrench
SDJCR/L	1212-X07A-KHP	12	3.5	12	120	12	12	21	40	70	DC□T0702□□	FTKA02565	KHA0404-NYLOCK	TW07P
	1212-X11A-KHP	12	3.5	12	120	14	12	29.8	40	70	DC□T11T3□□	FTKA0408	KHA0404-NYLOCK	TW15P

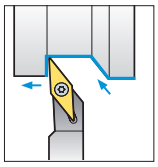
Applicable inserts **B71-73, B92**

SVJCR/L



VC□□





93°

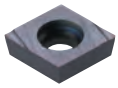
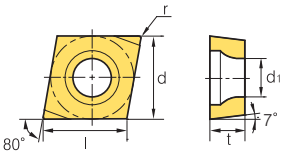
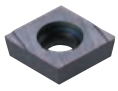
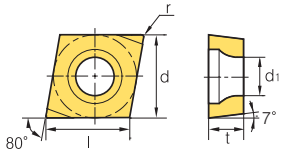
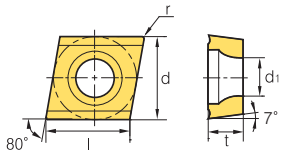
• R type insert

(mm)

Designation		H1	H2	W	L	S	h	ℓ	a	b	Insert	Screw	Plug	Wrench
SVJCR/L	1212-X11A-KHP	12	3.5	12	120	12	12	26	40	70	VC□T1103□□	FTKA02565	KHA0404-NYLOCK	TW07P
	1212-X12A-KHP	12	3.5	12	120	12	12	26	40	70	VC□□1203□□	FTKA02565	KHA0404-NYLOCK	TW07P

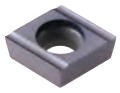
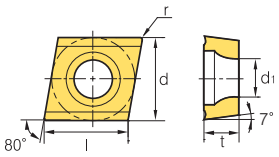
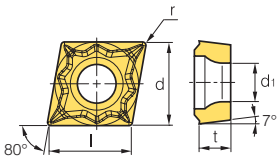
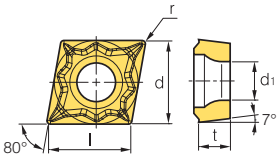
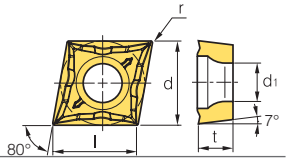
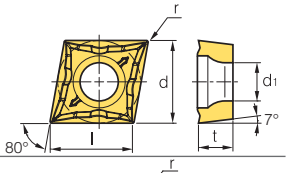
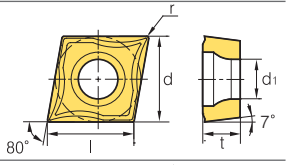
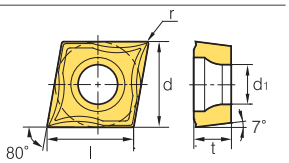
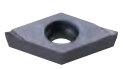
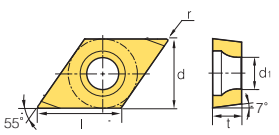
Applicable inserts **B86~B87, B97**

Insert

Picture	Designation	Coated				Uncoated	Dimensions (mm)					Configuration
		PC5300	PC8105	PC8110	PC8115	H01	l	d	t	r	d1	
CCGT-KF  Finishing (High precision)	0301003R-KF	●		●			3.6	3.5	1.39	0.03	1.9	
	030101R-KF	●		●			3.5	3.5	1.39	0.10	1.9	
	030102R-KF	●		●			3.5	3.5	1.39	0.20	1.9	
	030104R-KF	●		●			3.5	3.5	1.39	0.40	1.9	
	0401003R-KF	●		●			4.4	4.3	1.79	0.03	2.3	
	040101R-KF	●		●			4.4	4.3	1.79	0.10	2.3	
	040102R-KF	●		●			4.3	4.3	1.79	0.20	2.3	
	040104R-KF	●		●			4.3	4.3	1.79	0.40	2.3	
	0602003R-KF						6.6	6.35	2.38	0.03	2.8	
	060201R-KF						6.4	6.35	2.38	0.10	2.8	
	060202R-KF						6.2	6.35	2.38	0.20	2.8	
	09T3003R-KF						9.8	9.525	3.97	0.03	4.4	
	09T301R-KF						9.6	9.525	3.97	0.10	4.4	
	09T302R-KF						9.2	9.525	3.97	0.20	4.4	
	0301003L-KF	●		●			3.6	3.5	1.39	0.03	1.9	
	030101L-KF	●		●			3.5	3.5	1.39	0.10	1.9	
	030102L-KF	●		●			3.5	3.5	1.39	0.20	1.9	
	030104L-KF	●		●			3.5	3.5	1.39	0.40	1.9	
	0401003L-KF	●		●			4.4	4.3	1.79	0.03	2.3	
	040101L-KF	●		●			4.4	4.3	1.79	0.10	2.3	
	040102L-KF	●		●			4.3	4.3	1.79	0.20	2.3	
	040104L-KF	●		●			4.3	4.3	1.79	0.40	2.3	
	0602003L-KF						6.6	6.35	2.38	0.03	2.8	
	060201L-KF						6.4	6.35	2.38	0.10	2.8	
	060202L-KF						6.2	6.35	2.38	0.20	2.8	
	09T3003L-KF						9.8	9.525	3.97	0.03	4.4	
	09T301L-KF						9.6	9.525	3.97	0.10	4.4	
	09T302L-KF						9.2	9.525	3.97	0.20	4.4	
CCET-KF  Finishing (Utra high precision)	0602005MFR-KF	●		●			6.6	6.35	2.38	< 0.05	2.8	
	060201MFR-KF	●		●			6.4	6.35	2.38	< 0.10	2.8	
	060202MFR-KF	●		●			6.2	6.35	2.38	< 0.20	2.8	
	09T3005MFR-KF	●		●			9.8	9.525	3.97	< 0.05	4.4	
	09T301MFR-KF	●		●			9.6	9.525	3.97	< 0.10	4.4	
	09T302MFR-KF	●		●			9.2	9.525	3.97	< 0.20	4.4	
	0602005MFL-KF	●		●			6.6	6.35	2.38	< 0.05	2.8	
	060201MFL-KF	●		●			6.4	6.35	2.38	< 0.10	2.8	
	060202MFL-KF	●		●			6.2	6.35	2.38	< 0.20	2.8	
	09T3005MFL-KF	●		●			9.8	9.525	3.97	< 0.05	4.4	
	09T301MFL-KF	●		●			9.6	9.525	3.97	< 0.10	4.4	
	09T302MFL-KF	●		●			9.2	9.525	3.97	< 0.20	4.4	
CCGT-KM  Medium to finishing (High precision)	0602003R-KM	●		●			6.6	6.35	2.38	0.03	2.8	
	060201R-KM	●		●			6.4	6.35	2.38	0.10	2.8	
	060202R-KM	●		●			6.2	6.35	2.38	0.20	2.8	
	060204R-KM	●		●			6.2	6.35	2.38	0.40	2.8	
	09T3003R-KM	●		●			9.8	9.525	3.97	0.03	4.4	
	09T301R-KM	●		●			9.6	9.525	3.97	0.10	4.4	
	09T302R-KM	●		●			9.2	9.525	3.97	0.20	4.4	
	09T304R-KM	●		●			9.2	9.525	3.97	0.40	4.4	
	0602003L-KM	●		●			6.6	6.35	2.38	0.03	2.8	
	060201L-KM	●		●			6.4	6.35	2.38	0.10	2.8	
	060202L-KM	●		●			6.2	6.35	2.38	0.20	2.8	
	060204L-KM	●		●			6.2	6.35	2.38	0.40	2.8	
	09T3003L-KM	●		●			9.8	9.525	3.97	0.03	4.4	
	09T301L-KM	●		●			9.6	9.525	3.97	0.10	4.4	
	09T302L-KM	●		●			9.2	9.525	3.97	0.20	4.4	
	09T304L-KM	●		●			9.2	9.525	3.97	0.40	4.4	

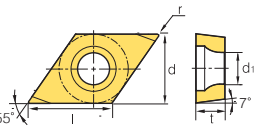
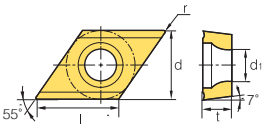
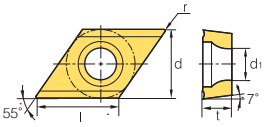
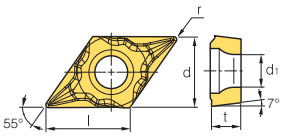
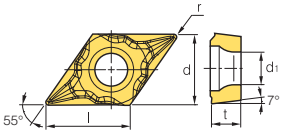
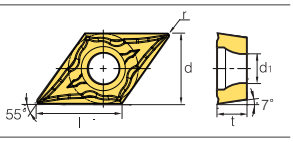
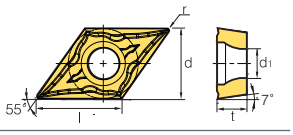
● : Stock item

Insert

Picture	Designation	Coated				Uncoated	Dimensions (mm)					Configuration
		PC5300	PC8105	PC8110	PC8115	H01	l	d	t	r	d1	
CCET-KM  Medium to finishing (Utra high precision)	0602005MFR-KM	●		●			6.6	6.35	2.38	< 0.05	2.8	
	060201MFR-KM	●		●			6.4	6.35	2.38	< 0.10	2.8	
	060202MFR-KM	●		●			6.2	6.35	2.38	< 0.20	2.8	
	09T3005MFR-KM	●		●			9.8	9.525	3.97	< 0.05	4.4	
	09T301MFR-KM	●		●			9.6	9.525	3.97	< 0.10	4.4	
	09T302MFR-KM	●		●			9.2	9.525	3.97	< 0.20	4.4	
	0602005MFL-KM	●		●			6.6	6.35	2.38	< 0.05	2.8	
	060201MFL-KM	●		●			6.4	6.35	2.38	< 0.10	2.8	
	060202MFL-KM	●		●			6.2	6.35	2.38	< 0.20	2.8	
	09T3005MFL-KM	●		●			9.8	9.525	3.97	< 0.05	4.4	
	09T301MFL-KM	●		●			9.6	9.525	3.97	< 0.10	4.4	
	09T302MFL-KM	●		●			9.2	9.525	3.97	< 0.20	4.4	
CCGT-FS  Finishing (High precision)	060201-FS	●		●			6.3	6.35	2.38	0.10	2.8	
	060202-FS	●		●			6.2	6.35	2.38	0.20	2.8	
	060204-FS	●		●			6.0	6.35	2.38	0.40	2.8	
	09T301-FS	●		●			9.8	9.525	3.97	0.10	4.4	
	09T302-FS	●		●			9.6	9.525	3.97	0.20	4.4	
	09T304-FS	●		●			9.2	9.525	3.97	0.40	4.4	
	09T308-FS	●		●			8.8	9.525	3.97	0.80	4.4	
CCGT-FS  Finishing (Utra high precision)	060201MFN-FS						6.3	6.35	2.38	< 0.10	2.8	
	060202MFN-FS						6.2	6.35	2.38	< 0.20	2.8	
	060204MFN-FS						6.0	6.35	2.38	< 0.40	2.8	
	09T301MFN-FS						9.8	9.525	3.97	< 0.10	4.4	
	09T302MFN-FS						9.6	9.525	3.97	< 0.20	4.4	
	09T304MFN-FS						9.2	9.525	3.97	< 0.40	4.4	
	09T308MFN-FS						8.8	9.525	3.97	< 0.80	4.4	
CCGT-MS  Medium cutting (High precision)	09T301-MS	●		●			9.8	9.525	3.97	0.10	4.4	
	09T302-MS	●		●			9.6	9.525	3.97	0.20	4.4	
	09T304-MS	●		●			9.2	9.525	3.97	0.40	4.4	
CCGT-MS  Medium cutting (Utra high precision)	09T301MFN-MS	●		●			9.8	9.525	3.97	< 0.10	4.4	
	09T302MFN-MS	●		●			9.6	9.525	3.97	< 0.20	4.4	
	09T304MFN-MS	●		●			9.2	9.525	3.97	< 0.40	4.4	
CCGT-VP1  Finishing (High precision)	60201-VP1	●	●	●	●	●	6.6	6.35	2.38	0.10	2.8	
	60202-VP1	●	●	●	●	●	6.4	6.35	2.38	0.20	2.8	
	60204-VP1	●	●	●	●	●	6.2	6.35	2.38	0.40	2.8	
	09T301-VP1	●	●	●	●	●	9.8	9.525	3.97	0.10	4.4	
	09T302-VP1	●	●	●	●	●	9.6	9.525	3.97	0.20	4.4	
	09T304-VP1	●	●	●	●	●	9.2	9.525	3.97	0.40	4.4	
CCGT-VP1  Finishing (Utra high precision)	060201MFN-VP1	●		●			6.6	6.35	2.38	< 0.10	2.8	
	060202MFN-VP1	●		●			6.4	6.35	2.38	< 0.20	2.8	
	060204MFN-VP1	●		●			6.2	6.35	2.38	< 0.40	2.8	
	09T301MFN-VP1	●		●			9.8	9.525	3.97	< 0.10	4.4	
	09T302MFN-VP1	●		●			9.6	9.525	3.97	< 0.20	4.4	
	09T304MFN-VP1	●		●			9.2	9.525	3.97	< 0.40	4.4	
DCGT-KF  Finishing (High precision)	0702003R-KF	●		●			7.8	6.35	2.38	0.03	2.8	
	070201R-KF	●		●			7.8	6.35	2.38	0.10	2.8	
	070202R-KF	●		●			7.8	6.35	2.38	0.20	2.8	
	070204R-KF	●		●			7.8	6.35	2.38	0.40	2.8	
	11T3003R-KF	●		●			11.6	9.525	3.97	0.03	4.4	
	11T301R-KF	●		●			11.6	9.525	3.97	0.10	4.4	
	11T302R-KF	●		●			11.6	9.525	3.97	0.20	4.4	
	11T304R-KF	●		●			11.6	9.525	3.97	0.40	4.4	
	0702003L-KF	●		●			7.8	6.35	2.38	0.03	2.8	
	070201L-KF	●		●			7.8	6.35	2.38	0.10	2.8	
	070202L-KF	●		●			7.8	6.35	2.38	0.20	2.8	
	070204L-KF	●		●			7.8	6.35	2.38	0.40	2.8	
	11T3003L-KF	●		●			11.6	9.525	3.97	0.03	4.4	
	11T301L-KF	●		●			11.6	9.525	3.97	0.10	4.4	
	11T302L-KF	●		●			11.6	9.525	3.97	0.20	4.4	
	11T304L-KF	●		●			11.6	9.525	3.97	0.40	4.4	

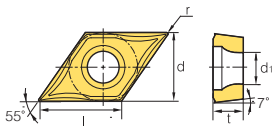
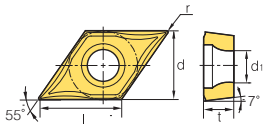
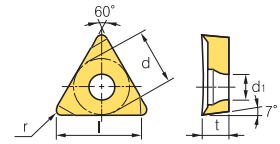
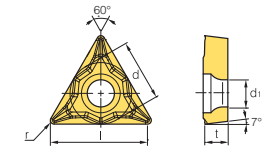
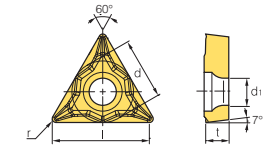
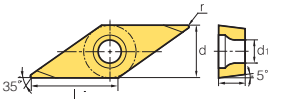
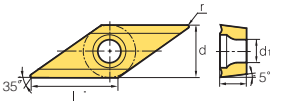
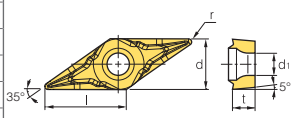
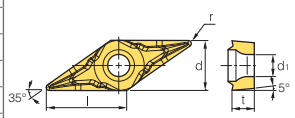
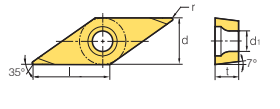
● : Stock item

Insert

Picture	Designation	Coated				Uncoated	Dimensions (mm)					Configuration
		PC5300	PC8105	PC8110	PC8115	H01	l	d	t	r	d1	
DCET-KF Finishing (Utra high precision)	0702005MFR-KF	●		●			7.8	6.35	2.38	< 0.05	2.8	
	070201MFR-KF	●		●			7.8	6.35	2.38	< 0.10	2.8	
	070202MFR-KF	●		●			7.8	6.35	2.38	< 0.20	2.8	
	11T3005MFR-KF	●		●			11.6	9.525	3.97	< 0.05	4.4	
	11T301MFR-KF	●		●			11.6	9.525	3.97	< 0.10	4.4	
	11T302MFR-KF	●		●			11.6	9.525	3.97	< 0.20	4.4	
	0702005MFL-KF	●		●			7.8	6.35	2.38	< 0.05	2.8	
	070201MFL-KF	●		●			7.8	6.35	2.38	< 0.10	2.8	
	070202MFL-KF	●		●			7.8	6.35	2.38	< 0.20	2.8	
	11T3005MFL-KF	●		●			11.6	9.525	3.97	< 0.05	4.4	
	11T301MFL-KF	●		●			11.6	9.525	3.97	< 0.10	4.4	
	11T302MFL-KF	●		●			11.6	9.525	3.97	< 0.20	4.4	
DCGT-KM Medium to finishing (High precision)	0702003R-KM	●		●			7.8	6.35	2.38	0.03	2.8	
	070201R-KM	●		●			7.8	6.35	2.38	0.10	2.8	
	070202R-KM	●		●			7.8	6.35	2.38	0.20	2.8	
	070204R-KM	●		●			7.8	6.35	2.38	0.40	2.8	
	11T3003R-KM	●		●			11.6	9.525	3.97	0.03	4.4	
	11T301R-KM	●		●			11.6	9.525	3.97	0.10	4.4	
	11T302R-KM	●		●			11.6	9.525	3.97	0.20	4.4	
	11T304R-KM	●		●			11.6	9.525	3.97	0.40	4.4	
	0702003L-KM	●		●			7.8	6.35	2.38	0.03	2.8	
	070201L-KM	●		●			7.8	6.35	2.38	0.10	2.8	
	070202L-KM	●		●			7.8	6.35	2.38	0.20	2.8	
	070204L-KM	●		●			7.8	6.35	2.38	0.40	2.8	
	11T3003L-KM	●		●			11.6	9.525	3.97	0.03	4.4	
	11T301L-KM	●		●			11.6	9.525	3.97	0.10	4.4	
	11T302L-KM	●		●			11.6	9.525	3.97	0.20	4.4	
	11T304L-KM	●		●			11.6	9.525	3.97	0.40	4.4	
DCET-KM Medium to finishing (Utra high precision)	0702005MFR-KM	●		●			7.8	6.35	2.38	< 0.05	2.8	
	070201MFR-KM	●		●			7.8	6.35	2.38	< 0.10	2.8	
	070202MFR-KM	●		●			7.8	6.35	2.38	< 0.20	2.8	
	11T3005MFR-KM	●		●			11.6	9.525	3.97	< 0.05	4.4	
	11T301MFR-KM	●		●			11.6	9.525	3.97	< 0.10	4.4	
	11T302MFR-KM	●		●			11.6	9.525	3.97	< 0.20	4.4	
	0702005MFL-KM	●		●			7.8	6.35	2.38	< 0.05	2.8	
	070201MFL-KM	●		●			7.8	6.35	2.38	< 0.10	2.8	
	070202MFL-KM	●		●			7.8	6.35	2.38	< 0.20	2.8	
	11T3005MFL-KM	●		●			11.6	9.525	3.97	< 0.05	4.4	
	11T301MFL-KM	●		●			11.6	9.525	3.97	< 0.10	4.4	
	11T302MFL-KM	●		●			11.6	9.525	3.97	< 0.20	4.4	
DCGT-FS new Finishing (High precision)	070201-FS	●		●			7.6	6.35	2.38	0.10	2.8	
	070202-FS	●		●			7.5	6.35	2.38	0.20	2.8	
	11T301-FS	●		●			11.6	9.525	3.97	0.10	4.4	
	11T302-FS	●		●			11.6	9.525	3.97	0.20	4.4	
	11T304-FS	●		●			11.6	9.525	3.97	0.40	4.4	
	11T308-FS	●		●			11.6	9.525	3.97	0.80	4.4	
DCGT-FS new Finishing (Utra high precision)	070201MFN-FS						7.6	6.35	2.38	< 0.10	2.8	
	070202MFN-FS						7.5	6.35	2.38	< 0.20	2.8	
	11T301MFN-FS						11.6	9.525	3.97	< 0.10	4.4	
	11T302MFN-FS						11.4	9.525	3.97	< 0.20	4.4	
	11T304MFN-FS						11.2	9.525	3.97	< 0.40	4.4	
	11T308MFN-FS						11.0	9.525	3.97	< 0.80	4.4	
DCGT-MS new Medium cutting (High precision)	11T301-MS	●		●			11.6	9.525	3.97	0.10	4.4	
	11T302-MS	●		●			11.6	9.525	3.97	0.20	4.4	
	11T304-MS	●		●			11.6	9.525	3.97	0.40	4.4	
DCGT-MS new Medium cutting (Utra high precision)	11T301MFN-MS	●		●			11.6	9.525	3.97	< 0.10	4.4	
	11T302MFN-MS	●		●			11.6	9.525	3.97	< 0.20	4.4	
	11T304MFN-MS	●		●			11.6	9.525	3.97	< 0.40	4.4	

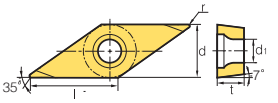
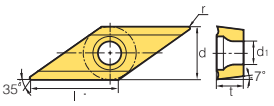
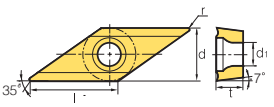
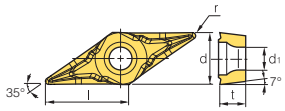
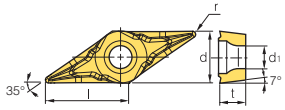
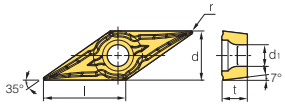
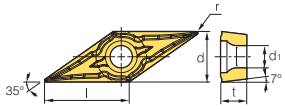
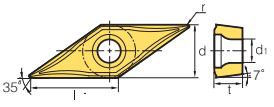
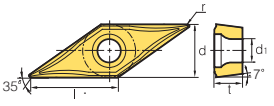
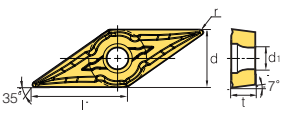
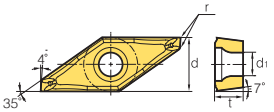
● : Stock item

Insert

Picture	Designation	Coated				Uncoated	Dimensions (mm)					Configuration
		PC5300	PC8105	PC8110	PC8115	H01	l	d	t	r	d1	
DCGT-VP1 Finishing (High precision)	070201-VP1	●	●	●	●	●	7.8	6.35	2.38	0.10	2.8	
	070202-VP1	●	●	●	●	●	7.8	6.35	2.38	0.20	2.8	
	070204-VP1	●	●	●	●	●	7.8	6.35	2.38	0.40	2.8	
	11T301-VP1	●		●			11.6	9.525	3.97	0.10	4.4	
	11T302-VP1	●	●	●	●	●	11.6	9.525	3.97	0.20	4.4	
	11T304-VP1	●	●	●	●	●	11.6	9.525	3.97	0.40	4.4	
DCGT-VP1 Finishing (Utra high precision)	070201MFN-VP1	●		●			7.8	6.35	2.38	< 0.10	2.8	
	070202MFN-VP1	●		●			7.8	6.35	2.38	< 0.20	2.8	
	070204MFN-VP1	●		●			7.8	6.35	2.38	< 0.40	2.8	
	11T301MFN-VP1	●		●			11.6	9.525	3.97	< 0.10	4.4	
	11T302MFN-VP1	●		●			11.6	9.525	3.97	< 0.20	4.4	
	11T304MFN-VP1	●		●			11.6	9.525	3.97	< 0.40	4.4	
TCGT-KF Finishing (High precision)	0802003R-KF						8.15	4.76	2.38	0.03	2.38	
	080201R-KF						8.0	4.76	2.38	0.10	2.38	
	080202R-KF						7.7	4.76	2.38	0.20	2.38	
	08020003L-KF						8.15	4.76	2.38	0.03	2.38	
	080201L-KF						8.0	4.76	2.38	0.10	2.38	
	080202L-KF						7.7	4.76	2.38	0.20	2.38	
TCGT-FS new Finishing (High precision)	110201-FS	●		●			9.3	6.35	2.38	0.10	2.8	
	110202-FS	●		●			9.1	6.35	2.38	0.20	2.8	
	110204-FS	●		●			8.6	6.35	2.38	0.40	2.8	
TCGT-FS new Finishing (Utra high precision)	110201MFN-FS						9.3	6.35	3.18	< 0.10	3.4	
	110202MFN-FS						9.1	6.35	3.18	< 0.20	3.4	
	110204MFN-FS						8.6	6.35	3.18	< 0.40	3.4	
VBGT-KF Finishing (High precision)	1103003R-KF	●		●			7.8	6.35	2.38	0.03	2.8	
	110301R-KF	●		●			7.8	6.35	2.38	0.10	2.8	
	110302R-KF	●		●			7.8	6.35	2.38	0.20	2.8	
	1103003L-KF	●		●			11.6	9.525	3.97	0.03	4.4	
	110301L-KF	●		●			11.6	9.525	3.97	0.10	4.4	
	110302L-KF	●		●			11.6	9.525	3.97	0.20	4.4	
VBGT-KM Medium to finishing (High precision)	1103003R-KM	●		●			7.8	6.35	2.38	0.03	2.8	
	110301R-KM	●		●			7.8	6.35	2.38	0.10	2.8	
	110302R-KM	●		●			7.8	6.35	2.38	0.20	2.8	
	1103003L-KM	●		●			11.6	9.525	3.97	0.03	4.4	
	110301L-KM	●		●			11.6	9.525	3.97	0.10	4.4	
	110302L-KM	●		●			11.6	9.525	3.97	0.20	4.4	
VBGT-FS new Finishing (High precision)	110301-FS	●		●			11.0	6.35	3.18	0.10	2.8	
	110302-FS	●		●			11.0	6.35	3.18	0.20	2.8	
	110304-FS	●		●			11.0	6.35	3.18	0.40	2.8	
	160401-FS	●		●			16.3	9.525	4.76	0.10	4.4	
	160402-FS	●		●			16.1	9.525	4.76	0.20	4.4	
	160404-FS	●		●			15.7	9.525	4.76	0.40	4.4	
VBGT-FS new Finishing (Utra high precision)	110301MFN-FS						10.8	6.35	3.18	< 0.10	2.8	
	110302MFN-FS						10.6	6.35	3.18	< 0.20	2.8	
	110304MFN-FS						11.4	6.35	3.18	< 0.40	2.8	
	160401MFN-FS						16.3	9.525	4.76	< 0.10	4.4	
	160402MFN-FS						16.1	9.525	4.76	< 0.20	4.4	
	160404MFN-FS						15.7	9.525	4.76	< 0.40	4.4	
VCGT-KF Finishing (High precision)	1103003R-KF						11.0	6.35	3.18	0.03	2.8	
	110301R-KF						11.0	6.35	3.18	0.10	2.8	
	110302R-KF						11.0	6.35	3.18	0.20	2.8	
	1103003L-KF						11.0	6.35	3.18	0.03	2.8	
	110301L-KF						11.0	6.35	3.18	0.10	2.8	
	110302L-KF						11.0	6.35	3.18	0.20	2.8	

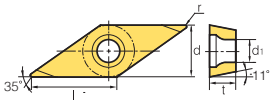
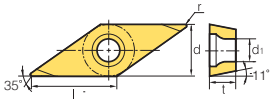
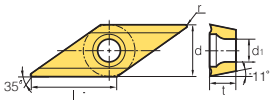
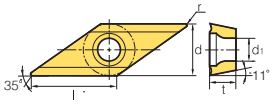
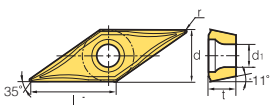
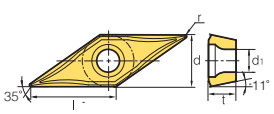
● : Stock item

Insert

Picture	Designation	Coated				Uncoated	Dimensions (mm)					Configuration
		PC5300	PC8105	PC8110	PC8115	H01	l	d	t	r	d1	
VCET-KF Finishing (Utra high precision)	1103005MFR-KF	●		●			11.0	6.35	3.18	< 0.05	2.8	
	110301MFR-KF	●		●			11.0	6.35	3.18	< 0.10	2.8	
	110302MFR-KF	●		●			11.0	6.35	3.18	< 0.20	2.8	
	1103005MFL-KF	●		●			11.0	6.35	3.18	< 0.05	2.8	
	110301MFL-KF	●		●			11.0	6.35	3.18	< 0.10	2.8	
	110302MFL-KF	●		●			11.0	6.35	3.18	< 0.20	2.8	
VCGT-KM Medium to finishing (High precision)	1103003R-KM						11.0	6.35	3.18	0.03	2.8	
	110301R-KM						11.0	6.35	3.18	0.10	2.8	
	110302R-KM						11.0	6.35	3.18	0.20	2.8	
	1103003L-KM						11.0	6.35	3.18	0.03	2.8	
	110301L-KM						11.0	6.35	3.18	0.10	2.8	
	110302L-KM						11.0	6.35	3.18	0.20	2.8	
VCET-KM Medium to finishing (Utra high precision)	1103005MFR-KM	●		●			11.0	6.35	3.18	< 0.05	2.8	
	110301MFR-KM	●		●			11.0	6.35	3.18	< 0.10	2.8	
	110302MFR-KM	●		●			11.0	6.35	3.18	< 0.20	2.8	
	3005MFL-KM	●		●			11.0	6.35	3.18	< 0.05	2.8	
	301MFL-KM	●		●			11.0	6.35	3.18	< 0.10	2.8	
	302MFL-KM	●		●			11.0	6.35	3.18	< 0.20	2.8	
VCGT-FS new Finishing (High precision)	110301-FS	●		●			11.0	6.35	3.18	0.10	2.8	
	110302-FS	●		●			11.0	6.35	3.18	0.20	2.8	
	110304-FS	●		●			11.0	6.35	3.18	0.40	2.8	
	160401-FS	●		●			16.3	9.525	4.76	0.10	4.4	
	160402-FS	●		●			16.1	9.525	4.76	0.20	4.4	
	160404-FS	●		●			15.7	9.525	4.76	0.40	4.4	
VCGT-FS new Finishing (Utra high precision)	110301MFN-FS						10.8	6.35	3.18	< 0.10	2.8	
	110302MFN-FS						10.6	6.35	3.18	< 0.20	2.8	
	110304MFN-FS						11.4	6.35	3.18	< 0.40	2.8	
	160401MFN-FS						16.3	9.525	4.76	< 0.10	4.4	
	160402MFN-FS						16.1	9.525	4.76	< 0.20	4.4	
	160404MFN-FS						15.7	9.525	4.76	< 0.40	4.4	
VCGT-MS new Medium cutting (High precision)	110301-MS	●		●			10.8	6.35	3.18	0.10	2.8	
	110302-MS	●		●			10.6	6.35	3.18	0.20	2.8	
	110304-MS	●		●			11.4	6.35	3.18	0.40	2.8	
VCGT-MS new Medium cutting (Utra high precision)	11T301MFN-MS	●		●			10.8	6.35	3.18	< 0.10	2.8	
	11T302MFN-MS	●		●			10.6	6.35	3.18	< 0.20	2.8	
	11T304MFN-MS	●		●			11.4	6.35	3.18	< 0.40	2.8	
VCGT-VP1 Finishing (High precision)	110301-VP1	●	●	●	●	●	11.0	6.35	3.18	0.10	2.8	
	110302-VP1	●	●	●	●	●	11.0	6.35	3.18	0.20	2.8	
	110304-VP1	●	●	●	●	●	11.0	6.35	3.18	0.40	2.8	
VCGT-VP1 Finishing (Utra high precision)	110301MFN-VP1	●		●			11.0	6.35	3.18	< 0.10	2.8	
	110302MFN-VP1	●		●			11.0	6.35	3.18	< 0.20	2.8	
	110304MFN-VP1	●		●			11.0	6.35	3.18	< 0.40	2.8	
VCGT-MS Medium cutting (Utra high precision)	1203008FN-MS	●		●			11.0	7.50	3.00	< 0.08	2.8	
	120301FN-MS	●		●			11.0	7.50	3.00	< 0.10	2.8	
	120302FN-MS	●		●			11.0	7.50	3.00	< 0.20	2.8	
	120304FN-MS	●		●			11.0	7.50	3.00	< 0.40	2.8	
VCGX-VP1 Finishing (Utra high precision) Chamfer type	120300MFR-VP1	●		●			11.0	7.50	3.18	< 0.00	2.8	
	120301MFR-VP1	●		●			11.0	7.50	3.18	< 0.10	2.8	
	120302MFR-VP1	●		●			11.0	7.50	3.18	< 0.20	2.8	
	120304MFR-VP1	●		●			11.0	7.50	3.18	< 0.40	2.8	
	120308MFR-VP1	●		●			11.0	7.50	3.18	< 0.80	2.8	

● : Stock item

Insert

Picture	Designation	Coated				Uncoated	Dimensions (mm)					Configuration
		PC5300	PC8105	PC8110	PC8115	H01	l	d	t	r	d1	
VPGT-KF Finishing (High precision)	080201R-KF	●		●			8.0	4.76	2.38	0.10	2.3	
	080202R-KF	●		●			8.0	4.76	2.38	0.20	2.3	
	1103003R-KF	●		●			11.0	6.35	3.18	0.03	2.8	
	110301R-KF	●		●			11.0	6.35	3.18	0.10	2.8	
	110302R-KF	●		●			11.0	6.35	3.18	0.20	2.8	
	080201L-KF	●		●			8.0	4.76	2.38	0.10	2.3	
	080202L-KF	●		●			8.0	4.76	2.38	0.20	2.3	
	1103003L-KF	●		●			11.0	6.35	3.18	0.03	2.8	
	110301L-KF	●		●			11.0	6.35	3.18	0.10	2.8	
	110302L-KF	●		●			11.0	6.35	3.18	0.20	2.8	
VPET-KF Finishing (Utra high precision)	0802005MFR-KF	●		●			8.0	6.35	2.38	< 0.05	2.3	
	080201MFR-KF	●		●			8.0	6.35	2.38	< 0.10	2.3	
	080202MFR-KF	●		●			8.0	6.35	2.38	< 0.20	2.3	
	0802005MFL-KF	●		●			8.0	6.35	2.38	< 0.05	2.3	
	080201MFL-KF	●		●			8.0	6.35	2.38	< 0.10	2.3	
	080202MFL-KF	●		●			8.0	6.35	2.38	< 0.20	2.3	
VPGT-KM Medium to finishing (High precision)	080201R-KM	●		●			8.0	4.76	2.38	0.10	2.3	
	080202R-KM	●		●			8.0	4.76	2.38	0.20	2.3	
	1103003R-KM	●		●			11.0	6.35	3.18	0.03	2.8	
	110301R-KM	●		●			11.0	6.35	3.18	0.10	2.8	
	110302R-KM	●		●			11.0	6.35	3.18	0.20	2.8	
	080201L-KM	●		●			8.0	4.76	2.38	0.10	2.3	
	080202L-KM	●		●			8.0	4.76	2.38	0.20	2.3	
	1103003L-KM	●		●			11.0	6.35	3.18	0.03	2.8	
	110301L-KM	●		●			11.0	6.35	3.18	0.10	2.8	
	110302L-KM	●		●			11.0	6.35	3.18	0.20	2.8	
VPET-KM Medium to finishing (Utra high precision)	0802005MFR-KM	●		●			8.0	6.35	3.18	< 0.05	2.8	
	080201MFR-KM	●		●			8.0	6.35	3.18	< 0.10	2.8	
	080202MFR-KM	●		●			8.0	6.35	3.18	< 0.20	2.8	
	0802005MFL-KM	●		●			8.0	6.35	3.18	< 0.05	2.8	
	080201MFL-KM	●		●			8.0	6.35	3.18	< 0.10	2.8	
	080202MFL-KM	●		●			8.0	6.35	3.18	< 0.20	2.8	
VPGT-VP1 Medium cutting (High precision)	110301-VP1	●	●	●	●	●	11.0	6.35	3.18	0.10	2.8	
	110302-VP1	●	●	●	●	●	11.0	6.35	3.18	0.20	2.8	
	110304-VP1	●	●	●	●	●	11.0	6.35	3.18	0.40	2.8	
VPGT-VP1 Medium cutting (Utra high precision)	110301MFN-VP1	●		●			11.0	6.35	3.18	< 0.10	2.8	
	110302MFN-VP1	●		●			11.0	6.35	3.18	< 0.20	2.8	
	110304MFN-VP1	●		●			11.0	6.35	3.18	< 0.40	2.8	

● : Stock item

Auto tools (Blade type)

- Blade insert for automatic lathes
- For external machining of precise small parts
- 4 types - SSB (for back turning), SGB (for grooving), SBT (for threading), SBC (for parting off)
- Convenient use of one holder to all blade inserts
- Exclusive holder for close cutting action to the sub spindle

Code system

• Insert

Turning (Back turning)

SB	B	R	25	005
Small blade	Back turning	Hand (R: Right L: Left)	Length of insert	Nose radius

Grooving

SB	G	R	25	20
Small blade	Grooving	Hand (R: Right L: Left)	Length of insert	Width of cutting edge

Threading

SB	T	R	25	60 – N – 010		
Small blade	Threading	Hand (R: Right L: Left)	Length of insert	Angle of thread	Hand of thread (R: Right L: Left N: Neutral)	Nose radius

Parting

SB	C	R	25	20	16 – N	
Small blade	Cut off / Parting	Hand (R: Right L: Left)	Length of insert	Width of cutting edge	Max. machining diameter	Hand of thread (R: Right L: Left N: None)

• Holder

SB	H	R	10	10 – K25 – X		
Small blade	Holder	Hand (R: Right L: Left)	Height of shank	Width of shank	Length of insert	Sub spindle

Types of blade insert

Possible to apply various types of blade inserts to one holder

SBB: For back turning

- Approach angle: 59°
- Max. cutting depth: 4 mm
- Nose R: 0.05, 0.1, 0.2 mm

SBG: For grooving

- Width: 0.5~2.5 mm
- Nose R: 0.05 mm

SBT: For threading

- V profile: 60°
- Pitch: 0.2~1.0 mm
- Nose R: 0.05 mm

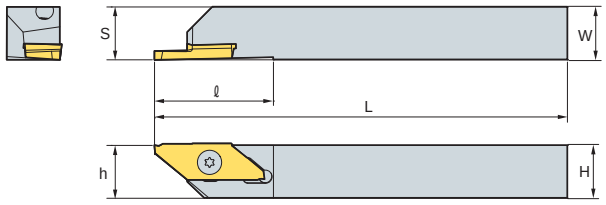
SBC: For cut off/Parting

- Cutting width: 0.7~2.0
- DMax.: 16 mm
- Nose R: 0.05 mm

SBHR/L

SBBR SBGR
SBTR SBCR

Offset "0"



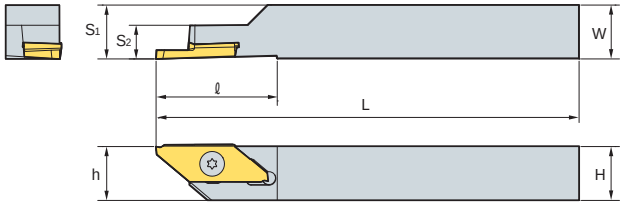
(mm)

Designation		H	W	L	S	h	ℓ	Insert	Screw	Wrench
SBHR/L	1010-K25	10	10	125	10	10	27	SB□R/L25	FTKA0409S	TW09P
	1212-K25	12	12	125	12	12	27			
	1616-K25	16	16	125	16	16	27			

SBHR/L-X (Sub spindle)

SBBR SBGR
SBTR SBCR

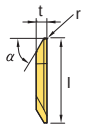
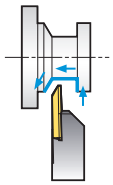
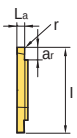
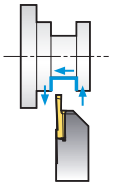
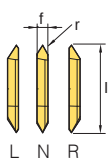
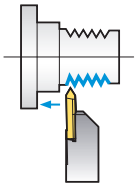
Offset "0"



(mm)

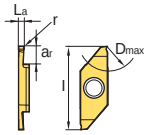
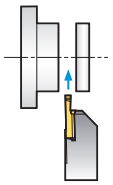
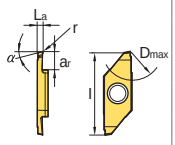
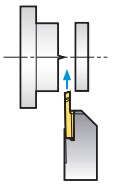
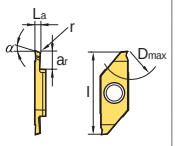
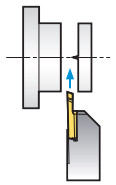
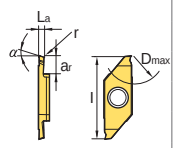
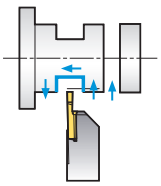
Designation		H	W	L	S1	S2	h	ℓ	Insert	Screw	Wrench
SBHR/L	1010-K25-X	10	10	125	10	7.5	10	27	SB□R/L25	FTKA0407S	TW09P
	1212-K25-X	12	12	125	12	7.5	12	27			

Insert

Application	Picture	Designation		Coated PC8110 R	Coated PC8110 L	Coated PC5300 R	Coated PC5300 L	l	α	t	r	La	ar	f	D-MAX	Pitch range Min.	Pitch range Max.	Configuration	Feed direction
Back turning	 SBBR/L	SBBR/L	25005	●	●	●	●	25	59	3.18	0.05	-	-	-	-	-	-		
			25010	●	●	●	●	25	59	3.18	0.10	-	-	-	-	-	-		
			25020	●	●	●	●	25	59	3.18	0.20	-	-	-	-	-	-		
Grooving	 SBGR/L	SBGR/L	2505	●	●	●	●	25	-	-	0.05	0.5	1.35	-	-	-	-		
			2510	●	●	●	●	25	-	-	0.05	1.0	2.75	-	-	-	-		
			2515	●	●	●	●	25	-	-	0.05	1.5	3.75	-	-	-	-		
			2520	●	●	●	●	25	-	-	0.05	2.0	3.75	-	-	-	-		
			2525	●	●	●	●	25	-	-	0.05	2.5	3.75	-	-	-	-		
Threading	 SBTR/L	SBTR/L	2560-N-005	●	●	●	●	25	-	-	0.05	-	-	1.59	-	0.2	2.0	 L N R	
			2560-N-010	●	●	●	●	25	-	-	0.10	-	-	1.59	-	1.0	2.0		
			2560-R-005	●	●	●	●	25	-	-	0.05	-	-	0.6	-	0.2	1.5		
			2560-R-010	●	●	●	●	25	-	-	0.10	-	-	0.6	-	1.0	1.5		
			2560-L-005	●	●	●	●	25	-	-	0.05	-	-	0.6	-	0.2	1.5		
			2560-L-010	●	●	●	●	25	-	-	0.10	-	-	0.6	-	1.0	1.5		

● : Stock item

Insert

Application	Picture	Designation	Coated				Dimensions (mm)										Configuration	Feed direction
			PC8110		PC5300										Pitch range			
			R	L	R	L	l	α	t	r	La	ar	f	D-MAX	Min.	Max.		
Parting off	 SBCR/L	SBCR/L 250708-N	●	●	●	●	25	0	-	0.05	0.7	4.3	-	8	-	-		
		251012-N	●	●	●	●	25	0	-	0.05	1.0	6.3	-	12	-	-		
		251512-N	●	●	●	●	25	0	-	0.05	1.5	6.3	-	12	-	-		
		252016-N	●	●	●	●	25	0	-	0.05	2.0	8.3	-	16	-	-		
		250708-R	●	●	●	●	25	15	-	0.05	0.7	4.3	-	8	-	-		
		251012-R	●	●	●	●	25	15	-	0.05	1.0	6.3	-	12	-	-		
		251512-R	●	●	●	●	25	15	-	0.05	1.5	6.3	-	12	-	-		
		252016-R	●	●	●	●	25	15	-	0.05	2.0	8.3	-	16	-	-		
		250708-L	●	●	●	●	25	15	-	0.05	0.7	4.3	-	8	-	-		
		251012-L	●	●	●	●	25	15	-	0.05	1.0	6.3	-	12	-	-		
		251512-L	●	●	●	●	25	15	-	0.05	1.5	6.3	-	12	-	-		
		252016-L	●	●	●	●	25	15	-	0.05	2.0	8.3	-	16	-	-		
		251012-T	●	●	●	●	25	0	-	0.05	1.0	6.3	-	12	-	-		
		251512-T	●	●	●	●	25	0	-	0.05	1.5	6.3	-	12	-	-		
		252016-T	●	●	●	●	25	0	-	0.05	2.0	8.3	-	16	-	-		

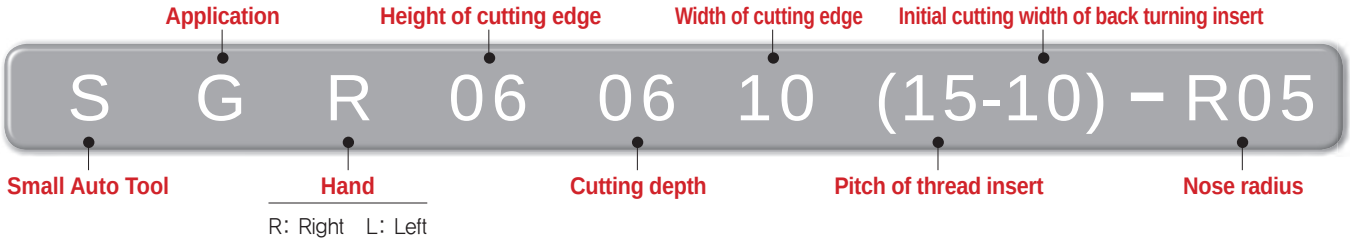
●: Stock item

Auto Tools (For multi utility)

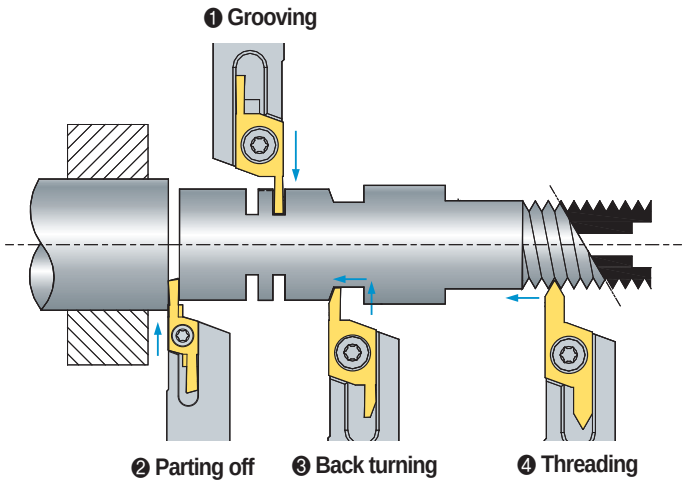
- Multifunctional insert for automatic lathes
- For external machining of precise small parts
- 5 types - SB (for back turning), SG (for grooving), ST (for threading), SC (for parting off), SGB (for grooving and back turning)
- Convenient use of one holder to all inserts
- Offset “0” to all ISO type holders

Code system

B: Back turning G: Grooving
C: Parting off T: Threading
GB : Grooving and back turning

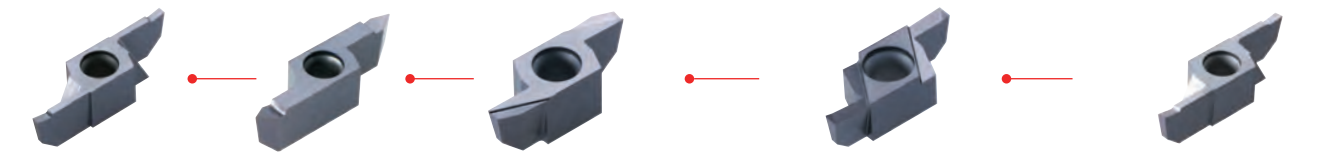


Application example



Types of multifunctional insert

Possible to apply various types of blade inserts to one holder (Ex: All designations of 06 size inserts can be applied to one 06 size holder.)

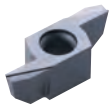


SG: Grooving | ST: Threading | SB: Back turning | SGB: Grooving and back turning | SC: Parting off

Recommended cutting conditions

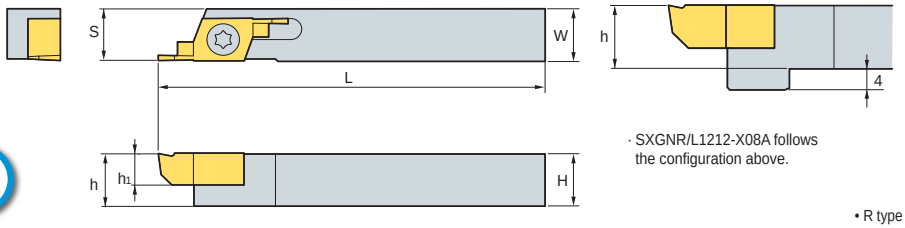
Workpiece		Turning		Grooving		Parting off		Back turning	
		Cutting speed, vc (m/min)	Feed, fn (mm/rev)	Cutting speed, vc (m/min)	Feed, fn (mm/rev)	Cutting speed, vc (m/min)	Feed, fn (mm/rev)	Cutting speed, vc (m/min)	Feed, fn (mm/rev)
P	Carbon steel	50~150	0.01~0.25	50~150	0.02~0.08	50~150	0.01~0.08	50~150	0.01~0.25
	Free cutting steel	30~150	0.02~0.25	30~150	0.02~0.08	30~150	0.01~0.08	30~150	0.01~0.25
M	Stainless steel	50~120	0.02~0.20	30~120	0.02~0.05	30~120	0.02~0.05	30~120	0.02~0.20
N	Non-ferrous metal	70~200	0.03~0.25	70~200	0.03~0.10	70~200	0.03~0.10	70~200	0.03~0.30

SXGNR/L



SBR, SGBR
SCR, STR, SGR

Offset "0"



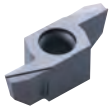
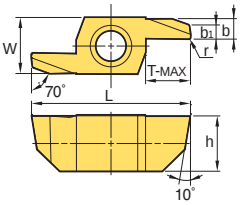
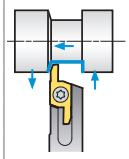
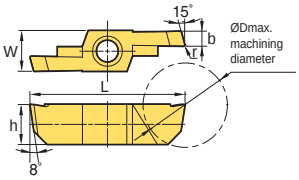
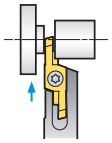
· SXGNR/L1212-X08A follows the configuration above.

• R type insert

(mm)

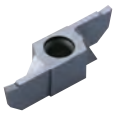
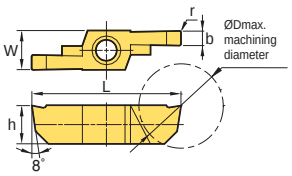
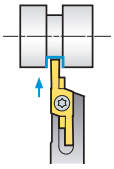
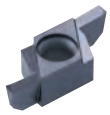
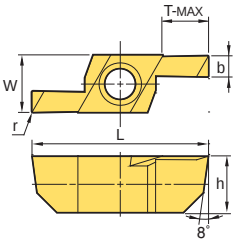
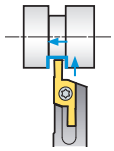
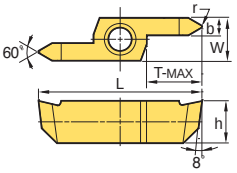
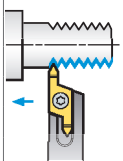
Designation		H	W	L	S	h	h1	Insert	Screw	Wrench
SXGNR/L	1010-X06A	10	10	125	10	10	6	S□R/L 06	FTNA 0408	TW 15P
	1212-X06A	12	12	125	12	12	6			
	1616-X06A	16	16	125	16	16	6			
	2020-X06A	20	20	125	20	20	6			
	1212-X08A	12	12	130	12	12	8	S□R/L 08	FTNA 0411	TW 15P
	1616-X08A	16	16	130	16	16	8			
	2020-X08A	20	20	130	20	20	8			

Insert

Application	Picture	Designation		Coated PC9030 R	Coated PC9030 L	Dimensions (mm) b1	b	W	L	r	h	T-MAX	ØD	Configuration	Feed direction
Back turning	SBR/L 	SBR/L	060520-10-R00			1	2	8	22	0	6	5.5	-		
			060520-10-R05			1	2	8	22	0.05	6	5.5	-		
			060520-10-R10			1	2	8	22	0.1	6	5.5	-		
			060630-20-R00			2	3	8	24	0	6	6.5	-		
			060630-20-R05			2	3	8	24	0.05	6	6.5	-		
			060630-20-R10			2	3	8	24	0.1	6	6.5	-		
			080630-20-R00			2	3	8	23	0	8	6.5	-		
			080630-20-R05			2	3	8	23	0.05	8	6.5	-		
			080630-20-R10			2	3	8	23	0.1	8	6.5	-		
			080840-20-R00			2	4	8	27	0	8	8.5	-		
			080840-20-R05			2	4	8	27	0.05	8	8.5	-		
			080840-20-R10			2	4	8	27	0.1	8	8.5	-		
Parting off	SCR/L 	SCR/L	060610-R00			-	1	8	24	0	6	-	11		
			060610-R05	●		-	1	8	24	0.05	6	-	11		
			060610-R10	●		-	1	8	24	0.1	6	-	11		
			060615-R00			-	1.5	8	24	0	6	-	11		
			060615-R05	●		-	1.5	8	24	0.05	6	-	11		
			060615-R10	●		-	1.5	8	24	0.1	6	-	11		
			060620-R00			-	2	8	24	0	6	-	11		
			060620-R05	●		-	2	8	24	0.05	6	-	11		
			060620-R10	●		-	2	8	24	0.1	6	-	11		
			081015-R00			-	1.5	8	31	0	8	-	18		
			081015-R05			-	1.5	8	31	0.05	8	-	18		
			081015-R10			-	1.5	8	31	0.1	8	-	18		
			081020-R00			-	2	8	31	0	8	-	18		
			081020-R05			-	2	8	31	0.05	8	-	18		
			081020-R10	●		-	2	8	31	0.1	8	-	18		
			081025-R00			-	2.5	8	31	0	8	-	18		
			081025-R05	●		-	2.5	8	31	0.05	8	-	18		
			081025-R10	●		-	2.5	8	31	0.1	8	-	18		
			081030-R00			-	3	8	31	0	8	-	18		
			081030-R05	●		-	3	8	31	0.05	8	-	18		
			081030-R10			-	3	8	31	0.1	8	-	18		

●: Stock item

Insert

Application	Picture	Designation		Coated PC9030 R	Coated PC9030 L	b	W	L	r	h	T-MAX	ØD	Pitch	Configuration	Feed direction
Grooving	SGR/L 	SGR/L	060610-R00			1	8	24	0	6	-	11	-		
			060610-R05	●		1	8	24	0.05	6	-	11	-		
			060610-R10	●		1	8	24	0.1	6	-	11	-		
			060615-R00			1.5	8	24	0	6	-	11	-		
			060615-R05	●		1.5	8	24	0.05	6	-	11	-		
			060615-R10	●		1.5	8	24	0.1	6	-	11	-		
			060620-R00			2	8	24	0	6	-	11	-		
			060620-R05	●		2	8	24	0.05	6	-	11	-		
			060620-R10	●		2	8	24	0.1	6	-	11	-		
			081015-R00			1.5	8	31	0	8	-	18	-		
			081015-R05			1.5	8	31	0.05	8	-	18	-		
			081015-R10			1.5	8	31	0.1	8	-	18	-		
			081020-R00			2	8	31	0	8	-	18	-		
			081020-R05	●		2	8	31	0.05	8	-	18	-		
			081020-R10			2	8	31	0.1	8	-	18	-		
			081025-R00			2.5	8	31	0	8	-	18	-		
			081025-R05			2.5	8	31	0.05	8	-	18	-		
			081025-R10			2.5	8	31	0.1	8	-	18	-		
			081030-R00			3	8	31	0	8	-	18	-		
			081030-R05			3	8	31	0.05	8	-	18	-		
			081030-R10			3	8	31	0.1	8	-	18	-		
Grooving and back turning	SGBR/L 	SGBR/L	0604520-R00			2	8	22	0	6	4.5	-	-		
			0604520-R05			2	8	22	0.05	6	4.5	-	-		
			0604520-R10			2	8	22	0.1	6	4.5	-	-		
			0604525-R00			2.5	8	22	0	6	4.5	-	-		
			0604525-R05			2.5	8	22	0.05	6	4.5	-	-		
			0604525-R10			2.5	8	22	0.1	6	4.5	-	-		
			0605530-R00			3	8	24	0	6	5.5	-	-		
			0605530-R05			3	8	24	0.05	6	5.5	-	-		
			0605530-R10			3	8	24	0.1	6	5.5	-	-		
			0805525-R00			2.5	8	24	0	8	5.5	-	-		
			0805525-R05			2.5	8	24	0.05	8	5.5	-	-		
			0805525-R10			2.5	8	24	0.1	8	5.5	-	-		
			0806530-R00			3	8	26	0	8	6.5	-	-		
			0806530-R05			3	8	26	0.05	8	6.5	-	-		
			0806530-R10			3	8	26	0.1	8	6.5	-	-		
Threading	STR/L 	STR/L	06073215			3.2	8	25	0.06	6	7	-	0.5-1.5		
			06073230			3.2	8	25	0.19	6	7	-	1.5-3.0		
			08103215			3.2	8	31	0.06	8	10.5	-	0.5-1.5		
			08103230			3.2	8	31	0.19	8	10.5	-	1.5-3.0		

● : Stock item

AutoTools (KGT/MGT type)

- Grooving insert for automatic lathes
- Exclusive holder for automatic lathes
- Economic double sided insert
- Strong clamping system secures stable machining and precision.
- A wide selection of chip breakers according to various cutting conditions such as low/high feed, continuous/interrupted machining, etc.

Code system

- **Insert**

KG M N 300 - 04 - T

System code	Tolerance	Hand	Width of cutting edge	Corner nose radius of insert	Chip breaker
KG SYSTEM (KORLOY Grooving) MG SYSTEM (Multi Grooving)	M: Pressed class G: Ground class	N: Neutral R: Right L: Left I : Internal	2.0~8.0 mm	0.2 mm 0.3 mm 0.4 mm	L/R/T/C LP/RP

- **Holder**

KG E H R/L 1212 - 3 D25A

System code	Application	Holder type	Hand	Shank size	Cutting width	Max. cutting diameter
KG SYSTEM (KORLOY Grooving) MG SYSTEM (Multi Grooving)	E: External machining I : Internal machining	H: Horizontal type V: Vertical type U: Undercut type	R: Right L: Left	Height 12 mm, width 12 mm (For internal machining: Min. machining diameter)	2.0~3.0 mm	Ø15~Ø32 mm

Chip breaker line-up

KGT Type

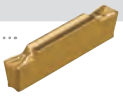
KGMN–L

- Sharp cutting edge • For low feed machining
- For small diameter parts

KGMN–R

- Reinforced cutting edge • For high feed machining
- For interrupted cutting

KGMN–T

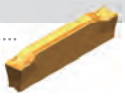


- Sharp cutting edge • Stronger chip control
- For turning and grooving

KGMR/L–LP

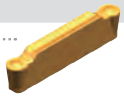
- Sharp cutting edge • For low feed machining
- Small diameter component • Right/Left handed

KGMR/L–RP



- Strong cutting edge • For high feed machining
- For iInterrupted cutting • Right/Left handed

KGMN–C



- Improved chip control • Copying
- Relief • Cast iron • Alloy steel
- Carbon steel • Stainless

MGT Type

MGM(G)N-M

- Easier chip control by narrowing chip width with the use of chip breaker on rake surface center
- Smooth chip flow by small dots in external machining
- Available for both external machining and grooving

MGMN-G

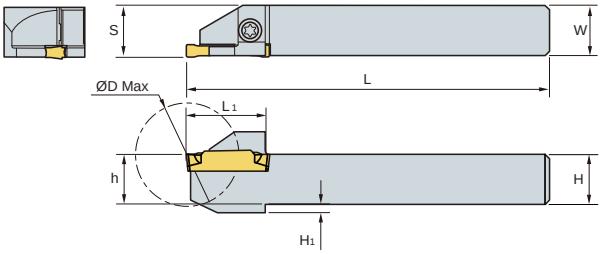
- Specially designed chip breaker allows narrower chips to promote better chip flow with the use of center dots
- Exclusive chip breaker for grooving

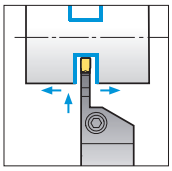
KGEHR/L-D00A

Grooving, turning, parting off

Compact type

KGGN KGMN KGMR/L
KRGN KRMN





• R type insert

(mm)

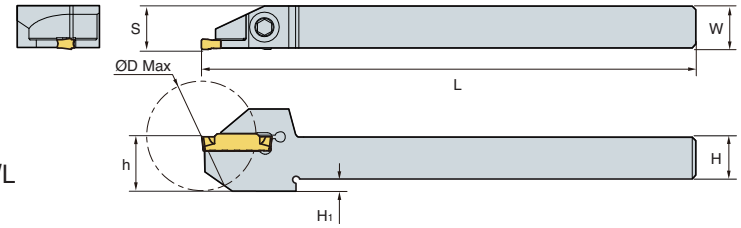
Designation		Dimensions (mm)							Insert	Screw	Wrench
		H	W	L1	L	S	h1	ØD_MAX			
KGEHR/L	1010-2-D20A	10	10	19	125	10.2	2	20	KGMN200-□-□ KGMR/L200-□-□ KRMN200-C	ETNA0412	TW15L
	1212-2-D25A	12	12	19	125	12.2	2	25			
	1414-2-D25A	14	14	19	125	14.2	-	25			
	1616-2-D32A	16	16	24	125	16.2	-	32			
	1212-3-D25A	12	12	19	130	12.4	2	25	KGMN300-□-□ KGMR/L300-□-□ KRMN300-C		
	1616-3-D32A	16	16	24	130	16.4	-	32			

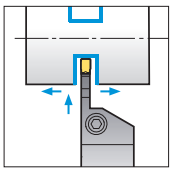
KGEHR/L-D00B

Grooving, turning, parting off

High rigidity type

KGGN KGMN KGMR/L
KRGN KRMN



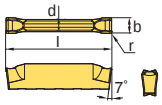
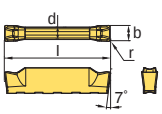
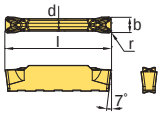


• R type insert

(mm)

Designation		Dimensions (mm)						Insert	Screw	Wrench
		H	W	L	S	h1	ØD_MAX			
KGEHR/L	1010-2-D30B	10	10	125	10.2	6.6	30	KGMN200-□-□ KGMR/L200-□-□ KRMN200-C	MHA0512	HW40L
	1212-2-D25B	12	12	125	12.5	3.5	25			
	1212-2-D30B	12	12	125	12.2	3.5	30			
	1616-2-D32B	16	16	125	16.2	-	32			
	1212-3-D25B	12	12	125	12.4	3.5	25	KGMN300-□-□ KGMR/L300-□-□ KRMN300-C		
	1212-3-D32B	12	12	125	12.4	3.5	32			
	1616-3-D32B	16	16	125	16.4	-	32			

KGT Insert

Application	Picture	Designation		Coated							Dimensions (mm)					Configuration
				NC3120	NC3225	NC5330	NC6315	PC3035	PC5300	PC9030	b	r	l	d	α°	
Grooving	KGMN-L	KGMN	200-02-L		●	●		●	●	●	2.0	0.2	20	1.7	-	
			300-02-L		●	●		●	●	●	3.0	0.2	20	2.3	-	
Grooving· Parting off	KGMN-R	KGMN	200-02-R		●	●		●	●	●	2.0	0.2	20	1.7	-	
			300-02-R		●	●		●	●	●	3.0	0.2	20	2.3	-	
Grooving·turning	KGMN-T	KGMN	200-02-T		●	●	●	●	●	●	2.0	0.2	20	1.7	-	
			300-02-T		●	●	●	●	●	●	3.0	0.2	20	2.3	-	
			300-04-T		●	●	●	●	●	●	3.0	0.4	20	2.3	-	

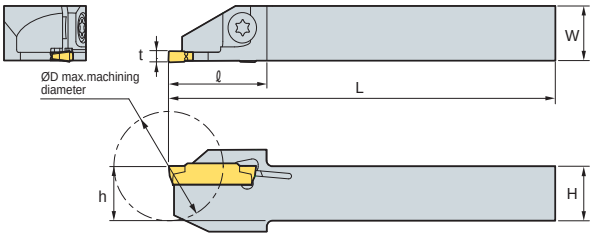
KGT Insert

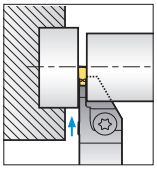
Application	Picture	Designation		Coated NC3120	NC3225	NC5330	NC6315	PC3035	PC5300	PC9030	Dimensions (mm) b	r	l	d	α°	Configuration
Parting off (Right handed)	KGMR-LP	KGMR	200-6D-LP			●			●		2.0	0.2	20	-	6	
			200-15D-LP			●			●		2.0	0.2	20	-	15	
			300-6D-LP			●			●		3.0	0.2	20	-	6	
			300-15D-LP			●			●		3.0	0.2	20	-	15	
Parting off (Right handed)	KGMR-RP	KGMR	200-6D-RP			●			●		2.0	0.2	20	-	6	
			200-15D-RP			●			●		2.0	0.2	20	-	15	
			300-6D-RP			●			●		3.0	0.2	20	-	6	
			300-15D-RP			●			●		3.0	0.2	20	-	15	
Parting off (Left handed)	KGML-LP	KGML	200-6D-LP								2.0	0.2	20	1.7	6	
			200-15D-LP								2.0	0.2	20	1.7	15	
			300-6D-LP								3.0	0.2	20	2.3	6	
			300-15D-LP								3.0	0.2	20	2.3	15	
Parting off (Left handed)	KGML-RP	KGML	200-6D-RP								2.0	0.2	20	1.7	6	
			200-15D-RP								2.0	0.2	20	1.7	15	
			300-6D-RP								3.0	0.2	20	2.3	6	
			300-15D-RP								3.0	0.2	20	2.3	15	
Copying	KRMN-C	KRMN	200-C		●	●	●	●	●		2.0	1.0	20	1.7	-	
			300-C		●	●	●	●	●		3.0	1.5	20	2.2	-	

●: Stock item

MGEHR/L

MGMN





• R type insert

(mm)

Designation		ØD	H = h	W	L	ℓ	t	Insert	Screw	Wrench
MGEHR/L	1010-X15A	20	10	10	125	18	1.5	MGMN150-G	ETNA 0412	TW 15L
	1212-X15A	25	12	12	125	19.5	1.5			
	1010-X20A	20	10	10	125	18	2	MGMN200-M MGMN200-G	ETNA 0412	TW 15L
	1212-X20A	25	12	12	125	19.5	2			
	1616-X20A	32	16	16	125	25	2			
	1010-X25A	20	10	10	125	20	2.5	MGMN250-M MGMN250-G	ETNA 0412	TW 15L
	1212-X25A	25	12	12	125	20	2.5			
	1616-X25A	32	16	16	125	25	2.5			

MGT Insert

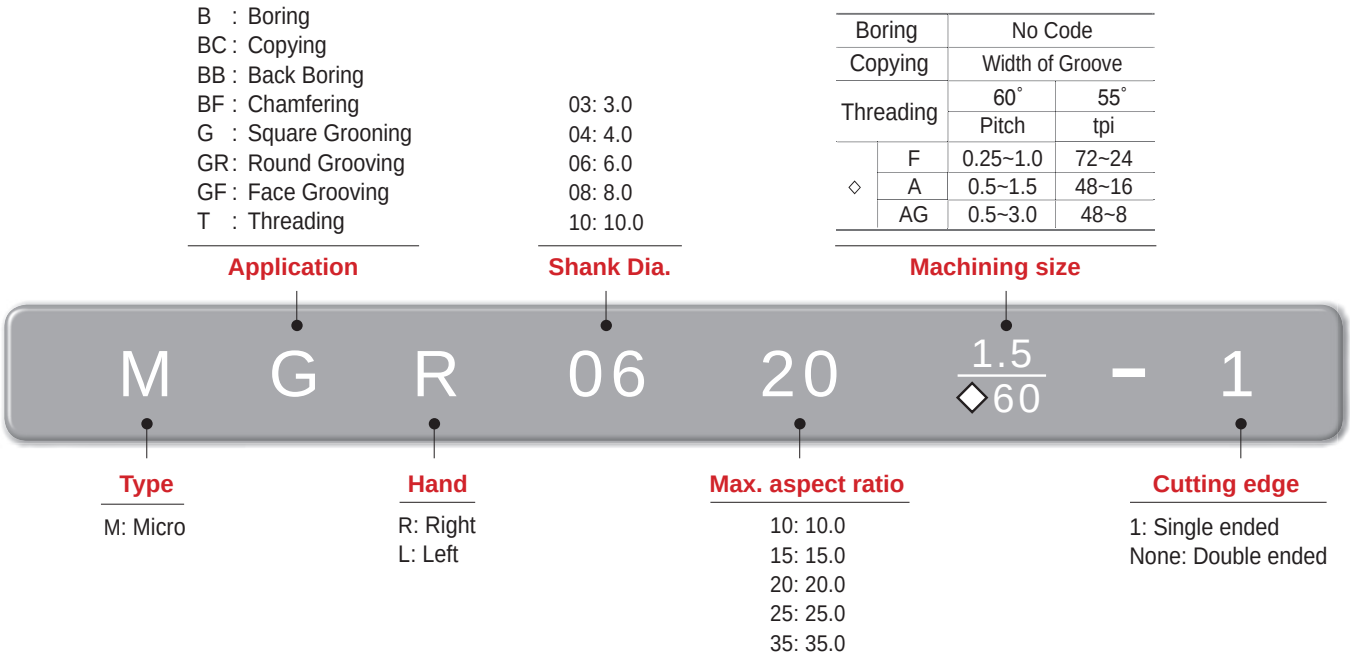
Application	Picture	Designation		Coateda NC3120	NC3225	NC3030	NC5330	NC6315	PC5300	PC9030	Uncoated H01	G10	ST30A	Dimensions (mm) b	r	l	d	t	Configuration
Grooving	MGMN-G	MGMN	150-G		●	●			●	●	●			1.5	0.15	16.0	1.2	3.5	
			200-G	●	●	●				●	●			2.0	0.2	16.0	1.6	3.5	
			250-G		●	●			●	●				2.5	0.2	18.5	2.0	3.85	
Grooving	MGMN-M	MGMN	200-M	●	●	●	●		●	●	●			2.0	0.2	16.0	1.6	3.5	
			250-M	●	●	●			●	●				2.5	0.2	18.5	2.0	3.85	

●: Stock item

Auto Tools (MSB tool)

- High hardness grade guarantees longer tool life
- Various kinds of machining (Fitting, Valve, Medical parts, Automobile component, and Semiconductor equipment) are available
- Various types of MSB tools (Boring, Grooving, Threading)

Code system



MSB tool code system

Types		Application		Designation
01	Boring	Boring		MBR/L○○☆☆
02		Copying		MBCR/L○○☆☆
03		Back Boring		MBBR/L○○☆☆
04		Chamfering		MBFR/L○○☆☆
05	Grooving	Square Grooving		MGR/L○○☆☆–□□
06		Round Grooving		MGRR/L○○☆☆–□□
07		Face Grooving		MGFR/L○○00–□□
08	Threading	Partial	60°	MTR/L○○☆☆–◇60
			55°	MTR/L○○☆☆–◇55

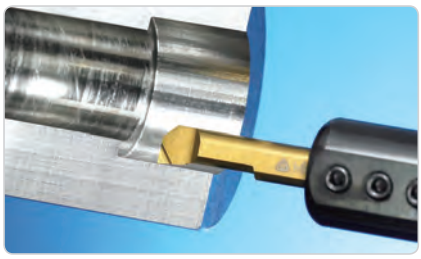
Details

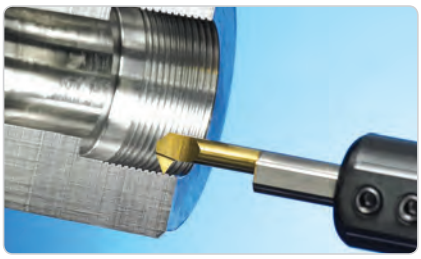
Marks	○○	Shank Dia.			
	☆☆	Max. depth of boring			
	□□	Width of groove			
	◇	Pitch/tpi	F	0.25~1.0	72~24
			A	0.5~1.5	48~16
			AG	0.5~3.0	48~8

Grades

Grades	Coating	Application and features
Z12M	Carbide	Ultra fine grain substrate ensures superior wear resistance and toughness Application: Cast iron, Aluminum alloy and Non-ferrous metals machining
PC30M	TiN coating	TiN coated ultra fine grain substrate ensures long tool life Application: Stainless steel, heat resisting alloy and hard-to-cut material machining

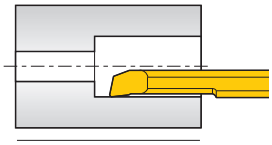
Machining types



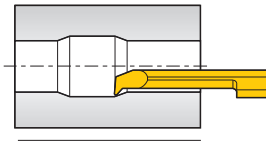


Types

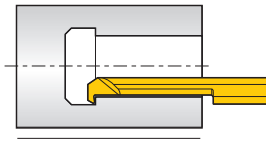
Boring



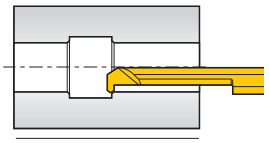
Boring
Min. dia. of machining: Ø3.2



Copying
Min. dia. of machining: Ø4.2

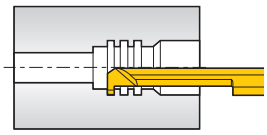


Back Boring
Min. dia. of machining: Ø3.2

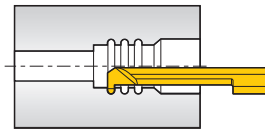


Chamfering
Min. dia. of machining: Ø4.2

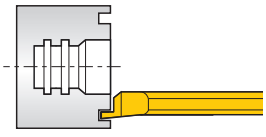
Grooving



Square Grooving
Min. dia. of machining: Ø3.2

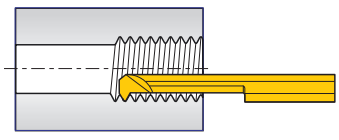


Round Grooving
Min. dia. of machining: Ø3.2



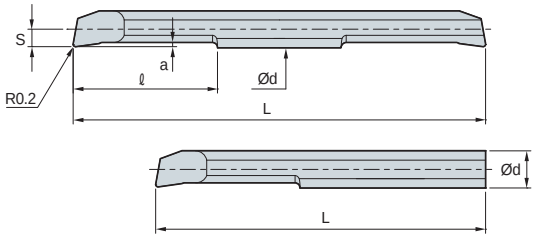
Face Grooving
Min. dia. of machining: Ø6.0

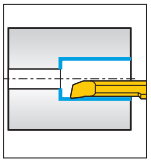
Threading



Threading
Min. dia. of machining: Ø3.3

Boring



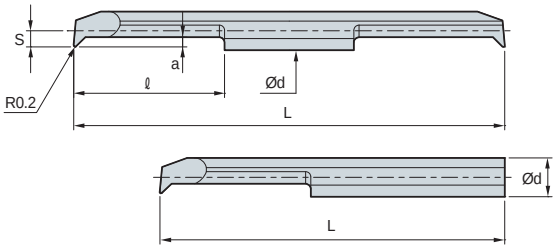


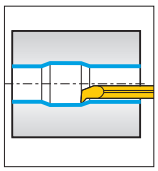
(mm)

Twin Edge				Single Edge				Ød	Min.dia. of machining	ℓ	Overall length L		Detailed cutting edge a	Detailed cutting edge S
Designation		Coated PC30M	Uncoated Z12M	Designation		Coated PC30M	Uncoated Z12M				Double ended	Single ended		
MBR	0310	●		MBR	0310-1			3.0	3.2	10	40	35	0.5	1.4
	0315	●			0315-1					15	50	45		
	0410	●			0410-1			4.0	4.2	10	40	35	0.6	1.9
	0415	●			0415-1					15	50	45		
	0420	●			0420-1					20	60	50		
	0610	●			0610-1			6.0	6.2	10	45	40	0.75	2.9
	0615	●			0615-1					15	55	45		
	0620	●			0620-1					20	65	50		
	0810	●			0810-1			8.0	8.2	10	50	45	0.8	3.9
	0820	●			0820-1					20	70	60		
	0830				0830-1					30	80	70		
	1015	●			1015-1			10.0	10.2	15	60	60	1.0	4.9
	1025	●			1025-1					25	80	70		
	1035	●			1035-1					35	100	80		

●: Stock item

Copying



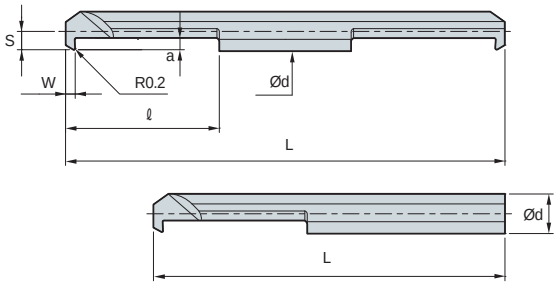


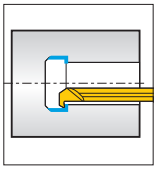
(mm)

Twin Edge				Single Edge				Ød	Min.dia. of machining	ℓ	Overall length L		Detailed cutting edge a	Detailed cutting edge S
Designation		Coated PC30M	Uncoated Z12M	Designation		Coated PC30M	Uncoated Z12M				Double ended	Single ended		
MBCR	0410	●		MBCR	0410-1			4.0	4.2	10	40	35	1.0	1.9
	0415	●			0415-1					15	50	45		
	0420	●			0420-1					20	60	50		
	0610	●			0610-1			6.0	6.2	10	45	40	1.3	2.9
	0615	●			0615-1					15	55	45		
	0620	●			0620-1					20	60	50		

●: Stock item

Back Boring



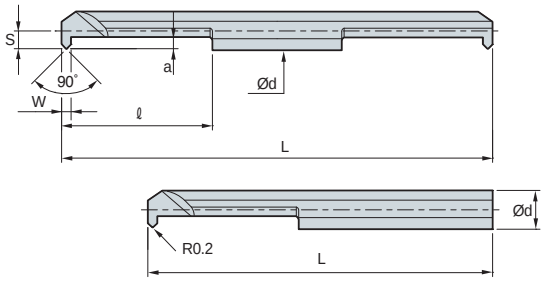


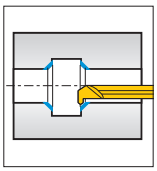
(mm)

Twin Edge				Single Edge				Ød	Min.dia. of machining	ℓ	Overall length		Detailed cutting edge		
Designation		Coated	Uncoated	Designation		Coated	Uncoated				L		W	a	S
		PC30M	Z12M			PC30M	Z12M				Double ended	Single ended			
MBBR	0310	●		MBBR	0310-1			3.0	3.2	10	40	35	1.5	0.8	1.4
	0315	●			0315-1					15	50	45			
	0410	●			0410-1			4.0	4.2	10	40	35	2.0	1.3	1.9
	0415	●			0415-1					15	50	45			
	0420	●			0420-1					20	60	50			
	0610	●			0610-1			6.0	6.2	10	45	40	2.0	1.9	2.9
	0615	●			0615-1					15	55	45			
	0620	●			0620-1					20	65	50			

● : Stock item

Chamfering



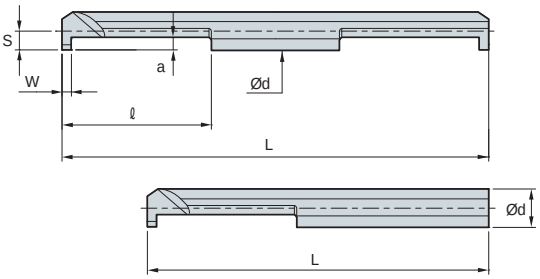


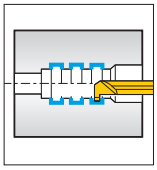
(mm)

Twin Edge				Single Edge				Ød	Min.dia. of machining	ℓ	Overall length		Detailed cutting edge		
Designation		Coated	Uncoated	Designation		Coated	Uncoated				L		W	a	S
		PC30M	Z12M			PC30M	Z12M				Double ended	Single ended			
MBFR	0410	●		MBFR	0410-1			4.0	4.2	10	40	35	0.8	1.0	1.9
	0415	●			0415-1					15	50	45			
	0420	●			0420-1					20	60	50			
	0610	●			0610-1			6.0	6.2	10	45	40	1.4	1.2	2.9
	0615	●			0615-1					15	55	45			
	0620	●			0620-1					20	65	50			

● : Stock item

Square Grooving



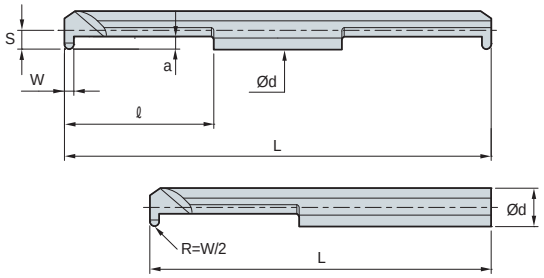


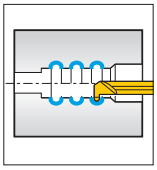
(mm)

Twin Edge				Single Edge				Ød	Min.dia. of machining	ℓ	Overall length L		Detailed cutting edge		
Designation		Coated PC30M	Uncoated Z12M	Designation		Coated PC30M	Uncoated Z12M				Double ended	Single ended	W	a	S
MGR	0310-1.0	●		MGR	0310-1.0-1			3.0	3.2	10	40	35	1.0	0.8	1.4
	0315-1.0	●			0315-1.0-1					15	50	45			
	0310-1.5	●			0310-1.5-1					10	40	35	1.5		
	0315-1.5	●			0315-1.5-1					15	50	45			
	0410-1.0	●			0410-1.0-1			4.0	4.2	10	40	35	1.0	1.4	1.9
	0420-1.0				0420-1.0-1					20	60	50			
	0410-1.5				0410-1.5-1					10	40	35	1.5		
	0420-1.5				0420-1.5-1					20	60	50			
	0410-2.0	●			0410-2.0-1					10	40	35	2.0		
	0420-2.0				0420-2.0-1					20	60	50			
	0610-1.0	●			0610-1.0-1			6.0	6.2	10	45	40	1.0	1.8	2.9
	0620-1.0	●			0620-1.0-1					20	65	50			
	0610-1.5	●			0610-1.5-1					10	45	40	1.5		
	0620-1.5	●			0620-1.5-1					20	65	50			
	0610-2.0	●			0610-2.0-1					10	45	40	2.0		
	0620-2.0	●			0620-2.0-1					20	65	50			
	0610-2.5	●			0610-2.5-1					10	45	40	2.5	2.0	
	0620-2.5	●			0620-2.5-1					20	65	50			
	0820-1.5	●			0820-1.5-1			8.0	8.2	20	70	60	1.5	2.5	3.9
	0820-2.0	●			0820-2.0-1								2.0		
	0820-2.5	●			0820-2.5-1								2.5	3.5	
	0820-3.0	●			0820-3.0-1								3.0		
	1025-1.5	●			1025-1.5-1			10.0	10.2	25	80	70	1.5	2.5	4.9
	1025-2.0	●			1025-2.0-1								2.0		
	1025-2.5	●			1025-2.5-1								2.5	3.5	
	1025-3.0	●			1025-3.0-1								3.0		

●: Stock item

Round Grooving



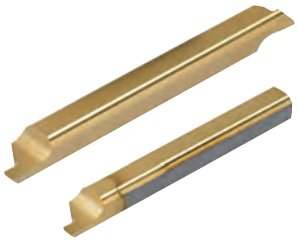


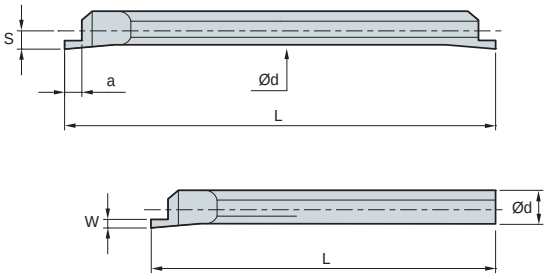
(mm)

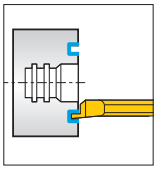
Twin Edge				Single Edge				Ød	Min.dia. of machining	ℓ	Overall length L		Detailed cutting edge		
Designation		Coated PC30M	Uncoated Z12M	Designation		Coated PC30M	Uncoated Z12M				Double ended	Single ended	W	a	S
MGRR	0310-0.8	●		MGRR	0310-0.8-1			3.0	3.2	10	40	35	0.8	0.8	1.4
	0315-0.8	●			0315-0.8-1					15	50	45			
	0410-1.0	●			0410-1.0-1			4.0	4.2	10	40	35	1.0	1.0	1.9
	0420-1.0	●			0420-1.0-1					20	60	50			
	0610-1.0	●			0610-1.0-1			6.0	6.2	10	45	40	1.0	2.0	2.9
	0620-1.0	●			0620-1.0-1					20	65	50			
	0610-1.5	●			0610-1.5-1					10	45	40	1.5		
	0620-1.5	●			0620-1.5-1					20	65	50			
	0610-2.0	●			0610-2.0-1					10	45	40	2.0		
	0620-2.0	●			0620-2.0-1					20	65	50			
	0820-1.0	●			0820-1.0-1			8.0	8.2	20	70	60	1.0	2.3	3.9
	0820-1.5	●			0820-1.5-1								1.5		
	0820-2.0				0820-2.0-1								2.0		
	1025-1.0	●			1025-1.0-1			10.0	10.2	25	80	70	1.0	2.8	4.9
	1025-1.5	●			1025-1.5-1								1.5		
	1025-2.0	●			1025-2.0-1								2.0		

●: Stock item

Face Grooving





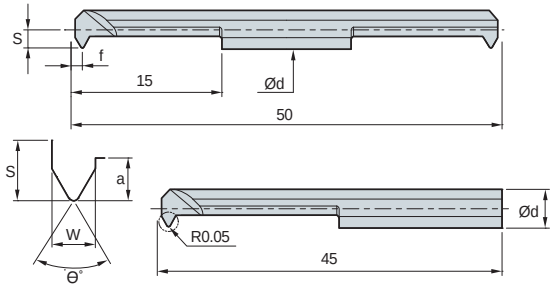


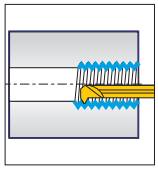
(mm)

Twin Edge				Single Edge				Ød	Min.dia. of machining	Overall length L		Detailed cutting edge		
Designation		Coated PC30M	Uncoated Z12M	Designation		Coated PC30M	Uncoated Z12M			Double ended	Single ended	W	a	S
MGFR	0400-1.0	●		MGFR	0400-1.0-1			4.0	6.0	50	45	1.0	1.5	1.8
	0400-1.5	●			0400-1.5-1							1.5	2.0	
	0600-1.0	●			0600-1.0-1			6.0	8.5	50	45	1.0	1.5	2.9
	0600-1.5	●			0600-1.5-1							1.5	2.0	
	0600-2.0	●			0600-2.0-1							2.0	2.5	
	0800-1.0	●			0800-1.0-1			8.0	10.4	70	60	1.0	1.5	3.9
	0800-1.5	●			0800-1.5-1							1.5	2.0	
	0800-2.0	●			0800-2.0-1							2.0	2.5	
	0800-2.5	●			0800-2.5-1							2.5	3.0	
	0800-3.0	●			0800-3.0-1							3.0	3.5	
					0800-3.5-1							3.5	4.0	
	1000-2.0	●			1000-2.0-1			10.0	12.4	80	70	2.0	2.5	4.9
	1000-2.5	●			1000-2.5-1							2.5	3.0	
	1000-3.0	●			1000-3.0-1							3.0	3.5	
	1000-3.5	●			1000-3.5-1							3.5	4.0	
	1000-4.0	●			1000-4.0-1							4.0	4.5	
	1000-4.5	●			1000-4.5-1							4.5	5.0	

●: Stock item

Threading





(mm)

Twin Edge				Single Edge				Ød	Min.dia. of ma-chining	Threading			Detailed cutting edge		
Designation		Coated PC30M	Uncoated Z12M	Designation		Coated PC30M	Uncoated Z12M			W	Pitch / tpi	θ°	S	a	f
MTR	0315-F60			MTR	0315-F60-1			3.0	3.3	1.2	0.5~1.0	60°	1.45	1.2	0.6
	0415-F60	●			0415-F60-1			4.0	4.3				1.95		
	0615-A60	●			0615-A60-1			6.0	6.2	2.0	0.5~1.5		2.90	2.2	1.0
	0315-F55	●			0315-F55-1			3.0	3.3	1.2	48~24	55°	1.45	1.2	0.6
	0415-F55	●			0415-F55-1			4.0	4.3				1.95		
	0615-A55	●			0615-A55-1			6.0	6.2	2.0	28~16		2.90	2.2	1.0

● : Stock item

SLEEVE

SL(SLEEVE)

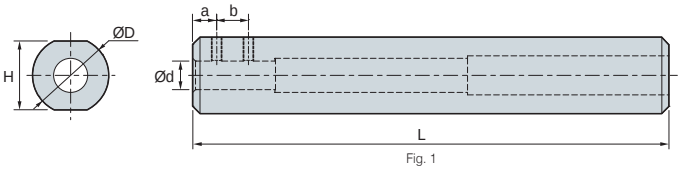


Fig. 1

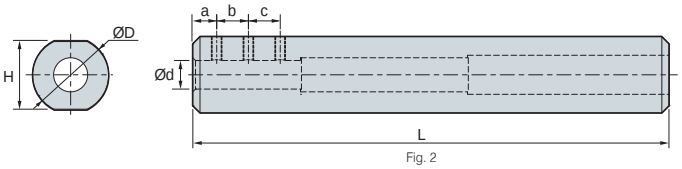


Fig. 2

(mm)

Designation	Ød	a	b	c	ØD	H	L	Screw	Wrench	Fig.
SL1603	3	5	-	-	16	14	100	M3	HW15L	1
SL1604	4	5	6	-	16	14	100	M4	HW20L	
SL1605	5	5	8	-	16	14	100	M4	HW20L	
SL1606	6	5	6	6	16	14	100	M4	HW20L	2
SL1607	7	5	6	8	16	14	100	M4	HW20L	
SL2008	8	5	10	10	20	18	100	M4	HW20L	2
SL2010	10	5	10	10	20	18	100	M5	HW20L	

※ Fine tolerance and surface roughness