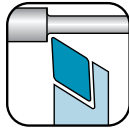
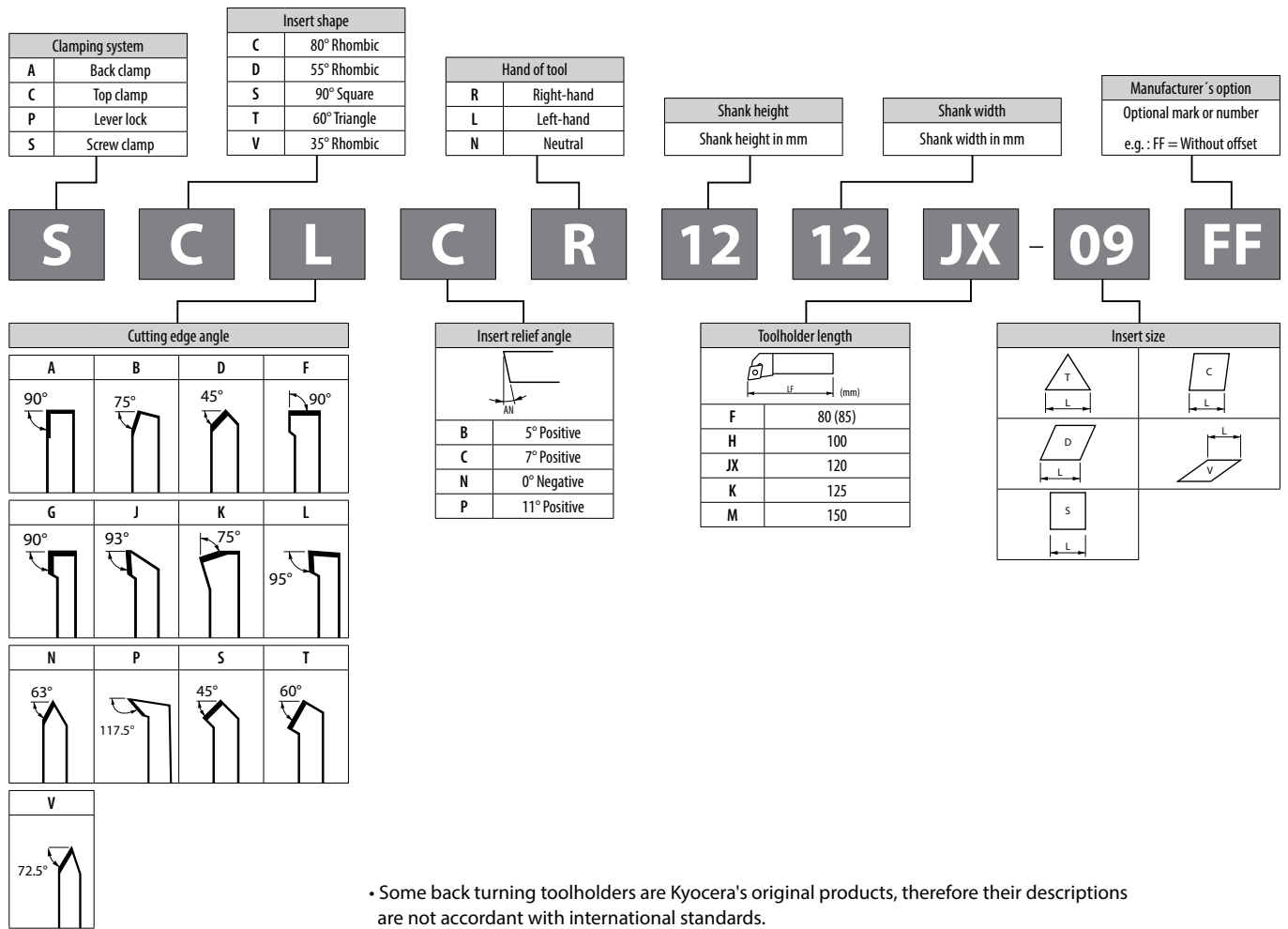


E



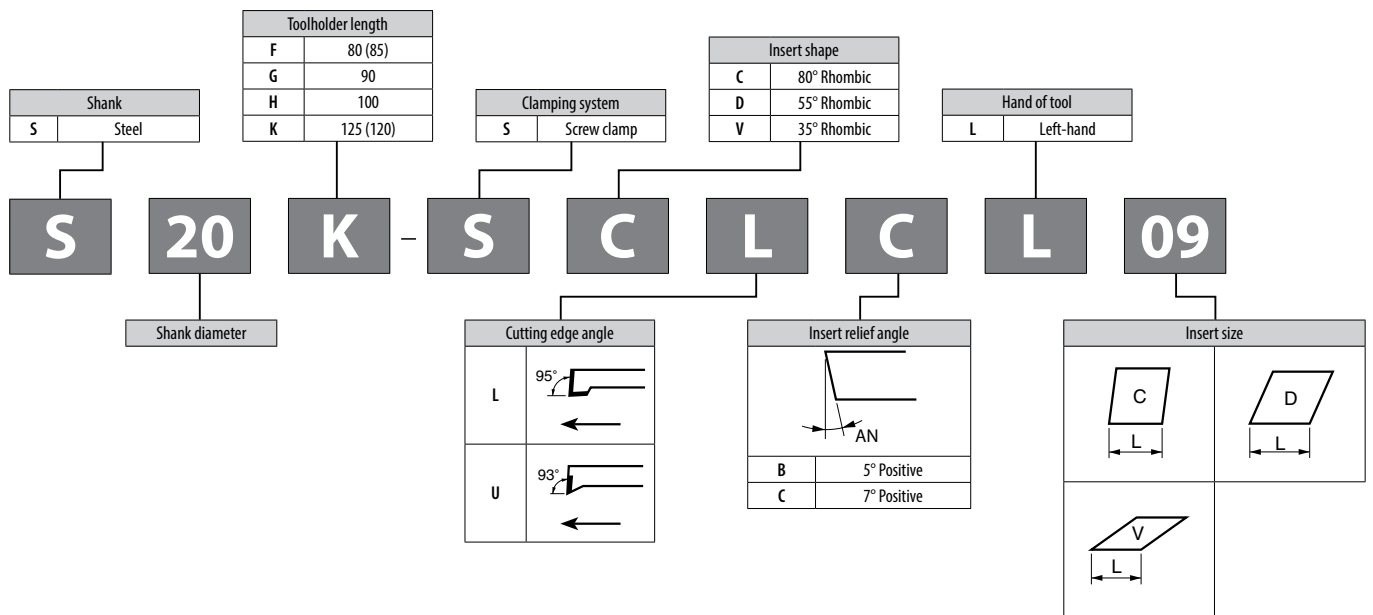
Introduction		E2
Toolholders for back turning		E14
TKFB insert	TKFB	E14
	KTKF / KTKF Goose-neck holder	E15
ABS15 insert	AABS-40F/SABS-40F	E16
ABW15 insert	AABW-40F/SABW-40F	E17
ABW23 insert	AABW-50F/SABW-50F	E18
Goose-neck toolholders		E19
DC insert	SDJC	E19
VP insert	SVLP	E20
External toolholders		E21
CC insert	ACLC-FF	E21
	SCLC	E22
	SCLC-FF/SCLC-FFJCT	E23
DC insert	ADJC-FF	E25
	SDJC-FF	E26
	SDJC-FFJCT	E27
	SDJC	E28
	SDLC-FF	E29
	SDXC	E30
	SDNC-F	E31
	SDNC	E32
DP insert	SDLP-FF	E33
TC/TP insert	STGC	E34
	STGP	E35
VB/VC insert	AVJB-FF/SVJB-FF/SVJB-FFJCT/SVJB/SVPB/SVVB	E36
	SVJC-FF/SVLC-FF	E40
	SVPC-FF/SVVC	E41
VP insert	SVJP-FF/SVJP-FFJCT/SVLP-FF/SVPP-FF	E42
External sleeve holders		E45
CC insert	S...SCLC	E45
DC insert	S...SDUC/S...SDLC	E46
VB/VC insert	S...SVUB/S...SVUC	E48
Toolholders for small double sided tooling		E50
CN insert	SCLN-FF (without offset)	E50
DN insert	SDLN-FF (without offset)	E51
TN insert	STLN-FF (without offset)	E52
Toolholders for double sided tooling for automatic lathes		E53
CN insert	PCLN-FF (without offset)	E53
TN insert	PTLN-FF (without offset)	E53
Recommended cutting conditions		E54

Square shank identification system (small tools)



• Some back turning toolholders are Kyocera's original products, therefore their descriptions are not accordant with international standards.

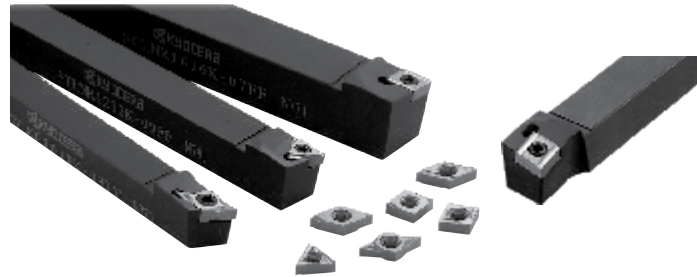
External sleeve holder identification system



• Specification may change without any prior notice.
 • Due to the installation size constraints on the machine, the toolholder length of some products may not match with the symbol.

Toolholders for small double sided tooling (Screw clamp, without offset)

Specially designed negative inserts (double-sided) for small workpieces enables sharp cutting equivalent to positive inserts, achieving high productivity due to economical doubled insert edge numbers.

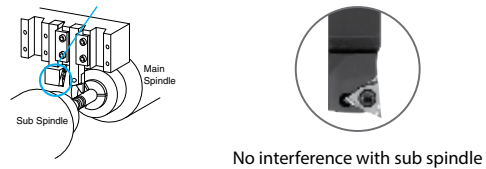


Designed small negative insert



No constraint of tool position against tool post into the newly designed small negative insert

The conventional toolholders for negative insert possibly interferes with sub spindle.

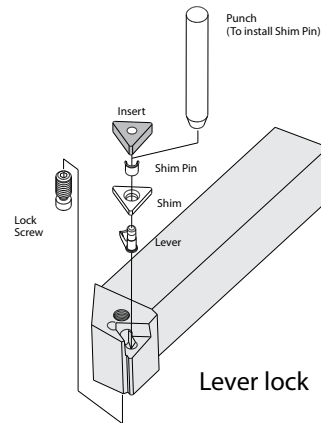


Toolholder for double sided tooling for automatic lathe (Lever lock, without offset)

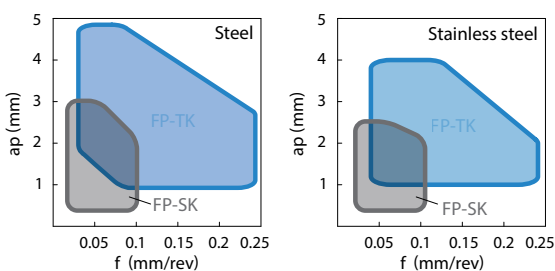
For medium to large ap in automatic lathes (When machining workpieces of medium to large diameter)



Sharp cutting oriented FP-SK/TK chipbreaker with polished and sharp edge preparation.



Applicable chipbreaker range



Design			Advantages
			2-step dot design provides reliable chip control at various ap.
			Polished chipbreaker. Smooth chip control and less adhesion.

Coolant-Through turning holders

Screw clamp JCT

Double-coolant hole design delivers an ample supply of coolant to the tool edge
Excellent chip control and longer tool life

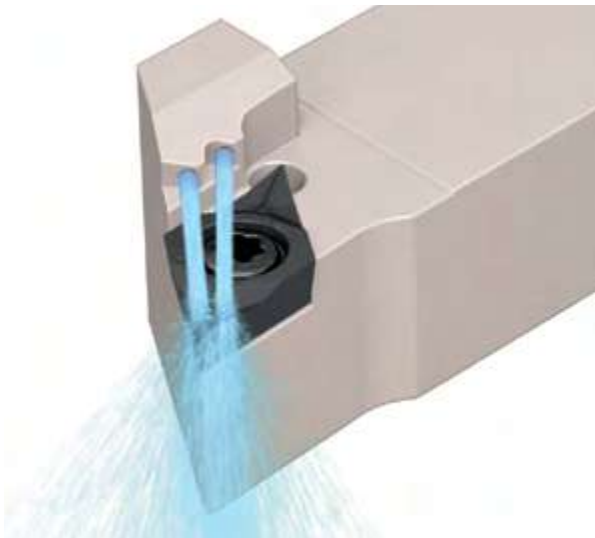
E



Small tools

1 Superior chip control performance

Double coolant hole design provides coolant to the insert cutting edge surface

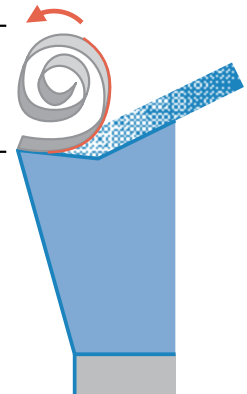


2 Sufficient cooling of the cutting edge leads to longer tool life

Double coolant holes

Provides stable chip curls
Superior chip control

The cutting edge stays cool
Long tool life



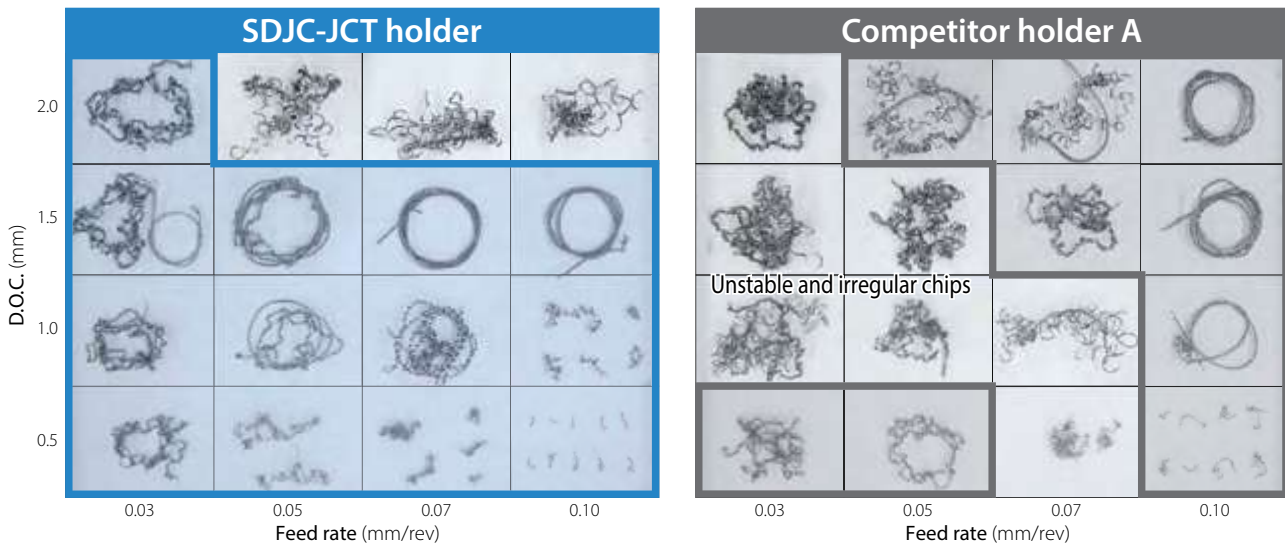
Insert cross-section

Coolant system comparison (Internal evaluation)

	Screw clamp JCT holder	Competitor holder A
Coolant system	<p>Discharges coolant towards the chips</p> <p>Chip evacuation direction</p>	<p>Discharges coolant down into the chip forcing the chip into the part</p> <p>Chip evacuation direction</p>
Superior chip control	Excellent: Provides stable chip curls	Poor: Chip becomes unstable
Coolant effects	Excellent: Ensures proper cooling of the cutting edge	Poor: Chip can obstruct coolant supply

Great for high pressure coolant - Chip control comparison (Internal evaluation)

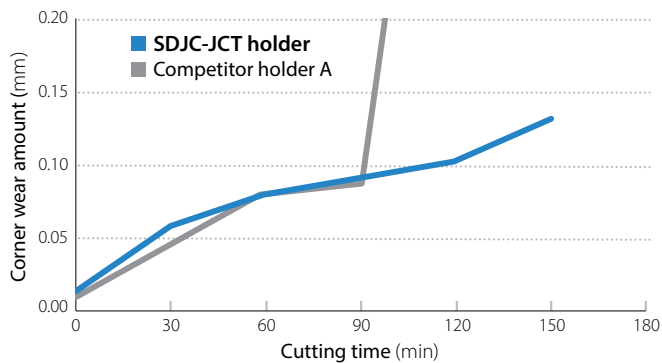
SDJC-JCT holder allows excellent chip control in a wide variety of cutting conditions



Cutting conditions: $V_c = 80$ m/min, DCGT11T302MP-CK PR1535 (Same inserts were used) Workpiece: TAB6400 (Ti-6Al-4V) External and internal coolant (1.5MPa) turning



Great for high pressure coolant - Wear resistance comparison (Internal evaluation)



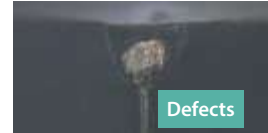
Cutting conditions: $V_c = 200$ m/min, external turning: $a_p = 2.0$ mm, $f = 0.05$ mm/rev, facing: $a_p = 0.2$ mm, $f = 0.03$ mm/rev DCGT11T302MFP-GQ PR1535 (same inserts were used) Workpiece: X5CrNi1810, external and internal coolant (1.5MPa) External turning and facing

Cutting edge

SDJC-JCT holder after machining 150 min



Competitor Holder A after machining 106 min

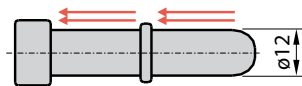


Defects

Case studies

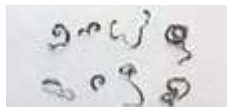
Pipe X5CrNi1810-equivalent

$V_c = 160$ m/min
 $a_p = 0.9 / 1.2$ mm
 $f = 0.18$ mm/rev
 Wet (Internal coolant: 14MPa)
 DCMT11T304 type



Chip control

SDJC-JCT holder
 Internal coolant



Competitor holder B
 Internal coolant

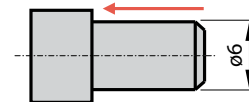


Changes to SDJC-JCT improved chip control while keeping same or more tool life.

User evaluation

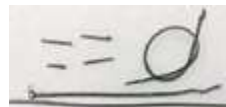
Pin 1.2842

$V_c = 180$ m/min
 $a_p = 1.4$ mm
 $f = 0.13$ mm/rev
 Wet
 DCMT11T304 type



Chip control

SDJC-JCT holder
 Internal coolant: 2.5MPa



Conventional holder
 External coolant



SDJC-JCT holder with internal coolant improved chip control. Reduced chip entanglement.

User evaluation

How to use goose-neck holder for swiss tool automatic lathe (Gang type tool post)



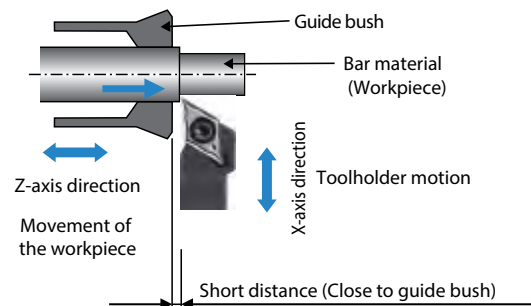
Goose-neck holder is applicable to automatic lathes whose toolholder does not move to longitudinal direction (Z-axis direction).

E

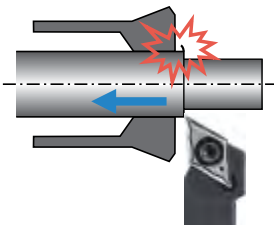
Swiss tool automatic lathe (Guide bush system)

In case of machining with the conventional toolholder

Goose-neck Holder is applicable to automatic lathe that toolholder does not move to longitudinal direction (Z-axis direction)

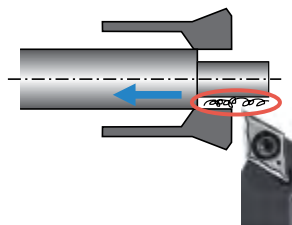


Problems of machining with the conventional toolholder



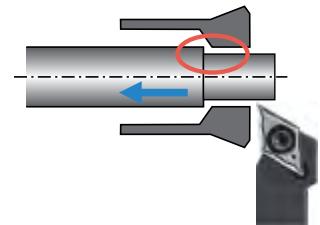
Case 1

During multiple passes, when bar material returns into guide bush, the burr contacts and breaks guide bush.



Case 3

During multiple passes, when bar material returns into guide bush, the chips contacts and breaks guide bush.



Case 4

Bar material deviation from the guide bush disables machining.

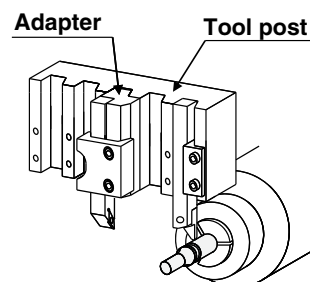
Case 2

The workpiece burr contacts the guide bush and causes dimensional variation.

Problems of toolholder Installation

When using a conventional toolholder

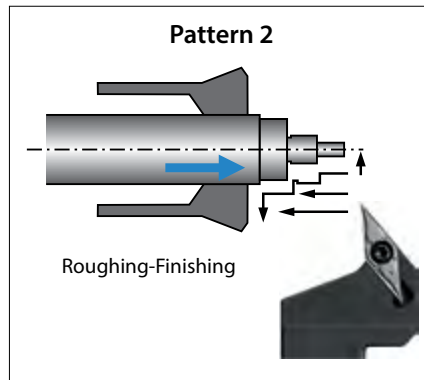
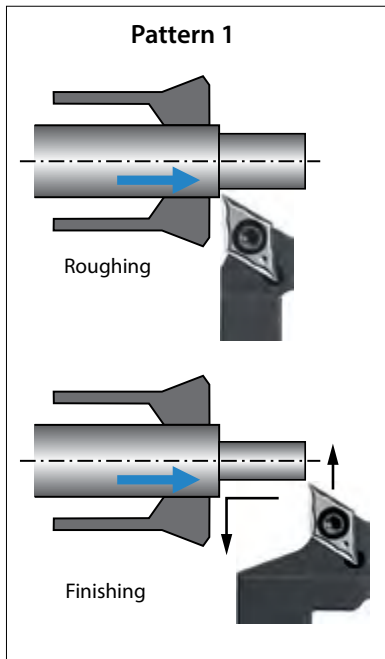
1. Additional space is required for an adapter.
2. Toolholder's handling is difficult due to limited space.
3. Necessary to buy an adapter.
4. An adapter may interfere with the next tool post.



Advantages of goose-neck holder

When using goose-neck holder

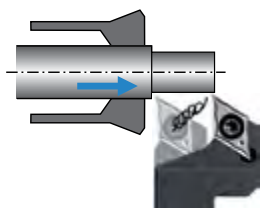
1. Machining precision improves by additional finishing process.
2. Chips do not come into the guide bush.
3. Better chip control due to large chip evacuation space.



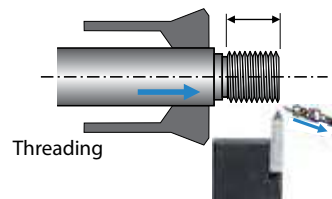
Available for roughing and finishing with one Goose-neck holder.

Available for machining after roughing without returning bar material into guide bush, preventing damages and improving precision.

For better chip control



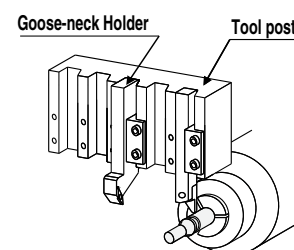
Optimum cutting edge position and large space for efficient chip evacuation.



With conventional threading toolholders, chip biting into guide bush can cause damages on threads.

Advantages of Toolholder installation - When using a goose-neck holder

1. Maximum number of toolholders can be attached.
2. No interference with next tool post.



External toolholder selection for productivity improvement

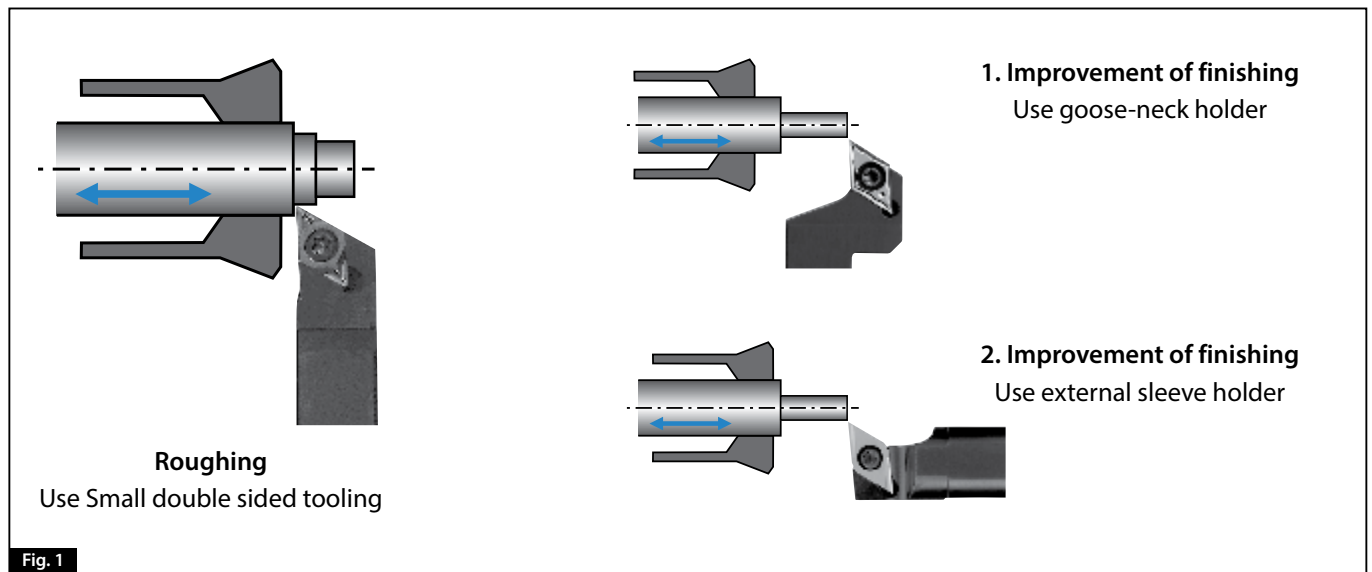
Applications	Tooling Example	Toolholder	Advantages	Workpiece diameter	Medium-roughing of steel (Radial ap: mm)
Medium-Roughing	SCLN-FF SDLN-FF STLN-FF	Small double sided tooling (Screw clamp)	Cost reduction	Over $\phi 6$	ap = ~2.5 mm
	PCLN-FF PTLN-FF	Toolholder for double sided tooling for automatic lathe (Lever lock) + FP-TK chipbreaker	Cost reduction	Over $\phi 16$	ap = 1.5 ~ 5 mm
Medium-Roughing + Finishing	Fig. 1	Small double sided tooling (Screw clamp)	Cost reduction	Under $\phi 16$	ap = ~2.5 mm
		Goose-neck holder (External sleeve holder)	Chip Control	-	-
	Fig. 2	Toolholder for double sided tooling for automatic lathe (Lever lock) + FP-TK chipbreaker	Cost reduction	$\phi 16 \sim \phi 32$	ap = 1.5 ~ 5 mm
		Goose-neck holder (External sleeve holder)	Chip control	-	-
	Fig. 3	Grooving toolholder	Long curled chips are evacuated toward a fixed direction	$\phi 16 \sim \phi 32$	ap = over 4 mm
		Goose-neck holder (External sleeve holder)	Chip control	-	-

E

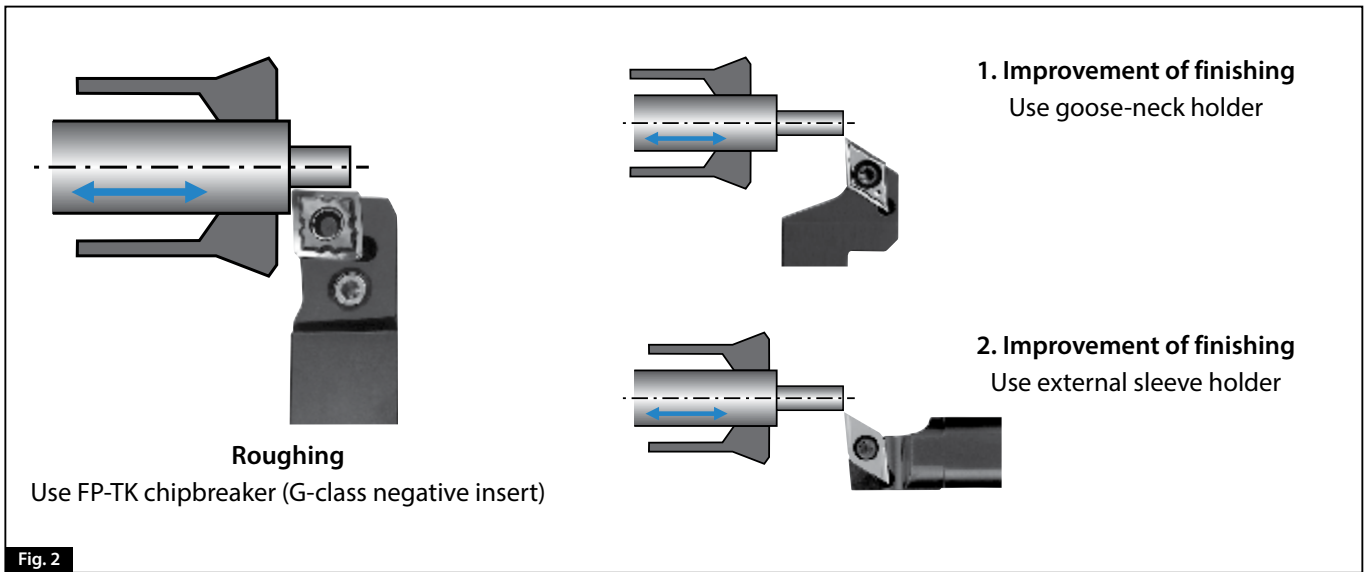


Small tools

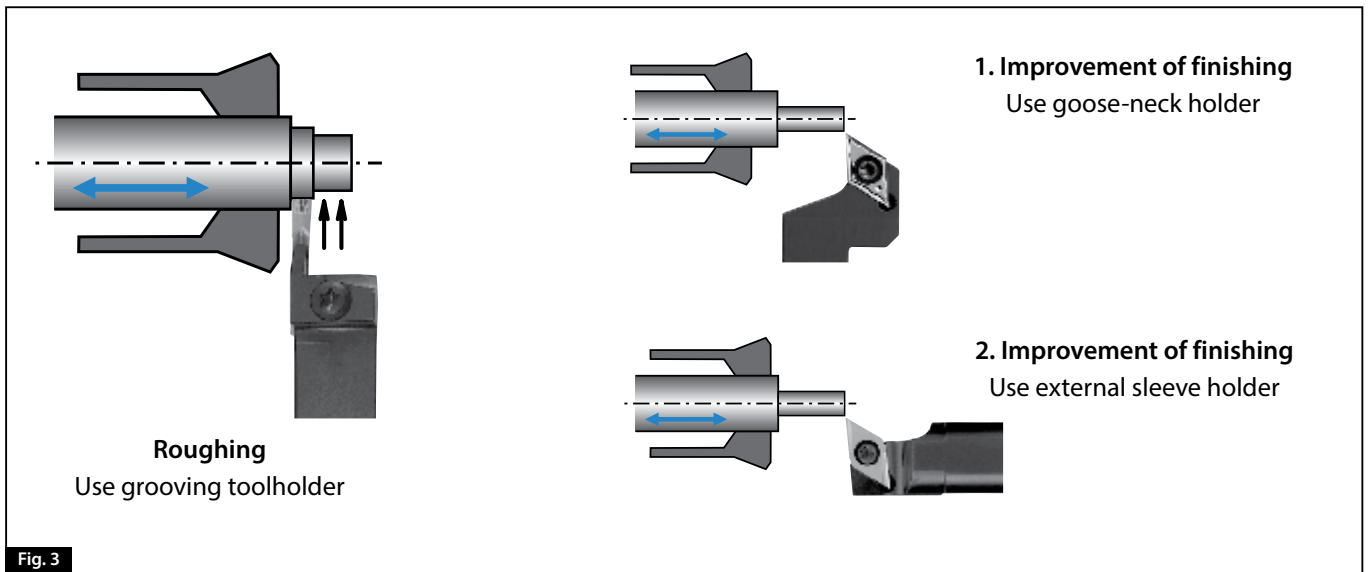
Guideline for roughing: ap = ~2.5 mm



Guideline for roughing: $a_p = 1.5 \sim 5 \text{ mm}$



Guideline for roughing: $a_p = \text{over } 4 \text{ mm}$



Back turning TKFB type

Chipbreaker GQ

Solution for problems at conventional back-turning. Original molded chipbreaker realizes excellent surface finish by smooth chip control.

E

1

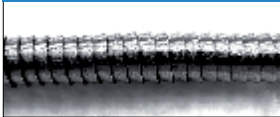
Original double-function chipbreaker for improved chip control



Small tools

Function 1: External
Preventing chip entanglement
--> Stable chip control

GQ Chipbreaker



Competitor A

Ground chipbreaker



Function 2: Grooving
Preventing chip biting
--> Good surface roughness

GQ Chipbreaker




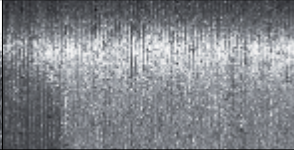

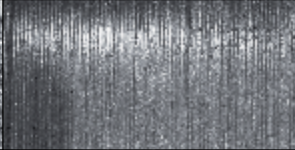
Competitor A

Ground chipbreaker



2 Excellent surface finish by preventing chip biting and clogging

Surface finish comparison

Workpiece surface	TKFB GQ chipbreaker		Competitor B (Ground chipbreaker)	
	Facing	External	Facing	External
				
Excellent surface 2.9 μmRz	3.8 μmRz	Chip biting 31.2 μmRz	7.6 μmRz	

Cutting conditions : V_c : 100 m/min, a_p = 3.0 mm, f = 0.02 mm/rev (Grooving), 0.05 mm/rev (External), workpiece material : C45, wet

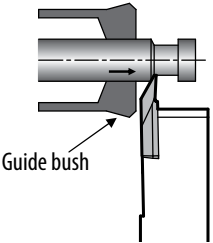
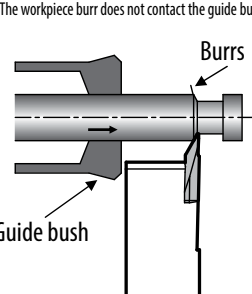
**GQ chipbreaker realizes excellent surface finish with single pass.
Suitable for cycle time reduction.**



Small tools

Toolholders for back turning - TKFB insert

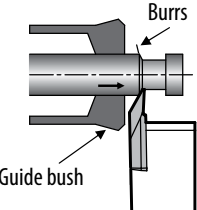
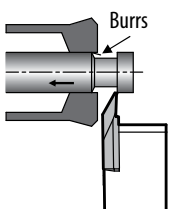
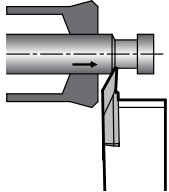
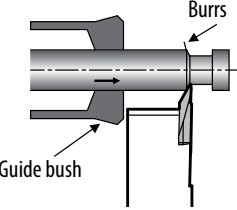
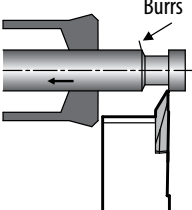
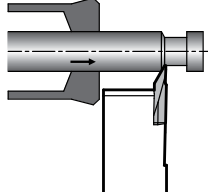
How to select back turning toolholder hand

<p>Right-hand</p>	 <p>Guide bush</p>	<ul style="list-style-type: none"> • Machining near the guide bush is possible • Narrow cutting edge width of TKFB12R15005M • Optimum for small parts and high precision machining
<p>Left-hand</p>	<p>The workpiece burr does not contact the guide bush.</p>  <p>Burrs</p> <p>Guide bush</p>	<ul style="list-style-type: none"> • Machining with a distance from guide bush • Good chip control due to large space between the guide bush and the tool. • Excellent chip control in roughing and finishing (plural passes) <ul style="list-style-type: none"> • Stable accuracy of external diameter dimension: <ul style="list-style-type: none"> • When burrs occur, if a left-hand toolholder is used, it is not necessary to return workpiece into guide bush in finishing. • Also, left-hand toolholders prevent guide bush wear caused by chip biting.

E

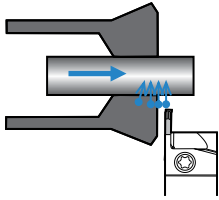
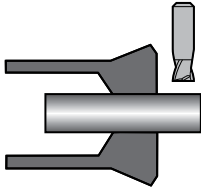
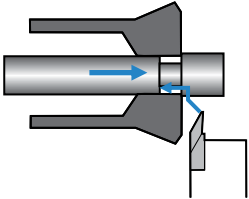
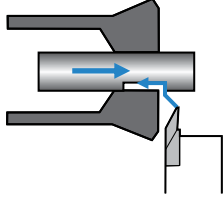
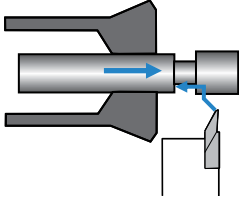
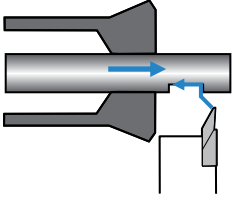
Small tools

Workpiece movement and tool hand selection - in roughing and finishing

	Roughing	Workpiece position after roughing	Finishing
<p>Right-hand</p>	 <p>Burrs</p> <p>Guide bush</p>	 <p>Burrs</p>	
<p>Left-hand</p>	 <p>Burrs</p> <p>Guide bush</p>	 <p>Burrs</p>	

* Good dimension accuracy: If a left-hand toolholder is used, burrs on workpiece generated in roughing do not damage the guide bush in finishing.

Chip control improvement in back turning

	Chip control improvement by tool pass changes - 1	Chip control improvement by tool pass changes - 2
Roughing ↓	Roughing with grooving tools 1. GMM2420-020MW (Grooving) 	Pre-Stage machining is processed with solid end mill 1. Solid end mill 
Finishing (Countermeasures 1) Use right-hand toolholder	When using TKFB12R28010M (for back turning / right hand)  <u>Advantages:</u> • Good surface roughness <u>Disadvantages:</u> • If a machining pass is long, the guide bush can not support the workpiece.	When using TKFB12R28010M (for back turning / right hand)  <u>Advantages:</u> 1. Minimal deflection in long machining passes 2. Chips are broken into small pieces, though the workpiece material is sticky <u>Disadvantages:</u> • The pre-stage machining may cause fractures, because of interrupted machining
Finishing (Countermeasures 2) Use left-hand toolholder	When using TKFB12L28010M (for back turning / left hand)  <u>Advantages:</u> 1. Good surface roughness 2. High precision machining if the machined portion does not contact the guide bush. <u>Disadvantages:</u> • If a machining pass is long, the guide bush can not support the workpiece.	When using TKFB12L28010M (for back turning / left hand)  <u>Advantages:</u> 1. Minimal deflection in long machining passes 2. Chips are broken into small pieces, though the workpiece material is sticky. 3. High precision machining if the machined portion does not contact the guide bush. <u>Disadvantages:</u> • The pre-stage machining may cause fractures, because of interrupted machining.

E

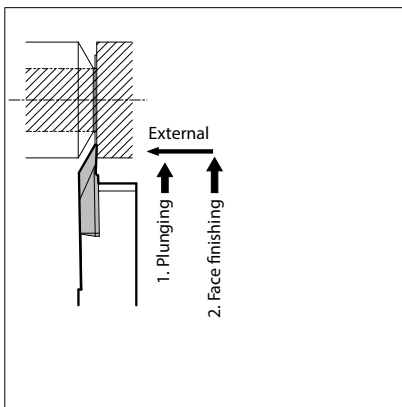


Small tools

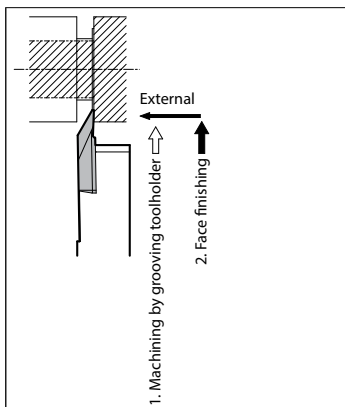
Countermeasure against peeled surface in face back turning

When peeled surface occurs on the workpiece face, please apply the countermeasures below.

Countermeasures 1 Face finishing


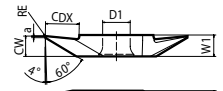

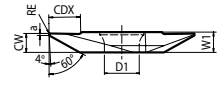


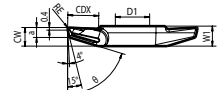


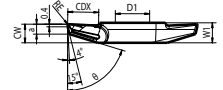



Countermeasures 2 Face finishing after grooving


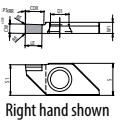

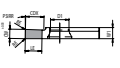


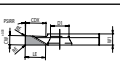


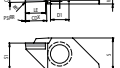
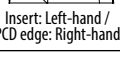



TKFB

E
Small tools

Insert	Description	No. of edges	Dimension (mm)							Angle (°)		Carbide		
			CW	CDX	S	D1	RE	W1	a	θ	PVD	-	-	
			PR1725	PR1535	PR1725	KW10	-	-	-					
	 TKFB 12R15005M 12R28005M 12R28010M	2	1.5 2.8 2.8	2.6 4.6 4.6		8.7 5.2	< 0.05 < 0.05 < 0.1		3	0.25 0.3 0.3		●●●●	●●●●	●●●●
	 TKFB 16R38005M 16R38010M	2	3.8	6.3	9.5	5.2	< 0.05 < 0.1		4	0.3		●●●●	●●●●	●●●●
	 TKFB 12L28005MR 12L28010MR	2	2.8	4.6	8.7	5.2	< 0.05 < 0.1		3	0.3		●●●●	●●●●	●●●●
	 TKFB 16L38005MR 16L38010MR	2	3.8	6.3	9.5	5.2	< 0.05 < 0.1		4	0.3		●●●●	●●●●	●●●●
	 TKFB12R 28005P-GQ 28015P-GQ	2	2.8	4.6	8.7	5.2	0.05 0.15		3	1.5	74	●●●●	●●●●	●●●●
	 TKFB16R 38005P-GQ 38015P-GQ	2	3.8	6.3	9.5	5.2	0.05 0.15		4	1.8	72	●●●●	●●●●	●●●●
	 TKFB12R 28005-GQ 28015-GQ	2	2.8	4.6	8.7	5.2	0.05 0.15		3	1.5	74	●●●●	●●●●	●●●●
	 TKFB16R 38005-GQ 38015-GQ	2	3.8	6.3	9.5	5.2	0.05 0.15		4	1.8	72	●●●●	●●●●	●●●●

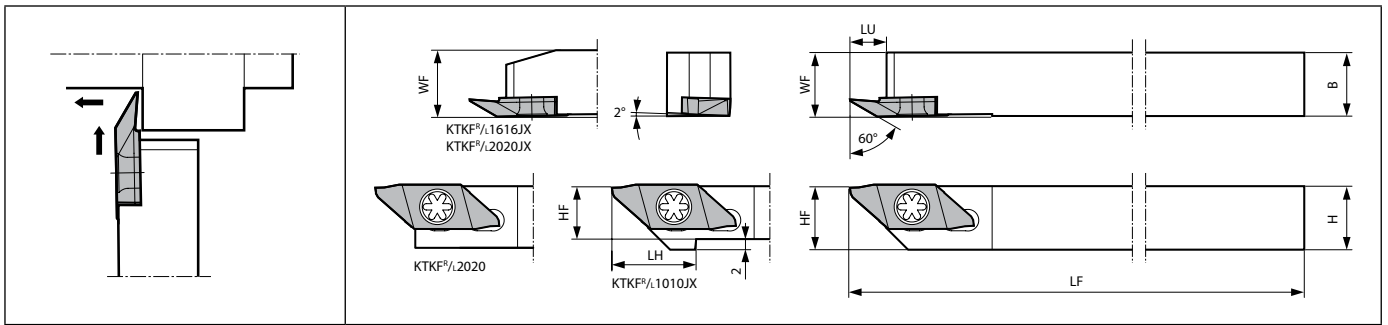
TKF (PCD inserts)

Insert	Description	No. of edges	Dimension (mm)										Angle (°)			Tolerance (mm)		PCD
			CW	CDX	S	S1	D1	RE	LE	W1	PSIR ^{PS} %	CW min.	CW max.	RE	-	-		
																	KPD001	-
 Turning / Grooving	 TKF12R 250-NB4.5	1	2.5	5	8.7	8.3	5	0.1	4.5	3	0	-0.03	+0.03	0	-0.05	●		
 External grooving (Turning possible)	 TKF12R 150-NB	1	1.5	3.5	8.7	8.3	5	0.1	3	3	0	-0.03	+0.03	0	-0.05	●		
	 TKF12L 250-NB		2	4												●		
 Turning / Grooving	 TKF12L 150-NB	1	1.5	3.5	8.7	8.3	5	0.1	3	3	0	-0.03	+0.03	0	-0.05	●		
	 TKF12L 200-NB		2	4												●		
	 TKF12R 200-AS 250-AS	1	2	5	8.7	7.3	5	0.1	5.3	3	0	-0.03	+0.03	0	-0.05	●		
	 TKF12L 200-AS		2	●														
 TKF16R 250-AS TKF16L 250-AS	1	2.5	8	9.5	8.0	5	0.1	6.3	4	0	-0.03	+0.03	0	-0.05	●●			
 TKF16L 250-ASR	1	2.5	8	9.5	8.0	5	0.1	6.3	4	0	-0.03	+0.03	0	-0.05	●			

● : Standard item

Recommended cutting conditions: E54 - E56

KTKF (Back turning)



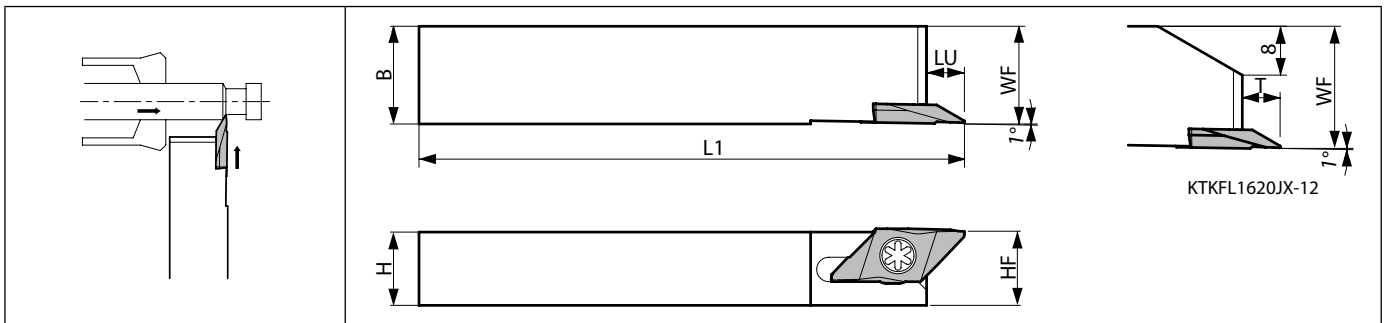
Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.

Toolholder dimensions

Description	Availability		Dimension (mm)							Spare parts		Applicable inserts
										Clamp screw	Wrench (Torx)	
			R	L	H	B	LH	HF	LF	LU	WF	
KTKF%/ 1010JX-12 1212JX-12 1616JX-12 2020JX-12	●	●	10	10	15	10	120	6	10	SB-4590TRWN	FT-10	TKFB%/L 12...
	●	●	12	12					12			
	●	●	16	16					16			
	●	●	20	20					20			
KTKF%/ 1010JX-16 1212JX-16 1616JX-16 2020JX-16	●	●	10	10	20	10	120	8	10	SB-4590TRWN	FT-10	TKFB%/L 16...
	●	●	12	12					12			
	●	●	16	16					16			
	●	●	20	20					20			
KTKF%/ 1212F-12 1212F-16	●	●	12	12		12	85	6	SB-4590TRWN	FT-10	TKFB%/L 12...	
	●	●						8			12	TKFB%/L 16...

LU shows the distance from the toolholder to the cutting edge.
See Page H16 for internal coolant type (coolant-through holders)

KTKF (Back turning)



Left-hand shown | Left-hand Insert for Left-hand Toolholder.

Toolholder dimensions

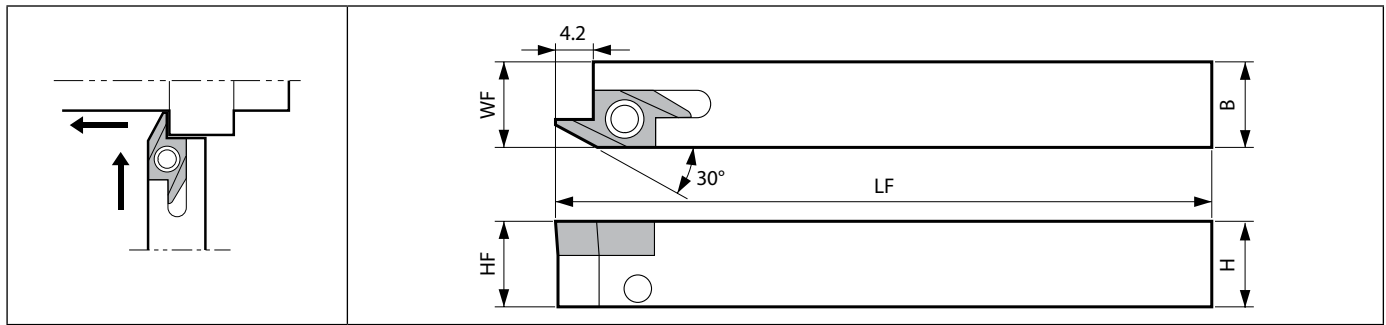
Description	Availability		Dimension (mm)					Spare parts		Applicable inserts
								Clamp screw	Wrench (Torx)	
			L	H	B	HF	LF	LU	WF	
KTKFL 1216JX-12 1620JX-12	●	12	16	12	120	6	16	SB-4590TRWN	FT-10	TKFBL12...
	●	16	20	16			20			

LU shows the distance from the toolholder to the cutting edge.

● : Standard item

Recommended cutting conditions: E54 - E56

AABS (Back turning)

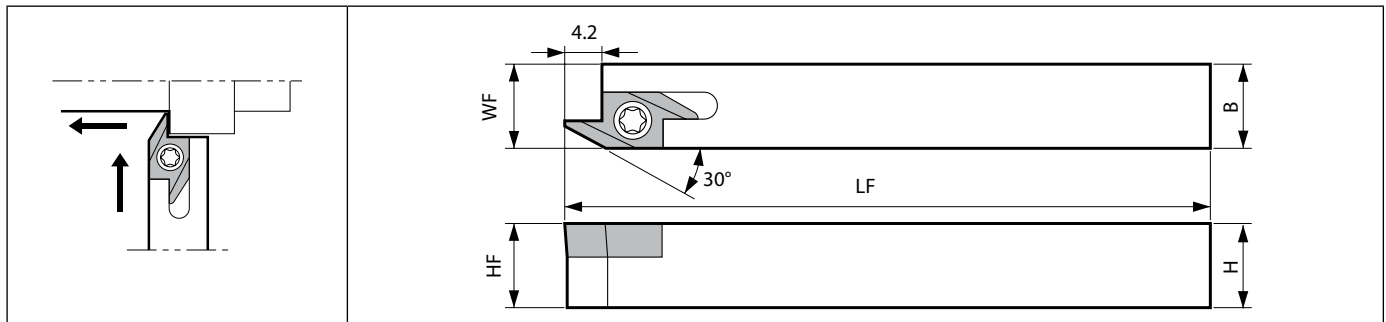


Right-hand shown | Lock screw is operated from opposite side of cutting point

Toolholder dimensions

Description	Availability	Dimension (mm)						Standard corner-R (RE)	Spare parts			Applicable inserts
		R	H	B	HF	LF	WF		Anchor pin	Lock screw	Wrench	
AABSR 1010JX-40F 1212JX-40F 1616JX-40F	● ● ●	10 12 16	10 12 16	10 12 16	10 12 16	120 12.2 16.2	0.15	LPA-11 LPA-13 LPA-17	HSB4X8R	FH-2	ABS15...(M)	

SABS (Back turning)



Right-hand shown

Toolholder dimensions

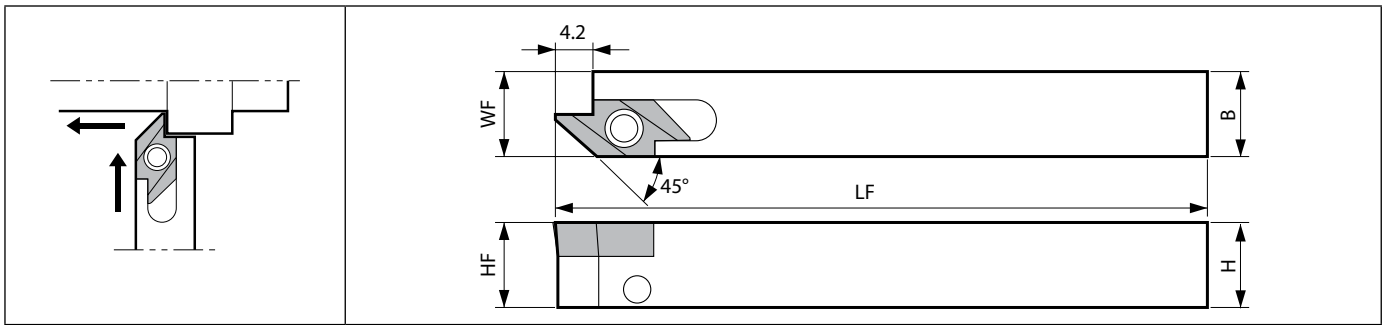
Description	Availability	Dimension (mm)						Standard corner-R (RE)	Spare parts		Applicable inserts
		R	H	B	HF	LF	WF		Clamp screw	Wrench	
SABSR 1010JX-40F 1212F-40F 1212JX-40F 1616JX-40F 2020K-40F	● ● ● ● ●	10 12 16 20	10 12 16 20	10 12 16 20	10 12 16 20	120 85 120 125	0.15	SB-3080TR	FT-10	ABS15...(M)	

Applicable inserts

Applications	Insert
Toolholder	
AABS - 40F	ABS15R40..
SABS - 40F	
Page	B108

● : Standard item

AABW-40F (Back turning)



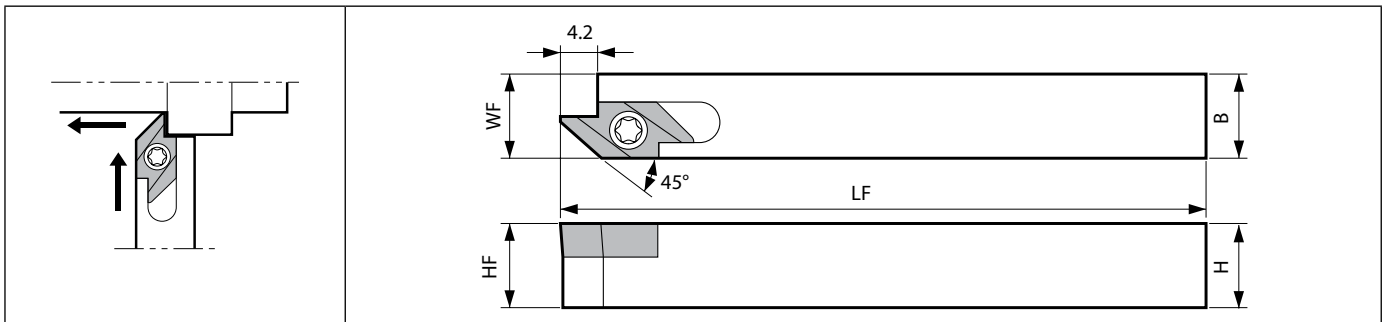
Right-hand shown | Lock screw is operated from opposite side of cutting point

Toolholder dimensions

Description	Availability	Dimension (mm)						Standard corner-R (RE)	Spare parts			Applicable inserts
		R	H	B	HF	LF	WF		Anchor pin	Lock screw	Wrench	
AABWR 1010JX-40F 1212JX-40F 1616JX-40F	●	10	10	10		10.2	0.15	LPA-11	HSB4X8R	FH-2	ABW15...(M)	
	●	12	12	12	120	12.2		LPA-13				
	●	16	16	16		16.2		LPA-17				



SABW-40F (Back turning)



Right-hand shown

Toolholder dimensions

Description	Availability	Dimension (mm)						Standard corner-R (RE)	Spare parts		Applicable inserts
		R	H	B	HF	LF	WF		Clamp screw	Wrench	
SABWR 1010JX-40F 1212JX-40F 1616JX-40F 2020K-40F	●	10	10	10		10.2	0.15	SB-3080TR	FT-10	ABW15...(M)	
	●	12	12	12	120	12.2					
	●	16	16	16		16.2					
	●	20	20	20	125	20.2					

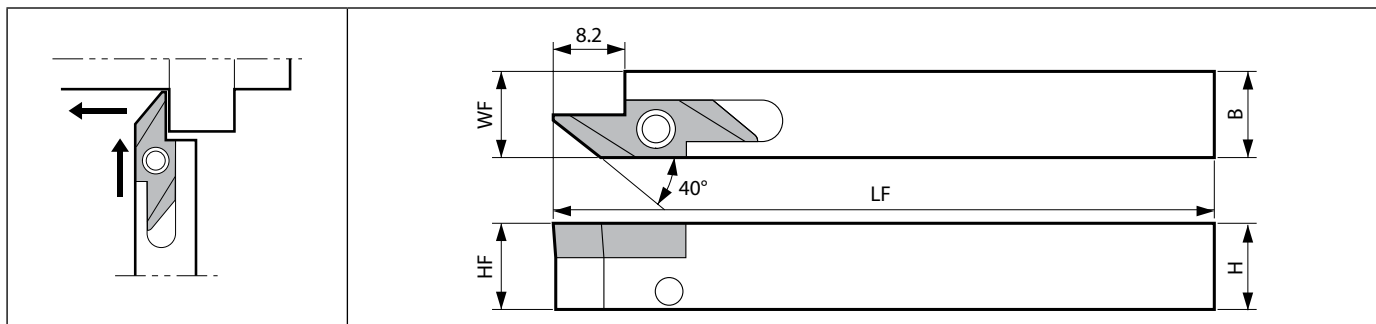
Applicable inserts

Applications	Insert
Toolholder AABW - 40F SABW - 40F Page	 ABW15R40.. B108

● : Standard item

Recommended cutting conditions: E54 - E56

AABW-50F (Back turning)

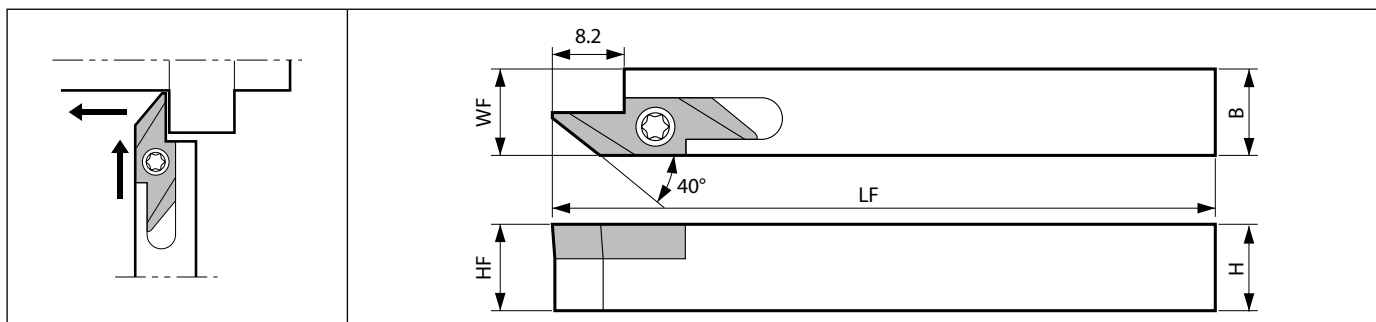


Right-hand shown | Lock screw is operated from opposite side of cutting point

Toolholder dimensions

Description	Availability	Dimension (mm)						Standard corner-R (RE)	Spare parts			Applicable inserts
		R	H	B	HF	LF	WF		Anchor pin	Lock screw	Wrench (Torx)	
AABWR	1010JX-50F	●	10	10	10		10.2	0.15	LPA-11			ABW23...(M)
	1212JX-50F	●	12	12	12	120	12.2		LPA-13	HSB4X8R	FH-2	
	1616JX-50F	●	16	16	16		16.2		LPA-17			

SABW-50F (Back turning)



Right-hand shown

Toolholder dimensions

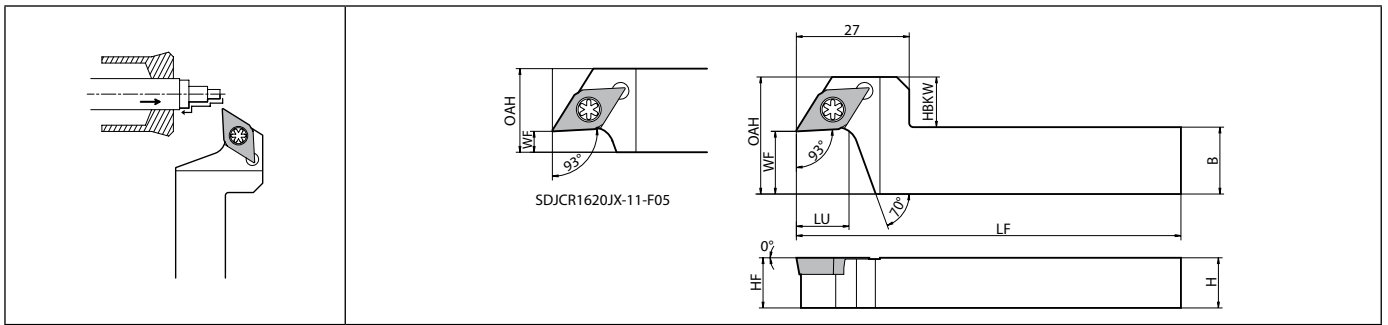
Description	Availability	Dimension (mm)						Standard corner-R (RE)	Spare parts		Applicable inserts
		R	H	B	HF	LF	WF		Clamp screw	Wrench (Torx)	
SABWR	1010JX-50F	●	10	10	10		10.2	0.15			ABW23...(M)
	1212JX-50F	●	12	12	12	120	12.2				
	1616JX-50F	●	16	16	16		16.2				
	2020K-50F	●	20	20	20	125	20.2		SB-3080TR	FT-10	

Applicable inserts

Applications	
Insert	
Toolholder	
AABW - 50F	ABW23R50..
SABW - 50F	
Page	B108

● : Standard item

SDJC (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability	Dimension (mm)									Standard corner-R (RE)	Spare parts		Applicable inserts
		R	H	B	OAH	HF	HBKW	LF	LU	WF		Clamp screw	Wrench (Torx)	
SDJCR 1216JX-11-F05 1216JX-11-F15 1620JX-11-F05 1620JX-11-F15	● ● ● ●	12	16	18 28	12	2 12	120	12.6	5 15 5 15	0.2	SB-4085TR	FT-15	DC..11T3	

For WP chipbreaker, cutting edge offsets or program corrections are required on R34-R35.

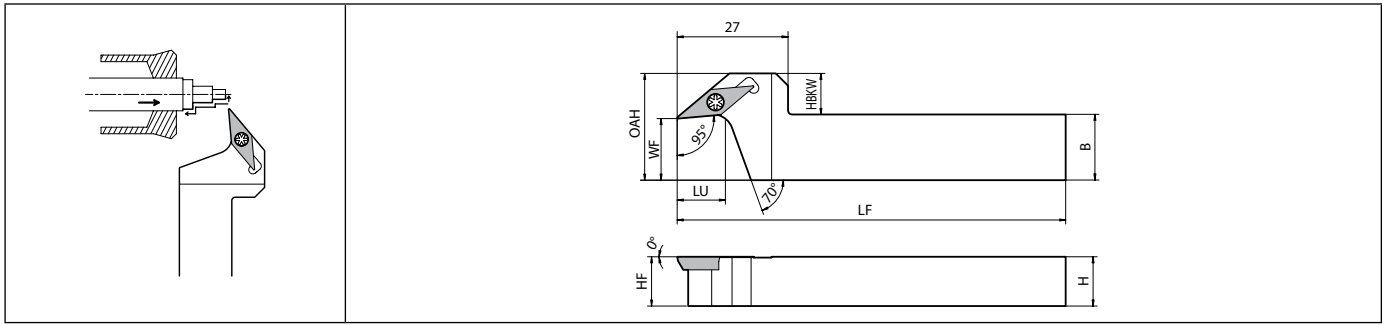
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Toolholder									
SDJC	DCM□11T3..	DCGT11T3..AP	DCGT11T3....	DCET11T3.....FSF	DC□11T3.....F	DCGT11T3..MF...	DCMT11T3..GP	DCMT11T3..PP	
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67	
Applications	Finishing	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	
Toolholder									
SDJC	DCGT11T3..MFP-SK	DCMX11T3..WP	DCMX11T304R-WP	DCMT11T3..XP	DCGT11T3..R-A3	DCGT11T3..AH	DCMT11T3..GK	DCGT11T3..ME...	
Page	B76	B76	B77	B67	B71	B71	B76	B74	
Applications	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed	
Toolholder									
SDJC	DCMT11T3..HQ	DCMT11T3..MQ	DCMT11T3..XQ	DCMW11T3.....	DC□11T3.....U	DCET11T3.....JSF	DC□11T3.....J	DCET11T3.....USF	
Page	B76	B76	B77	C18	B70-B72, B75	B69	B69, B74	B70	
Applications	Medium	Medium	Minute ap	Without Chipbreaker					
Toolholder									
SDJC	DCGT11T3...F	DC□11T3..	DCGT11T3.....CF	DCGW11T3..					
Page	B73-B76	B67-B68, C33	B71	B76					

● : Standard item

Recommended cutting conditions: E54 - E56


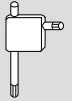

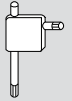
SVLP (External turning / External copying)



Right-hand shown


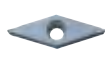






E

Toolholder dimensions

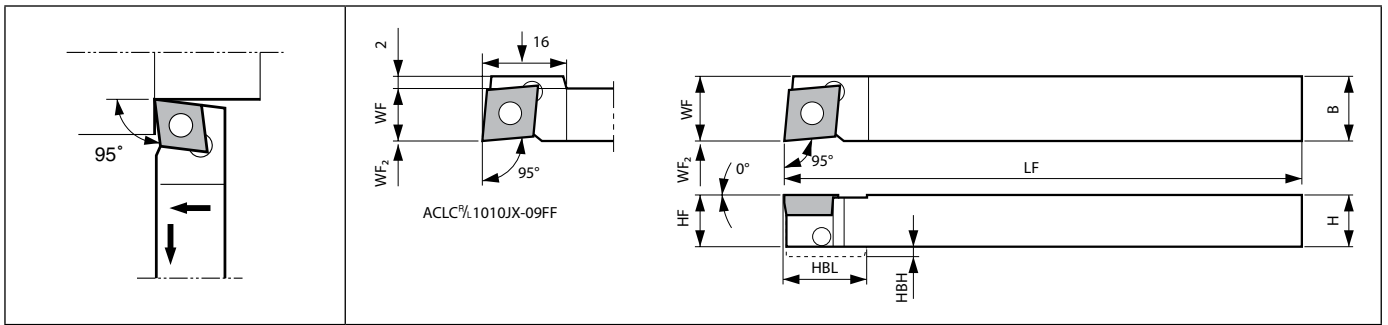
Description	Availability	Dimension (mm)									Standard corner-R (RE)	Spare parts		Applicable inserts
		R	H	B	OAH	HF	HBKW	LF	LU	WF		Clamp screw	Wrench (Torx)	
														
SVLPR 1216JX-11-F15 1620JX-11-F15	● ●	12 16	16 20	26	12 16	10 6	120	12	15	0.2	SB-2570TR 	FT-8 	VP.1103	

Small tools

Applicable inserts

Applications	Finishing	Finishing	Finishing	Finishing	Low feed	Low feed	Low feed	Minute ap
Insert								
Toolholder								
SVLP	VPGT1103...CK	VPET1103...FSF	VPET1103...F	VPGT1103...MF...	VP...T1103...U	VPET1103...J	VPET1103...USF	VPGT1103...CF
Page	B100	B101	B100-B101	B101	B100, B102	B101	B102	B100

ACLC-FF (External turning / External facing)



Right-hand shown | Lock screw is operated from opposite side of cutting point

Toolholder dimensions

Description	Availability		Dimension (mm)									Standard corner-R (RE)	Spare parts			Applicable inserts
	R	L	H	B	HF	HBH	HBL	LF	WF	WF2	Anchor pin		Lock screw	Wrench		
ACLC%L 1010JX-06FF	●	●	10	10	10			120	10	0	0.2		HSB4X8%L	FH-2	CC..0602	
ACLC%L 1010JX-09FF	●	●	10	10	10	2	16		10		0.2		HSB4X8%L	FH-2	CC..09T3	
1212JX-09FF	●	●	12	12	12			120	12	0						
1616JX-09FF	●	●	16	16	16				16							

Lock Screw : HSB4X8R for Right-hand Toolholder, HSB4X8L for Left-hand Toolholder.

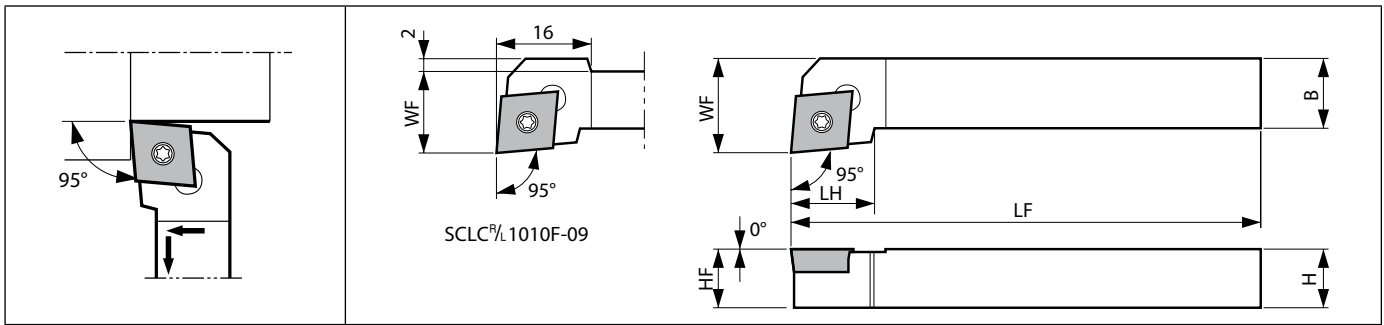
Applicable inserts

Applications	Non-ferrous Metals PCD	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert									
Toolholder	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF
Page	C31-C32	C31	B59	B60	B61	B63	B56	B63	B63
Applications	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN
Insert									
Toolholder	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF
Page	B64	B59	B59	B63	B62	B63	B64	C16	C16
Applications	Low feed	Low feed	Low feed	Medium	Medium	Without Chipbreaker			
Insert									
Toolholder	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF	ACLC-FF			
Page	B57, B60, B62	B57	B56-B57	B61-B63	B56, B60-B63, C32	B63			

● : Standard item

Recommended cutting conditions: E54 - E56

SCLC (External turning / External facing)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)						Standard corner-R (RE)	Spare parts				Applicable inserts
										Clamp screw	Wrench	Wrench (Torx)	Wrench	
	R	L	H	B	LH	HF	LF	WF						
SCLC 1010F-06	●	●	10	10	9	10	80	12	0.2	SB-2570TR	FT-8	-	-	CC..0602
SCLC 1010F-09	●	●	10	10	14	10	80	14	0.2	SB-4085TR	-	FT-15	-	CC..09T3
1212H-09	●	●	12	12		12	100	16						
1616H-09	●	●	16	16	15	16	20							
2020K-09	●	●	20	20	20	20	125	25						
2525M-09	●	●	25	25	22	25	150	32						
SCLC 1616H-12	●	●	16	16	20	16	100	20	0.4	SB-5090TR	-	LTW-20	CC..1204	
2020K-12	●	●	20	20	22	20	125	25						
2525M-12	●	●	25	25		25	150	32						

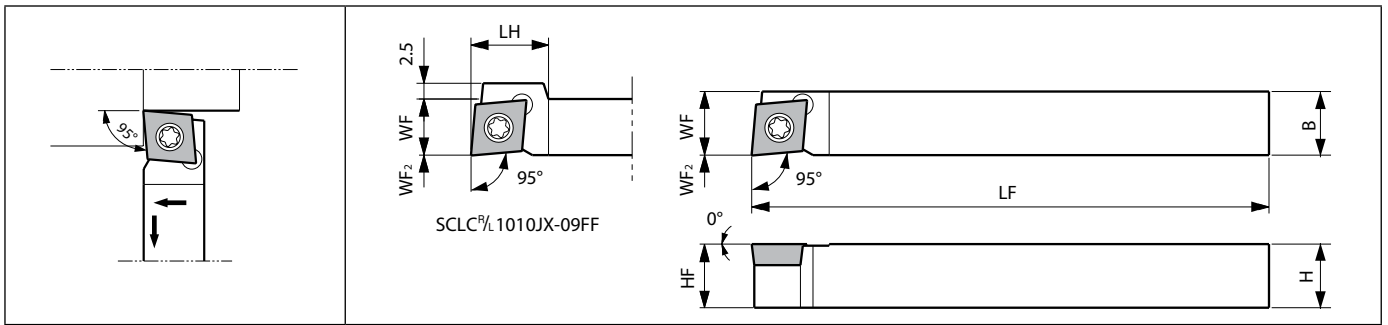
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert								
Toolholder	CC... ..	CCGT09T3..R-FS	CCMT120408	CCGT.....AP	CCGT.....MP-CK	CCGT.....MF....	CCET09T3..MR-P	
Page	C31-C32	B59	B66	B59	B60	B61	B58	
Applications	Finishing	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Insert								
Toolholder	CCGT0602..MFP-PF	CCMT.....PP	CCGT.....MFP-SK	CCMT.....WP	CCGT.....A3	CCGT09T3..AH	CCMT.....GK	CCGT.....MF....
Page	B63	B56	B63	B64	B59	B59	B63	B62
Applications	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Medium	Medium
Insert								
Toolholder	CCMT.....HQ	CCMT09T3..MQ	CCMW.....	CC... ..U	CCET.....J	CCET.....USF	CCGT.....F	CC... ..
Page	B63	B64	C16	B57, B60, B62	B57	B56-B57	B61-B63	B56, B60-B63, C32
Applications	Medium	Without Chipbreaker						
Insert								
Toolholder	CCGT09T3..FN-Z	CCGW.....						
Page		B63						

● : Standard item


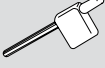
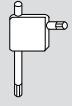

Recommended cutting conditions: E54 - E56

SCLC-FF (External turning / External facing)



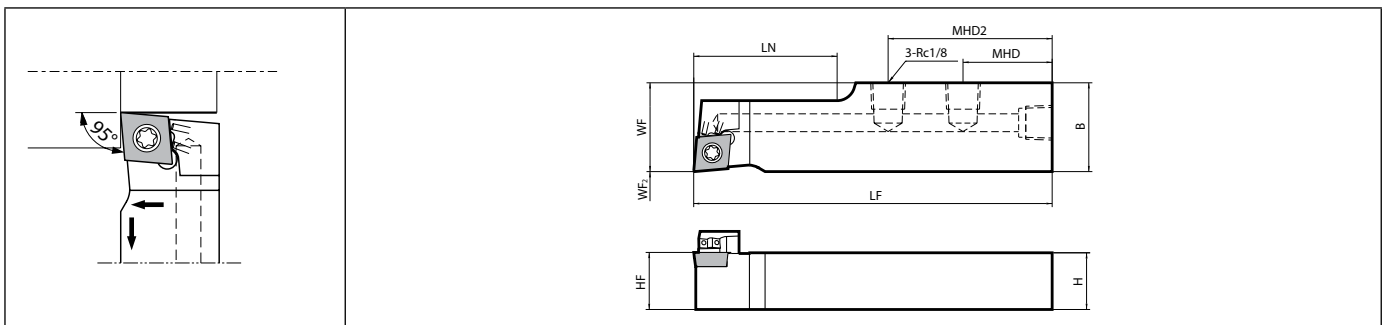
Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)								Standard corner-R (RE)	Spare parts			Applicable inserts
												Clamp screw	Wrench	Wrench (Torx)	
															
R	L	H	B	LH	HF	LF	WF	WF2							
SCLC ^{9/L} 0808F-06FF 1010JX-06FF	●	●	8	8	-	8	85	8	0	0.2		FT-8	-	CC..0602	
	●	●	10	10	-	10	120	10							
SCLC ^{9/L} 1010JX-09FF 1212F-09FF 1212JX-09FF 1616JX-09FF 2020JX-09FF	●	●	10	10	-	15	10	120	0	0.2	SB-4085TR	-	FT-15	CC..09T3	
	●	●	12	12		85	12	12							
	●	●				16	16	16							16
	●	●	20	20		20	20	20							


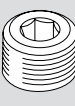
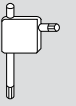


SCLC-FFJCT (External turning / External facing)



Right-hand shown | SCLCR1220...: 2-Rc1/8

Toolholder dimensions

Description	Availability		Dimension (mm)									Standard corner-R (RE)	Coolant hole	Spare parts			Applicable inserts
														Clamp screw	Plug	Wrench (Torx)	
																	
R	H	B	MHD	MHD2	HF	LF	LN	WF	WF2								
SCLCR 1220H-09FFJCT 1625H-09FFJCT 2025H-09FFJCT	●	12	20	35		12		28	20	0	0.2	Yes	SB-4085TR	GP-1	FT-15	CC..09T3	
	●	16	25	25	46	16	100	40	25								
	●	20															20

Please see page H14 and H15 for piping parts of coolant-through holders.

● : Standard item

Recommended cutting conditions: E54 - E56

Applicable inserts

Applications	Non-ferrous Metals PCD	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert								
Toolholder								
SCLC-FF	CC□□.....	CCGW0602..NE	CCGT.....AP	CCGT.....MP-CK	CCGT.....MF....	CCGT0602..MFP-PF	CCMT.....PP	CCGT.....MFP-SK
SCLC-FF/CT	CC□□09T3..		CCGT09T3..AP	CCGT09T3..MP-CK	CCGT09T3..MF....		CCMT09T3..PP	CCGT09T3..MFP-SK
Page	C31-C32	C31	B59-B60	B60-B61	B56, B61	B63	B56, B66	B59, B63
Applications	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN
Insert								
Toolholder								
SCLC-FF	CCMT.....WP	CCGT09T3....A3	CCGT09T3..AH	CCMT.....GK	CCGT.....MF...	CCMT.....HQ	CCMT09T3..MQ	CCMW.....
SCLC-FF/CT	CCMT09T3..WP	CCGT09T3..R-A3		CCMT09T3..GK	CCGT09T3..MF....	CCMT09T3..HQ		CCMW09T3.....
Page	B59, B64	B59, B63	B59, B62	B63	B62, B66	B63, C16	B57, B60, B62, B64	C16
Applications	Low feed	Low feed	Low feed	Medium	Medium	Without Chipbreaker		
Insert								
Toolholder								
SCLC-FF	CC□□T.....	CCET.....	CCET.....	CCGT.....F	CC□□T.....	CCGW.....		
SCLC-FF/CT	CC□□T09T3.....	CCET09T3..MFR-J	CCET09T3.....	CCGT09T3...F	CC□□T09T3....	CCGW09T3..		
Page	B56-B57, B60, B62	B57, B61-B63	B56-B57, B60-B63, C32	B61-B63	B56, B60-B63, C32	B63		

E

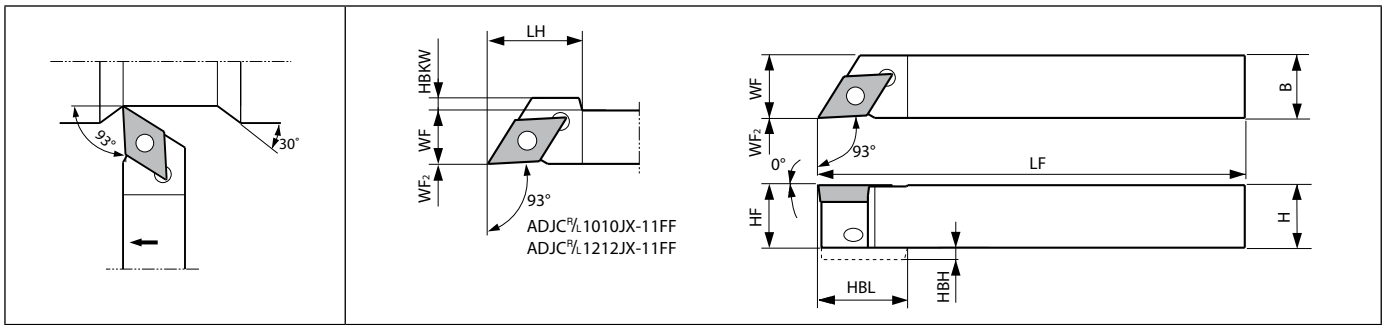


Small tools

● : Standard item

Recommended cutting conditions: E54 - E56

ADJC-FF (External turning / External copying)



Right-hand shown | Lock screw is operated from opposite side of cutting point

Toolholder dimensions

Description	Availability		Dimension (mm)											Standard corner-R (RE)	Spare parts			Applicable inserts
	R	L	H	B	LH	HF	HBH	HBKW	HBL	LF	WF	WF2	Anchor pin		Lock screw	Wrench		
ADJC%L 1010JX-07FF	●	●	10	10		10					120	10	0	0.2	LPF-11	HSB4X8 ^{R/L}	FH-2	DC..0702
ADJC%L 1010JX-11FF	●	●	10	10	20	10	2	3	20		120	10	0	0.2	LPF-13	HSB4X8 ^{R/L}	FH-2	DC..11T3
ADJC%L 1212JX-11FF	●	●	12	12		12		1				12						
ADJC%L 1616JX-11FF	●	●	16	16		16					16				LPF-17			

Lock Screw : HSB4X8R for Right-hand Toolholder, HSB4X8L for Left-hand Toolholder.
 For WP chipbreaker, cutting edge offsets or program corrections are required on R34-R35.

Applicable inserts

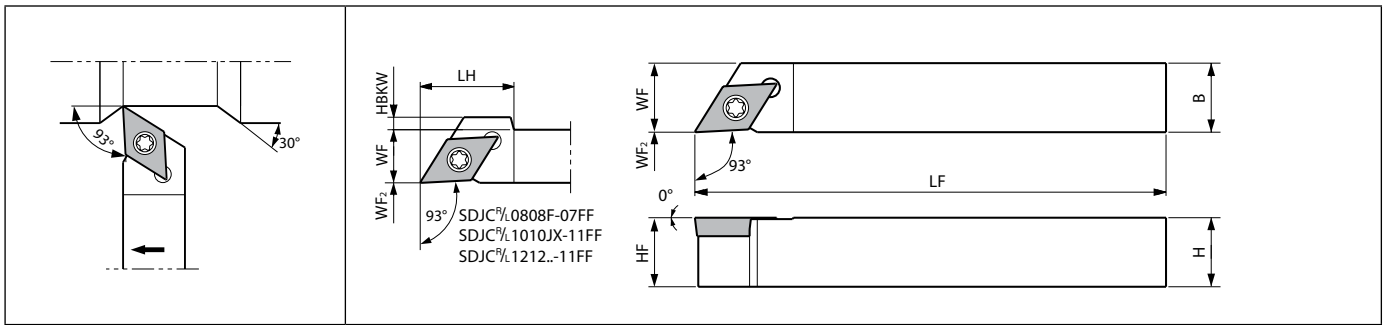
Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert								
Toolholder								
ADJC-FF	DC□□.....	DCGT.....AP	DCGT.....	DCET.....	DC□T.....F	DCGT.....MF...	DCMT.....GP	DCMT.....PP
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67
Applications	Finishing	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Insert								
Toolholder								
ADJC-FF	DCGT.....MFP-SK	DCMX.....WP	DCMX...04...WP	DCMT.....XP	DCGT11T3...A3	DCGT11T3...AH	DCMT.....GK	DCGT.....MF...
Page	B76	B76	B77	B67	B71	B71	B76	B74
Applications	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed
Insert								
Toolholder								
ADJC-FF	DCMT.....HQ	DCMT.....MQ	DCMT11T3...XQ	DCMW.....	DC□T.....	DCET11T3.....	DC□T.....	DCET.....
Page	B76	B76	B77	C18	B70-B72, B75	B69	B69, B74	B70
Applications	Medium	Medium	Medium	Minute ap	Without Chipbreaker			
Insert								
Toolholder								
ADJC-FF	DCGT.....	DCGT.....F	DC□T.....	DCGT.....	DCGW.....			
Page	B67, B71, B73-B76	B73-B76	B67-B68, C33	B71	B76			

● : Standard item

Recommended cutting conditions: E54 - E56



SDJC-FF (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)									Standard corner-R (RE)	Spare parts			Applicable inserts
	R	L	H	B	LH	HF	HBKW	LF	WF	WF2	Clamp screw		Wrench (Torx)	Wrench (Torx)		
	SDJC% 0808F-07FF	●	●	8	8	14	8	0.5	85	8	0		0.2	SB-2570TR	FT-8	
SDJC% 1010JX-07FF	●	●	10	10		10		120	10							
SDJC% 1010JX-11FF	●	●	10	10	20	10	3	120	10	0	0.2	SB-4085TR	-	FT-15	DC..11T3	
SDJC% 1212JX-11FF	●	●	12	12		12	1	85	12							
SDJC% 1616JX-11FF	●	●	16	16		16		120	16							
SDJC% 2020JX-11FF	●	●	20	20		20			20							

For WP chipbreaker, cutting edge offsets or program corrections are required on R34-R35.

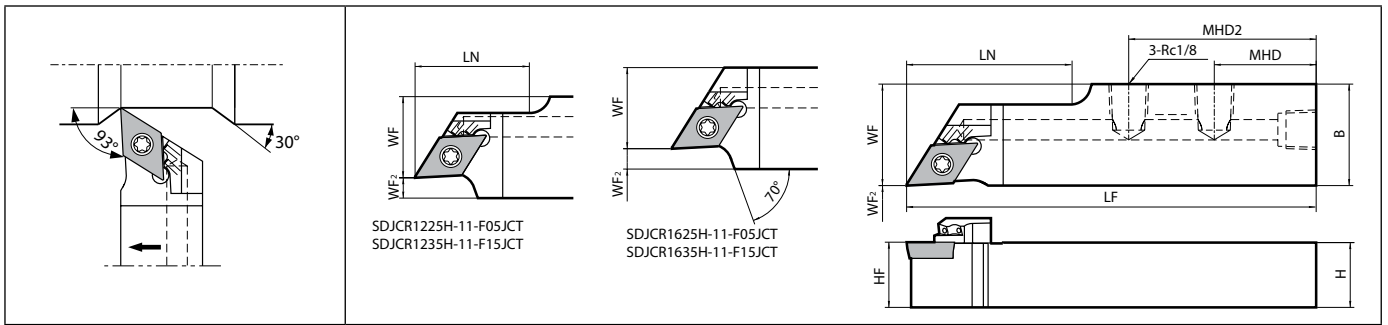
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert								
Toolholder								
SDJC-FF	DC□□.....	DCGT.....AP	DCGT.....	DCET.....	DC□T.....F	DCGT.....MF...	DCMT.....GP	DCMT.....PP
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67
Applications	Finishing	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Insert								
Toolholder								
SDJC-FF	DCGT.....MFP-SK	DCMX.....WP	DCMX...04..WP	DCMT.....XP	DCGT11T3...A3	DCGT11T3..AH	DCMT.....GK	DCGT.....MF...
Page	B76	B76	B77	B67	B71	B71	B76	B74
Applications	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed
Insert								
Toolholder								
SDJC-FF	DCMT.....HQ	DCMT.....MQ	DCMT11T3.XQ	DCMW.....	DC□T.....	DCET11T3.....	DC□T.....	DCET.....
Page	B76	B76	B77	C18	B70-B72, B75	B69	B69, B74	B70
Applications	Medium	Medium	Medium	Minute ap	Without Chipbreaker			
Insert								
Toolholder								
SDJC-FF	DCGT.....	DCGT.....F	DC□T.....	DCGT.....	DCGW.....			
Page	B67, B71, B73-B76	B73-B76	B67-B68, C33	B71	B76			

● : Standard item

Recommended cutting conditions: E54 - E56

SDJC-FFJCT (External turning / External copying)



Right-hand shown | SDJCR1220...:2-Rc1/8

Toolholder dimensions

Description	Availability	Dimension (mm)										Standard corner-R (RE)	Spare parts			Applicable inserts	
		R	H	B	MHD	MHD2	HF	LF	LN	WF	WF2		Coolant hole	Clamp screw	Plug		Wrench (Torx)
SDJCR 1220H-11FFJCT	●	12	20	35		12		28	20			0.2	Yes	SB-4085TR	GP-1	FT-15	DC..11T3
SDJCR 1625H-11FFJCT	●	16				16	100	40	25	0							
SDJCR 2025H-11FFJCT	●	20	25	46		20											
SDJCR 1225H-11-F05JCT	●	12	25	35		12	100	28	20	5		0.2	Yes	SB-4085TR	GP-1	FT-15	DC..11T3
SDJCR 1235H-11-F15JCT	●		35								15						
SDJCR 1625H-11-F05JCT	●	16	25	25	46	16	100		20	5		0.2	Yes	SB-4085TR	GP-1	FT-15	DC..11T3
SDJCR 1635H-11-F15JCT	●		35								15						

Please see page H14 and H15 for piping parts of coolant-through holders.
For WP chipbreaker, cutting edge offsets or program corrections are required on R34-R35.

Applicable inserts

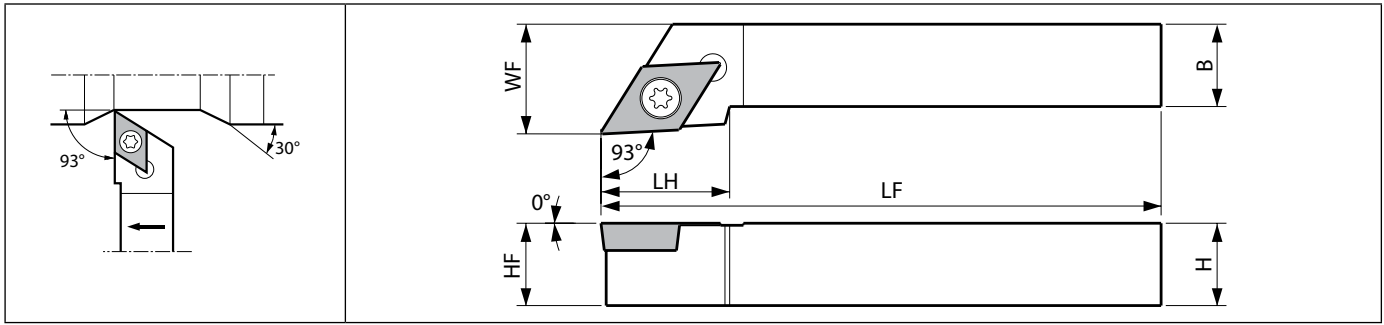
Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert									
Toolholder									
SDJC-JCT	DCM□11T3..	DCGT11T3..AP	DCGT11T3....	DCET11T3.....	DC□11T3.....F	DCGT11T3..MF...	DCMT11T3..GP	DCMT11T3..PP	
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67	
Applications	Finishing	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Insert									
Toolholder									
SDJC-JCT	DCGT11T3..MFP-SK	DCMX11T3..WP	DCMX11T304R-WP	DCMT11T3..XP	DCGT11T3..R-A3	DCGT11T3..AH	DCMT11T3..GK	DCGT11T3..MF...	
Page	B76	B76	B77	B67	B71	B71	B76	B74	
Applications	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed	
Insert									
Toolholder									
SDJC-JCT	DCMT11T3..HQ	DCMT11T3..MQ	DCMT11T3..XQ	DCMW11T3.....	DC□11T3.....	DCET11T3.....	DC□11T3.....	DCET11T3.....	
Page	B76	B76	B77	C18	B70-B72, B75	B69	B69, B74	B70	
Applications	Medium	Medium	Medium	Minute ap	Without Chipbreaker				
Insert									
Toolholder									
SDJC-JCT	DCGT11T3....	DCGT11T3...F	DC□11T3..	DCGT11T3.....	DCGW11T3..				
Page	B67, B71, B73-B76	B73-B76	B67-B68, C33	B71	B76				

● : Standard item

Recommended cutting conditions: E54 - E56



SDJC (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)							Standard corner-R (RE)	Spare parts			Applicable inserts
	R	L	H	B	LH	HF	LF	WF	Clamp screw		Wrench (Torx)	Wrench (Torx)		
	●	●	10	10	12	10	80	12	0.2				-	
SDJC ^{90°}	●	●	10	10	18	10	80	12	0.2			-	DC..11T3	
SDJC ^{90°}	●	●	12	12		12	16							
1212H-11	●	●	16	16		16	100	20						
1616H-11	●	●	20	20		20	125	25						
2020K-11	●	●	25	25	23	25	150	32						
2525M-11	●	●												

For WP chipbreaker, cutting edge offsets or program corrections are required on R34-R35.

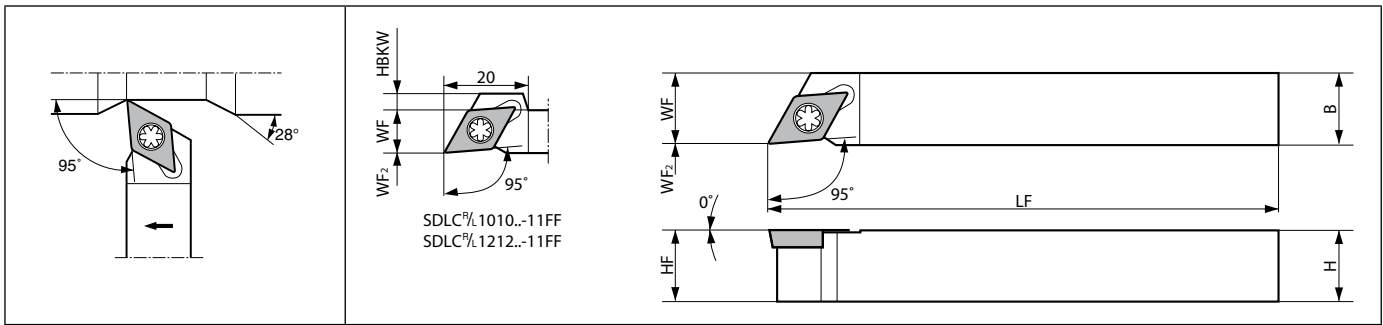
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert								
Toolholder	DC□□.....	DCGT.....AP	DCGT.....CK	DCET.....FSF	DC□□.....F	DCGT.....MF...GF	DCMT.....GP	DCMT.....PP
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67
Applications	Finishing	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Insert								
Toolholder	DCGT.....MFP-SK	DCMX.....WP	DCMX...04...WP	DCMT.....XP	DCGT11T3...A3	DCGT11T3...AH	DCMT.....GK	DCGT.....MF...
Page	B76	B76	B77	B67	B71	B71	B76	B74
Applications	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed
Insert								
Toolholder	DCMT.....HQ	DCMT.....MQ	DCMT11T3...XQ	DCMW.....	DC□□.....U	DCET11T3.....JSF	DC□□.....J	DCET.....USF
Page	B76	B76	B77	C18	B70-B72, B75	B69	B69, B74	B70
Applications	Medium	Medium	Medium	Minute ap	Without Chipbreaker			
Insert								
Toolholder	DCGT.....	DCGT.....F	DC□□.....	DCGT.....CF	DCGW.....			
Page	B67, B71, B73-B76	B73-B76	B67-B68, C33	B71	B76			

● : Standard item

Recommended cutting conditions: E54 - E56

SDLC-FF (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)							Standard corner-R (RE)	Spare parts			Applicable inserts
	R	L	H	B	HF	HBKW	LF	WF	WF2		Clamp screw	Wrench (Torx)	Wrench (Torx)	
SDLC% 1010JX-07FF 1212F-07FF 1212JX-07FF 1616JX-07FF	●	●	10	10	10		120	10	0	0.2			-	DC..0702
	●	●	12	12	12		85	12						
	●	●	16	16	16		120	16						
	●	●	16	16	16		120	16						
SDLC% 1010F-11FF 1010JX-11FF 1212F-11FF 1212JX-11FF 1616H-11FF 1616JX-11FF	●	●	10	10	10	4	80	10	0	0.2			-	DC..11T3
	●	●	12	12	12	2	120	12						
	●	●	12	12	12	2	85	12						
	●	●	16	16	16		100	16						
	●	●	16	16	16		120	16						
	●	●	16	16	16		120	16						



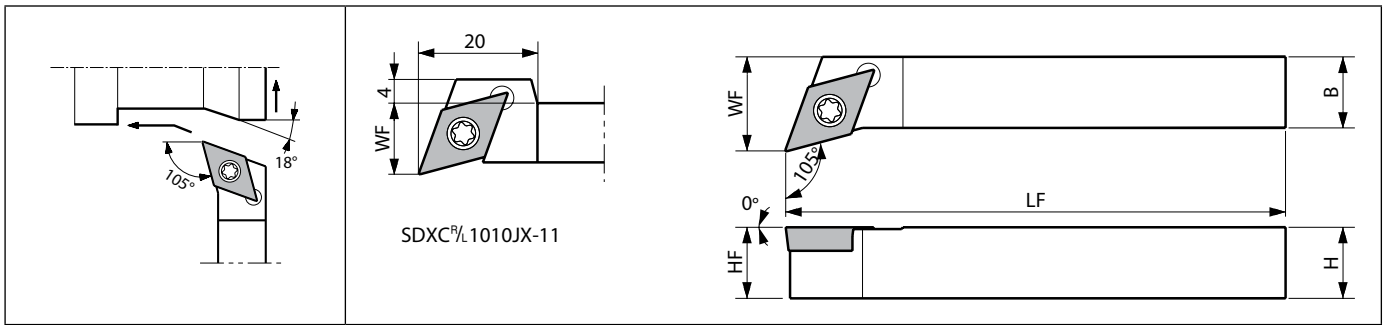
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert								
Toolholder								
SDLC-FF	DC□□.....	DCGT.....AP	DCGT.....CK	DCET.....FSF	DC□T.....F	DCGT.....MF...GF	DCMT.....GP	DCMT.....PP
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67
Applications	Finishing	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Insert								
Toolholder								
SDLC-FF	DCGT.....MFP-SK	DCMX11T3..WP	DCMX11T304L-WP	DCMT.....XP	DCGT11T3...A3	DCGT11T3..AH	DCMT.....GK	DCGT.....MF...GQ
Page	B76	B76	B77	B67	B71	B71	B76	B74
Applications	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed
Insert								
Toolholder								
SDLC-FF	DCMT.....HQ	DCMT.....MQ	DCMT11T3..XQ	DCMW.....	DC□T.....U	DCET11T3.....JSF	DC□T.....J	DCET.....USF
Page	B76	B76	B77	C18	B70-B72, B75	B69	B69, B74	B70
Applications	Medium	Medium	Medium	Medium	Minute ap	Without Chipbreaker		
Insert								
Toolholder								
SDLC-FF	DCGT.....	DCGT.....F	DC□T.....	DCGT11T3...FN-Z	DCGT.....CF	DCGW.....		
Page	B67, B71, B73-B76	B73-B76	B67-B68, C33		B71	B76		

● : Standard item

Recommended cutting conditions: E54 - E56

SDXC (External turning / External facing / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)					Standard corner-R (RE)	Spare parts			Applicable inserts
	R	L	H	B	HF	LF	WF		Clamp screw	Wrench (Torx)	Wrench (Torx)	
	●	●	10	10	10	120	12		0.2			
SDXC%L 1010JX-07	●	●	10	10	10	120	12	0.2			-	DC..11T3
SDXC%L 1010JX-11	●	●	12	12	12		16					
1212JX-11	●	●	16	16	16		20					
1616JX-11	●	●	16	16	16							

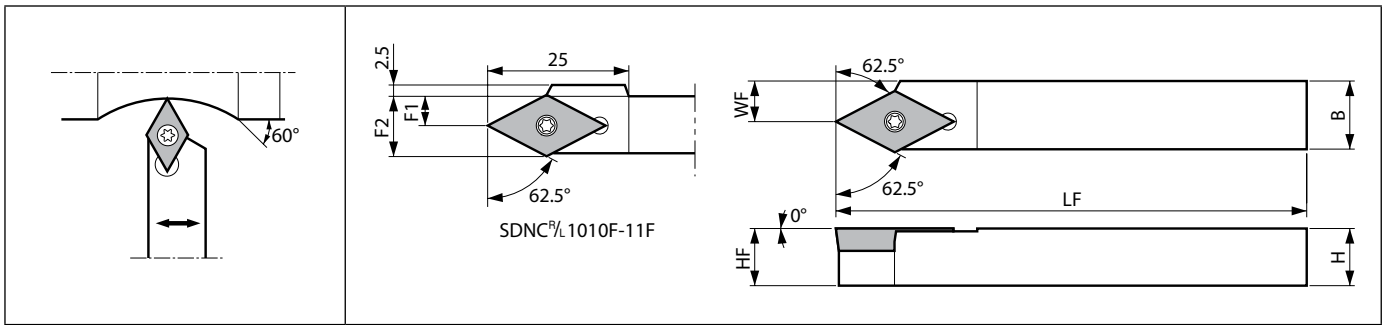
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Toolholder								
SDXC	DC□□.....	DCGT.....AP	DCGT.....CK	DCET.....FSF	DC□T.....F	DCGT.....MF...	DCMT.....GP	DCMT.....PP
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67
Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Toolholder								
SDXC	DCGT.....MFP-SK	DCMT.....XP	DCGT11T3...A3	DCGT11T3...AH	DCMT.....GK	DCGT.....MF...	DCMT.....HQ	DCMT.....MQ
Page	B76	B67	B71	B71	B76	B74	B76	B76
Applications	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed	Medium	Medium
Toolholder								
SDXC	DCMT11T3...XQ	DCMW.....	DC□T.....U	DCET11T3...JSF	DC□T.....J	DCET.....USF	DCGT.....	DCGT.....F
Page	B77	C18	B70-B72, B75	B69	B69, B74	B70	B67, B71, B73-B76	B73-B76
Applications	Medium	Minute ap	Without Chipbreaker					
Toolholder								
SDXC	DC□T.....	DCGT.....CF	DCGW.....					
Page	B67-B68, C33	B71	B76					

● : Standard item


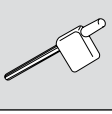
Recommended cutting conditions: E54 - E56

SDNC-F (External turning / External copying)
























Right-hand shown

Toolholder dimensions

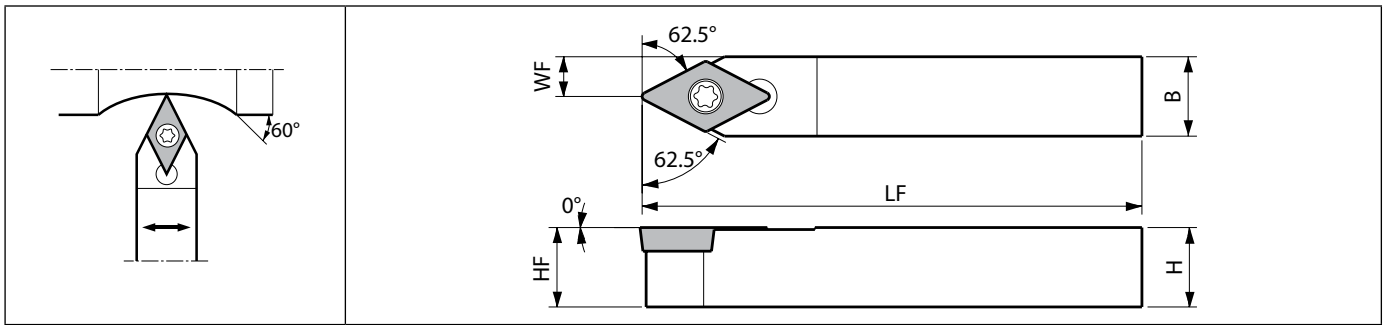
Description	Availability		Dimension (mm)							Standard corner-R (RE)	Spare parts		Applicable inserts
	R	L	H	B	HF	LF	WF	Clamp screw	Wrench (Torx)				
													
SDNC%L 1010JX-07F	●	●	10	10	10	120	7	0.2	SB-2570TR	FT-8	DC..0702		



Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Toolholder									
SDNC-F	DC...T0702.....J	DCGT0702..AP	DCGT0702....	DCET0702.....	DC...T0702.....F	DCGT0702..MF...	DCMT0702...GP	DCMT0702..PP	
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67	B70-B72, B75
Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	
Toolholder									
SDNC-F	DCGT0702..MFP-SK	DCMT070204XP	DCMT0702..GK	DCGT0702..MF...	DCMT0702..HQ	DCMT0702..MQ	DCMW0702.....T	DC...T0702.....U	
Page	B76	B67	B76	B74	B76	B76	C18	B70-B72, B75	
Applications	Low feed	Low feed	Medium	Medium	Medium	Minute ap	Without Chipbreaker		
Toolholder									
SDNC-F	DCET0702.....J	DCET0702.....USF	DCGT0702....	DCGT0702....F	DCGT0702..	DCGT0702.....CF	DCGW0702..		
Page	B69	B70	B67, B71, B73-B76	B73-B76	B67	B71	B76		

SDNCN (External turning / External copying)



E



Small tools

Toolholder dimensions

Description	Availability	Dimension (mm)						Standard corner-R (RE)	Spare parts			Applicable inserts
		N	H	B	HF	LF	WF		Clamp screw	Wrench (Torx)	Wrench (Torx)	
SDNCN 0808F-07	●	8	8	8	85	4	0.2			-	DC..0702	
1010JX-07	●	10	10	10	120	5						
1212JX-07	●	12	12	12	120	6						
SDNCN 1010F-11	●	10	10	10	80	5	0.2		-	FT-15	DC..11T3	
1010JX-11	●				120							
1212F-11	●	12	12	12	85	6						
1212JX-11	●				120							
1616H-11	●	16	16	16	100	8						
1616JX-11	●				120							

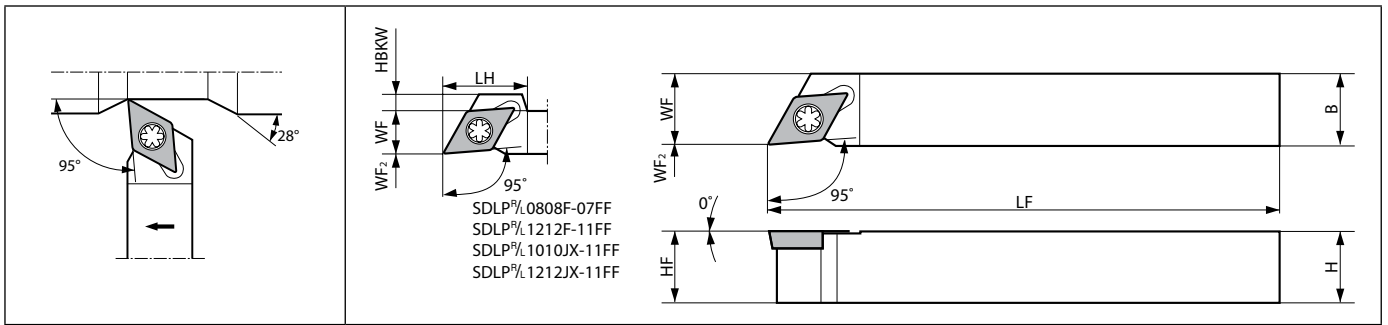
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert								
Toolholder								
SDNC	DC□□.....	DCGT.....AP	DCGT.....	DCET.....	DC□□.....F	DCGT.....MF....	DCMT.....GP	DCMT.....PP
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67
Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Insert								
Toolholder								
SDNC - 07 / 11	DCGT.....MFP-SK	DCMT.....XP	DCGT11T3...A3	DCGT11T3...AH	DCMT.....GK	DCGT.....MF....	DCMT.....HQ	DCMT.....MQ
Page	B76	B67	B71	B71	B76	B74	B76	B76
Applications	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed	Medium	Medium
Insert								
Toolholder								
SDNC - 07 / 11	DCMT11T3..XQ	DCMW.....	DC□□.....U	DCET11T3.....JSF	DC□□.....J	DCET.....USF	DCGT.....	DCGT.....F
Page	B77	C18	B70-B72, B75	B69	B69, B74	B70	B67, B71, B73-B76	B73-B76
Applications	Medium	Minute ap	Without Chipbreaker					
Insert								
Toolholder								
SDNC - 07 / 11	DC□□.....	DCGT.....CF	DCGW.....					
Page	B67-B68, C33	B71	B76					

● : Standard item

Recommended cutting conditions: E54 - E56

SDLP-FF (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)									Standard corner-R (RE)	Spare parts			Applicable inserts
													Clamp screw	Wrench (Torx)	Wrench (Torx)	
	R	L	H	B	LH	HF	HBKW	LF	WF	WF2						
SDLP%L 0808F-07FF 1010JX-07FF	●	●	8	8	14	8	0.5	85	8	0	0.2		FT-8	-	DP.0702	
SDLP%L 1010JX-11FF 1212JX-11FF 1616JX-11FF	●	●	10	10	20	10	4	120	10							0
	●	●	12	12		12	2		12							
	●	●	16	16		16			16							

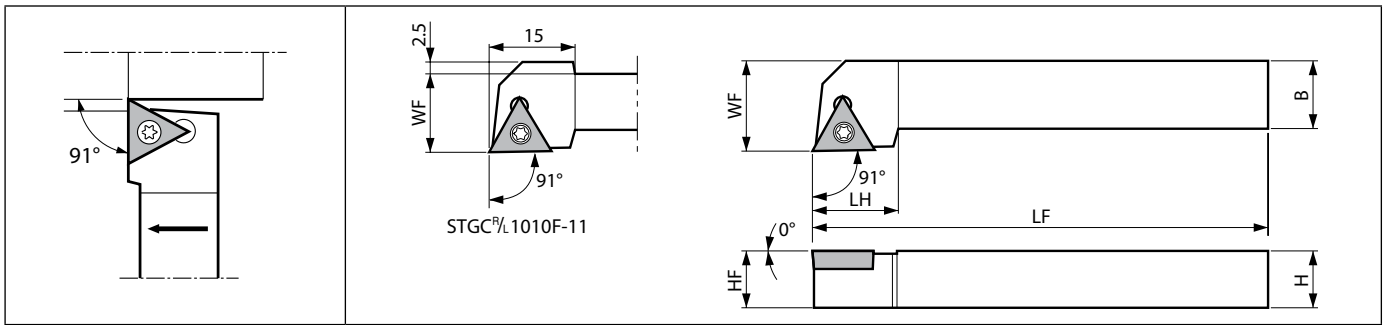
Applicable inserts

Applications	Finishing	Low feed
Insert		
Toolholder	DPET.....FSF	DPET.....USF
Page	B78	B78



Small tools

STGC (External turning)




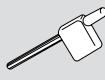
Right-hand shown

E








Small tools

Toolholder dimensions

Description	Availability		Dimension (mm)						Standard corner-R (RE)	Spare parts		Applicable inserts
										Clamp screw	Wrench (Torx)	
	R	L	H	B	LH	HF	LF	WF				
STGC%L 0808E-08	●		8	8	12	8	70	10	0.2	SB-2050TR	FT-6	TC..0802
1010F-08	●	●	10	10		10	80	12				
STGC%L 1010F-11	●	●	10	10	15	10	80	14	0.4	SB-2570TR	FT-8	TC..1103
1212H-11	●	●	12	12		12	100	16				
1616H-11	●	●	16	16		16		20				
2020K-11	●	●	20	20		20	125	25				
2525M-11	●	●	25	25		20	25	150				

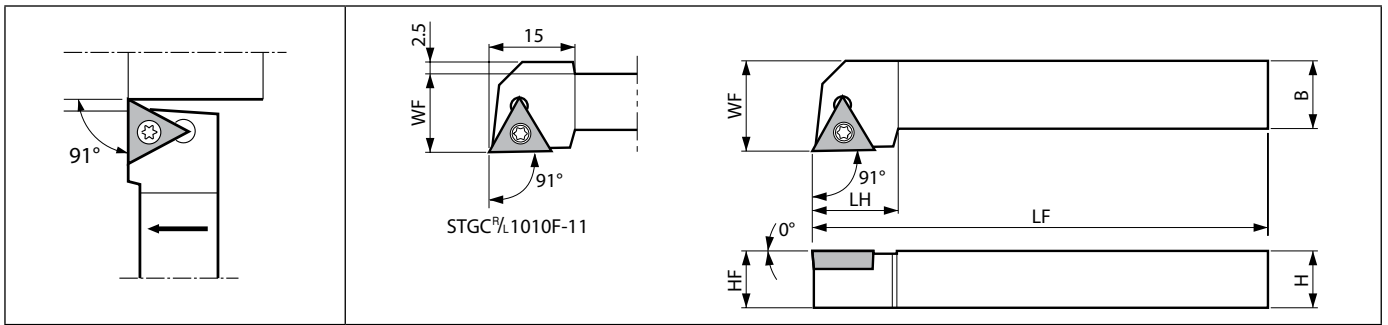
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing - Medium	Low feed	Low feed	Without Chipbreaker
Insert					
Toolholder					
STGC	TC□□.....	TCGT1103...A3	TCGT.....U	TCET.....USF	TCGW.....
Page	C35	B86	B85-B86	B85	B86

● : Standard item

Recommended cutting conditions: E54 - E56

STGP (External turning)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)							Standard corner-R (RE)	Spare parts		Applicable inserts
											Clamp screw	Wrench (Torx)	
	R	L	H	B	LH	HF	LF	WF					
STGPR 0808E-08	●		8	8	12	8	70	10	0.2	SB-2050TR	FT-6	TP.0802	
STGP ^{90°} 1010F-11	●	●	10	10	15	10	80	14	0.2	SB-3080TR	FT-10	TP...B1103 TP...H1103 TP...T1103	
1212H-11	●	●	12	12		12	100	16					
1616H-11	●	●	16	16		16		20					



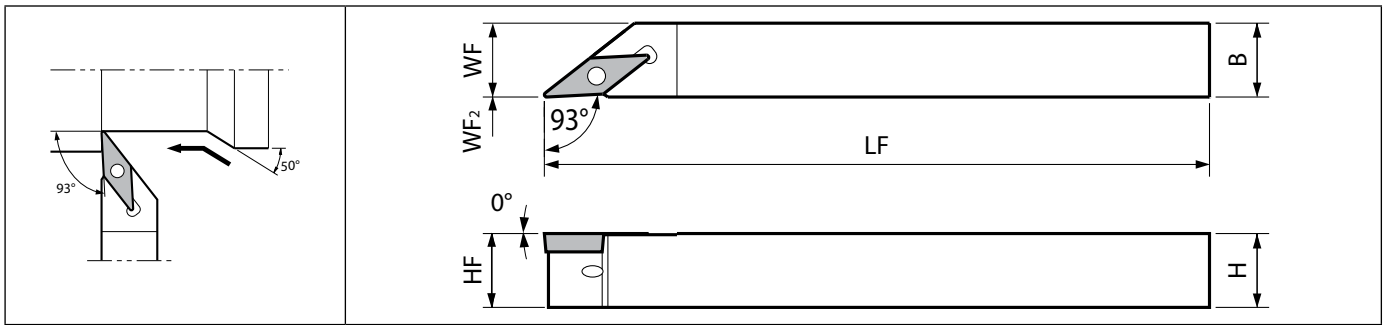
Applicable inserts

Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing - Medium
Insert								
Toolholder	TP...□.....	TPGT1103..AP	TPET.....FSF	TPMT1103..GP	TPMT1103..PP	TPMT1103..XP	TPGH.....	TPMT1103..HQ
Page	C36-C37	B90	B90, B92	B88	B89	B89	B88-B89	B91
Applications	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Medium	Minute ap	Without Chipbreaker		
Insert								
Toolholder	TPMT1103..XQ	TPGB.....	TPET.....USF	TPGH1103.....H	TPGT0802.....CF	TPGB.....		
Page	B92	C19	B92	B89	B90	B90, C36, J36		

● : Standard item

Recommended cutting conditions: E54 - E56

AVJB-FF (External turning / External copying)



Right-hand shown | Lock screw is operated from opposite side of cutting point

E



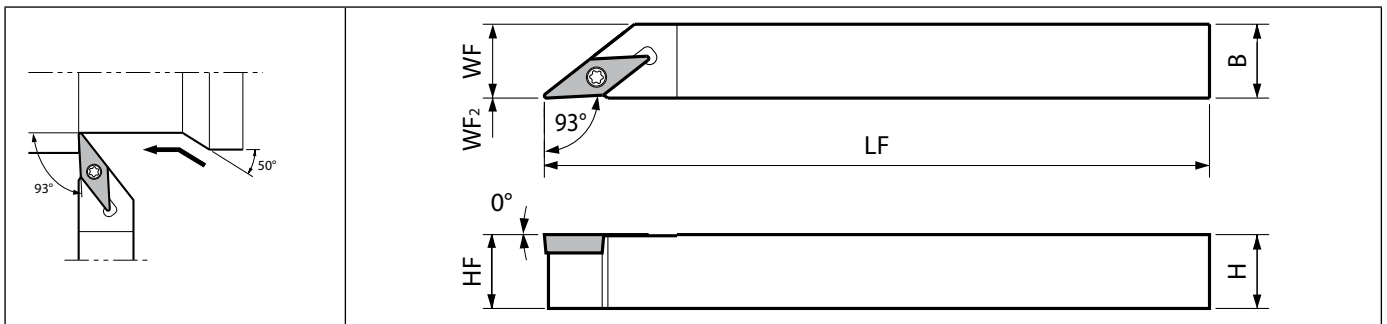
Small tools

Toolholder dimensions

Description	Availability		Dimension (mm)						Standard corner-R (RE)	Spare parts			Applicable inserts
										Anchor pin	Lock screw	Wrench (Torx)	
	R	L	H	B	HF	LF	WF	WF2					
AVJB ^{90°}	●	●	10	10	10	120	10	0	0.4	LPF-11	HSB4X8 ^{90°} /L	FH-2	VB..1103
1212JX-11FF	●	●	12	12	12		12			LPF-1113			
1616JX-11FF	●	●	16	16	16		16			LPF-1117			

Lock Screw : HSB4X8R for Right-hand Toolholder, HSB4X8L for Left-hand Toolholder.

SVJB-FF (External turning / External copying)



Right-hand shown

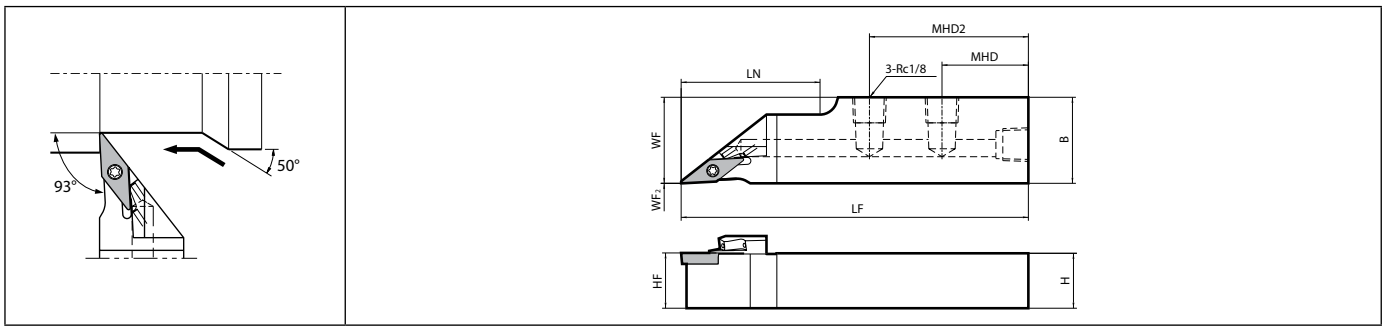
Toolholder dimensions

Description	Availability		Dimension (mm)						Standard corner-R (RE)	Spare parts		Applicable inserts
										Clamp screw	Wrench (Torx)	
	R	L	H	B	HF	LF	WF	WF2				
SVJB ^{90°}	●	●	10	10	10	120	10	0	0.4	SB-2570TR	FT-8	VB..1103
1212JX-11FF	●	●	12	12	12		12					
1616JX-11FF	●	●	16	16	16		16					
2020JX-11FF	●	●	20	20	20		20					

● : Standard item

Recommended cutting conditions: E54 - E56

SVJB-FFJCT (External turning / External copying)



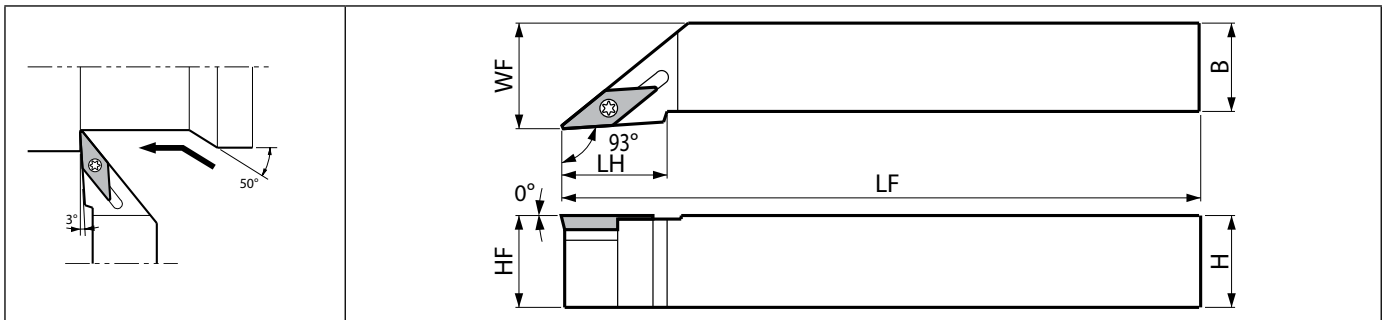
Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)									Standard corner-R (RE)	Coolant hole	Spare parts			Applicable inserts
	R	H	B	MHD	MHD2	HF	LF	LN	WF	WF2	Clamp screw			Plug	Wrench (Torx)		
	SVJBR 1220H-11FFJCT	●	12	20	35		12		28	20				0.4	Yes	SB-2570TR	
1625H-11FFJCT	●	16	25	25	46	16	100	40	25	0	0.4	Yes	SB-2570TR	GP-1	FT-8	VB..1103	
2025H-11FFJCT	●	20				20											

Please see page H14 and H15 for piping parts of coolant-through holders.

SVJB (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)							Standard corner-R (RE)	Spare parts						Applicable inserts
	R	L	H	B	LH	HF	LF	WF	Clamp screw		Shim	Shim screw	Wrench	Wrench (Torx)	Wrench (hex.)		
	SVJB% 2020K-11	●	●	20	20	30	20	125	25		0.4	SB-2570TR	-	-	FT-8	-	
2525M-11	●	●	25	25	35	25	150	32									
SVJB% 2020K-16N	●	●	20	20	30	20	125	25	0.8	SB-40125TRN	SVN-32N	SS-4N	-	FT-15	LW-4	VB..1604	
2525M-16N	●	●	25	25		25	150	32									

Lock Screw : HSB4X8R for Right-hand Toolholder, HSB4X8L for Left-hand Toolholder.

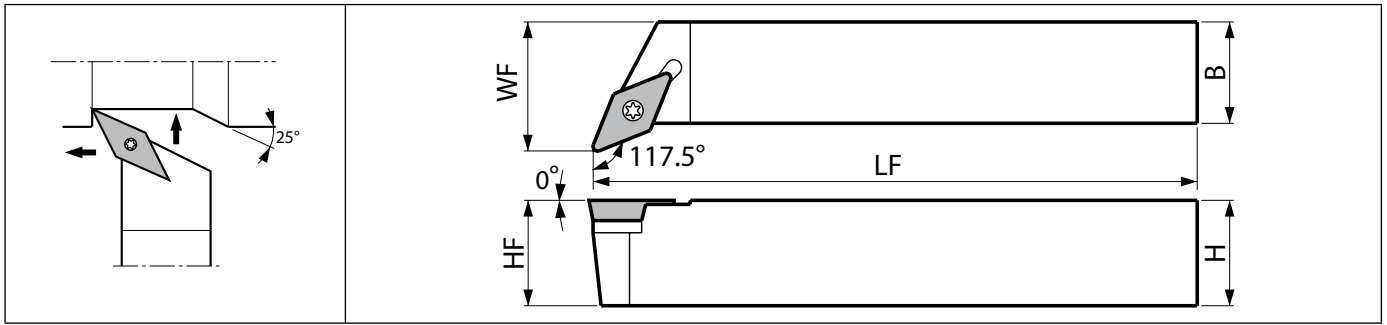
For insert with corner-R(RE) 0.2 or 0.4 mm, shim (SVN-32S) is recommended (sold separately).

● : Standard item

Recommended cutting conditions: E54 - E56



SVPB (External turning / External facing / External copying / Undercutting)



Right-hand shown

E



Small tools

Toolholder dimensions

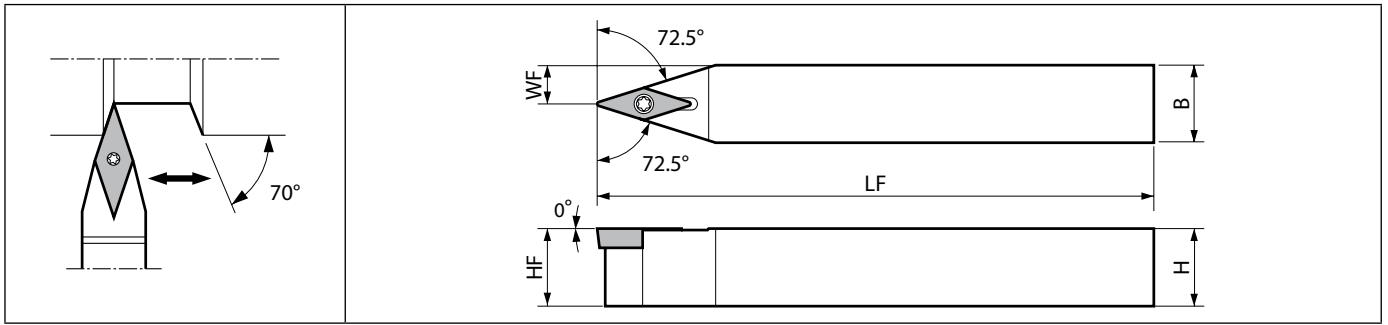
Description	Availability		Dimension (mm)						Standard corner-R (RE)	Spare parts						Applicable inserts
										Clamp screw	Shim	Shim screw	Wrench (Torx)	Wrench (Torx)	Wrench (hex.)	
	R	L	H	B	HF	LF	WF									
SVPB [®] /L 1010JX-11 1212JX-11 1616JX-11 2020K-11 2525M-11	●	●	10	10	10		14.5	0.4		-			FT-8	-	-	VB..1103
	●	●	12	12	12	120	16.5									
	●	●	16	16	16		20.5									
	●	●	20	20	20	125	25									
	●	●	25	25	25	150	32									
SVPB [®] /L 2020K-16N 2525M-16N	●	●	20	20	20	125	25	0.8	SB-40125TRN	SVN-32N		-	FT-15	LW-4	VB..1604	
	●	●	25	25	25	150	32									

For insert with corner-R(RE) 0.2 or 0.4mm, shim (SVN-32S) is recommended (sold separately).

Undercutting diameter of SVPB

Corner-R (RE)	ap (mm)	DCN (MIN.)
0.4	0.5	ø25
	1	ø30
0.8	0.5	ø40
	1	ø55

SVVBN (External turning / External copying)



Toolholder dimensions

Description	Availability	Dimension (mm)						Standard corner-R (RE)	Spare parts						Applicable inserts
		N	H	B	HF	LF	WF		Clamp screw	Shim	Shim screw	Wrench (Torx)	Wrench (Torx)	Wrench (hex.)	
SVVBN	1010F-11 1010JX-11 1212F-11 1212JX-11 1616H-11 1616JX-11 2020K-11 2525M-11	●	10	10	10	80	5	0.4	SB-2570TR	-	-	FT-8	-	-	VB..1103
	●				120										
	●	12	12	12	85	6									
	●				120										
	●	16	16	16	100	8									
	●				120										
	●	20	20	20	125	10									
	●	25	25	25	150	12.5									
SVVBN	2020K-16N 2525M-16N	●	20	20	20	125	10	0.8	SB-40125TRN	SVN-32N	SS-4N	-	FT-15	LW-4	VB..1604
	●	25	25	25	150	12.5									

For insert with corner-R(RE) 0.2 or 0.4 mm, shim (SVN-32S) is recommended (sold separately).

Applicable inserts

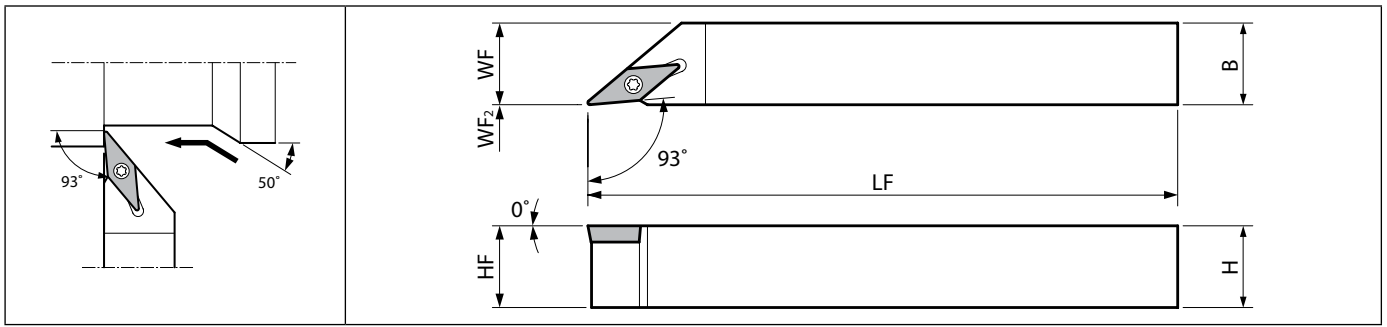
Applications	Non-ferrous metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing - Medium
Insert								
Toolholder								
AVJB-FF								
SVJB-FF	VB□□1103.....					VBMT110304GP	VBMT1103..PP	VBMT1103..VF
SVJB-FFJCT			VBET1103.....	VB□□1103.....F				
SVJB								
SVPB	VB□□.....	VCGT160404AP				VBMT.....GP	VBMT.....PP	VBMT.....VF
SVVB								VCGT1604...A3
Page	C39	B98	B95-B96	B95-B96	B95	B95	B95-B96	B98
Applications	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN				
Insert								
Toolholder								
AVJB-FF								
SVJB-FF		VBMT1103..HQ	VB□□1103.....Y	VBGW110308....				
SVJB-FFJCT								
SVJB								
SVPB	VCGT160404AH	VBMT.....HQ	VB□□.....Y	VBGW...08....				
SVVB								
Page	B98	B96	B97	C21				

● : Standard item

Recommended cutting conditions: E54 - E56



SVJC-FF (External turning / External copying)



Right-hand shown

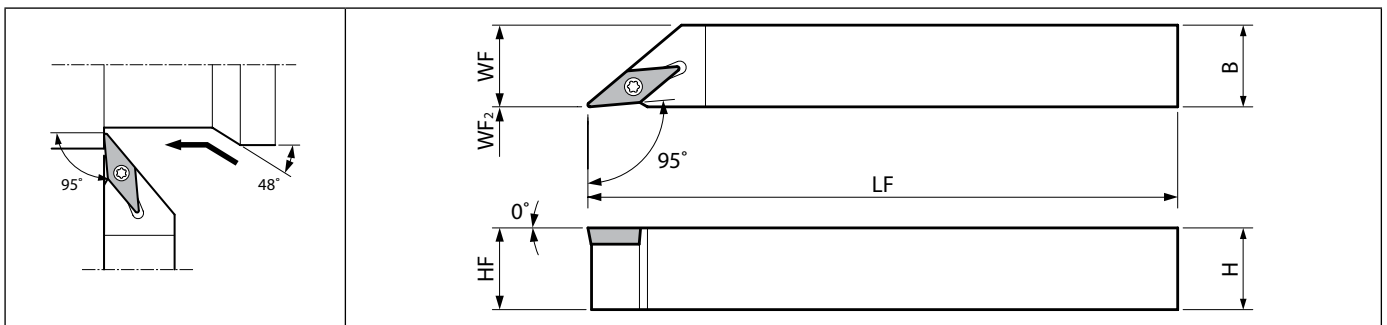
E

Toolholder dimensions

Description	Availabi- lity		Dimension (mm)							Standard corner-R (RE)	Spare parts		Applicable inserts
	R	L	H	B	HF	LF	WF	WF2	Standard corner-R (RE)		Clamp screw	Wrench (Torx)	
SVJC ^{CF} 1010JX-11FF 1212F-11FF 1212JX-11FF 1616JX-11FF 2020JX-11FF	●	●	10	10	10	120	10	0	0.2			VC..1103	
	●	●	12	12	12	85	12						
	●	●	16	16	16	120	16						
	●	●	20	20	20		20						

Small tools

SVLC-FF (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availabi- lity		Dimension (mm)							Standard corner-R (RE)	Spare parts		Applicable inserts
	R	L	H	B	HF	LF	WF	WF2	Standard corner-R (RE)		Clamp screw	Wrench (Torx)	
SVLC ^{CF} 1212F-11FF 1212JX-11FF 1616JX-11FF	●	●	12	12	12	120	12	0	0.2			VC..1103	
	●	●	16	16	16	85	16						

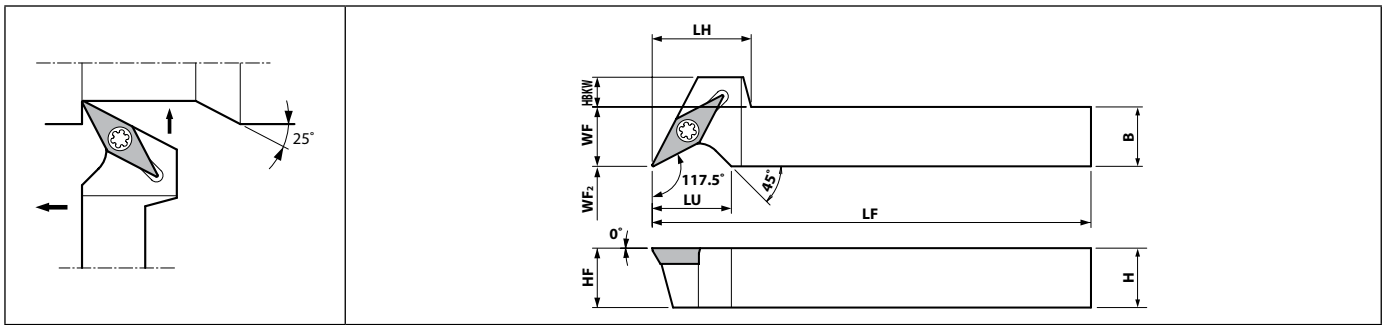
Applicable inserts

Applications	Finishing	Finishing - Medium	Finishing - Medium	Minute ap
Insert				
Toolholder				
SVJC-FF	VCCT1103...MFP-GF	VCET1103.....Y	VCMT110304HQ	VCCT1103...MP-CF
Page	B99	B98	B99	B99

● : Standard item

Recommended cutting conditions: E54 - E56

SVPC-FF (External turning / External copying / Undercutting)



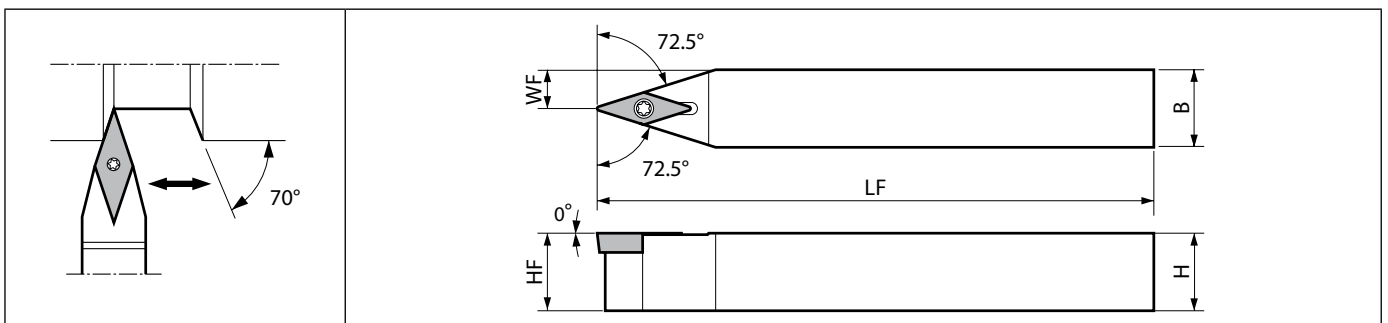
Right-hand shown

Toolholder dimensions

Description	Availability	Dimension (mm)										Standard corner-R (RE)	Spare parts		Applicable inserts
		R	H	B	LH	HF	HBKW	LF	LU	WF	WF2		Clamp screw	Wrench (Torx)	
SVPCR 1010JX-11FF	●	10	10	20	10	8	120	16	10	0	0.2	SB-2570TR	FT-8	VC..1103	
1212F-11FF	●	12	12		12	6	85		12						
1212JX-11FF	●	16	16		16	2	120	20	16						
1616JX-11FF	●														



SVVCN (External turning)



Toolholder dimensions

Description	Availability	Dimension (mm)					Standard corner-R (RE)	Spare parts		Applicable inserts
		N	H	B	HF	LF		WF	Clamp screw	
SVVCN 1010JX-11	●	10	10	10	120	5	0.2	SB-2570TR	FT-8	VC..1103
1212JX-11	●	12	12	12		6				
1616JX-11	●	16	16	16		8				

Applicable inserts

Applications	Finishing	Finishing - Medium	Finishing - Medium	Minute ap
Insert				
Toolholder				
SVPC-FF	VCMT1103..MFP-GF	VCET1103.....Y	VCMT110304HQ	VCGT1103..MP-CF
SVWCR				
Page	B99	B98	B99	B99

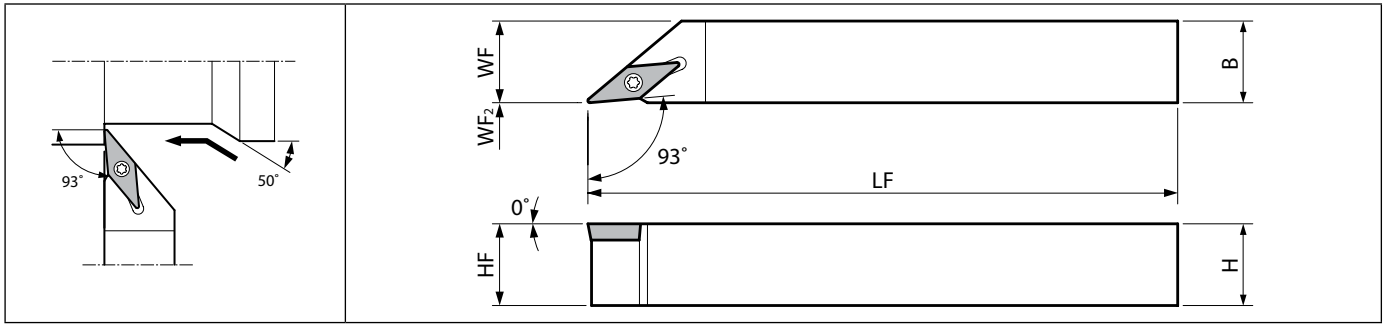
Undercutting diameter of SVPP-FF

Corner-R (RE)	ap (mm)	DCN (MIN.)
0.2	0.5	ø20
	0.7	ø25

● : Standard item

Recommended cutting conditions: E54 - E56


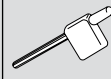
SVJP-FF (External turning / External copying)



Right-hand shown

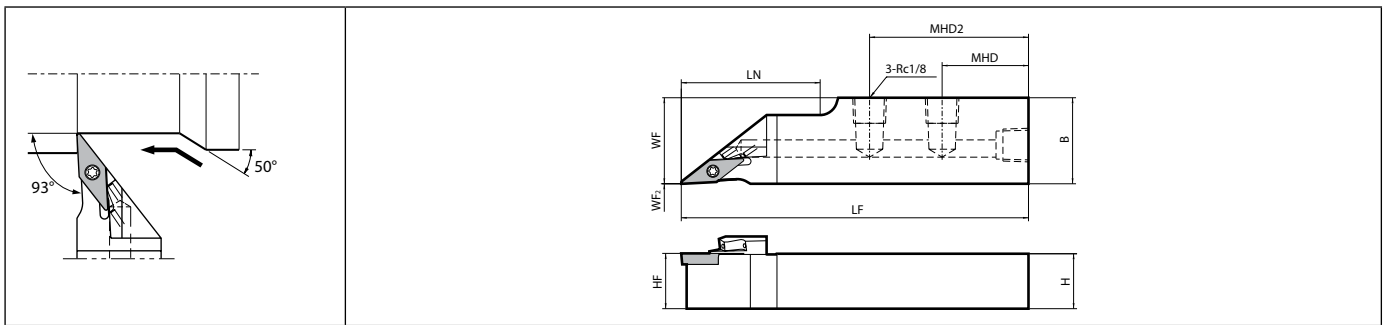
E

Toolholder dimensions

Description	Availability		Dimension (mm)							Standard corner-R (RE)	Spare parts		Applicable inserts
	R	L	H	B	HF	LF	WF	WF2	Standard corner-R (RE)		Clamp screw	Wrench (Torx)	
													
SVJP ^{PL} 1212F-11FF 1212JX-11FF 1616JX-11FF 2020JX-11FF	●	●	12	12	12	85	12	0	0.2	SB-2570TR	FT-8	VP.1103	



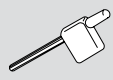
Small tools

SVJP-FFJCT (External turning / External copying)



Right-hand shown

Toolholder dimensions

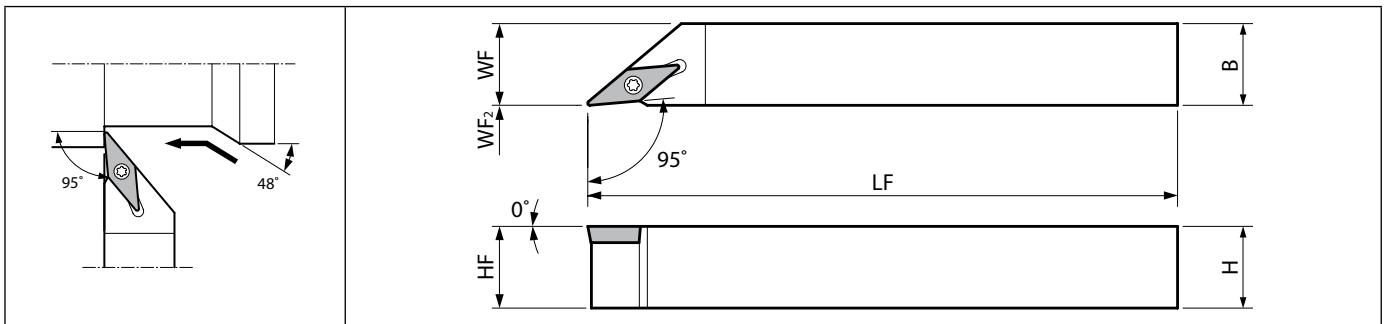
Description	Availability	Dimension (mm)										Standard corner-R (RE)	Coolant hole	Spare parts			Applicable inserts		
		R	H	B	MHD	MHD2	HF	LF	LN	WF	WF2			Standard corner-R (RE)	Coolant hole	Clamp screw		Plug	Wrench
																			
SVJPR 1220H-11FFJCT 1625H-11FFJCT 2025H-11FFJCT	●	12	20	35		12	100	28	20	0	0.2	Yes	SB-2570TR	GP-1	FT-8	VP.1103			

Please see page H14 and H15 for piping parts of coolant-through holders.

● : Standard item


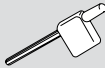

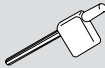

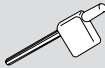
Recommended cutting conditions: E54 - E56

SVLP-FF (External turning / External copying)



Right-hand shown

Toolholder dimensions

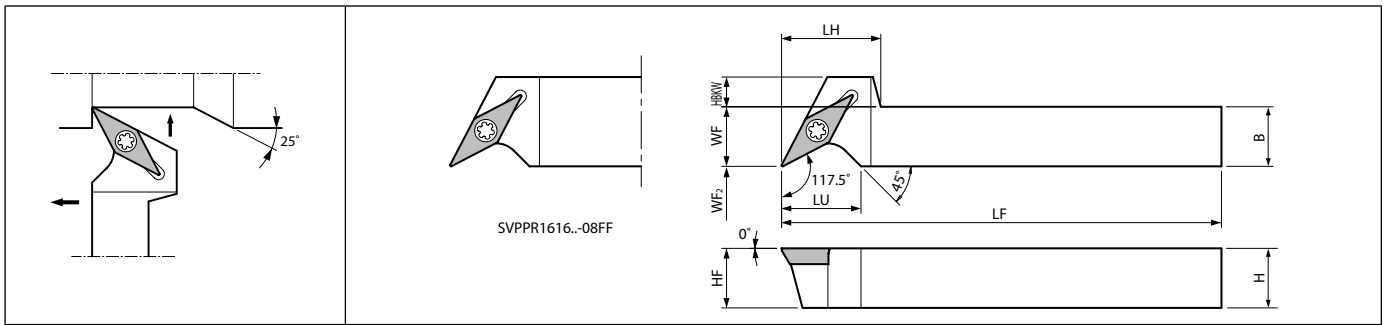
Description	Availability		Dimension (mm)							Standard corner-R (RE)	Spare parts		Applicable inserts
											Clamp screw	Wrench (Torx)	
	R	L	H	B	HF	LF	WF	WF2					
SVLP ^{P/L} 1010JX-08FF 1212F-08FF 1212JX-08FF 1616JX-08FF	●	●	10	10	10	120	10	0	0.1			VP.0802	
	●	●	12	12	12	85	12						
	●	●	16	16	16	120	16						
	●	●				120	16						
SVLP ^{P/L} 1212F-11FF 1212JX-11FF 1616JX-11FF	●	●	12	12	12	85	12	0	0.2			VP.1103	
	●	●				120							12
	●	●	16	16	16	120	16						
	●	●				120		16					

E




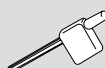
Small tools

SVPPR-FF (External turning / External facing / External copying / Undercutting)



Right-hand shown

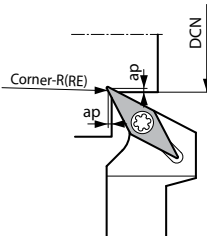
Toolholder dimensions

Description	Availability	Dimension (mm)										Standard corner-R (RE)	Spare parts		Applicable inserts
		R	H	B	LH	HF	HBKW	LF	LU	WF	WF2		Clamp screw	Wrench (Torx)	
															
SVPPR 1010JX-08FF 1212F-08FF 1212JX-08FF 1616JX-08FF	●	10	10	16	16	10	4	120	12	10	0	0.1	SB-2050TR	FT-6	VP.0802
●	12	12	12			2	85	12		12					
●	16	16	16			120	16								
SVPPR 1010JX-11FF 1212F-11FF 1212JX-11FF 1616JX-11FF	●	10	10	20	16	10	8	120	16	10	0	0.2	SB-2570TR	FT-8	VP.1103
●	12	12	12			6	85	12		12					
●	16	16	16			2	120	16							

Applicable inserts

Applications	Finishing	Finishing	Finishing	Finishing	Finishing	Low feed	Low feed	Low feed
Insert								
Toolholder								
SVJP-FF - 11FF		VPGT1103...CK	VPET1103.....FSF	VPET1103.....F	VPGT1103...MFP-GF	VPET1103.....U	VPET1103.....J	VPET1103.....USF
SVJP-FFJCT - 11FFJCT	VPET1103005MR-F							
SVLP-FF - 08FF / 11FF	VP...T.....	VPGT.....CK	VPET.....FSF	VPET.....F			VPET.....U	VPET.....USF
SVPP-FF - 08FF / 11FF								
Page	B101	B100	B101	B100-B101	B101	B100, B102	B101	B102
Applications	Minute ap							
Insert								
Toolholder								
SVJP-FF - 11FF		VPGT1103.....CF						
SVJP-FFJCT - 11FFJCT								
SVLP-FF - 08FF / 11FF								
SVPP-FF - 08FF / 11FF								
Page	B100							

Undercutting diameter of SVPP-FF

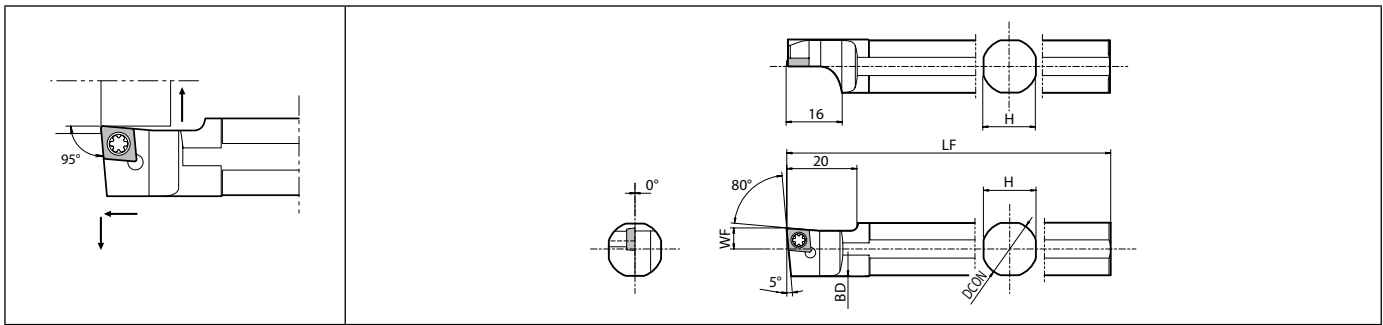


Corner-R (RE)	ap (mm)	DCN (MIN.)
0.2	0.5	ø20
	1	ø25

● : Standard item

Recommended cutting conditions: E54 - E56

S-SCLC (External turning / External facing)



Left-hand shown | Right-hand Insert for Left-hand Toolholder.

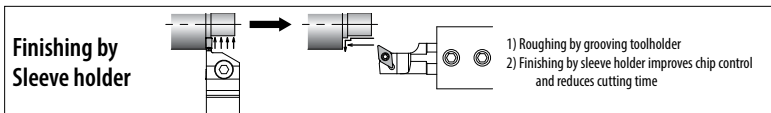
Toolholder dimensions

Description	Availability	Dimension (mm)					Standard corner-R (RE)	Spare parts			Applicable inserts					
		L	DCON	H	BD	LF		WF	Clamp screw	Wrench (Torx)		Wrench (Torx)				
S12F- SCLCLO6	●	12	11	13.4	80	6	0.4	SB-2560TR	FT-8	-	CC..0602					
S14H- SCLCLO6	●	14	13		100											
S15F- SCLCLO6	●	15.875	15	85												
S16F- SCLCLO6	●	16	17	120												
S19G- SCLCLO6	●	19.05	18.4	90												
S19K- SCLCLO6	●		120													
S20G- SCLCLO6	●	20	19.4	90												
S20K- SCLCLO6	●		120													
S19G- SCLCLO9	●	19.05	18.4	90	10							0.4	SB-4065TR	-	FT-15	CC..09T3
S19K- SCLCLO9	●		120													
S20G- SCLCLO9	●	20	19.4	90												
S20K- SCLCLO9	●		120													
S25.0H- SCLCLO9	●	25	24.4	100												
S25K- SCLCLO9	●	25.4	24.8	120												



Applicable inserts

Applications	Hard Materials PCD	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Insert								
Toolholder	CC...T.....	CCGW0602..NE	CCGT.....AP	CCGT.....MP-CK	CCGT.....MF...GF	CCGT0602..MFP-PF	CCMT.....PP	CCGT.....MFP-SK
Page	C31-C32	C31	B59	B60	B61	B63	B56	B63
Applications	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN
Insert								
Toolholder	CCMT.....WP	CCGT09T3..R-A3	CCGT09T3..AH	CCMT.....GK	CCGT.....MF...GQ	CCMT.....HQ	CCMT09T3..MQ	CCMW.....
Page	B64	B59	B59	B63	B62	B63	B64	C16
Applications	Low feed	Low feed	Low feed	Medium	Medium	Without Chipbreaker		
Insert								
Toolholder	CC...T.....U	CCET.....J	CCET.....USF	CCGT.....F	CC...T.....	CCGW.....		
Page	B57, B60, B62	B57	B56-B57	B61-B63	B56, B60-B63, C32	B63		

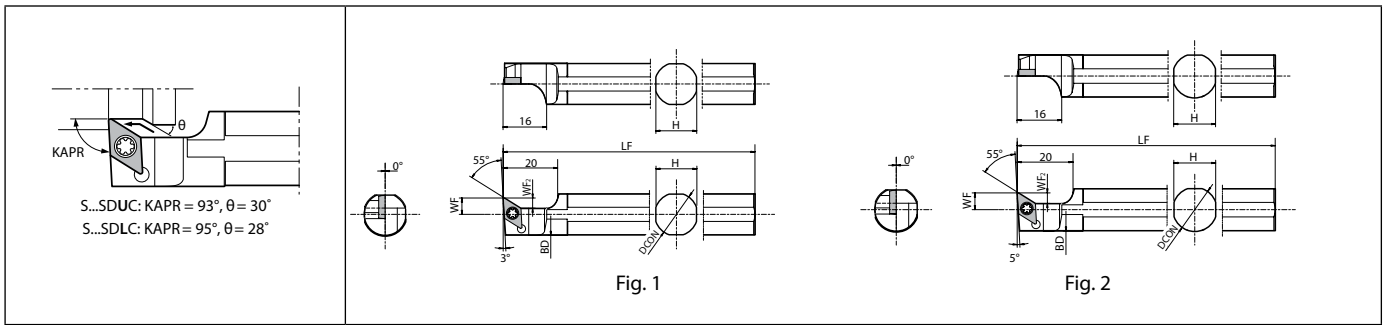


● : Standard item

Recommended cutting conditions: E54 - E56

S-SDUC (External turning / External copying)

S-SDLC (External turning / External facing)



Left-hand shown | Right-hand Insert for Left-hand Toolholder.

Toolholder dimensions

Description	Availability	Dimension (mm)						Fig.	Standard corner-R (RE)	Spare parts			Applicable inserts	
		L	DCON	H	BD	LF	WF			WF2	Clamp screw	Wrench (Torx)		Wrench (Torx)
S14H- SDUCL07	●	14	13	13.4	100	6	3.8	1	0.4	SB-2560TR	FT-8	-	DC..0702	
S15F- SDUCL07	●	15.875	15	15.4	85									
S19G- SDUCL07	●	19.05	17	18.4	90									
S19K- SDUCL07	●				120									
S20G- SDUCL07	●				90									
S20K- SDUCL07	●	20	18	19.4	120	10	5.8	1	0.4	SB-4085TR	-	FT-15	DC..11T3	
S19G- SDUCL11	●	19.05	17	18.4	90									
S19K- SDUCL11	●				120									
S20G- SDUCL11	●				90									
S20K- SDUCL11	●	20	18	19.4	120									25
S22K- SDUCL11	●	22	20	21.4	100									
S25.0H- SDUCL11	●	25	23	24.4	120									
S25K- SDUCL11	●	25.4	23	24.8	120									
S12F- SDLCL07	●	12	11	13.4	80	6	3.8	2	0.4	SB-2560TR	FT-8	-	DC..0702	
S14H- SDLCL07	●	14	13	13.4	100									
S15F- SDLCL07	●	15.875	15	15.4	85									
S16F- SDLCL07	●	16	15	15.4	85									
S19G- SDLCL07	●	19.05	17	18.4	90									
S19K- SDLCL07	●				120									
S20G- SDLCL07	●				90									
S20K- SDLCL07	●	20	18	19.4	120	10	5.8	2	0.4	SB-4085TR	-	FT-15	DC..11T3	
S19G- SDLCL11	●	19.05	17	18.4	90									
S19K- SDLCL11	●				120									
S20G- SDLCL11	●				90									
S20K- SDLCL11	●	20	18	19.4	120									22
S22K- SDLCL11	●	22	20	21.4	100									
S25.0H- SDLCL11	●	25	23	24.4	120									
S25K- SDLCL11	●	25.4	23	24.8	120									

For WP chipbreaker, cutting edge offsets or program corrections are required on R34-R35.

● : Standard item

Recommended cutting conditions: E54 - E56

Applicable inserts

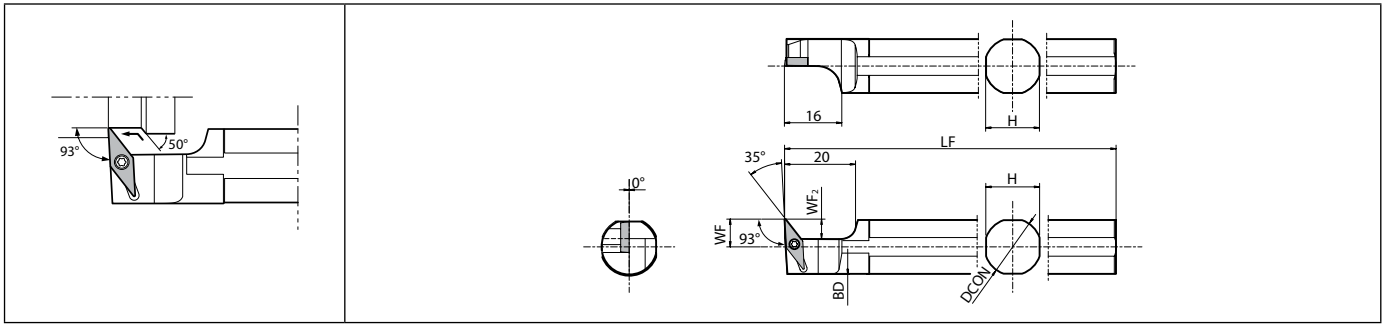
Applications	Non-ferrous Metals PCD	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing
Toolholder								
S-SDUC	DCM□.....	DCGT.....AP	DCGT.....CK	DCET.....FSF	DC□T.....F	DCGT.....MF...GF	DCMT.....GP	DCMT.....PP
S-SDLC								
Page	C33	B71	B67	B68	B68-B69, B73	B73	B67	B67
Applications	Finishing	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium
Toolholder								
S-SDUC	DCGT.....MFP-SK	DCMX.....WP	DCMX...04R-WP	DCMT.....XP	DCGT11T3..R-A3	DCGT11T3..AH	DCMT.....GK	DCGT.....MF...
S-SDLC								
Page	B76	B76	B77	B67, B71	B71, B76	B71, B74	B76	B74, B76
Applications	Finishing - Medium	Finishing - Medium	Finishing - Medium	Hard materials/ Cast iron CBN	Low feed	Low feed	Low feed	Low feed
Toolholder								
S-SDUC	DCMT.....HQ	DCMT.....MQ	DCMT11T3..XQ	DCMW.....	DC□T.....U	DCET11T3.....JSF	DC□T.....J	DCET.....USF
S-SDLC								
Page	B76-B77	B76, C18	B70-B72, B75, B77	B69, C18	B69-B72, B74-B75	B69-B70	B67, B69, B71, B73-B76	B70, B73-B76
Applications	Medium	Medium	Medium	Minute ap	Without Chipbreaker			
Toolholder								
S-SDUC	DCGT.....	DCGT.....F	DC□T.....	DCGT.....CF	DCGW.....			
S-SDLC								
Page	B67-B68, B71, B73-B76, C33	B71, B73-B76	B67-B68, B76, C33	B71	B76			

E



Small tools

S-SVUB (External turning / External copying)




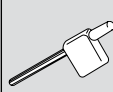
Left-hand shown | Right-hand Insert for Left-hand Toolholder.

E



Small tools

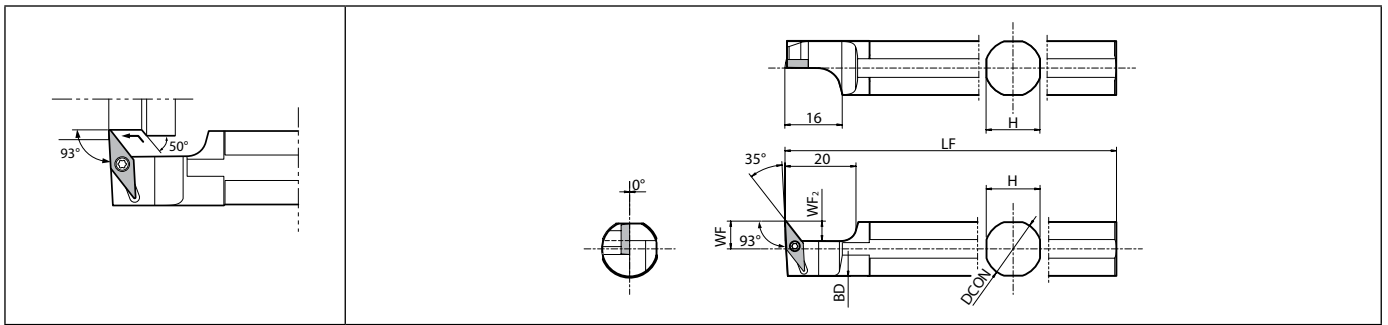
Toolholder dimensions

Description	Availability	Dimension (mm)						Standard corner-R (RE)	Coolant hole	Spare parts		Applicable inserts	
		L	DCON	H	BD	LF	WF			WF2	Clamp screw		Wrench (Torx)
													
S19G- SVUBL11	●	19.05	17	18.4	90	10.5	8	0.4	No	SB-2570TR	FT-8	VB..1103	
S19K- SVUBL11	●				120								
S20G- SVUBL11	●				90								
S20K- SVUBL11	●	20	18	19.4	120								
S25.0H- SVUBL11	●	25	23	24.4	100								
S25K- SVUBL11	●	25.4		24.8	120								

● : Standard item


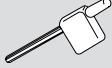
Recommended cutting conditions: E54 - E56

S-SVUC (External turning / External copying)
















Left-hand shown | Right-hand Insert for Left-hand Toolholder.

Toolholder dimensions

Description	Availability	Dimension (mm)						Standard corner-R (RE)	Coolant hole	Spare parts		Applicable inserts	
		L	DCON	H	BD	LF	WF			WF2	Clamp screw		Wrench (Torx)
													
S12F- SVUCL08	●	12	11	13.4	80	7.5	5.5	0.4	No	SB-2050TR	FT-6	VC..0802	
S14H- SVUCL08	●	14	13		100								
S15F- SVUCL08	●	15.875	15	15.4	85	8	10.5	0.2	No	SB-2570TR	FT-8	VC..1103	
S16F- SVUCL08	●	16											
S19G- SVUCL11	●	19.05	17	18.4	90	10.5	8	0.2	No	SB-2570TR	FT-8	VC..1103	
S19K- SVUCL11	●				120								
S20G- SVUCL11	●	20	18	19.4	90	10.5	8	0.2	No	SB-2570TR	FT-8	VC..1103	
S20K- SVUCL11	●				120								
S25.0H- SVUCL11	●	25	23	24.4	100	10.5	8	0.2	No	SB-2570TR	FT-8	VC..1103	
S25K- SVUCL11	●	25.4		24.8	120								

Applicable inserts

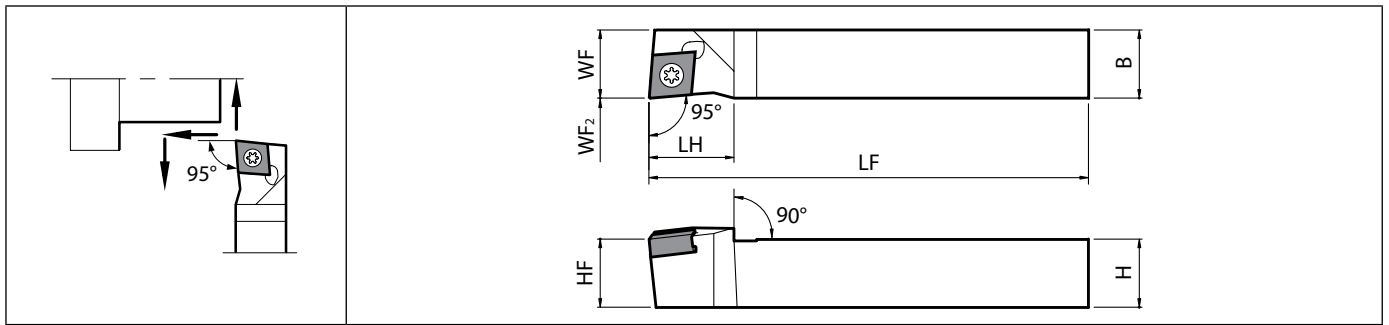
Applications	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing	Finishing - Medium
Insert									
Toolholder									
S-SVUB	VB□1103.....	VBET1103.....	VB□1103.....F	VCGT1103..MFP-GF	VBMT110304GP	VBMT1103..PP	VBMT1103..VF	VBMT1103..HQ	VBMT1103..HQ
S-SVUC	VC□.....					VCMT0802..PP	VCMT0802..VF	VCMT.....HQ	VCMT.....HQ
Page	B95 - B98	B95	B95-B96	B98	B95	B95, C22	B96, B99	B97	B97
Applications	Finishing - Medium	Hard materials/ Cast iron CBN	Minute ap	Non-ferrous metals PCD					
Insert									
Toolholder									
S-SVUB	VB□1103.....Y	VBGW110308....		VB□1103.....					
S-SVUC		VCGW080208T00815ME	VCGT1103..MP-CF	VC□.....					
Page	C21	C21	B99	C39					

● : Standard item

Recommended cutting conditions: E54 - E56





SCLN (External turning / External copying)



Right-hand shown

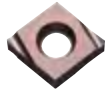
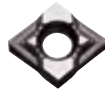
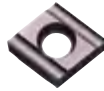
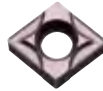
E

Toolholder dimensions

Description	Availability	Dimension (mm)							Standard corner-R (RE)	Side rake angle (°)	Inclination angle (°)	Spare parts		Applicable inserts	
		R	H	B	LH	HF	LF	WF				WF2	Clamp screw		Wrench
															
SCLNR	1010K-07FF	●	10	10	15	10	120	10	0	0.2	-6	-6	SB-3080TR	LTW-10SS	CN..0703
	1212F-07FF	●	12	12		12	85	12							
	1212K-07FF	●	16	16		16	120	16							
	1616K-07FF	●				16	16	16							

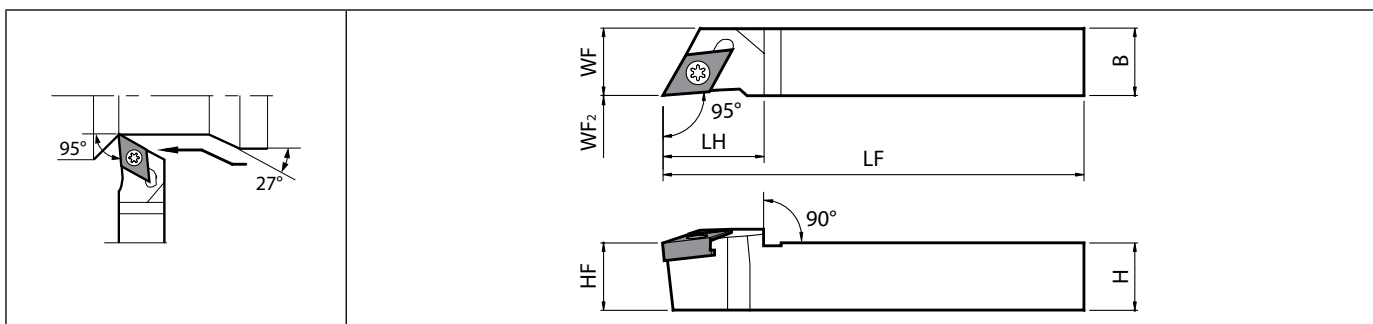
Small tools

Applicable inserts

Applications	Finishing	Finishing - Medium	Low feed	Medium - Roughing
Insert				
Toolholder	CNGU0703.....	CNGU0703..MFP-SK	CNGU0703.....U	CNMU0703..E-GK
Page	B53	B53	B53	B53



● : Standard item

SDLN (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability	Dimension (mm)							Standard corner-R (RE)	Side rake angle (°)	Inclination angle (°)	Spare parts		Applicable inserts	
		R	H	B	LH	HF	LF	WF				WF2	Clamp screw		Wrench
		 													
SDLNR 1010K-08FF	●	10	10	18	10	120	10	0	0.2	-6	-7	SB-3080TR	LTW-10SS	DN..0803	
1212F-08FF	●	12	12		12	85	12								
1212K-08FF	●	16	16		16	120	16								
1616K-08FF	●														

Applicable inserts

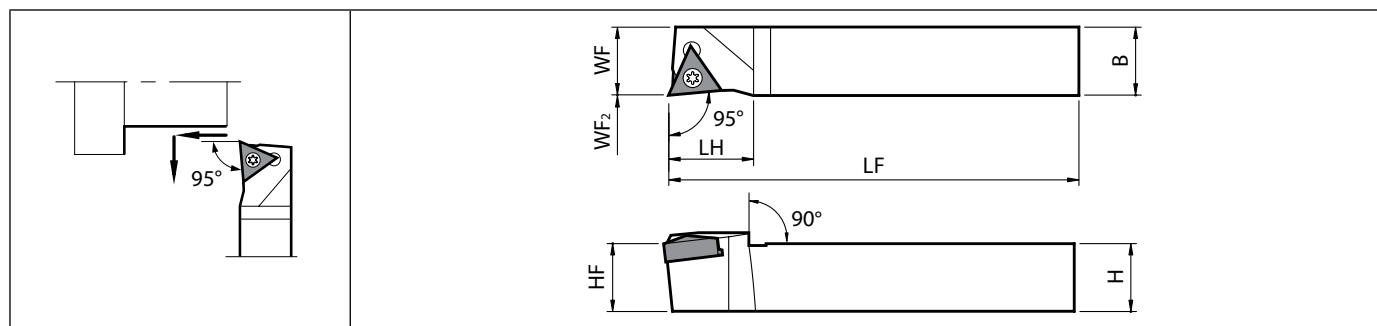
Applications	Finishing	Finishing - Medium	Low feed	Medium - Roughing
Insert				
Toolholder				
SDLN	DNGU0803...MFR-F	DNGU0803...MFP-SK	DNGU0803...R-U	DNMU0803...E-GK
Page	B54	B54	B54	B54

E



Small tools

STLN (External turning)



Right-hand shown

E

Toolholder dimensions

Description	Availability	Dimension (mm)							Standard corner-R (RE)	Side rake angle (°)	Inclination angle (°)	Spare parts		Applicable inserts	
		R	H	B	LH	HF	LF	WF				WF2	Clamp screw		Wrench (Torx)
		SB-2570TR		LTW-8SS											
STLNR 1010K-09FF	●	10	10	15	10	120	10	0	0.2	-6	-7	SB-2570TR	LTW-8SS	TNGU09	
1212F-09FF	●	12	12		12	85	12								
1212K-09FF	●	16	16		16	120	16								
1616K-09FF	●														

Applicable inserts

Applications	Finishing	Low feed
Insert		
Toolholder		
STLN	TNGU0903.....	TNGU0903.....
Page	B55	B55

Insert grades - small double sided tooling

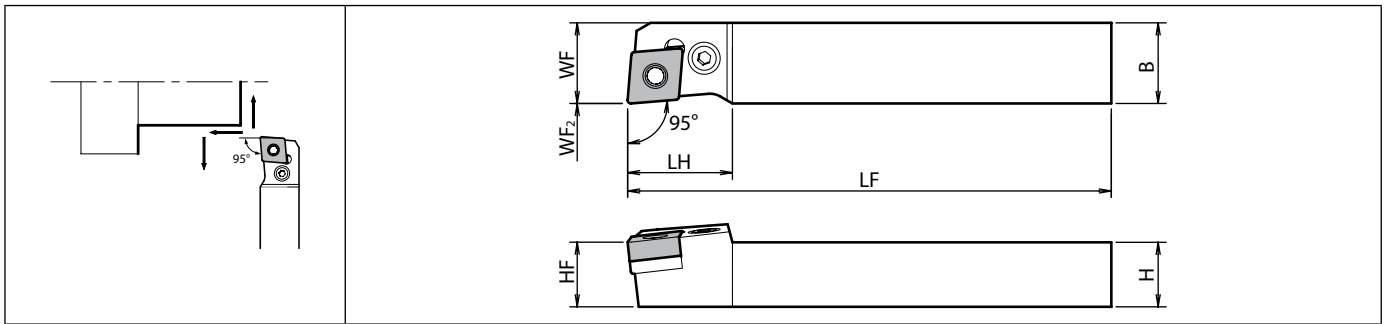
Workpiece material	PR1225	PR1535	PR1705	PR1725
Free-cutting steel	-	-	● Vc = 100 m/min 60 ~ 150	○ Vc = 100 m/min 60 ~ 150
Carbon steel / Alloy steel	○ Vc = 100 m/min 60 ~ 150	○ Vc = 100 m/min 60 ~ 150	○ Vc = 130 m/min 60 ~ 200	● Vc = 130 m/min 60 ~ 200
Stainless steel	○ Vc = 80 m/min 50 ~ 150	● Vc = 100 m/min 60 ~ 150	-	○ Vc = 100 m/min 80 ~ 150

- : Continuous to light interruption: 1st recommendation
- : Continuous to light interruption: 2nd recommendation
- : Continuous: 1st recommendation
- : Continuous: 2nd recommendation



Small tools

PCLN-FF (External turning / External facing)



Right-hand shown

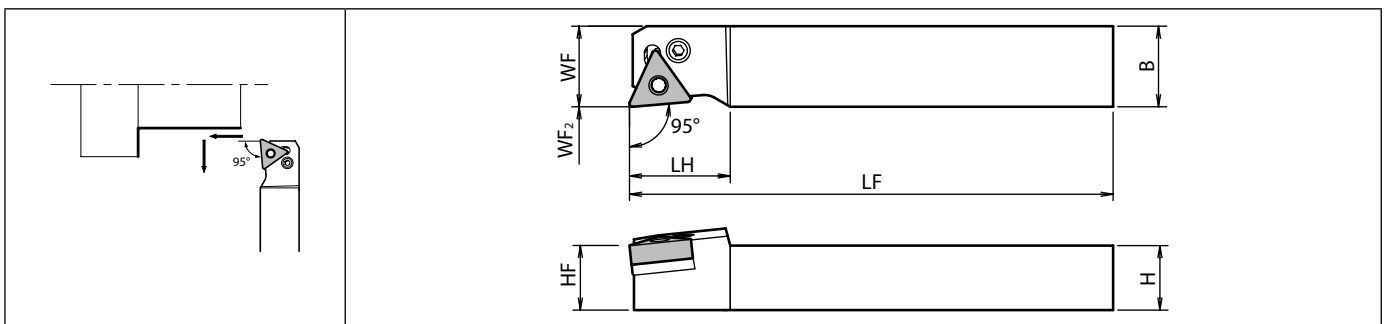
Toolholder dimensions

Description	Availability	Dimension (mm)								Standard corner-R (RE)	Side rake angle (°)	Inclination angle (°)	Spare parts						Applicable inserts
		R	H	B	LH	HF	LF	WF	WF2				Lever	Lock screw	Punch	Shim	Shim pin	Wrench (hex.)	
		PCLNR 1620JX-12FF 2020JX-12FF	● ●	16 20	20	26	16 20	120	20				0	0.8	-6	-6	LL-2N	LS-2N	



Small tools

PTLN-FF (External turning)



Right-hand shown

Toolholder dimensions

Description	Availability	Dimension (mm)								Standard corner-R (RE)	Side rake angle (°)	Inclination angle (°)	Spare parts							Applicable inserts
		R	H	B	LH	HF	LF	WF	WF2				Lever	Lock screw	Punch	Shim	Shim pin	Shim*	Wrench (hex.)	
		PTLNR 1620JX-16FF 2020JX-16FF	● ●	16 20	20	24	16 20	120	20				0	0.8	-6	-6	LL-1N	LS-1N	PC-1	

When using inserts whose corner-R(RE) is greater than 1.6mm, please purchase a shim* and use it in order to prevent workpiece and shim from interfering each other.

Applicable inserts

Applications	Finishing - Medium	Medium - Roughing
Insert		
Toolholder		
PCLN-FF	CNGG1204..MFP-SK	CNGG1204..FP-TK
Page	B19	B19

Applicable inserts

Applications	Finishing - Medium	Large ap	Medium - Roughing
Insert			
Toolholder			
PTLN-FF	TNGG1604..MFP-SK	TNMG1604..R-LD	TNGG1604..FP-TK
Page	B43	B42	B41

● : Standard item

Recommended cutting conditions: E53

External turning (positive insert) - cutting diameter under $\phi 16\text{mm}$

ISO classification	Workpiece material	Hardness	Cutting range	Applications	Chipbreaker	Insert grade	Corner-R (r _e)	Lower limit - Recommendation - Upper limit		
								V _c (m/min)	a _p (mm)	f (mm/rev)
P*	Low carbon steel Low carbon alloy	HB ≤ 300	Precision finishing	Continuous	F	PR1725	0.05	100 - 150 - 200	0.05 - 0.07 - 0.15	0.03 - 0.05 - 0.1
				Interruption		PR1725	0.2	80 - 120 - 160	0.05 - 0.1 - 0.2	0.03 - 0.1 - 0.15
			Precision finishing Molded chipbreaker	Continuous	CF	PR1725	0.2	100 - 150 - 200	0.02 - 0.05 - 0.1	0.02 - 0.05 - 0.12
				Interruption						
			Finishing	Continuous	GF	PR1725	0.2	100 - 140 - 180	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2
	Interruption			PR1725	0.4	80 - 120 - 160	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2		
	Finishing-Medium	Continuous	GQ	PR1725	0.2	80 - 120 - 160	0.8 - 3.0 - 5.0	0.03 - 0.05 - 0.1		
		Interruption		PR1725	0.4	60 - 100 - 140	0.8 - 2.0 - 3.0	0.03 - 0.05 - 0.1		
	Low feed & Large a _p	Continuous	J, U	PR1725	0.2	80 - 100 - 140	0.5 - 2.0 - 3.5	0.02 - 0.05 - 0.1		
	Medium carbon steel Medium carbon alloy	HB ≤ 330	Precision finishing	Continuous	F	PR1725	0.05	100 - 150 - 200	0.05 - 0.07 - 0.15	0.03 - 0.05 - 0.1
				Interruption		PR1725	0.2	80 - 120 - 160	0.05 - 0.1 - 0.2	0.03 - 0.1 - 0.15
			Precision finishing Molded chipbreaker	Continuous	CF	PR1725	0.2	100 - 150 - 200	0.02 - 0.05 - 0.1	0.02 - 0.05 - 0.12
				Interruption						
			Finishing	Continuous	GF	PR1725	0.2	100 - 140 - 180	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2
	Interruption			PR1725	0.4	80 - 120 - 160	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2		
Finishing-Medium	Continuous	GQ	PR1725	0.2	80 - 120 - 160	0.8 - 3.0 - 5.0	0.03 - 0.05 - 0.1			
	Interruption		PR1725	0.4	60 - 100 - 140	0.8 - 2.0 - 3.0	0.03 - 0.05 - 0.1			
Low feed & Large a _p	Continuous	J, U	PR1725	0.2	80 - 100 - 140	0.5 - 2.0 - 3.5	0.02 - 0.05 - 0.1			
High carbon alloy	HB ≤ 280	Precision finishing	Continuous	F	PR1725	0.05	100 - 150 - 200	0.05 - 0.07 - 0.15	0.03 - 0.05 - 0.1	
			Interruption		PR1725	0.2	80 - 120 - 160	0.05 - 0.1 - 0.2	0.03 - 0.1 - 0.15	
		Precision finishing Molded chipbreaker	Continuous	CF	PR1725	0.2	100 - 150 - 200	0.02 - 0.05 - 0.1	0.02 - 0.05 - 0.12	
			Interruption							
		Finishing	Continuous	GF	PR1725	0.2	100 - 140 - 180	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2	
Interruption			PR1725	0.4	80 - 120 - 160	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2			
Finishing-Medium	Continuous	GQ	PR1725	0.2	80 - 120 - 160	0.3 - 1.5 - 3.0	0.03 - 0.05 - 0.1			
	Interruption		PR1725	0.4	60 - 100 - 140	0.3 - 1.0 - 2.0	0.03 - 0.05 - 0.1			
Low feed & Large a _p	Continuous	J, U	PR1725	0.2	80 - 100 - 140	0.5 - 2.0 - 3.5	0.02 - 0.05 - 0.1			
M	Stainless steel (Austenitic related)	HB ≤ 220	Finishing	Continuous	GF	PR1225	0.2	80 - 100 - 120	0.1 - 0.3 - 0.5	0.03 - 0.05 - 0.1
				Interruption		PR1535	0.4	60 - 80 - 100	0.3 - 0.5 - 1.0	0.05 - 0.1 - 0.15
	Medium	Continuous	GQ	PR1225	0.2	80 - 100 - 120	0.5 - 1.5 - 3.0	0.03 - 0.08 - 0.12		
		Interruption		PR1535	0.4	60 - 80 - 100	0.5 - 1.0 - 2.0	0.05 - 0.1 - 0.15		
	Stainless steel (Precipitation Hardening)	HB ≤ 300	Finishing	Continuous	GF	PR1225	0.2	40 - 60 - 80	0.1 - 0.3 - 0.5	0.03 - 0.05 - 0.1
				Interruption		PR1535	0.4	30 - 50 - 70	0.3 - 0.5 - 1.0	0.05 - 0.1 - 0.15
Medium	Continuous	GQ	PR1225	0.2	40 - 60 - 80	0.5 - 1.0 - 2.0	0.03 - 0.08 - 0.12			
	Interruption		PR1535	0.4	30 - 50 - 70	0.5 - 1.0 - 1.5	0.05 - 0.1 - 0.15			

* For machining free-cutting steels, such as SUM, etc. use PR1705 at V_c = 200 m/min or less.
For a_p and f, refer to specs for low carbon steels.

E



Small tools

External turning (positive insert) - cutting diameter under $\varnothing 16\text{mm}$

ISO classification	Workpiece material	Hardness	Cutting range	Applications	Chipbreaker	Insert grade	Corner-R (r _e)	Lower limit - Recommendation - Upper limit		
								V _c (m/min)	a _p (mm)	f (mm/rev)
K	Gray cast iron	HB ≤ 250	Finishing	Continuous	Standard	CA310	0.4	100 - 120 - 150	0.2 - 0.5 - 1.0	0.1 - 0.15 - 0.2
				Interruption		CA315	0.4	80 - 100 - 120	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.15
			Medium	Continuous	Standard	CA310	0.4	100 - 120 - 150	0.5 - 1.0 - 2.0	0.1 - 0.15 - 0.2
				Interruption		CA315	0.8	80 - 100 - 120	0.5 - 1.0 - 2.0	0.05 - 0.1 - 0.15
	Nodular cast iron	HB ≤ 270	Finishing	Continuous	Standard	CA310	0.4	80 - 100 - 120	0.2 - 0.5 - 1.0	0.1 - 0.15 - 0.2
				Interruption		CA315	0.4	60 - 80 - 100	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.15
Medium	Continuous	Standard	CA310	0.4	80 - 100 - 120	0.5 - 1.0 - 2.0	0.1 - 0.15 - 0.2			
	Interruption		CA315	0.8	60 - 80 - 100	0.5 - 1.0 - 2.0	0.05 - 0.1 - 0.15			
N	Non-ferrous metals Copper alloy Aluminum Aluminum alloys (Si10% or less) etc.	HB ≤ 100	High speed machining (Rainbow surface gloss)	Continuous	Without chipbreaker	KPD001	0.2	150 - 250 - 350	0.05 - 0.1 - 0.3	0.05 - 0.1 - 0.15
			Finishing (Long tool life)	Continuous	F	PDL025	0.2	100 - 150 - 200	0.05 - 0.3 - 0.5	0.02 - 0.07 - 0.1
				Interruption		PDL025	0.4	100 - 150 - 200	0.05 - 0.3 - 0.5	0.02 - 0.07 - 0.1
			Finishing	Continuous	F	KW10	0.2	100 - 150 - 200	0.05 - 0.3 - 0.5	0.02 - 0.07 - 0.1
				Interruption		KW10	0.4	100 - 150 - 200	0.05 - 0.3 - 0.5	0.02 - 0.07 - 0.1
			Medium	Continuous	U	KW10	0.2	100 - 150 - 200	0.2 - 0.5 - 1.5	0.03 - 0.1 - 0.2
Interruption	KW10	0.4		100 - 150 - 200		0.2 - 0.5 - 1.5	0.03 - 0.1 - 0.2			
S	Titanium alloys	HB ≤ 400	Precision finishing (Rainbow surface gloss)	Continuous	Without chipbreaker	KPD001	0.2	100 - 120 - 150	0.05 - 0.1 - 0.3	0.03 - 0.07 - 0.1
				Interruption	KPD001	0.4	70 - 100 - 120	0.05 - 0.1 - 0.3	0.03 - 0.07 - 0.1	
			Medium	Continuous	F, U	KW10	0.4	30 - 50 - 70	0.1 - 0.5 - 1.0	0.03 - 0.1 - 0.2
	Interruption	KW10	0.4	30 - 50 - 70		0.1 - 0.5 - 1.0	0.03 - 0.1 - 0.2			
	Heat-resistant alloys	HB ≤ 350	Finishing	Continuous	F, U without chipbreaker	KW10	0.4	10 - 30 - 50	0.1 - 0.3 - 0.5	0.03 - 0.05 - 0.1
				Interruption		KW10	0.8	10 - 30 - 50	0.2 - 0.5 - 0.7	0.03 - 0.05 - 0.1
Finishing			Continuous	MQ	PR1535	0.4	40 - 60 - 80	0.1 - 0.3 - 0.5	0.03 - 0.05 - 0.1	
Interruption	PR1535	0.8	40 - 60 - 80		0.1 - 0.3 - 0.5	0.03 - 0.05 - 0.1				
H	Hardened steel Hard materials	40 ~ 50 HRC	Finishing	Continuous	GK	PR1425	0.2	40 - 60 - 80	0.1 - 0.3 - 0.5	0.02 - 0.07 - 0.1
				Interruption		PR1425	0.4	40 - 60 - 80	0.1 - 0.3 - 0.5	0.02 - 0.07 - 0.1
		50 ~ 68 HRC	Finishing	Continuous	ME	KBN05M	0.2	80 - 120 - 150	0.1 - 0.3 - 0.5	0.02 - 0.07 - 0.1
				Interruption	MET	KBN05M	0.4	60 - 100 - 120	0.1 - 0.3 - 0.5	0.02 - 0.07 - 0.1



Small tools

Back Turning - cutting diameter under $\varnothing 16\text{mm}$

KTKF

Workpiece material		MEGACOAT NANO PLUS		MEGACOAT NANO		MEGACOAT		Remarks
		PR1725		PR1535		PR1225		
		Grooving	Turning	Grooving	Turning	Grooving	Turning	
Carbon steel / Alloy steel	Vc (m/min)	★ 60 ~ 200		☆ 60 ~ 150		☆ 60 ~ 150		Coolant
	f (mm/rev)	0.01 ~ 0.03	0.02 ~ 0.15	0.01 ~ 0.03	0.02 ~ 0.15	0.01 ~ 0.03	0.02 ~ 0.15	
Stainless steel	Vc (m/min)	☆ 60 ~ 150		★ 60 ~ 130		☆ 60 ~ 130		
	f (mm/rev)	0.01 ~ 0.02	0.02 ~ 0.1	0.01 ~ 0.02	0.02 ~ 0.1	0.01 ~ 0.02	0.02 ~ 0.1	

Workpiece material		Carbide		PCD		Remarks
		KW10		KPD001		
		Grooving	Turning	Grooving	Turning	
Cast iron	Vc (m/min)	50 ~ 100		-		Coolant
	f (mm/rev)	0.01 ~ 0.02	0.02 ~ 0.15	-		
Aluminum	Vc (m/min)	200 ~ 450		200 ~ 500		
	f (mm/rev)	0.01 ~ 0.03	0.02 ~ 0.15	0.01 ~ 0.03	0.02 ~ 0.12	
Brass	Vc (m/min)	100 ~ 200		100 ~ 350		
	f (mm/rev)	0.01 ~ 0.05	0.02 ~ 0.2	0.01 ~ 0.05	0.02 ~ 0.15	

KTKF (GQ chipbreaker)

Workpiece material		MEGACOAT NANO PLUS		MEGACOAT NANO		MEGACOAT		Remarks
		PR1725		PR1535		PR1225		
		Grooving	Turning	Grooving	Turning	Grooving	Turning	
Carbon steel / Alloy steel	Vc (m/min)	★ 60 ~ 200		☆ 60 ~ 150		☆ 60 ~ 150		Coolant
	f (mm/rev)	0.01 ~ 0.04	0.02 ~ 0.15	0.01 ~ 0.04	0.02 ~ 0.15	0.01 ~ 0.04	0.02 ~ 0.15	
Stainless steel	Vc (m/min)	☆ 60 ~ 150		★ 60 ~ 130		☆ 60 ~ 130		
	f (mm/rev)	0.01 ~ 0.03	0.02 ~ 0.1	0.01 ~ 0.03	0.02 ~ 0.1	0.01 ~ 0.03	0.02 ~ 0.1	

ABS15, ABW15, ABW23

Workpiece Material		MEGACOAT NANO PLUS		MEGACOAT		PVD coated carbide		Remarks
		PR1725		PR1225		PR1025 (PR930)		
		Grooving	Turning	Grooving	Turning	Grooving	Turning	
Carbon steel / Alloy steel	Vc (m/min)	★ 60 ~ 180		☆ 60 ~ 150		☆ 80 ~ 100		Coolant
	f (mm/rev)	0.02	0.02 ~ 0.07	0.02	0.02 ~ 0.07	0.02	0.02 ~ 0.07	
Stainless steel	Vc (m/min)	☆ 30 ~ 130		★ 40 ~ 120		☆ 30 ~ 50		
	f (mm/rev)	0.02	0.02 ~ 0.05	0.02	0.02 ~ 0.05	0.02	0.02 ~ 0.05	

Workpiece material		Carbide		Remarks
		KW10		
		Grooving	Turning	
Aluminum	Vc (m/min)	150 ~ 200		Coolant
	f (mm/rev)	0.02	0.02 ~ 0.10	
Brass	Vc (m/min)	100 ~ 160		
	f (mm/rev)	0.03	0.02 ~ 0.15	

★: 1st recommendation

☆: 2nd recommendation

