

# Small Tools

**E1~E42**

E

Summary of Turning **E2~E3**

Small Tools Identification System **E8**



Toolholders for Back Turning **E9~E13**

ABS Insert	(Back Turning)	<b>E9</b>
ABW Insert	(Back Turning)	<b>E10</b>
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VP □□ Insert	(Goose-neck Holder)	<b>E15</b>



Toolholder for Small Double Sided Tooling **E16~E17**

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TN □ U Insert	(Without Offset)	<b>E18</b>



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CC □□ Insert	(Without Offset / With Offset)	<b>E20</b>
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DP □□ Insert	(Without Offset / With Offset)	<b>E26</b>
TC / TP □□ Insert		<b>E27</b>
VB / VC □□ Insert	(Without Offset / With Offset)	<b>E28</b>
VP □□ Insert	(Without Offset / With Offset)	<b>E30</b>
YP □□ Insert		<b>E32</b>



External Sleeve Holder Tools **E33~E35**

CC □□ Insert	<b>E33</b>
DC □□ Insert	<b>E34</b>
VB / VC □□ Insert	<b>E35</b>



External Toolholders (Top Clamp) **E36~E37**

SP □ R / SP □ N Insert	<b>E36</b>
TP □ R / TP □ N Insert	<b>E37</b>



Technical Information **E38~E39**








Recommended Cutting Conditions **E38**

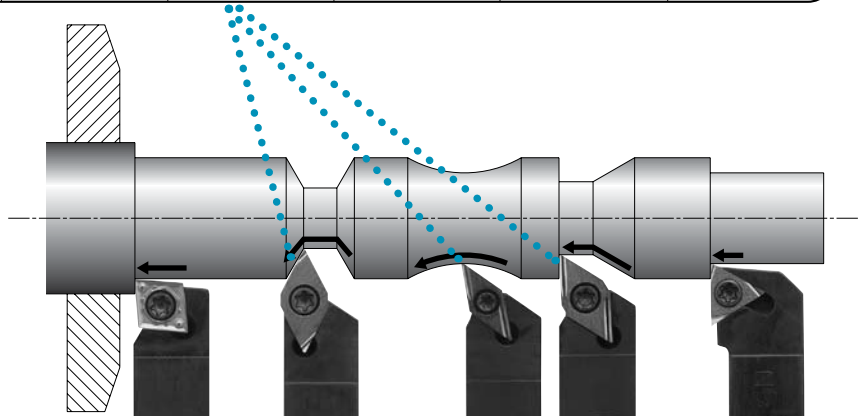
Alternative Toolholder Reference Table for Small Tools **E40~E42**







# Summary of Turning

## External / Copying

						
ADJC-FF	SDJC-FF	SDJC	SDLC-FF SDLP-FF	SDLN-FF	SDNC-F	SDNC
Back Clamp Without Offset	Screw Clamp Without Offset	Screw Clamp With Offset	Screw Clamp Without Offset	Screw Clamp Without Offset	Screw Clamp With Offset	Screw Clamp With Offset
E22	E23	E23	E24,E26	E16	E25	E25



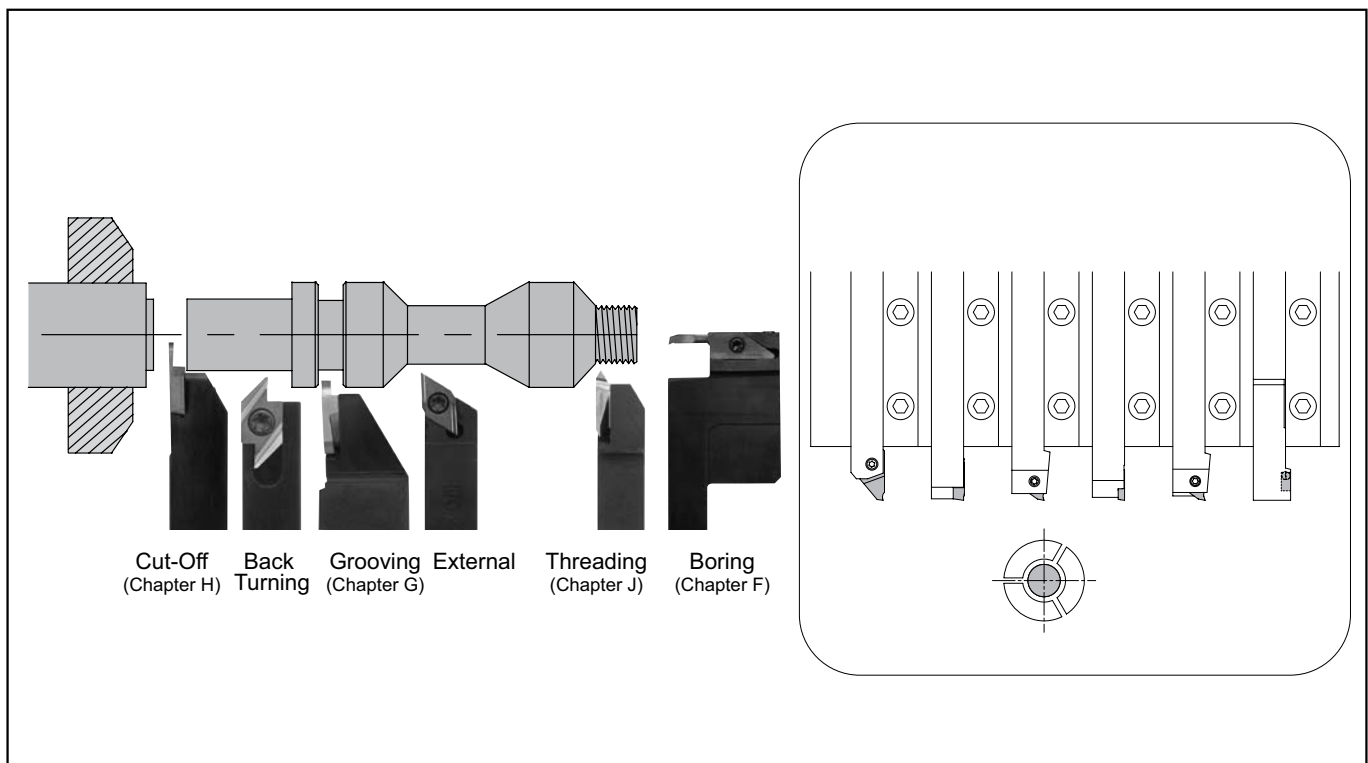
## External / Facing

			
ACLC-FF	SCLC-FF	SCLC	SCLN-FF
Back Clamp Without Offset	Screw Clamp Without Offset	Screw Clamp With Offset	Screw Clamp Without Offset
E20	E21	E21	E16

## External

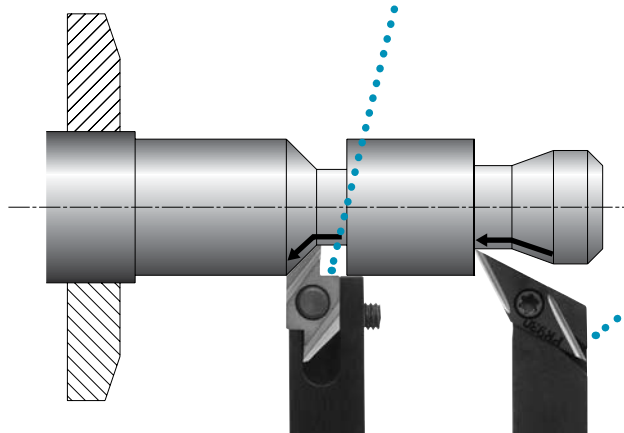
	
STGC(P)	STLN-FF
Screw Clamp With Offset	Screw Clamp Without Offset
E27	E17

## Tooling example① CNC Automatic lathe (Gang Type)



## Back Turning

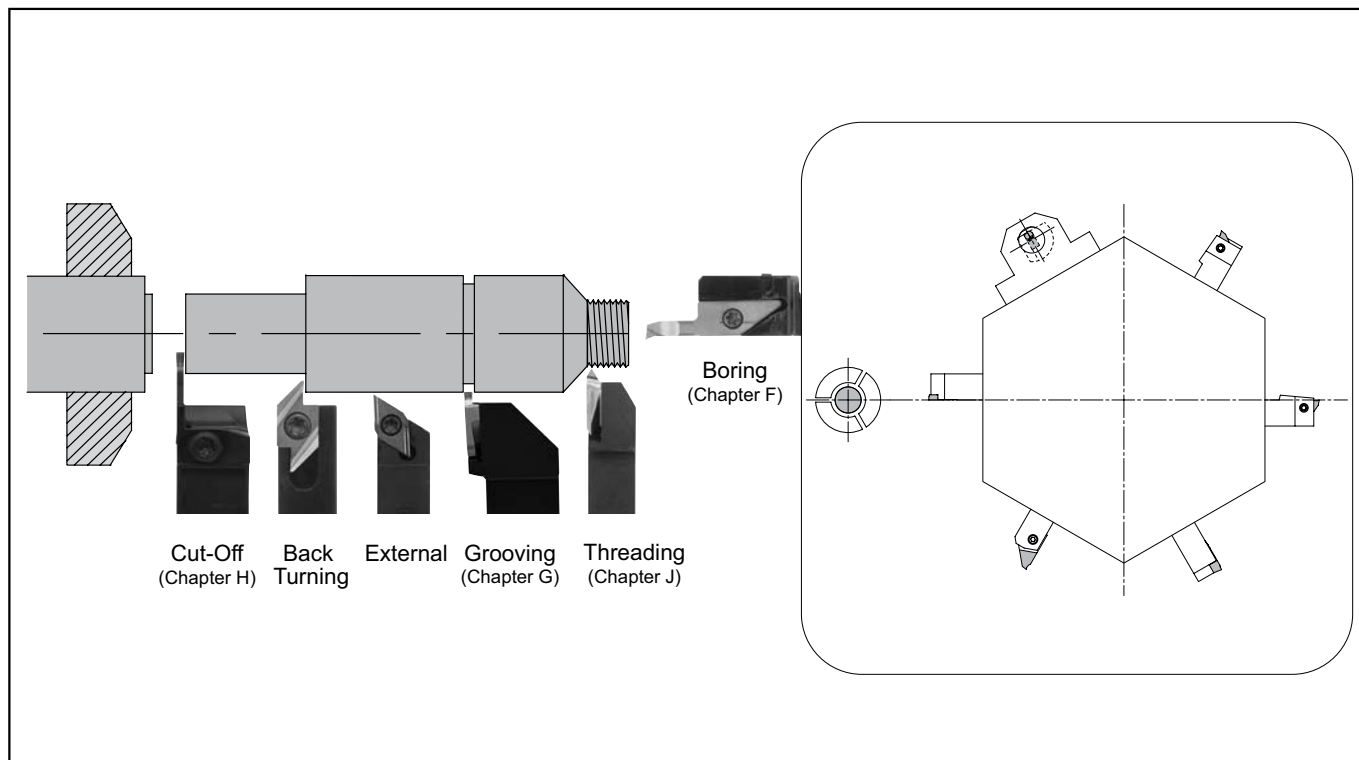
AABS-40F	SABS-40F	AABW-40F	SABW-40F	AABW-50F	SABW-50F	KTKF
Back Clamp Edge Width:2.8 ap:~4.0	Screw Clamp Edge Width:2.8 ap:~4.0	Back Clamp Edge Width:4.7 ap:~4.0	Screw Clamp Edge Width:4.7 ap:~4.0	Back Clamp Edge Width:4.7 ap:~5.0	Screw Clamp Edge Width:4.7 ap:~5.0	Screw Clamp Edge Width:1.5~3.8 ap:1.8~5.5
E9	E9	E10	E10	E11	E11	E12



## External / Facing / Copying / Undercutting

SVPB	SVPP	SVPP-FF
Screw Clamp With Offset	Screw Clamp With Offset	Screw Clamp Without Offset
E29	E31	E31

## Tooling example② CNC Automatic lathe (Gang Type)



Small Tools



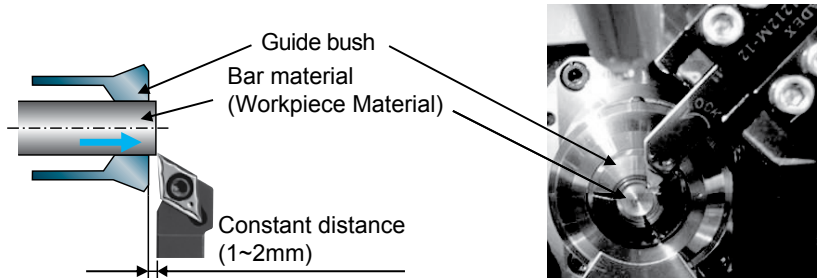
# Summary of Turning

## ■ Swiss Tool Automatic Lathe (Guide Bush System)

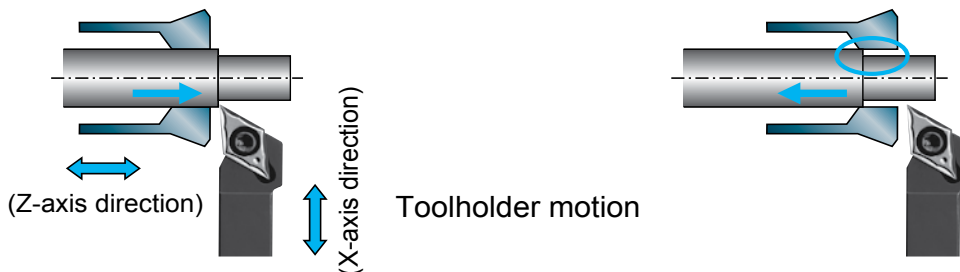
Goose-neck holder is applicable to automatic lathes whose toolholder does not move to longitudinal direction (Z-axis direction).

### ● In case of machining with the conventional toolholder

#### Before Machining



#### During Machining



The tool position is fixed and the bar material (workpiece) moves longitudinally.

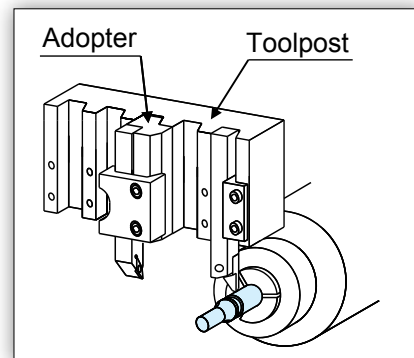
At step turning with multiple passes, the machined part returns into the guide bush and causes various problems.

## ● Problems

### 1. Problems in attachment

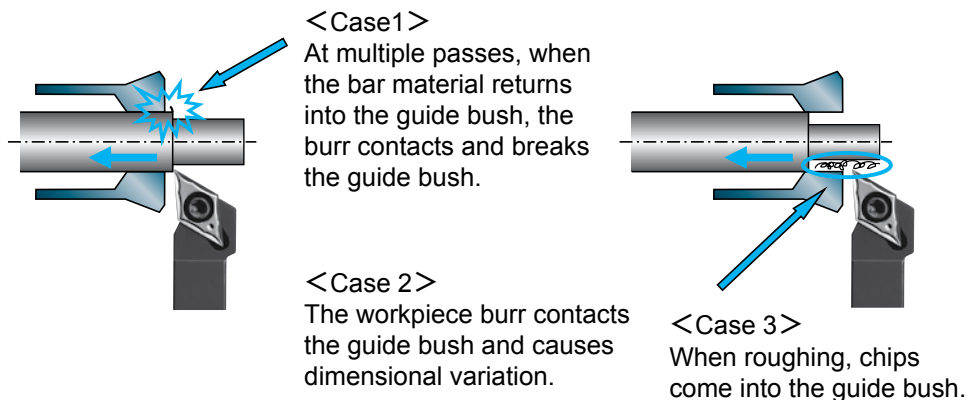
When using a conventional toolholder,

- 1) Additional space is required for an adopter.
- 2) Toolholder's handling is difficult due to limited space.
- 3) Necessary to buy an adopter.
- 4) An adopter may interfere with the next toolpost.



### 2. Problems in machining

#### When machining with a conventional toolholder



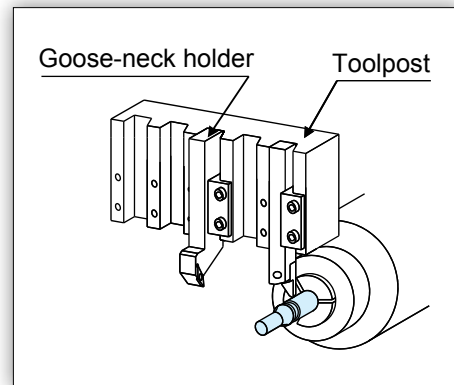


## ● Advantages of Goose-neck Holder

### In Case of Goose-neck Holder

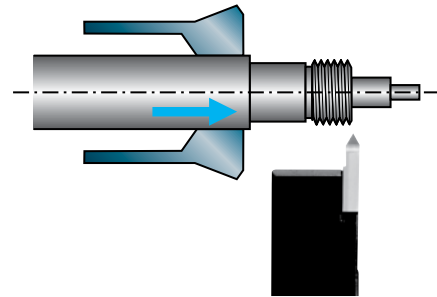
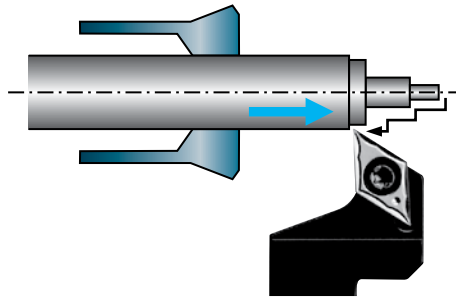
When using a Goose-neck holder

- 1) Maximum number of toolholders can be attached.
- 2) No interference with next toolpost.



## 1. Advantages of Using Goose-neck Holder

### With a 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.

## ■ Goose-neck Holder Lineup External / Copying

SDJC <sup>..</sup>	SVLP <sup>..</sup>
Screw Clamp	Screw Clamp
● E14	● E15











### For threading





KTKF Threading
Screw Clamp
● J18

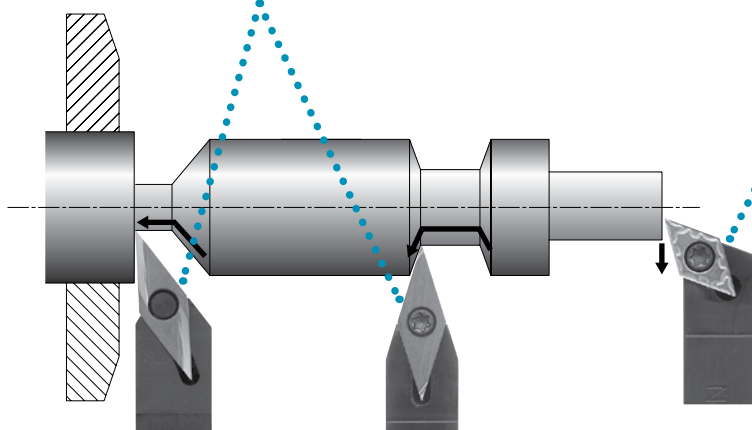
# Summary of Turning

## External / Copying

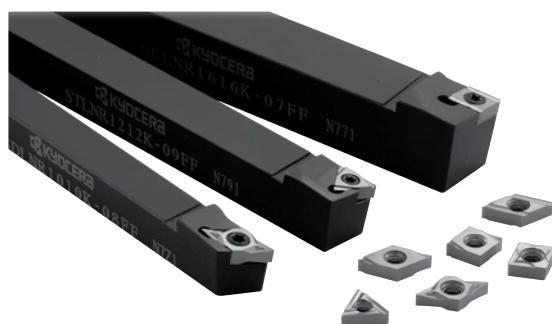
## External / Facing / Copying

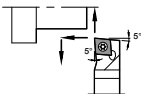
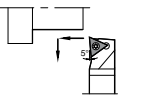
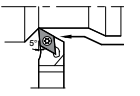



				
SVVB	AVJB-FF	SVJB-FF SVJP-FF	SVJB	SVLP-FF
Screw Clamp	Back Clamp Without Offset	Screw Clamp Without Offset	Screw Clamp	Screw Clamp Without Offset
 E29	 E28	 E28,E30	 E28	 E30

	
SDXC	SYXP-F
Screw Clamp	Screw Clamp
 E24	 E32



## Toolholders for Small Double Sided Tooling (Screw Clamp)

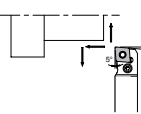
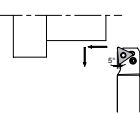




Machining type	External / Facing	External / Up Facing	External / Copying
Cutting Edge Angle	95°	95°	95°
Screw Clamp (Without Offset)			
Ref. Page	 E16	 E17	 E16

The double-sided design offers less cost per insert and more stability with newly-designed negative inserts. Sharp cutting performance equivalent to conventional positive inserts.

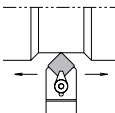
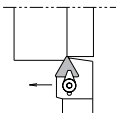
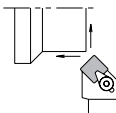
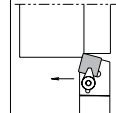
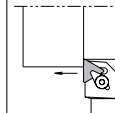
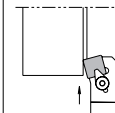
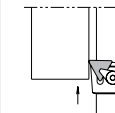







## Toolholder for Double Sided Tooling for Automatic Lathe (Without Offset : Lever Lock)



Application	External / Facing	External / Up Facing
Cutting Edge Angle	95°	95°
Lever Lock (Without Offset)		
Ref. Page	 E18	 E19

The Lever lock type is available for small tools for external machining.


## Top Clamp (For Insert without Hole)

Machining type	External / Chamfering		External / Facing / Chamfering	External		Facing	
Cutting Edge Angle	45°	60°	45°	75°	91°	15°	-1°
Top Clamp							
	CSDP	CTTP	CSSP	CSBP	CTGP	CSKP	CTFP
Ref. Page	 E36	 E37	 E36	 E36	 E37	 E36	 E37

## ■ External Sleeve Holder Tools

More tools attachable to CNC Automatic lathe

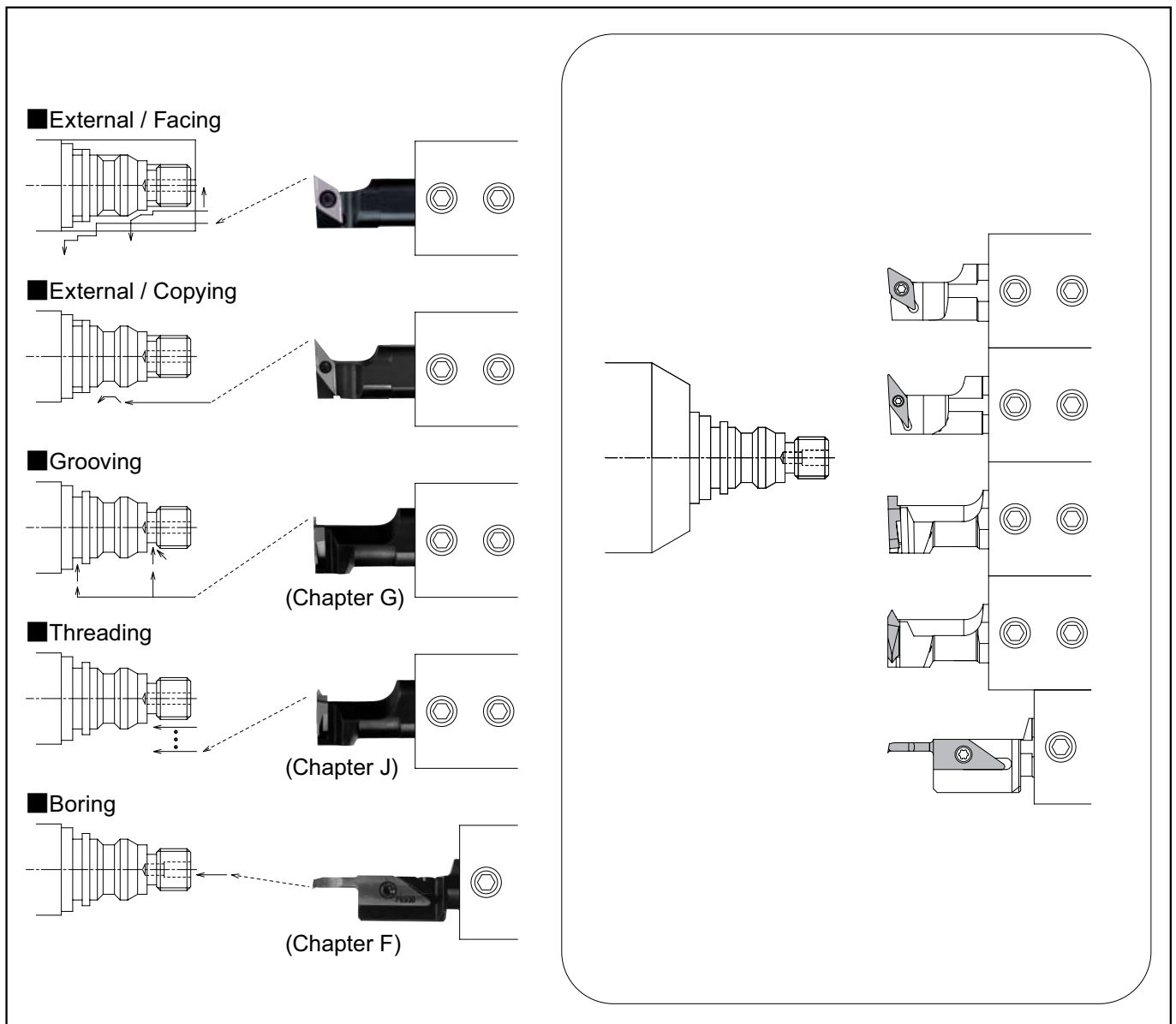
Limit to attachable tools at intricate part machining ▶▶▶ Use External Sleeve Holder Tools

 <p><b>S...SCLC</b></p> <p>Screw Clamp Shank Dia. ø12~ø25.4</p> <p> <b>E33</b></p>	 <p><b>S...SDUC</b></p> <p>Screw Clamp Shank Dia. ø14~ø25.4</p> <p> <b>E34</b></p>	 <p><b>S...SDLC</b></p> <p>Screw Clamp Shank Dia. ø12~ø25.4</p> <p> <b>E34</b></p>	 <p><b>S...SVUB(C)</b></p> <p>Screw Clamp Shank Dia. ø12~ø25.4</p> <p> <b>E35</b></p>
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See Page  **R34~R40** for Tooling Layout and Automatic Lathe List by Manufacturer.

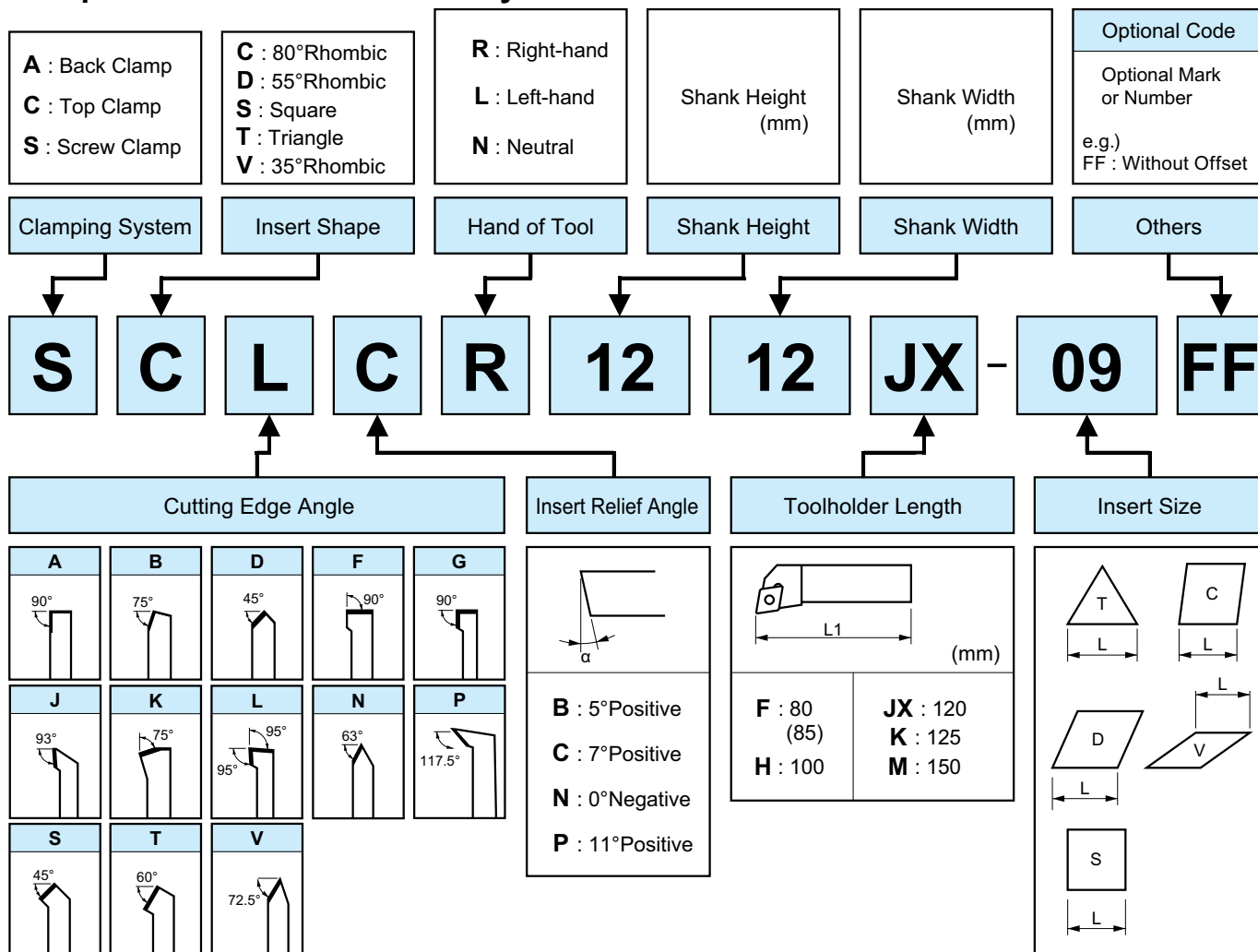


### ■ Tooling example<sup>③</sup> CNC Automatic Lathe (Opposed Gang Type)

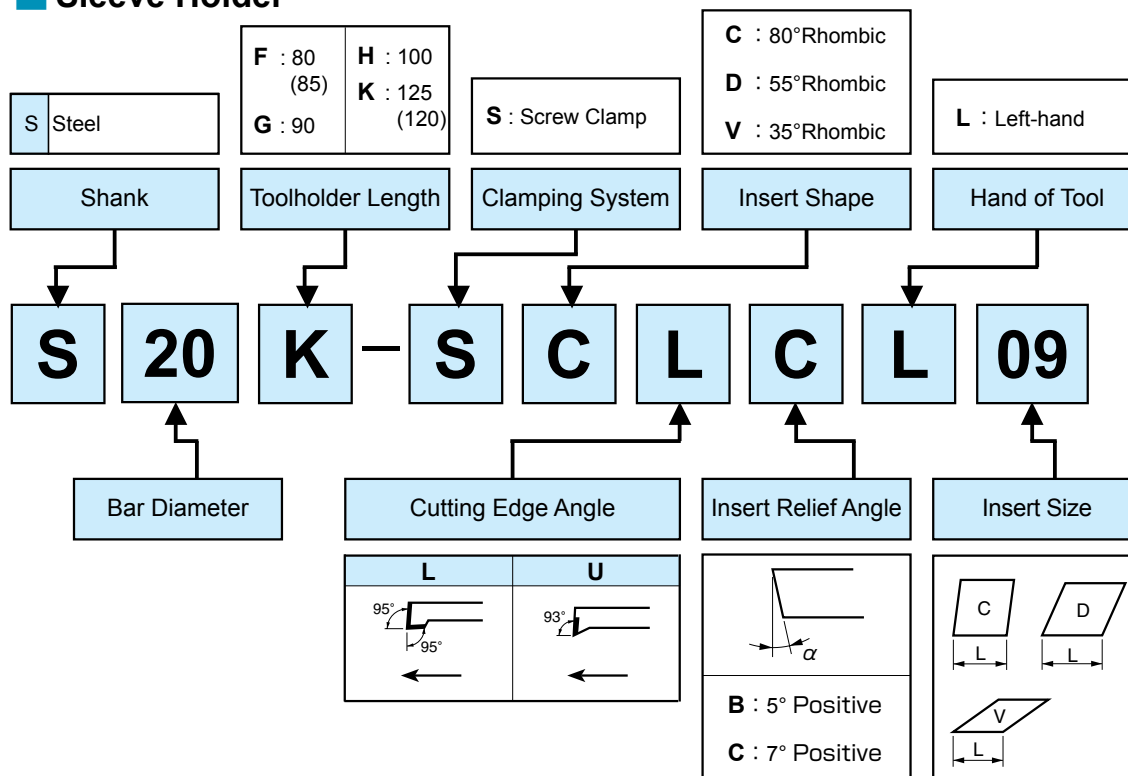


# Small Tools Identification System

## Square Shank Identification System

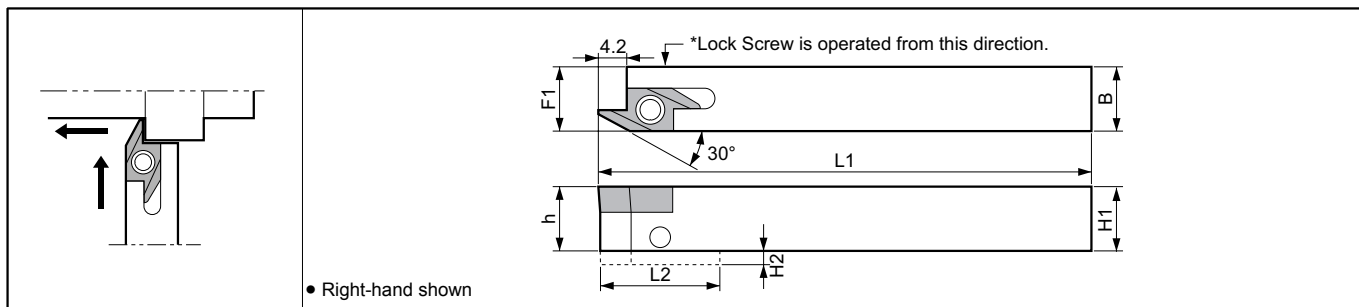


## Sleeve Holder

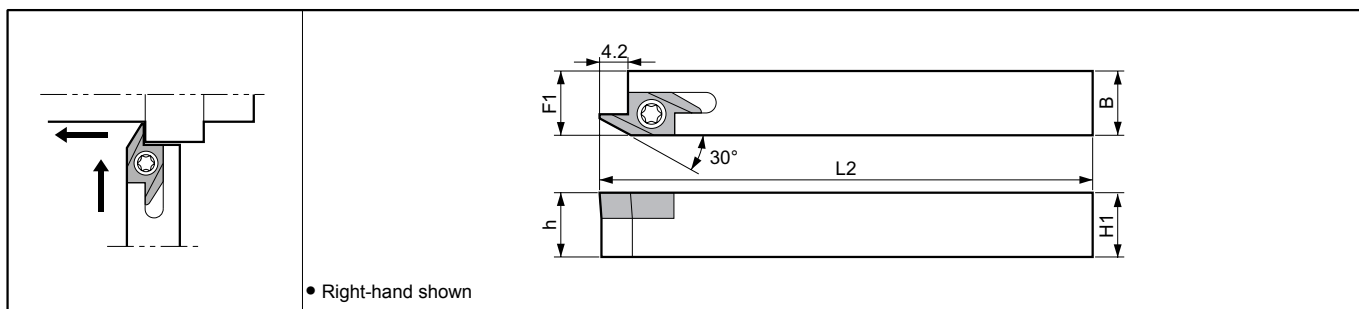


- The dimensions and specifications are subject to change for improvement without notice.
- Depending on the machine specifications such as attachment dimension, the symbol may not match the actual toolholder length.





### AABS-40F (Edge Width: 2.8mm, MAX Depth: 4mm)



### SABS-40F (Edge Width: 2.8mm, MAX Depth: 4mm)

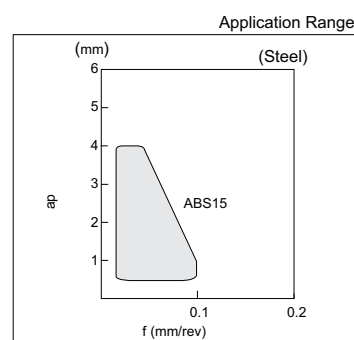


#### Toolholder Dimensions

Description		Std.	Dimension (mm)							Standard Corner-R(r <sub>c</sub> )	Spare Parts				
			H1=h	H2	B	L1	L2	F1			Anchor Pin	Lock Screw	Clamp Screw	Wrench	
															
AABSR	1010JX-40F	●	10		10			10.2	0.15	LPA-11	HSB4X8R	-	FH-2		
	1212JX-40F	●	12	-	12	120	-	12.2		LPA-13					
	1616JX-40F	●	16		16			16.2		LPA-17					
SABSR	1010JX-40F	●	10		10			10.2	0.15	-	-	SB-3080TR	FT-10		
	1212JX-40F	●	12	-	12	120	-	12.2							
	1616JX-40F	●	16		16			16.2							
SABSR	1212F -40F	●	12	-	12	85	-	12.2	0.15	-	-	SB-3080TR	FT-10		
	2020K -40F	●	20		20	125	-	20.2							

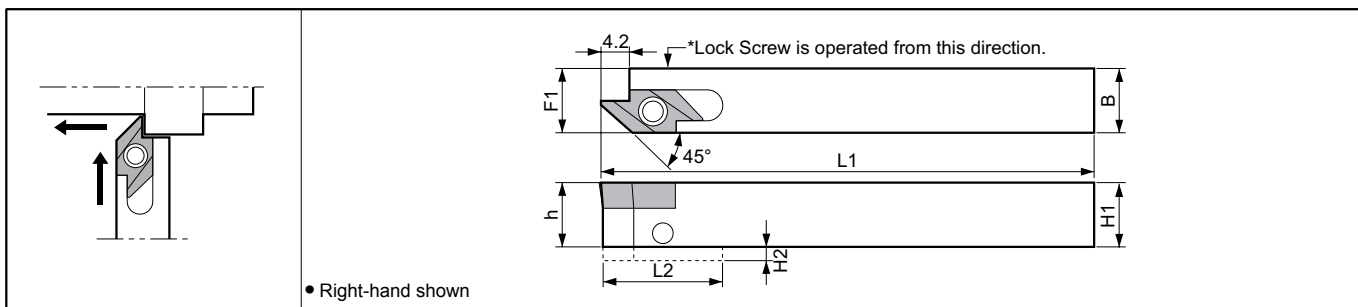
#### Applicable Inserts

Insert	Description	Corner-R (r <sub>c</sub> : mm)	Reference Page
	ABS15R4005	0.05	B82
	15R4015	0.15	
	ABS15R4005M	< 0.05	
	15R4015M	< 0.15	

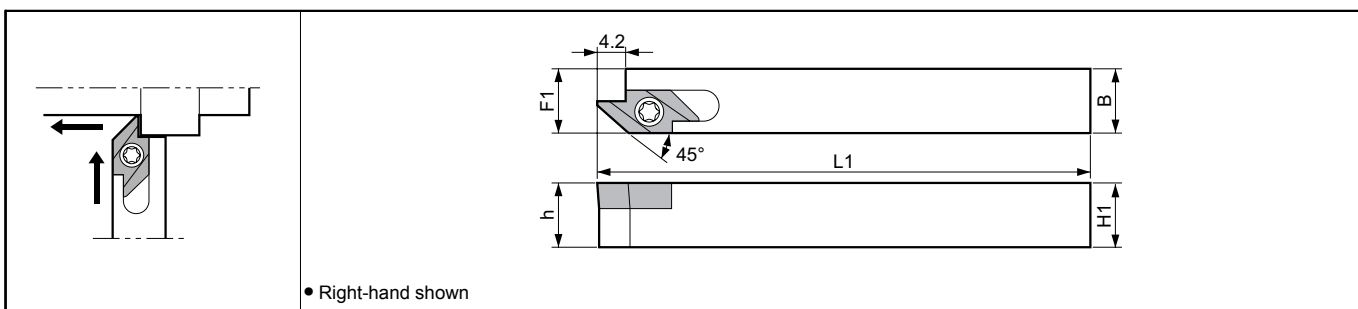


Recommended Cutting Conditions **E39**





### AABW-40F (Edge Width: 4.7mm, MAX Depth: 4mm)



### SABW-40F (Edge Width: 4.7mm, MAX Depth: 4mm)

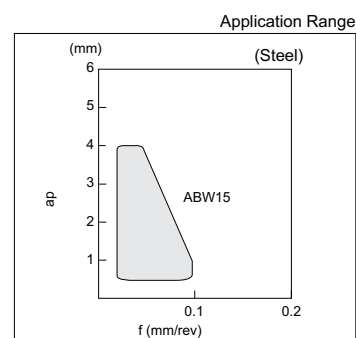


#### Toolholder Dimensions

Description		Std.	Dimension (mm)							Standard Corner-R(ε)	Spare Parts				
			H1=h	H2	B	L1	L2	F1							
AABWR	1010JX-40F	●	10		10			10.2	0.15	LPA-11	HSB4X8R	-	FH-2		
	1212JX-40F	●	12	-	12	120	-	12.2		LPA-13					
	1616JX-40F	●	16		16			16.2		LPA-17					
SABWR	1010JX-40F	●	10		10			10.2	0.15	-	-	SB-3080TR	FT-10		
	1212JX-40F	●	12	-	12	120	-	12.2							
	1616JX-40F	●	16		16			16.2							
SABWR	2020K -40F	●	20	-	20	125	-	20.2	0.15	-	-	SB-3080TR	FT-10		

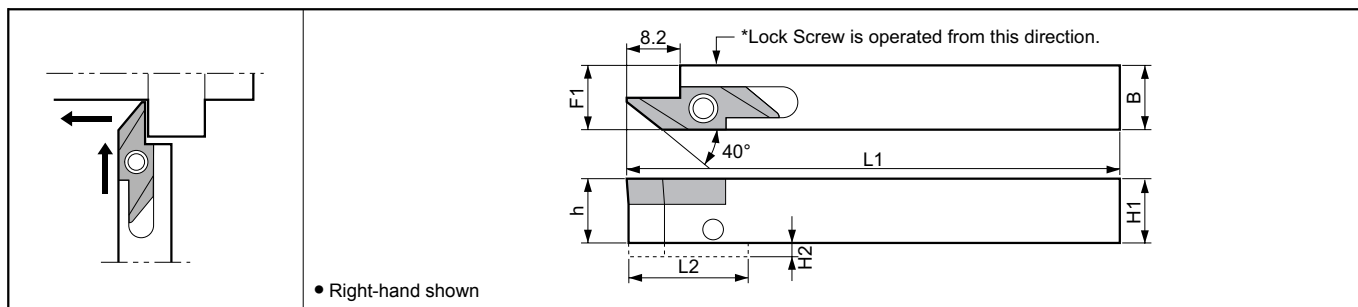
#### Applicable Inserts

Insert		Description	Corner-R (rε: mm)	Reference Page
		ABW15R4005 15R4015	0.05 0.15	B82
		ABW15R4005M 15R4015M	< 0.05 < 0.15	

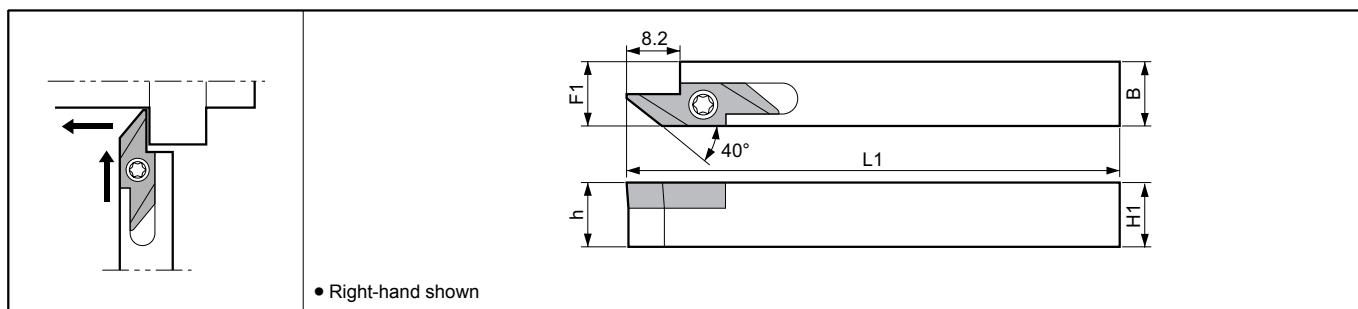


Recommended Cutting Conditions E39

### AABW-50F (Edge Width: 4.7mm, MAX Depth: 5mm)



### SABW-50F (Edge Width: 4.7mm, MAX Depth: 5mm)

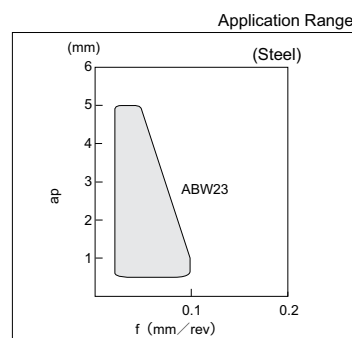


#### Toolholder Dimensions

Description		Std.	Dimension (mm)							Standard Corner-R (r <sub>e</sub> )	Spare Parts			
			H1=h	H2	B	L1	L2	F1			Anchor Pin	Lock Screw	Clamp Screw	Wrench
AABWR	1010JX-50F	●	10	-	10	120	-	10.2	0.15		LPA-11	HSB4X8R	-	FH-2
	1212JX-50F	●	12	-	12	120	-	12.2			LPA-13			
	1616JX-50F	●	16	-	16	120	-	16.2			LPA-17			
SABWR	1010JX-50F	●	10	-	10	120	-	10.2	0.15	-	-	-	SB-3080TR	FT-10
	1212JX-50F	●	12	-	12	120	-	12.2						
	1616JX-50F	●	16	-	16	120	-	16.2						
SABWR	2020K -50F	●	20	-	20	125	-	20.2	0.15	-	-	-	SB-3080TR	FT-10

#### Applicable Inserts

Insert	Description	Corner-R (r <sub>e</sub> : mm)	Reference Page
	ABW23R5005 23R5015	0.05 0.15	B82
	ABW23R5005M 23R5015M	<0.05 <0.15	

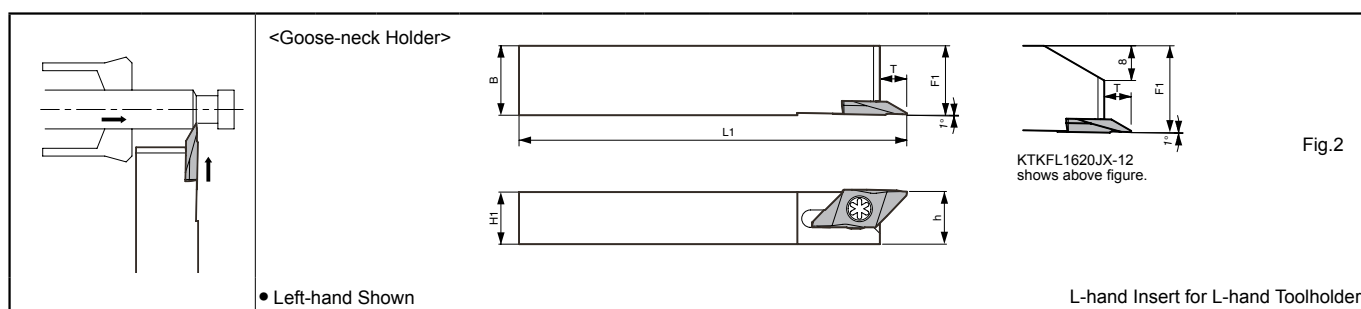
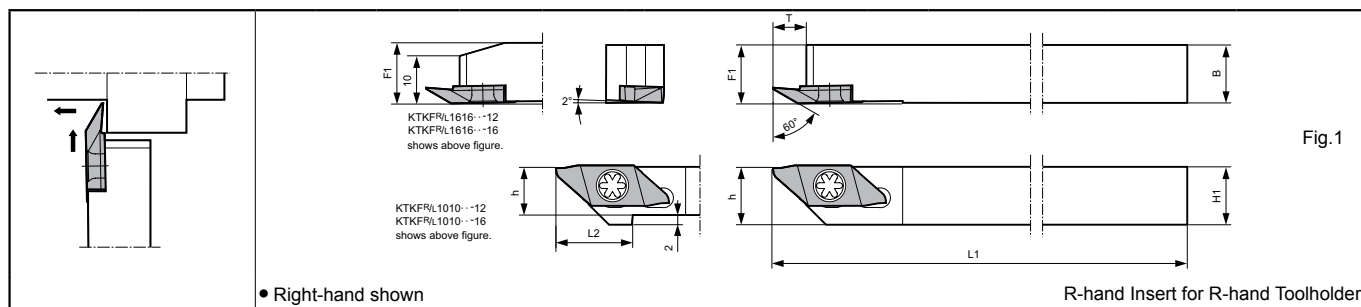


Recommended Cutting Conditions E39





# Toolholders for Back Turning (TKFB Insert)

## KTKF/KTKF (Goose-neck Holder)



### Toolholder Dimensions

Description		Std.		Dimension (mm)						Drawing	Spare Parts		Applicable Inserts
		R	<div>NEW</div> L	H1=h	B	L1	L2	F1	T		Clamp Screw	Wrench	
													
KTKF <sup>R/L</sup>	1010JX-12	●	●	10	10	120	15	10	6	Fig.1	SB-4590TRWN	LTW-10S	TKFB12 <sup>R/L</sup> ...
	1212JX-12	●	●	12	12		-	12					
	1616JX-12	●	●	16	16		-	16					
KTKF <sup>R/L</sup>	1010JX-16	●	●	10	10	120	20	10	8		SB-4590TRWN	LTW-10S	TKFB16 <sup>R/L</sup> ...
	1212JX-16	●	●	12	12		-	12					
	1616JX-16	●	●	16	16		-	16					
KTKF <sup>R/L</sup>	1212F-12	●	●	12	12	85	-	12	6		SB-4590TRWN	LTW-10S	TKFB12 <sup>R/L</sup> ...
	1212F-16	●	●					8	8				TKFB16 <sup>R/L</sup> ...
<div>NEW</div> KTKFL	1216JX-12		●	12	16	120	-	16	6	Fig.2	SB-4590TRWN	LTW-10S	TKFB12L ...
	1620JX-12		●	16	20			20					

• Dimension T shows the distance from the Toolholder to the cutting edge.

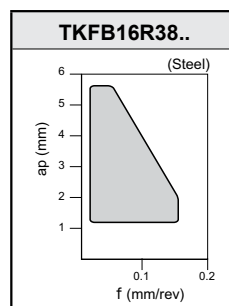
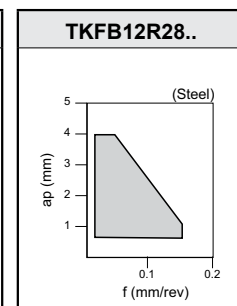
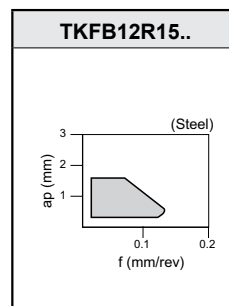
### Applicable Chipbreaker Range

(ap indicates radius)

### Applicable Inserts

Insert	Description	Corner-R (r: mm)	Ref. Page
<p>Photo shows Right-hand</p> <p>• Right-hand shown</p> <p>• Left-hand shown</p>	TKFB 12R15005M	<0.05	B81
	12R28005M	<0.05	
	12R28010M	<0.1	
	TKFB 16R38005M	<0.05	
	16R38010M	<0.1	
	TKFB 12L28005MR	<0.05	
	12L28010MR	<0.1	
	TKFB 16L38005MR	<0.05	
	16L38010MR	<0.1	

Recommended Cutting Conditions E39



● : Std. Item

## ◆ Combination of Toolholders and Inserts (See Table.1)

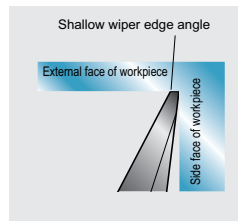
Table1

Toolholder	R-hand(R)	Toolholder	L-hand(L)
Insert	R-hand(R)	Insert	L-hand(L)

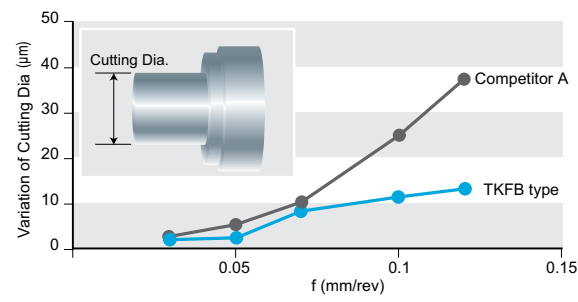
## ■ Advantages of TKFB type for Back Turning

1. Minimal deflection due to lower cutting force
2. Smooth chip control
3. Better surface finish by optimum wiper edge angle

### ● TKFB edge shape



### ● Variation of Cutting Dia (Transfer of Cutting Edge)



Cutting Conditions:  $V_c=80\text{m/min}$   $a_p=1\text{mm}$   $f=0.03\sim0.12\text{mm/rev}$  WET C45

### ● Comparison of surface finish

	TKFB type	Competitor B
Feed Rate (mm/rev) $f=0.05$	 $R_z=3.3\mu\text{m}$	 $R_z=11.2\mu\text{m}$
Feed Rate (mm/rev) $f=0.07$	 $R_z=4.6\mu\text{m}$	 $R_z=14.2\mu\text{m}$

Cutting Conditions:  $V_c=80\text{m/min}$   $a_p=1\text{mm}$  WET(oil-base) C45

## ■ When using TKF-AS type

The KTKF holder can be used as a multi-functional tooling for nonferrous and nonmetal materials when combined with a TKF-AS insert (See Fig.1).

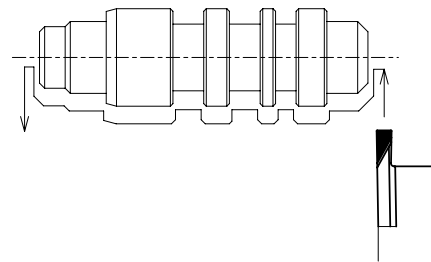


Fig.1 Example of the pass of KTKF toolholder + TKF-AS insert

Insert Handed Insert shows R-hand.		Description	W	Reference Page
		TKF12R 200-AS	2.0	C25
		250-AS	2.5	
		TKF16R 250-AS	2.5	

Recommended Cutting Conditions ● E39

### Note 1)

The cutting edge of the TKF..-AS will be 1 mm lower than the center line when attached to the KTKF toolholder (See Fig.2). Adjust the height by making NC lathe parameter settings or inserting a plate.

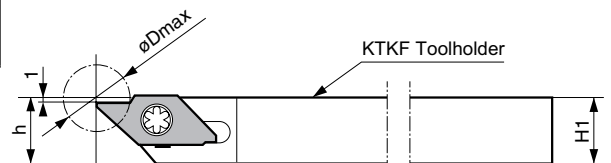
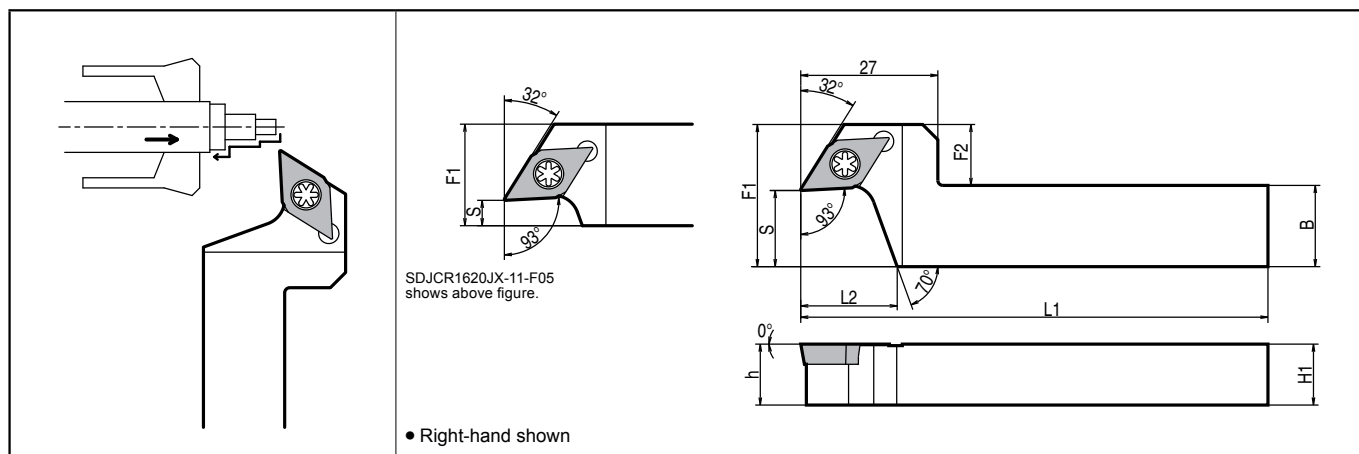




Fig.2 When a TKF-AS insert is attached  
(The cutting edge is 1 mm lower than the center line.)

# Goose-neck Holder [DC ☐ ☐ Insert]

## SDJC (External / Copying)



### Toolholder Dimensions

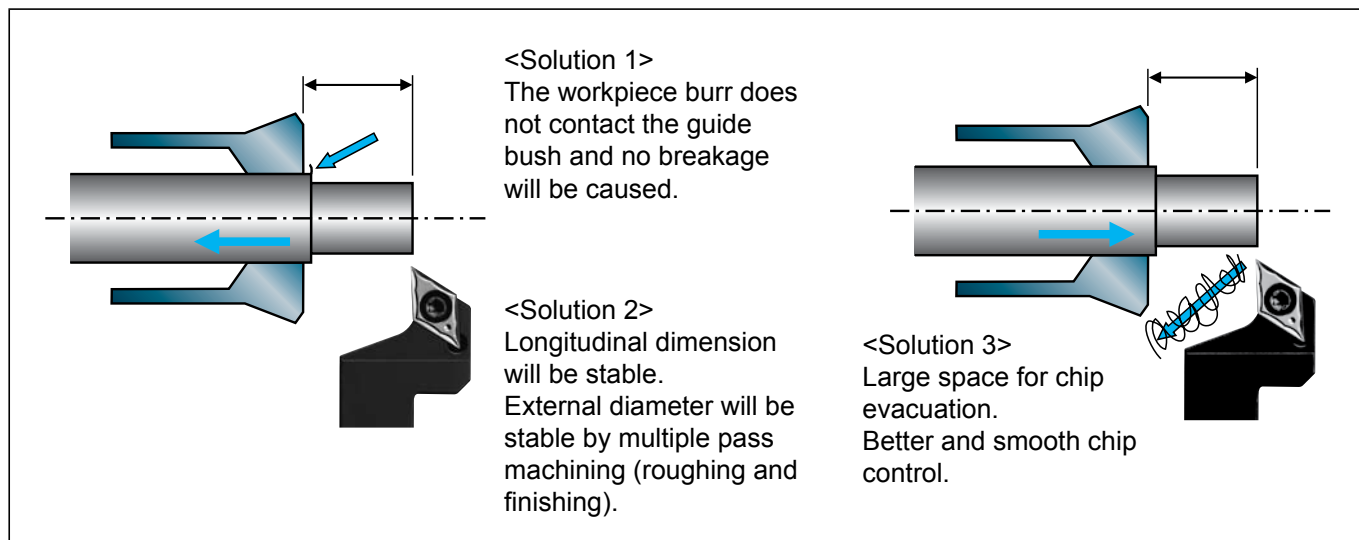
Description	Std.	Dimension (mm)							Standard Corner-R(r <sub>e</sub> )	Spare Parts		
										Clamp Screw	Wrench	
		H1=h	B	L1	L2	F1	F2	S				
SDJCR 1216JX-11-F05	●	12	16	120	15.4	18	2	5	0.2	SB-4085TR	FT-15	
	●				1216JX-11-F15	19	28	12				
	●	16	20		15.4	20	-	5				
	●				1620JX-11-F15	19	28	8				

### Applicable Inserts

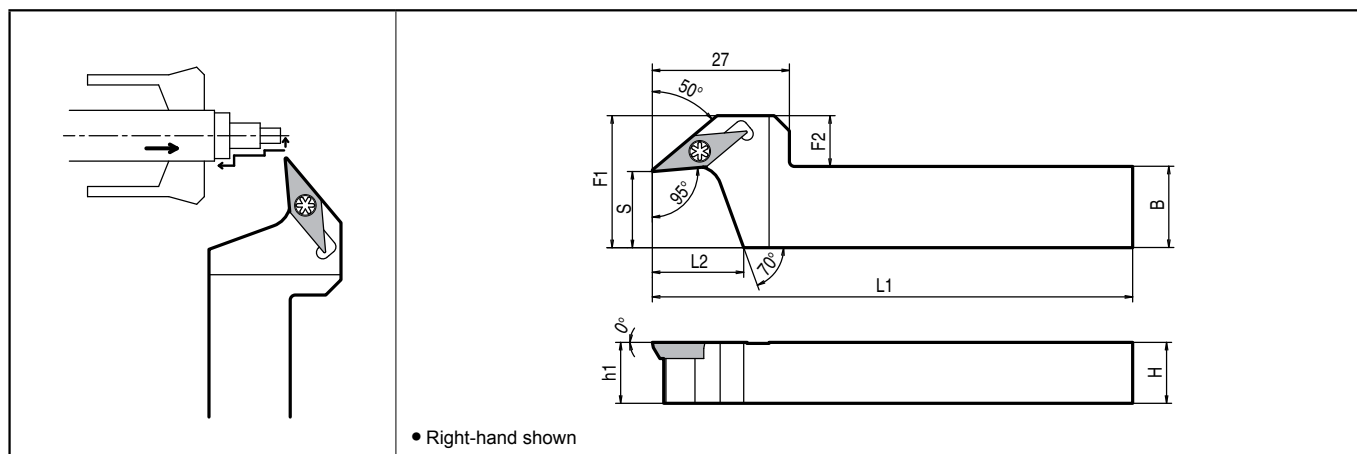
Application	Minute ap	Finishing	Finishing-Medium	Finishing-Medium	Finishing	Finishing / Precision	Low Feed	Low Feed / Precision	Low Feed	Low Feed / Precision
Ref. Page	B52	B52	B53	B53	B55	B55	B56	B56	B57	B57
Insert	CF	GF	GK	GQ	$\frac{P}{L}$ -F	$\frac{P}{L}$ -FSF	(E/F) $\frac{P}{L}$ -U	F $\frac{P}{L}$ -USF	(E/F) $\frac{P}{L}$ -J	F $\frac{P}{L}$ -JSF
Toolholder										
<b>SDJCR...-11-F..</b>	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCGT11T3..	DCGT11T3..	DCET11T3..	DCGT11T3..	DCET11T3..	DCGT11T3..	DCET11T3..
Application	Low Carbon Steel / Finishing	Low Carbon Steel / Finishing-Medium	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard materials		
Ref. Page	B54	B54	B54	B57	B57	B57	C19	C11		
Insert	XP	XQ	MQ	Without Chipbreaker	AH	$\frac{P}{L}$ -A3	PCD	CBN		
Toolholder										
<b>SDJCR...-11-F..</b>	DCMT11T3..	DCMT11T3..	DCMT11T3..	DCGW11T3..	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCMW11T3..		

Recommended Cutting Conditions ● E38

## Goose-neck holder is available for multiple passes at roughing and finishing



### SVLP (External / Copying)



#### Toolholder Dimensions

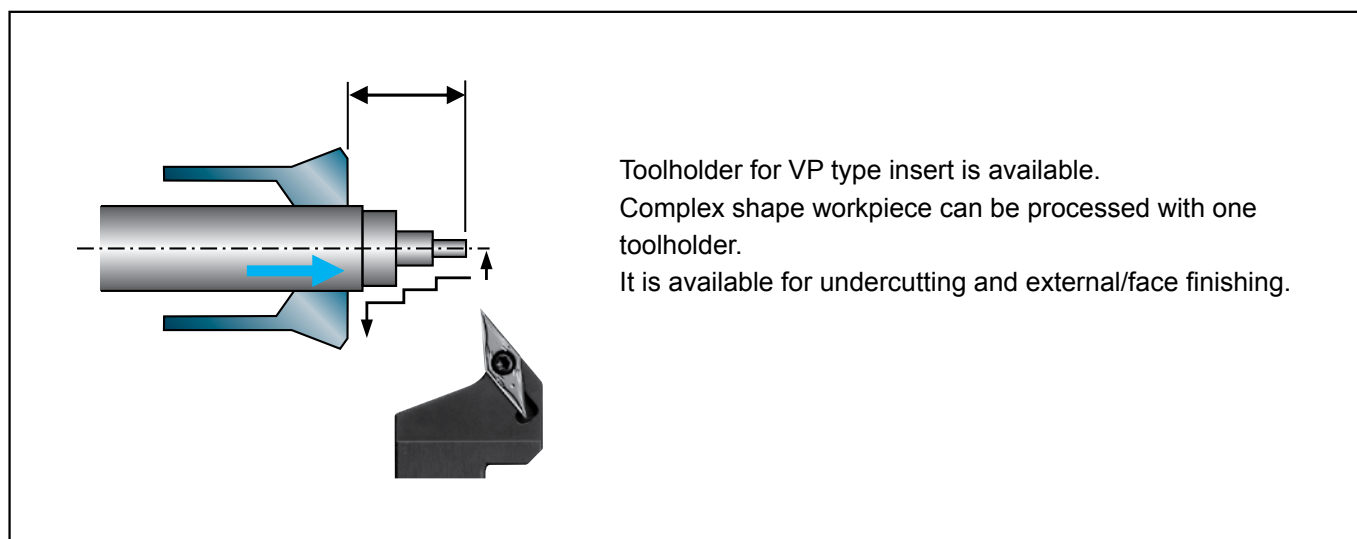
Description	Std.	Dimension (mm)							Standard Corner-R(rε)	Spare Parts		
		H1=h	B	L1	L2	F1	F2	S		Clamp Screw	Wrench	
SVLPR 1216JX-11-F15	●	12	16	120	18	26	10	15	0.2			
1620JX-11-F15	●	16	20				6					

#### Applicable Inserts

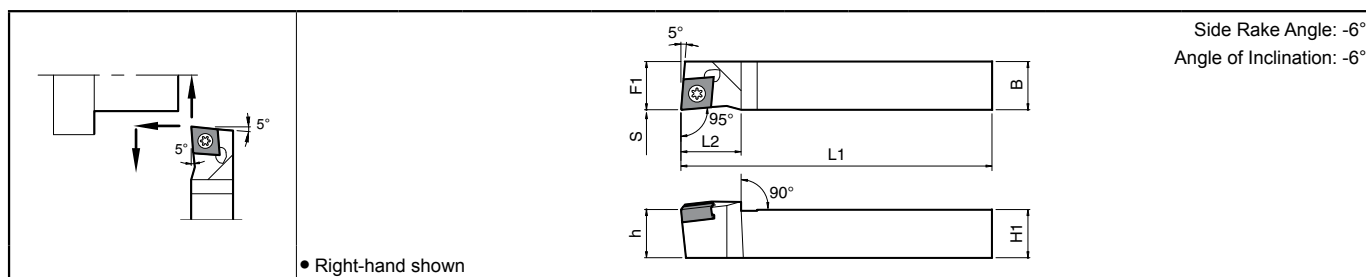
Application	Minute ap	Finishing	Finishing	Finishing / Precision	Low Feed	Low Feed / Precision				
Ref. Page	B75	B75	B75	B76	B76	B76				
Insert	CF	CK	GF	VL-FSF	FVL-U	FVL-USF				
Toolholder										
SVLPR....11-F..	VPGT1103..	VPGT1103..	VPGT1103..	VPET1103..	VPGT1103..	VPET1103..				

Recommended Cutting Conditions ●E38

### One toolholder for complex shape workpiece







### SCLN (Without Offset) (External / Facing)



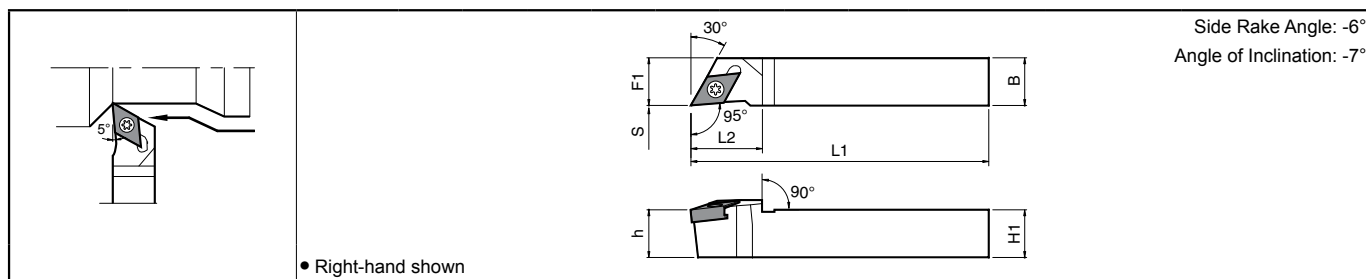
#### Toolholder Dimensions

Description	Std.	Dimension (mm)								Standard Corner-R(r)	Spare Parts		Applicable Inserts
		H1=h	B	L1	L2	F1	S				Clamp Screw	Wrench	
<b>SCLNR 1010K-07FF</b>	●	10	10	120		10				0.2	SB-3080TR	LTW-10SS	CNGU0703.. CNMU0703..
<b>1212F-07FF</b>	●	12	12	85	15	12	0						
<b>1212K-07FF</b>	●			120		16							
<b>1616K-07FF</b>	●	16	16										

#### Applicable Inserts

Applications	Finishing-Medium	Medium-Roughing	Finishing	Low Feed
Ref. Page	B42	B42	B42	B42
Toolholder	SK 	GK 	FR-F 	(F / E) R-U 
<b>SCLNR...-07FF</b>	CNGU0703..	CNMU0703..	CNGU0703..	CNGU0703..





### SDLN (Without Offset) (External / Copying)



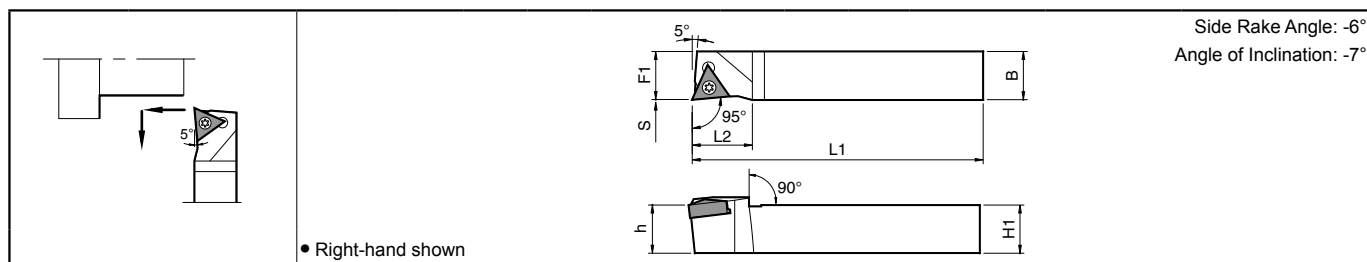
#### Toolholder Dimensions

Description	Std.	Dimension (mm)								Standard Corner-R(r)	Spare Parts		Applicable Inserts
		H1=h	B	L1	L2	F1	S				Clamp Screw	Wrench	
<b>SDLNR 1010K-08FF</b>	●	10	10	120		10				0.2	SB-3080TR	LTW-10SS	DNGU0803.. DNMU0803..
<b>1212F-08FF</b>	●	12	12	85	18	12	0						
<b>1212K-08FF</b>	●			120		16							
<b>1616K-08FF</b>	●	16	16										

#### Applicable Inserts

Applications	Finishing-Medium	Medium-Roughing	Finishing	Low Feed
Ref. Page	B43	B43	B43	B43
Toolholder	SK 	GK 	FR-F 	(F / E) R-U 
<b>SDLNR...-08FF</b>	DNGU0803..	DNMU0803..	DNGU0803..	DNGU0803..

## STLN (External / Up Facing)



### Toolholder Dimensions

Description	Std.	Dimension (mm)							Standard Corner-R(r)	Spare Parts		Applicable Inserts
		H1=h	B	L1	L2	F1	S			Clamp Screw 	Wrench 	
<b>STLNR 1010K-09FF</b>	●	10	10	120	15	10	0		0.2			TNGU0903..
<b>1212F-09FF</b>	●	12	12	85		12						
<b>1212K-09FF</b>	●	12	12	120		12						
<b>1616K-09FF</b>	●	16	16			16						

### Applicable Inserts

Applications	Finishing	Low Feed
Ref. Page	B44	B44
Insert	FR-F	(E / F) R-U
Toolholder		
<b>STLNR...-09FF</b>	TNGU0903..	TNGU0903..

### Smaller double sided tooling for precision machining

TNGU09 Type



Small Negative Insert

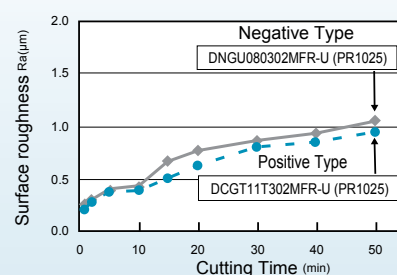
TNGG16 Type



Negative Insert

Double-sided design allows all edges to be used. Compared to the positive type, the double-sided design offers less cost per insert and more stability.

### Surface roughness comparison (Sharp edge)



<Cutting Conditions>

Workpiece Material : C45 Vc=100m/min, ap=1.5mm, f=0.03mm/rev, Wet

Internal evaluation

### Recommended Cutting Conditions

Workpiece Material	Insert Grade		
	PR1005	PR1025	PR1225
Free-cutting steel	● Vc=100m/min (60~150)		
Carbon Steel Alloy Steel	○ Vc=100m/min (60~150)	● Vc=100m/min (60~150)	○ Vc=100m/min (60~150)
Stainless Steel		○ Vc=100m/min (60~150)	● Vc=100m/min (60~150)

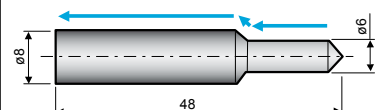
● Continuous to Light Interruption / 1st Choice

○ Continuous to Light Interruption / 2nd Choice

### Case Studies

#### X10CrNiS18-9 (SUS303)

- Spool
- <Dia 6mm portion>
- Vc=66m/min
- ap=1.25mm
- f=0.025mm/rev
- Wet
- <Dia 8mm portion>
- Vc=130m/min
- ap=0.25mm
- f=0.025mm/rev
- Wet



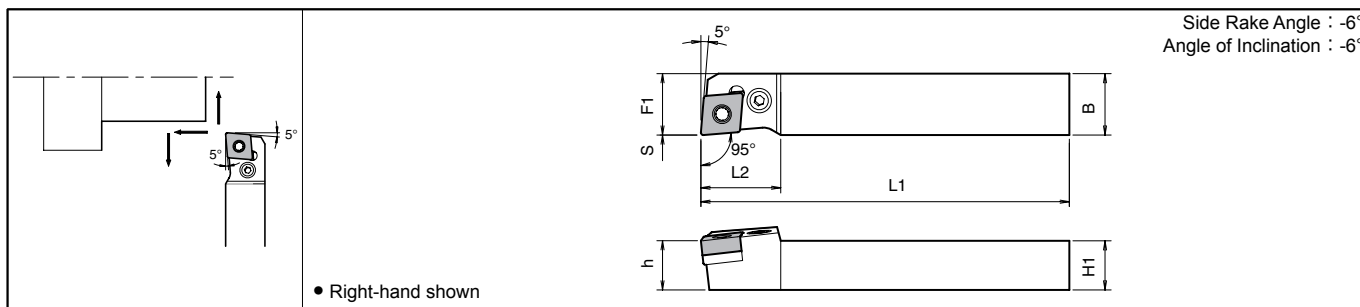
Required Surface Roughness: 0.8μmRa

<b>DNGU080302MF-SK (PR1025)</b>	60,000 pcs/insert (4 corners)
Competitor D (DCGT type)	20,000 pcs/insert (2 corners)







Competitor D (DCGT type) machined 10,000 pcs/edge. PR1025 machined 15,000 pcs/edge resulting in 3 times longer tool life per insert.

Evaluation by the user

### PCLN (Without Offset) (External / Facing)



#### Toolholder Dimensions

Description	Std.	Dimension (mm)							Standard Corner-R(R°)	Spare Parts					
		H1=h	B	L1	L2	F1	S	Lever		Lock Screw	Shim	Shim Pin	Punch	Wrench	
															
PCLNR 1620JX-12FF	●	16	20	120	26	20	0	0.8	LL-2N	LS-2N	LC-42N	LSP-2	PC-2	LW-3	

#### Applicable Inserts (1st Choice)

Application	Medium-Roughing
Ref. Page	<b>B44</b>
Insert	<b>TK</b> 
Toolholder	
<b>PCLNR 1620JX-12FF</b>	CNGG1204..FP-TK

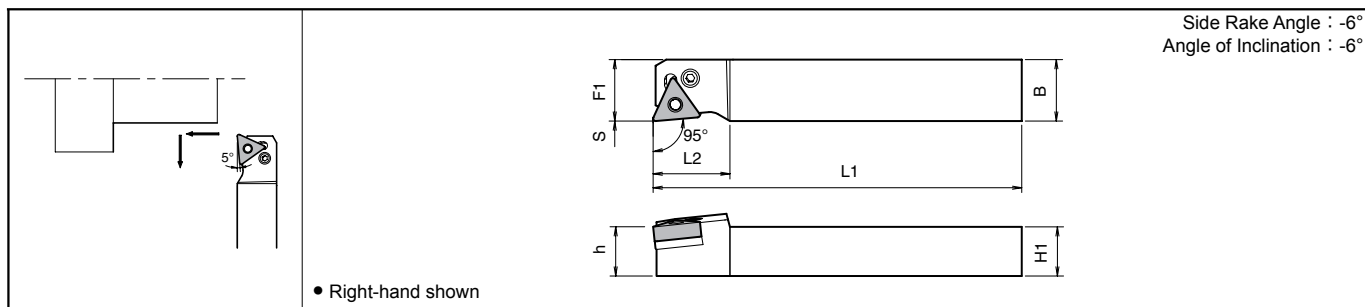
Recommended Cutting Conditions ● **E17**

#### Applicable Inserts (Optional)

Application	Finishing	Finishing-Medium	Finishing	Finishing-Medium	Finishing-Medium	Finishing-Medium	Medium-Roughing	Medium-Roughing
Insert	<b>WP</b> (Wiper) 	<b>WQ</b> (Wiper) 	<b>GP</b> 	<b>HQ</b> 	<b>CQ</b> 	<b>CJ</b> 	<b>GS</b> 	<b>PS</b> 
Size	12	12	12	12	12	12	12	12
Page	<b>B14</b>	<b>B14</b>	<b>B14</b>	<b>B14</b>	<b>B14</b>	<b>B14</b>	<b>B15</b>	<b>B15</b>
Application	Medium-Roughing	Medium-Roughing	Medium-Roughing / High Feed	Roughing	Roughing	Single Sided / Roughing / High Feed	Medium	
Insert	<b>HS</b> 	<b>CS</b> 	<b>PT</b> 	Standard 	<b>PH</b> 	<b>PX</b> 	<b>R/L</b> 	
Size	12	12	12	12	12	12	12	
Page	<b>B15</b>	<b>B15</b>	<b>B15</b>	<b>B16</b>	<b>B16</b>	<b>B16</b>	<b>B18</b>	
Application	Medium-Roughing / Low Cutting Force	Low Carbon Steel / Finishing	Low Carbon Steel / Medium	Low Carbon Steel Roughing	Stainless Steel Finishing	Stainless Steel Medium-Roughing	Stainless Steel Medium-Roughing	Cast Iron
Insert	<b>R/L-25R</b> 	<b>XP (-T)</b> 	<b>XQ</b> 	<b>XS</b> 	<b>MQ</b> 	<b>MS</b> 	<b>MU</b> 	<b>C</b> 
Size	12	12	12	12	12	12	12	12
Page	<b>B18</b>	<b>B16</b>	<b>B16</b>	<b>B16</b>	<b>B17</b>	<b>B17</b>	<b>B17</b>	<b>B17</b>
Application	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard materials
Insert	<b>ZS</b> 	<b>GC</b> 	Without Chipbreaker 	<b>Ceramic</b> 	<b>AH</b> 	<b>A3</b> 	<b>PCD</b> 	<b>CBN</b> 
Size	12	12	12	12	12	12	12	12
Page	<b>B17</b>	<b>B18</b>	<b>B18</b>	<b>B85</b>	<b>B18</b>	<b>B18</b>	<b>C17</b>	<b>C5</b>



### PTLN (Without Offset) (External / Up Facing)



#### Toolholder Dimensions

Description	Std.	Dimension (mm)							Standard Corner-R(ε)	Spare Parts					
		H1=h	B	L1	L2	F1	S			Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench
<b>PTLNR 1620JX-16FF</b>	●	16	20	120	25	20	0	0.8		LL-1N	LS-1N	LT-32N ※ LT-32N-20	LSP-1	PC-1	FH-2.5

• When using inserts whose corner R(re) is larger than 1.6 mm, please purchase a shim with \* mark and use it in order to prevent workpiece and shim from interfering each other.

#### Applicable Inserts (1st Choice)

Application	Medium-Roughing
Ref. Page	B44
Toolholder	TK
<b>PTLNR 1620JX-16FF</b>	TNGG1604..FP-TK

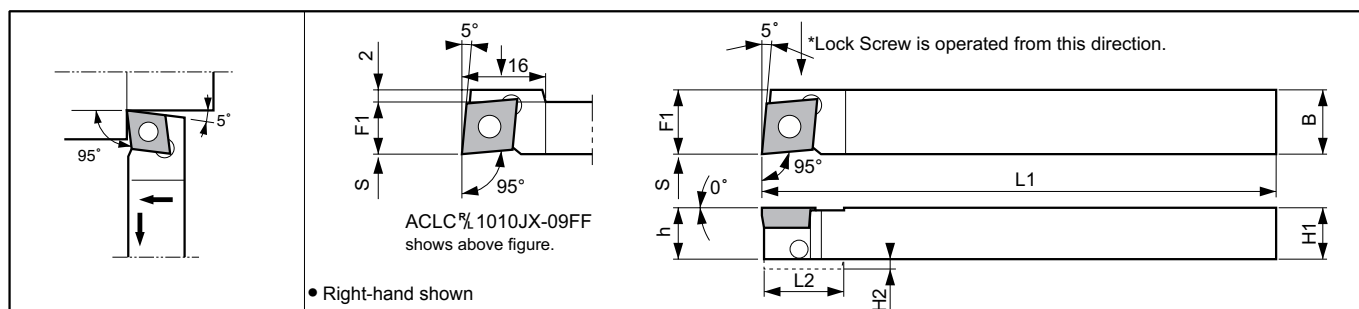
Recommended Cutting Conditions **E17**

#### Applicable Inserts (Optional)




Application	Finishing	Finishing-Medium	Finishing-Medium	Medium-Roughing	Medium-Roughing	Medium-Roughing	Medium-Roughing / High Feed	Medium-Roughing / High Feed	Roughing
Insert	GP	HQ	CQ	GS	PS	HS	PT	GT	PH
Size	16	16	16	16	16	16	16	16	16
Page	B30	B30	B30	B30	B30	B30	B31	B31	B31
Application	Single Sided / Roughing / High Feed	Roughing	Finishing-Roughing	Finishing-Roughing	Medium-Roughing / Low Cutting Force	Low Carbon Steel Finishing	Low Carbon Steel Medium	Low Carbon Steel Roughing	Stainless Steel Finishing
Insert	PX	Standard	R/L-S	R/L-□	R/L-25R	XP (-T)	XQ	XS	MQ
Size	16	16	16	16	16	16	16	16	16
Page	B31	B31	B34	B34	B34	B31	B31	B31	B32
Application	Stainless Steel Medium-Roughing	Stainless Steel Medium-Roughing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Non-ferrous Metals	Non-ferrous Metals
Insert	MS	MU	C	ZS	GC	Without Chipbreaker	Ceramic	AH	R/L-A3
Size	16	16	16	16	16	16	16	16	16
Page	B32	B32	B33	B33	B33	B33	B90	B33	B33
Application	Non-ferrous Metals	Hard materials							
Insert	PCD	CBN							
Size	16	16							
Page	C17	C7							

# External Toolholders [CC □□ Insert]

## ACLC-FF (Without Offset) (External / Facing)



### Toolholder Dimensions

Description		Std.		Dimension (mm)							Standard Corner-R(°)	Spare Parts				
		R	L	H1=h	H2	B	L1	L2	F1	S		Anchor Pin	Lock Screw	Wrench		
																
ACLC <sup>R/L</sup>	1010JX-06FF	●	●	10	-	10	120	-	10	0	0.2	LPF-11	HSB4X8 <sup>R/L</sup>	FH-2		
	1010JX-09FF	●	●	10	2	10	120	-	10			LPF-13				
	1212JX-09FF	●	●	12	-	12		-	12			LPF-17				
	1616JX-09FF	●	●	16	-	16										

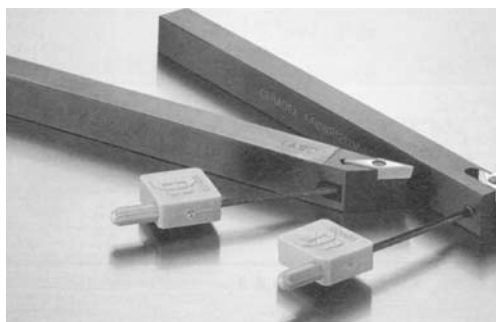
• Lock Screw : HSB4×8R for R-hand Toolholder, HSB4×8L for L-hand Toolholder.

### Applicable Inserts

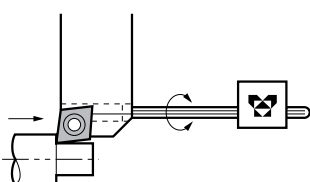
Applications	Finishing	Finishing-Medium	Finishing-Medium	Low Feed	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B45	B45	B45	B48	B46	B47	B46	B46	C18	C10
Insert	GF	GK	GQ	(E / F) <sup>R/L</sup> -U	MQ	Without Chipbreaker	AH	<sup>R/L</sup> -A3	PCD	CBN
Toolholder										
ACLC <sup>R/L</sup> ...-06FF	CCGT0602..	CCMT0602..	CCGT0602..	CCGT0602..	-	CCGW0602..	-	-	CCMT0602.. CCGW0602..	CCMW0602..
ACLC <sup>R/L</sup> ...-09FF	CCGT09T3..	CCMT09T3..	CCGT09T3..	CCGT09T3..	CCMT09T3..	CCGW09T3..	CCGT09T3..	CCGT09T3..	CCMT09T3.. CCGW09T3..	CCMW09T3..

For recommended cutting conditions, see page [E38](#)

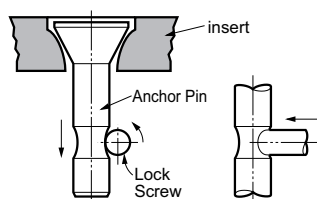
### Back Clamp Holders



1. The lock screw can be operated from the back side and allows simple insert replacement on Swiss type automatic lathes. (Fig.1)
2. Simple insert replacement by slightly turning the wrench. (Fig.2)
3. Rigid clamping with anchor pin and lock screw. (Fig.2)

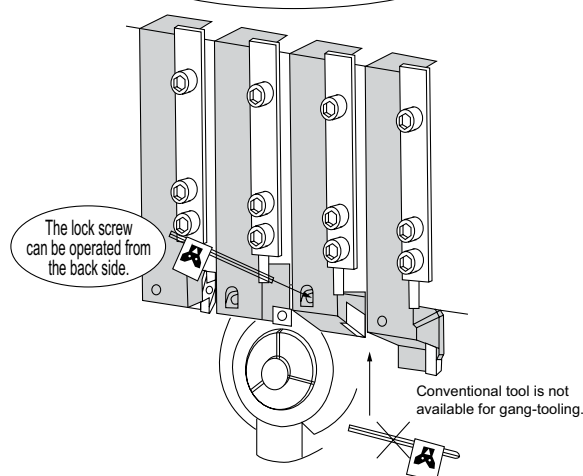


(Fig.1)



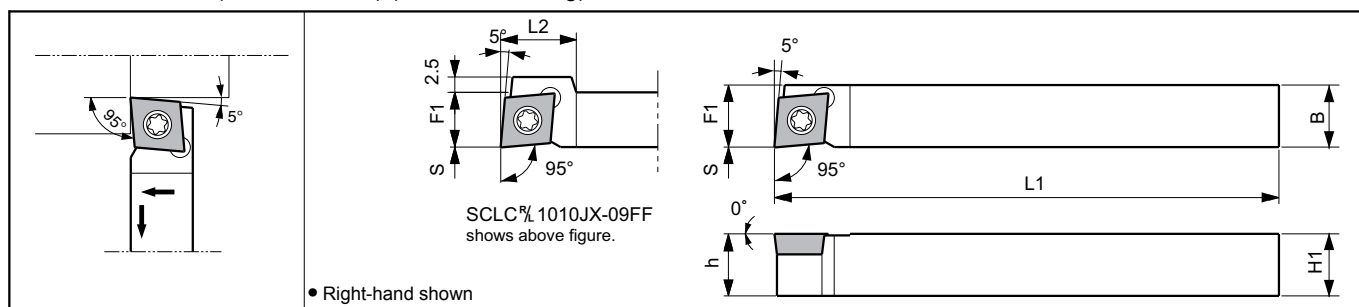
(Fig.2)

Simple insert replacement, including with gang-tooling



# External Toolholders [CC ☐ ☐ Insert]

## SCLC-FF (Without Offset) (External / Facing)



### Toolholder Dimensions

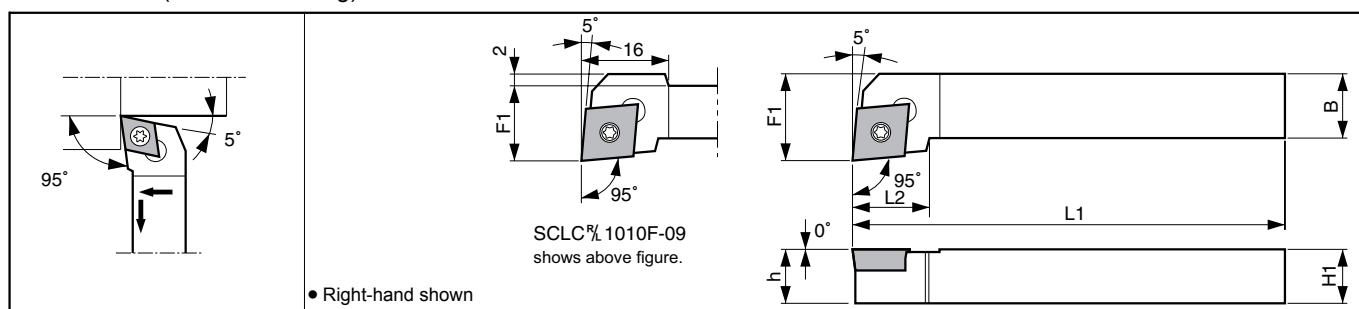
Description	Std.		Dimension (mm)							Standard Corner-R(°)	Spare Parts				
	R	L	H1=h	B	L1	L2	F1	S			Clamp Screw	Wrench	Wrench		
SCLC% 0808F-06FF 1212F-09FF	●	●	8	8	85	-	8	0		0.2	SB-2570TR	FT-8	-		
	●	●	12	12		-	12	0		0.2	SB-4085TR	FT-15	-		
SCLC% 1010JX-06FF 1010JX-09FF 1212JX-09FF 1616JX-09FF	●	●	10	10	120	-	10	0		0.2	SB-2570TR	FT-8	-		
	●	●	10	10		15	10	0		0.2	SB-4085TR	FT-15	-		
	●	●	12	12		-	12	0		0.2	SB-4085TR	FT-15	-		
	●	●	16	16		-	16	0		0.2	SB-4085TR	FT-15	-		

E



Small Tools

## SCLC (External / Facing)



### Toolholder Dimensions

Description	Std.		Dimension (mm)							Standard Corner-R(°)	Spare Parts				
	R	L	H1=h	B	L1	L2	F1				Clamp Screw	Wrench	Wrench		
SCLC% 1010F -06 1010F -09 1212H -09 1616H -09 2020K -09 2525M -09 1616H -12 2020K -12 2525M -12	●	●	10	10	80	9	12			0.2	SB-2570TR	FT-8	-		
	●	●	10	10	80	14	14			0.2	SB-4085TR	FT-15	-		
	●	●	12	12	100	-	16			0.2	SB-4085TR	FT-15	-		
	●	●	16	16		15	20			0.2	SB-4085TR	FT-15	-		
	●	●	20	20	125	20	25			0.2	SB-4085TR	FT-15	-		
	●	●	25	25	150	22	32			0.2	SB-4085TR	FT-15	-		
	●	●	16	16	100	20	20			0.4	SB-5090TR	-	LTW-20		
	●	●	20	20	125	22	25			0.4	SB-5090TR	-	LTW-20		
	●	●	25	25	150	22	32			0.4	SB-5090TR	-	LTW-20		

### Applicable Inserts (SCLC-FF / SCLC)

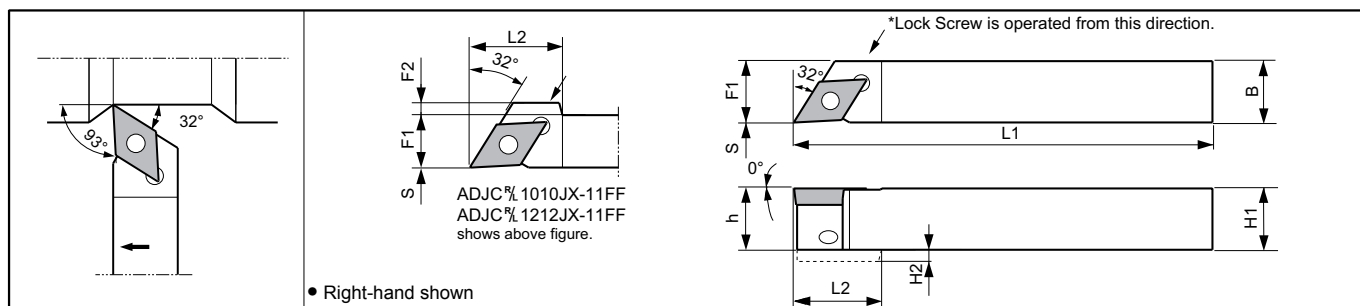
Applications	Finishing	Finishing-Medium	Finishing-Medium	Low Feed	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B45	B45	B45	B48	B46	B46	B46	B46	C18	C10
Insert	GF	GK	GQ	(E/F) %-U	MQ	Without Chipbreaker	AH	%-A3	PCD	CBN
Toolholder										
SCLC%...-06FF/-06	CCGT0602..	CCMT0602..	CCGT0602..	CCGT0602..	-	CCGW0602..	-	-	CCMT0602.. CCGW0602..	CCMW0602..
SCLC%...-09FF/-09	CCGT09T3..	CCMT09T3..	CCGT09T3..	CCGT09T3..	CCMT09T3..	CCGW09T3..	CCGT09T3..	CCGT09T3..	CCMT09T3.. CCGW09T3..	CCMW09T3..
SCLC%...-12	-	CCMT1204..	-	-	-	-	-	CCGT1204..	-	-

For recommended cutting conditions, see page [E38](#)

● : Std. Item

# External Toolholders [DC ☐ ☐ Insert]

## ADJC-FF (Without Offset) (External / Copying)



### Toolholder Dimensions

Description	Std.		Dimension (mm)								Standard Corner-R (°)	Spare Parts			
	R	L	H1=h	H2	B	L1	L2	F1	F2	S		Anchor Pin	Lock Screw	Wrench	
ADJC <sup>R/L</sup> 1010JX-07FF	●	●	10	-	10	120	-	10	-	0	0.2	LPF-11	HSB4X8 <sup>R/L</sup>	FH-2	
ADJC <sup>R/L</sup> 1010JX-11FF	●	●	10	2	10		20	10	3		0.2	LPF-13			
ADJC <sup>R/L</sup> 1212JX-11FF	●	●	12	-	12		-	12	1		0.2	LPF-17			
ADJC <sup>R/L</sup> 1616JX-11FF	●	●	16	-	16		-	16	-		0.2	LPF-17			

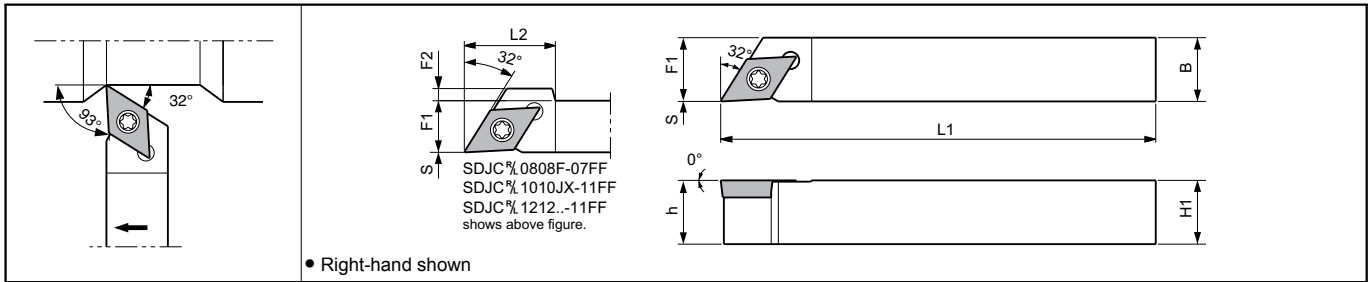
• Lock Screw : HSB4×8R for Right-hand Toolholder, and HSB4×8L for Left-hand Toolholder.

### Applicable Inserts



Applications	Minute ap	Finishing	Finishing-Medium	Finishing-Medium	Medium	Medium	Finishing	Finishing / Precision	Low Feed	Finishing / Precision
Ref. Page	B52	B52	B53	B53	B54	B53	B55	B55	B56	B56
Insert	CF	GF	GK	GQ	FN-Z	Standard	<sup>R/L</sup> -F	<sup>R/L</sup> -FSF	(E / F) <sup>R/L</sup> -U	F <sup>R/L</sup> -USF
Toolholder										
ADJC <sup>R/L</sup> ....-07FF	DCGT0702..	DCGT0702..	DCMT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCET0702..	DCGT0702..	DCET0702..
ADJC <sup>R/L</sup> ....-11FF	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCET11T3..	DCGT11T3..	DCET11T3..
Applications	Low Feed	Low Feed / Precision	Low Carbon Steel Finishing	Low Carbon Steel Finishing-Medium	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B57	B57	B54	B54	B54	B57	B57	B57	C19	C11
Insert	(E / F) <sup>R/L</sup> -J	F <sup>R/L</sup> -JSF	XP	XQ	MQ	Without Chipbreaker	AH	<sup>R/L</sup> -A3	PCD	CBN
Toolholder										
ADJC <sup>R/L</sup> ....-07FF	-	-	DCMT0702..	-	DCMT0702..	DCGW0702..	-	-	DCMT0702..	DCMW0702..
ADJC <sup>R/L</sup> ....-11FF	DCGT11T3..	DCET11T3..	DCMT11T3..	DCMT11T3..	DCMT11T3..	DCGW11T3..	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCMW11T3..

For recommended cutting conditions, see page [E38](#)

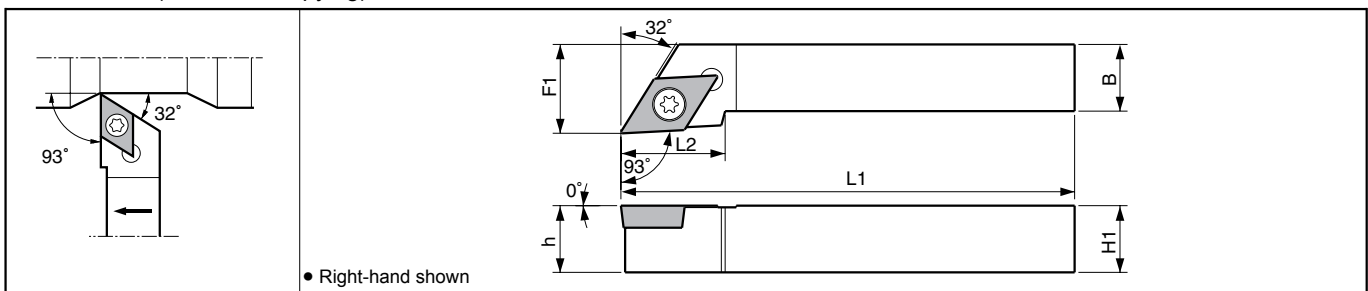
### SDJC-FF (Without Offset) (External / Copying)



#### Toolholder Dimensions

Description		Std.		Dimension (mm)							Standard Corner-R(°)	Spare Parts				
		R	L	H1=h	B	L1	L2	F1	F2	S		Clamp Screw	Wrench			
																
SDJC <sup>°</sup> / <sub>L</sub>	0808F -07FF	●	●	8	8	85	14	8	0.5	0	0.2	SB-2570TR	FT-8			
	1212F -11FF	●	●	12	12		20	12	1			SB-4085TR	FT-15			
SDJC <sup>°</sup> / <sub>L</sub>	1010JX-07FF	●	●	10	10	120	-	10	-	0	0.2	SB-2570TR	FT-8			
	1010JX-11FF	●	●	10	10		20	10	3			SB-4085TR	FT-15			
	1212JX-11FF	●	●	12	12		-	12	1							
	1616JX-11FF	●	●	16	16		-	16	-							

### SDJC (External / Copying)



#### Applicable Inserts

Description	Std.		Dimension (mm)								Standard Corner-R(ε)	Spare Parts			
	R	L	H1=h	B	L1	L2	F1					Clamp Screw	Wrench		
SDJC% 1010F -07	●	●	10	10	80	12	12				0.2	SB-2570TR	FT-8		
SDJC% 1010F -11	●	●	10	10	80		12				0.2	SB-4085TR	FT-15		
1212H -11	●	●	12	12	100		16								
1616H -11	●	●	16	16		18	20								
2020K -11	●	●	20	20	125		25								
2525M -11	●	●	25	25	150		32								

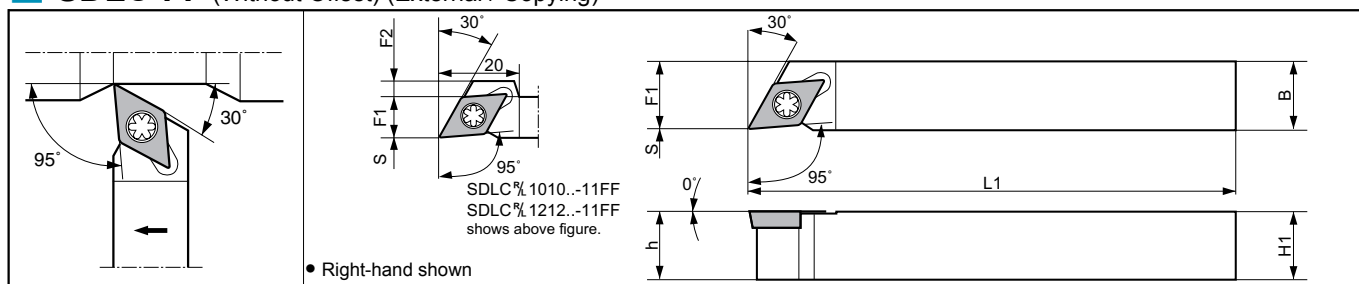
#### Applicable Inserts

Applications	Minute ap	Finishing	Finishing-Medium	Finishing-Medium	Medium	Medium	Finishing	Finishing / Precision	Low Feed	Finishing / Precision
Ref. Page	B52	B52	B53	B53	B54	B53	B55	B55	B56	B56
Toolholder	CF	GF	GK	GQ	FN-Z	Standard	%-F	%-FSF	(E / F) %-U	F%-USF
Insert										
SDJC%L...-07FF/-07	DCGT0702..	DCGT0702..	DCMT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCET0702..	DCGT0702..	DCET0702..
SDJC%L...-11FF/-11	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCET11T3..	DCGT11T3..	DCET11T3..
Applications	Low Feed	Low Feed / Precision	Low Carbon Steel Finishing	Low Carbon Steel Finishing-Medium	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B57	B57	B54	B54	B54	B57	B57	B57	C19	C11
Toolholder	(E / F) %-J	F%-JSF	XP	XQ	MQ	Without Chipbreaker	AH	%-A3	PCD	CBN
Insert										
SDJC%L...-07FF/-07	-	-	DCMT0702..	-	DCMT0702..	DCGW0702..	-	-	DCMT0702..	DCMW0702..
SDJC%L...-11FF/-11	DCGT11T3..	DCET11T3..	DCMT11T3..	DCMT11T3..	DCMT11T3..	DCGW11T3..	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCMW11T3..



For recommended cutting conditions, see page [E38](#)

# External Toolholders [DC ☐ ☐ Insert]

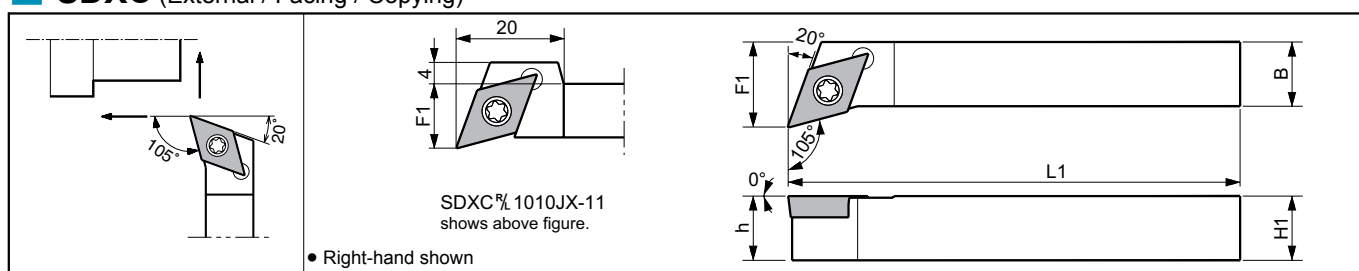
## SDLC-FF (Without Offset) (External / Copying)



### Toolholder Dimensions

Description		Std.		Dimension (mm)							Standard Corner-R(r)	Spare Parts				
		R	L	H1=h	B	L1	F1	F2	S			Clamp Screw	Wrench			
																
SDLC <sup>R/L</sup>	1010JX-07FF	●	●	10	10	120	10	-	0	0.2	SB-2570TR	FT-8				
	1212JX-07FF	●	●	12	12		12									
	1616JX-07FF	●	●	16	16		16									
SDLC <sup>R/L</sup>	1010JX-11FF	●	●	10	10	120	10	4	0	0.2	SB-4085TR	FT-15				
	1212JX-11FF	●	●	12	12		12	2								
	1616JX-11FF	●	●	16	16		16	-								
SDLC <sup>R/L</sup>	1212F -07FF	●	●	12	12	85	12	-	0	0.2	SB-2570TR	FT-8				
SDLC <sup>R/L</sup>	1010F -11FF	●	●	10	10	80	10	4	0	0.2	SB-4085TR	FT-15				
	1212F -11FF	●	●	12	12	85	12	2								
	1616H -11FF	●		16	16	100	16	-								

## SDXC (External / Facing / Copying)



### Applicable Inserts

Description	Std.		Dimension (mm)							Standard Corner-R (°)	Spare Parts				
	R	L	H1=h	B	L1	F1					Clamp Screw	Wrench			
SDXC <sup>R/L</sup> 1010JX-07 1010JX-11 1212JX-11 1616JX-11	●	●	10	10	120	12			0.2	SB-2570TR	FT-8				
	●	●	10	10		12									
	●	●	12	12		16									
	●	●	16	16		20									

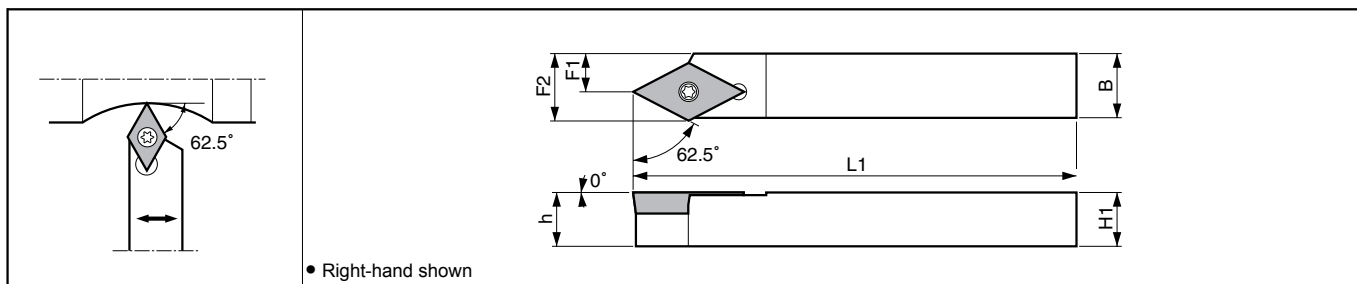
### Applicable Inserts (SDLC-FF / SDXC)

Applications	Minute ap	Finishing	Finishing-Medium	Finishing-Medium	Medium	Medium	Finishing	Finishing / Precision	Low Feed	Finishing / Precision
Ref. Page	B52	B52	B53	B53	B54	B53	B55	B55	B56	B56
Insert	CF	GF	GK	GQ	FN-Z	Standard	%-F	%-FSF	(E / F) %-U	F%-USF
Toolholder										
SDLC <sup>R/L</sup> ...-07FF	DCGT0702..	DCGT0702..	DCMT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCET0702..	DCGT0702..	DCET0702..
SDXC <sup>R/L</sup> ...-07	DCGT0702..	DCGT0702..	DCMT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCET0702..	DCGT0702..	DCET0702..
SDLC <sup>R/L</sup> ...-11FF	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCET11T3..	DCGT11T3..	DCET11T3..
SDXC <sup>R/L</sup> ...-11	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCET11T3..	DCGT11T3..	DCET11T3..
Applications	Low Feed	Low Feed / Precision	Low Carbon Steel Finishing	Low Carbon Steel Finishing-Medium	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B57	B57	B54	B54	B54	B57	B57	B57	C19	C11
Insert	(E / F) %-J	F%-JSF	XP	XQ	MQ	Without Chipbreaker	AH	%-A3	PCD	CBN
Toolholder										
SDLC <sup>R/L</sup> ...-07FF	-	-	DCMT0702..	-	DCMT0702..	DCGW0702..	-	-	DCMT0702..	DCMW0702..
SDXC <sup>R/L</sup> ...-07	-	-	DCMT0702..	-	DCMT0702..	DCGW0702..	-	-	DCMT0702..	DCMW0702..
SDLC <sup>R/L</sup> ...-11FF	DCGT11T3..	DCET11T3..	DCMT11T3..	DCMT11T3..	DCMT11T3..	DCGW11T3..	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCMW11T3..
SDXC <sup>R/L</sup> ...-11	DCGT11T3..	DCET11T3..	DCMT11T3..	DCMT11T3..	DCMT11T3..	DCGW11T3..	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCMW11T3..

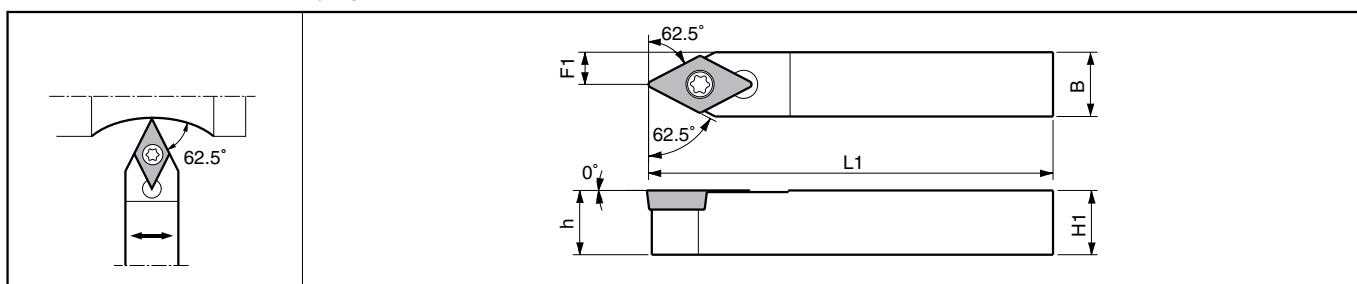
For recommended cutting conditions, see page [E38](#)

● : Std. Item ○ : Check Availability R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)

### SDNC-F (External / Copying)



### SDNC (External / Copying)



#### Toolholder Dimensions

Description	Std.			Dimension (mm)							Standard Corner-R(re)	Spare Parts			
	R	N	L	H1=h	B	L1	F1	F2				Clamp Screw	Wrench		
<b>SDNC<sup>R/L</sup></b> 1010JX-07F	●		●	10	10	120	7	10.5			0.2	SB-2570TR	FT-8		
<b>SDNCN</b> 1010JX-07		●		10	10		5	-			0.2	SB-2570TR	FT-8		
1212JX-07		●		12	12		6	-							
1010JX-11		●		10	10	120	5	-			0.2	SB-4085TR	FT-15		
1212JX-11		●		12	12		6	-							
1616JX-11		●		16	16		8	-							
<b>SDNCN</b> 0808F -07		●		8	8	85	4	-			0.2	SB-2570TR	FT-8		
<b>SDNCN</b> 1010F -11		●		10	10	80	5	-							
1212F -11		●		12	12	85	6	-			0.2	SB-4085TR	FT-15		
1616H -11		●		16	16	100	8	-							

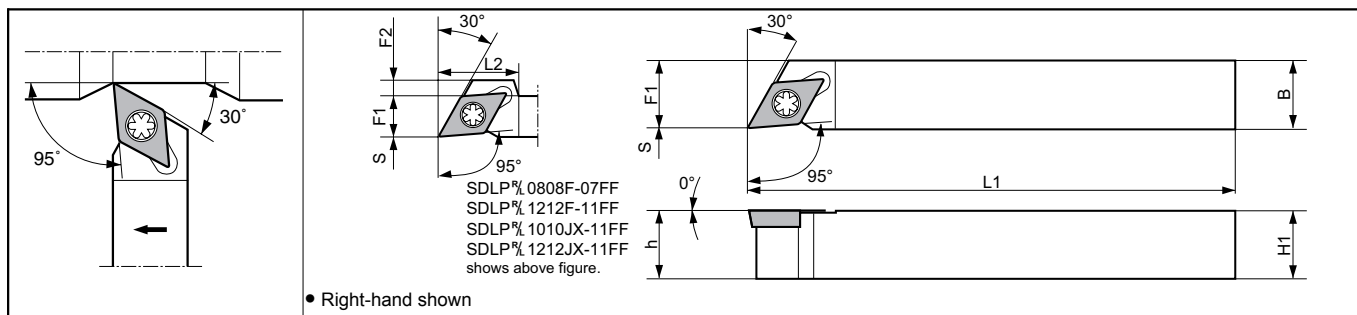
#### Applicable Inserts

Applications	Minute ap	Finishing	Finishing-Medium	Finishing-Medium	Medium	Medium	Finishing	Finishing / Precision	Low Feed	Finishing / Precision
Ref. Page	B52	B52	B53	B53	B54	B53	B55	B55	B56	B56
Toolholder	CF	GF	GK	GQ	FN-Z	Standard	%L-F	%L-FSF	(E / F) %L-U	F%L-USF
<b>SDNC<sup>R/L</sup>...-07F</b>										
<b>SDNCN...-07</b>	DCGT0702..	DCGT0702..	DCMT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCET0702..	DCGT0702..	DCET0702..
<b>SDNCN...-11</b>	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3.. DCMT11T3..	DCGT11T3..	DCET11T3..	DCGT11T3..	DCET11T3..
Applications	Low Feed	Low Feed / Precision	Low Carbon Steel Finishing	Low Carbon Steel Finishing-Medium	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B57	B57	B54	B54	B54	B57	B57	B57	C19	C11
Toolholder	(E / F) %L-J	F%L-JSF	XP	XQ	MQ	Without Chipbreaker	AH	%L-A3	PCD	CBN
<b>SDNC<sup>R/L</sup>...-07F</b>										
<b>SDNCN...-07</b>	-	-	DCMT0702..	-	DCMT0702..	DCGW0702..	-	-	DCMT0702..	DCMW0702..
<b>SDNCN...-11</b>	DCGT11T3..	DCET11T3..	DCMT11T3..	DCMT11T3..	DCMT11T3..	DCGW11T3..	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCMW11T3..

For recommended cutting conditions, see page [E38](#)





### SDLP-FF (Without Offset) (External / Copying)



E

#### Toolholder Dimensions

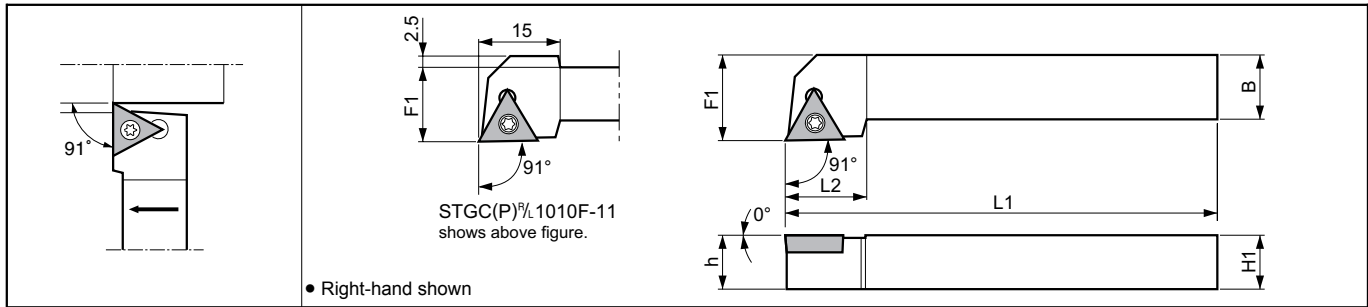
Description		Std.		Dimension (mm)							Standard Corner-R(r)	Spare Parts				
		R	L	H1=h	B	L1	L2	F1	F2	S		Clamp Screw	Wrench			
																
SDLP <sup>R/L</sup>	0808F -07FF	●	●	8	8	85	14	8	0.5	0	0.2	SB-2570TR	FT-8			
	1212F -11FF	●	●	12	12		20	12	2			SB-4085TR	FT-15			
SDLP <sup>R/L</sup>	1010JX-07FF	●	●	10	10	120	-	10	-	0	0.2	SB-2570TR	FT-8			
	1010JX-11FF	●	●	10	10		20	10	4			SB-4085TR	FT-15			
	1212JX-11FF	●	●	12	12			12	2							
	1616JX-11FF	●	●	16	16		-	16	-							

#### Applicable Inserts



Applications	Finishing / Precision	Low Feed / Precision							
Ref. Page	B59	B59							
Insert	<sup>R/L</sup> -FSF	<sup>F</sup> <sup>R/L</sup> -USF							
Toolholder									
SDLP <sup>R/L</sup> ...-07FF	DPET0702..	DPET0702..							
SDLP <sup>R/L</sup> ...-11FF	DPET11T3..	DPET11T3..							

For recommended cutting conditions, see page [E38](#)

## STGC(P) (External)



### Toolholder Dimensions

Description		Std.		Dimension (mm)							Standard Corner-R(°)	Spare Parts					
		R	L	H1=h	B	L1	L2	F1				Clamp Screw	Wrench				
																	
STGC <sup>R/L</sup>	0808E -08	●	●	8	8	70	12	10			0.2	SB-2050TR	FT-6				
	1010F -08	●	●	10	10	80		12									
STGC <sup>R/L</sup>	1010F -11	●	●	10	10	80	15	14			0.4	SB-2570TR	FT-8				
	1212H -11	●	●	12	12	100		16									
	1616H -11	●	●	16	16			20									
	2020K -11	●	●	20	20			125									25
	2525M -11	●	●	25	25			150									20
STGP <sup>R/L</sup>	0808E -08	●	●	8	8	70	12	10			0.2	SB-2050TR	FT-6				
	1010F -08	●	●	10	10	80		12									
STGP <sup>R/L</sup>	1010F -11	●	●	10	10	80	15	14			0.2	SB-3080TR	FT-10				
	1212H -11	●	●	12	12	100		16									
	1616H -11	●	●	16	16			20									

### Applicable Inserts (STGC)

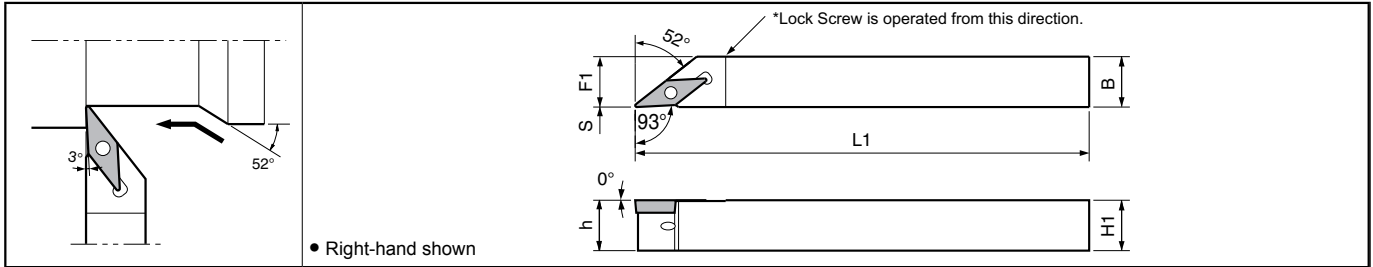
Applications	Low Feed	Low Feed / Precision	Cast Iron	Non-ferrous Metals	Non-ferrous Metals					
Ref. Page	B63, B64	B64	B64	B64	C19, C20					
Insert	(E/F) $\frac{1}{2}$ -U	F $\frac{1}{2}$ -USF	Without Chipbreaker	$\frac{1}{2}$ -A3	PCD					
Toolholder										
STGC <sup>R/L</sup> ....-08	TCGT0802..	TCET0802..	TCGW0802..	-	TCMT0802..					
STGC <sup>R/L</sup> ....-11	TCGT1103..	TCET1103..	TCGW1103..	TCGT1103..	TCMT1103.. TCGW1103..					

### Applicable Inserts (STGP)

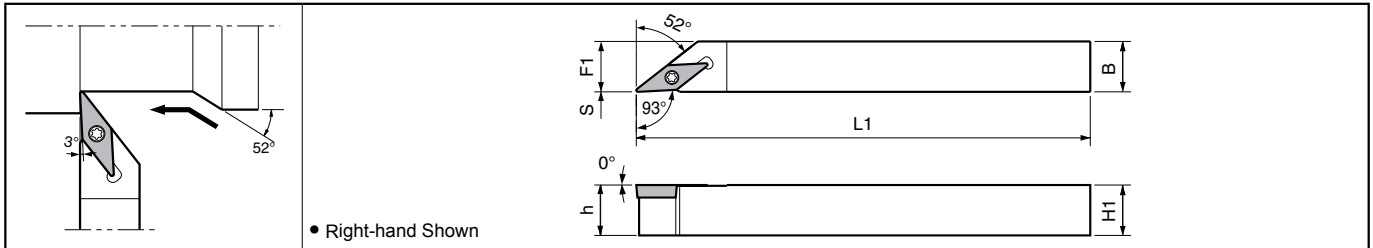
Applications	Minute ap	Finishing-Medium	Finishing	Finishing / Precision	Low Feed / Precision	Medium cutting	Low Carbon Steel Finishing	Low Carbon Steel Finishing-Medium	Cast Iron	Non-ferrous Metals
Ref. Page	B66	B66	B67	B68	B68	B67	B66	B66	B68	C20, C21
Insert	CF	HQ	$\frac{1}{2}$	$\frac{1}{2}$ -FSF	F $\frac{1}{2}$ -USF	$\frac{1}{2}$ -H	XP	XQ	Without Chipbreaker	PCD
Toolholder										
STGP <sup>R/L</sup> ....-08	TPGT0802..	-	TPGH0802..	TPET0802..	TPET0802..	-	-	-	TPGB0802..	TPMH0802.. TPGB0802..
STGP <sup>R/L</sup> ....-11	-	TPMT1103..	TPGH1103..	TPET1103..	TPET1103..	TPGH1103..	TPMT1103..	TPMT1103..	TPGB1103..	TPMH1103.. TPGB1103..
Applications	Hard Materials									
Ref. Page	C12									
Insert	CBN									
Toolholder										
STGP <sup>R/L</sup> ....-08	TPGB0802..									
STGP <sup>R/L</sup> ....-11	TPGB1103..									

For recommended cutting conditions, see page [E38](#)

### AVJB-FF (Without Offset) (External / Copying)



### SVJB-FF (Without Offset) (External / Copying)

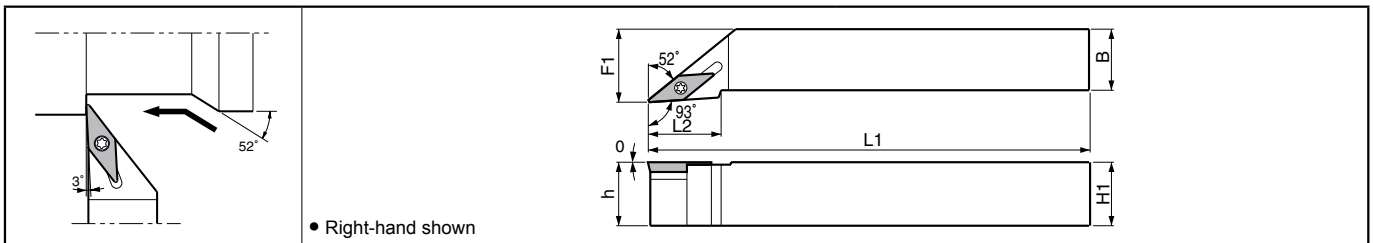


#### Toolholder Dimensions

Description	Std.	Dimension (mm)								Standard Corner-R(°)	Spare Parts			
		R	L	H1=h	B	L1	L2	F1	S		Anchor Pin	Lock Screw	Clamp Screw	Wrench
AVJB <sup>R/L</sup> 1010JX-11FF	●	●	10	10	120	-	12	10	0	0.4	LPF-11	HSB4X8 <sup>R/L</sup>	-	FH-2
	●	●	12	12							LPF-1113			
	●	●	16	16							LPF-1117			
SVJB <sup>R/L</sup> 1010JX-11FF	●	●	10	10	120	-	12	10	0	0.4	-	-	SB-2570TR	FT-8
	●	●	12	12							-			
	●	●	16	16							-			

• Lock Screw: HSB4×8R for R-hand Toolholder, HSB4×8L for L-hand Toolholder.

### SVJB (External / Copying)



#### Toolholder Dimensions

Description	Std.	Dimension (mm)								Standard Corner-R(°)	Spare Parts				
		R	L	H1=h	B	L1	L2	F1			Clamp Screw	Wrench	Shim	Shim Screw	Wrench
SVJB <sup>R/L</sup> 2020K-11	●	●	20	20	125	30	25			0.4	SB-2570TR	FT-8	-	-	-
	●	●	25	25	150	35	32								
SVJB <sup>R/L</sup> 2020K-16N	●	●	20	20	125	30	25			0.8	SB-40125TRN	FT-15	SVN-32N	SS-4N	LW-4
	●	●	25	25	150	35	32								

• Lock Screw: HSB4×8R for R-hand Toolholder, HSB4×8L for L-hand Toolholder.

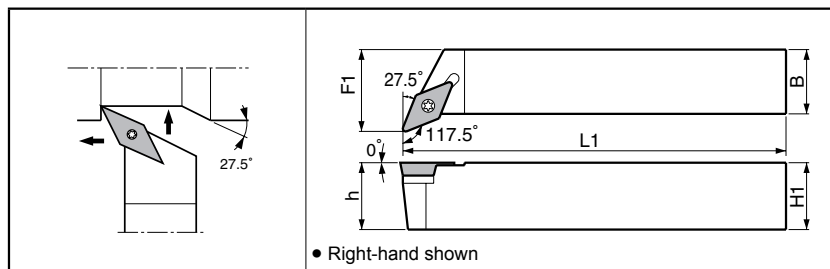
#### Applicable Inserts (AVJB-F / SVJB-F / SVJB)

Application	Finishing	Finishing	Finishing-Medium	Finishing	Finishing / Precision	Finishing-Medium	Medium	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B72	B72	B72, B73	B72	B72	B73	B72, B73	B73	B73	C22	C14
Insert	GP	VF	HQ	<sup>R/L</sup> -F	<sup>R/L</sup> -FSF	<sup>R/L</sup> -Y	FN-Z	AH	<sup>R/L</sup> -A3	PCD	CBN
Toolholder											
○ VJB <sup>R/L</sup> ...-11FF-11	VBMT1103..	VBMT1103..	VBMT1103.. VCMT1103..	VBGT1103..	VBET1103..	VBGT1103.. VCGT1103..	VBGT1103.. VCGT1103..	-	-	VBMT1103..	VBGW1103..
SVJB <sup>R/L</sup> ...-16 N	VBMT1604..	VBMT1604..	VBMT1604.. VCMT1604..	-	-	VBGT1604.. VCGT1604..	VBGT1604.. VCGT1604..	VCGT1604..	VCGT1604..	VBMT1604..	VBGW1604.. VCGW1604..

For recommended cutting conditions, see page [E38](#)

### SVPB (External / Facing / Copying / Undercutting)

#### Undercutting diameter of SVPB

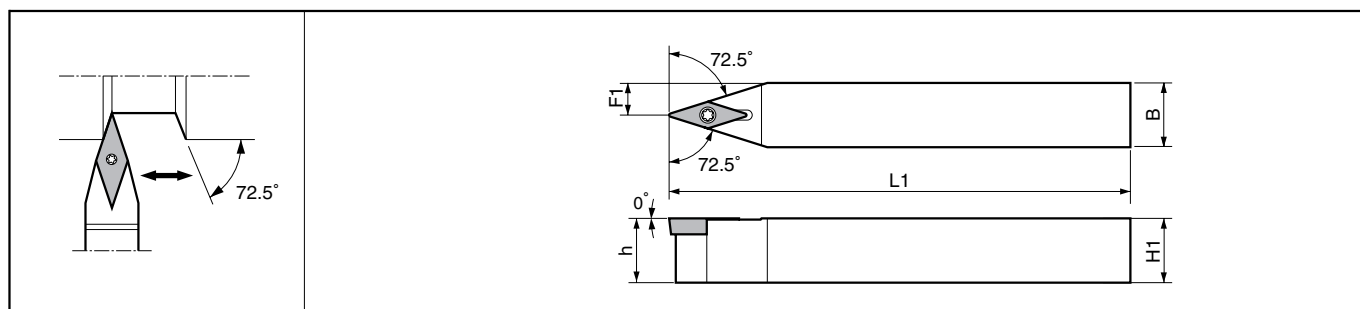


Corner-R (rε)	ap	øD (MIN)
0.4	0.5	ø25
	1	ø30
0.8	0.5	ø45
	1	ø55

#### Toolholder Dimensions

Description	Std.		Dimension (mm)							Standard Corner-R(rε)	Spare Parts				
	R	L	H1=h	B	L1	L2	F1				Clamp Screw	Wrench	Shim	Shim Screw	Wrench
SVPB <sup>R/L</sup> 1010JX-11	●	●	10	10			14.5			0.4	SB-2570TR	FT-8	-	-	-
	●	●	12	12	120	-	16.5								
	●	●	16	16			20.5								
SVPB <sup>R/L</sup> 2020K-11	●	●	20	20	125	-	25			0.4	SB-2570TR	FT-8	-	-	-
	●	●	25	25	150	-	32								
SVPB <sup>R/L</sup> 2020K-16N	●	●	20	20	125	-	25			0.8	SB-40125TRN	FT-15	SVN-32N	SS-4N	LW-4
	●	●	25	25	150	-	32								

### SVVB (External / Copying)



#### Toolholder Dimensions

Description	Std.	Dimension (mm)							Standard Corner-R(rε)	Spare Parts				
		H1=h	B	L1	F1					Clamp Screw	Wrench	Shim	Shim Screw	Wrench
SVVBN 1212F-11	●	12	12	85	6				0.4	SB-2570TR	FT-8	-	-	-
SVVBN 1010JX-11	●	10	10		5									
SVVBN 1212JX-11	●	12	12	120	6									
SVVBN 1616JX-11	●	16	16		8									
SVVBN 1010F-11	●	10	10	80	5				0.4	SB-2570TR	FT-8	-	-	-
	●	16	16	100	8									
	●	20	20	125	10									
	●	25	25	150	12.5									
SVVBN 2020K-16N	●	20	20	125	10				0.8	SB-40125TRN	FT-15	SVN-32N	SS-4N	LW-4
	●	25	25	150	12.5									

#### Applicable Inserts

Application	Finishing	Finishing-Medium	Finishing-Medium	Finishing	Finishing / Precision	Finishing-Medium	Medium	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B72	B72	B72, B73	B72	B72	B73	B72, B73	B73	B73	C22	C14
Insert	GP	VF	HQ	Y-F	Y-FSF	Y-Y	FN-Z	AH	Y-A3	PCD	CBN
Toolholder											
SVPB <sup>R/L</sup> ...-11	VBMT1103..	VBMT1103..	VBMT1103..	VBGT1103..	VBET1103..	VBGT1103..	VBGT1103..	-	-	VBMT1103..	VBGW1103..
SVVBN...-11	VBMT1103..	VBMT1103..	VBMT1103..	VBGT1103..	VBET1103..	VBGT1103..	VBGT1103..	-	-	VBMT1103..	VBGW1103..
SVPB <sup>R/L</sup> ...-16N	VBMT1604..	VBMT1604..	VBMT1604..	-	-	VBGT1604..	VBGT1604..	VBGT1604..	VBGT1604..	VBMT1604..	VBGW1604..
SVVBN...-16N	VBMT1604..	VBMT1604..	VBMT1604..	-	-	VBGT1604..	VBGT1604..	VBGT1604..	VBGT1604..	VBMT1604..	VBGW1604..

For recommended cutting conditions, see page [E38](#)

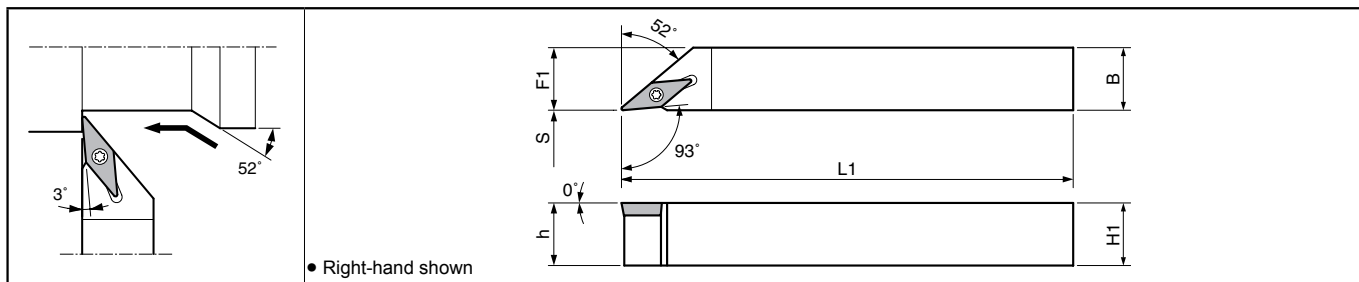
● : Std. Item ○ : Check Availability R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)

E

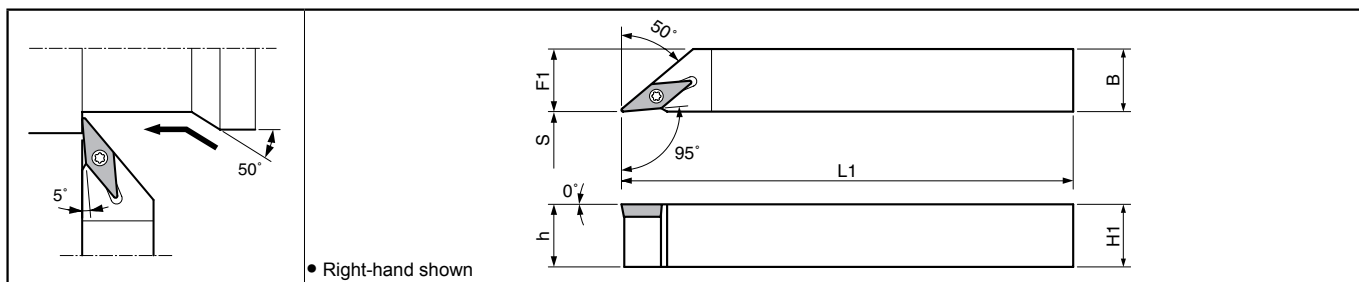


Small Tools



### SVJP-FF (Without Offset) (External / Copying)



### SVLP-FF (Without Offset) (External / Copying)



### Toolholder Dimensions

Description		Std.		Dimension (mm)							Standard Corner-R(°)	Spare Parts				
		R	L	H1=h	B	L1	L2	L3	F1	S		Clamp Screw	Wrench			
																
SVJP <sup>R/L</sup>	1212F -11FF	●	●	12	12	85	-	-	12	0	0.2	SB-2570TR	FT-8			
	1212JX -11FF	●	●	12	12	120			12							
	1616JX -11FF	●	●	16	16	16										
SVLP <sup>R/L</sup>	1010JX -08FF	●	●	10	10	120	-	-	10	0	0.1	SB-2050TR	FT-6			
	1212JX -08FF	●	●	12	12				12							
	1616JX -08FF	●	●	16	16				16							
SVLP <sup>R/L</sup>	1212JX -11FF	●	●	12	12	120	-	-	12	0	0.2	SB-2570TR	FT-8			
	1616JX -11FF	●	●	16	16				16							
SVLP <sup>R/L</sup>	1212F -08FF	●	●	12	12	85	-	-	12	0	0.1	SB-2050TR	FT-6			
	1212F -11FF	●	●	12	12	85			-							

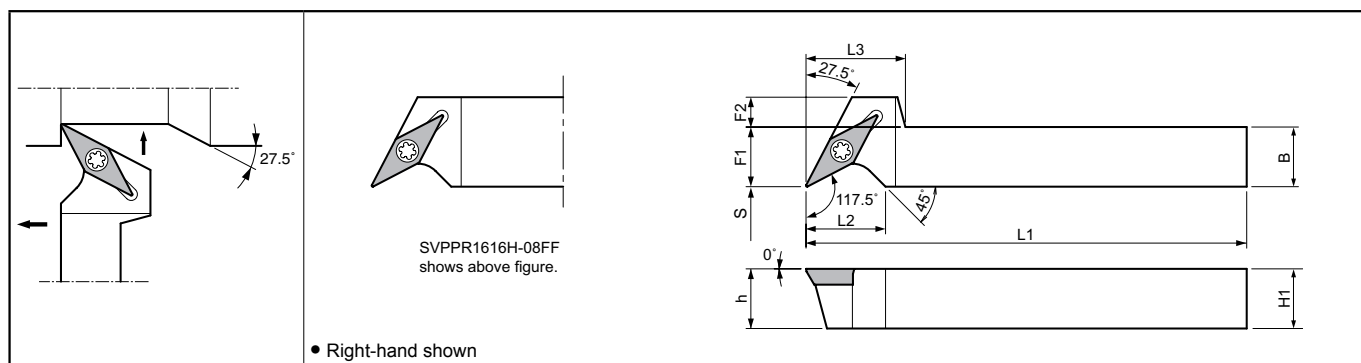
### Applicable Inserts

Applications	Minute ap	Finishing	Finishing	Finishing / Precision	Low Feed	Low Feed / Precision				
Ref. Page	B75	B75	B75	B76	B76	B76				
Insert	CF	CK	GF	<sup>R/L</sup> -FSF	F <sup>R/L</sup> -U	F <sup>R/L</sup> -USF				
Toolholder										
SVLP <sup>R/L</sup> ...-08FF	-	VPGT0802..	-	VPET0802..	-	VPET0802..				
SVOP <sup>R/L</sup> ...-11FF	VPGT1103..	VPGT1103..	VPGT1103..	VPET1103..	VPGT1103..	VPET1103..				

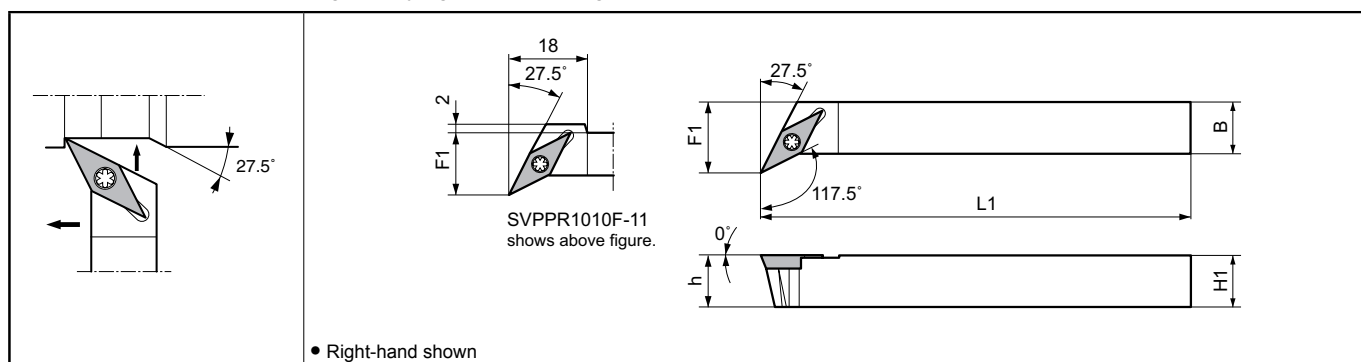
For recommended cutting conditions, see page [E38](#)



## SVPP-FF (Without Offset) (External / Facing / Copying / Undercutting)



## SVPP (External / Facing / Copying / Undercutting)



### Toolholder Dimensions

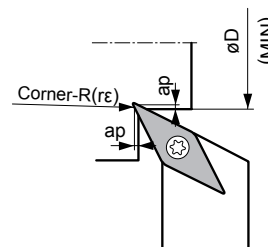
Description	Std.	Dimension (mm)										Standard Corner-R(rε)	Spare Parts				
		R	L	H1-h	B	L1	L2	L3	F1	F2	S		Clamp Screw	Wrench			
SVPPR 1010JX-08FF	●			10	10				10	4							
	●			12	12	120	12	16	12	2	0	0.1	SB-2050TR	FT-6			
	●			16	16			-	16	-							
SVPPR 1010JX-11FF	●			10	10				10	8							
	●			12	12	120	16	20	12	6	0	0.2	SB-2570TR	FT-8			
	●			16	16				16	2							
SVPPR 1212F -08FF	●			12	12	85	12	16	12	2	0	0.1	SB-2050TR	FT-6			
	●			12	12	85	16	20	12	6	0	0.2	SB-2570TR	FT-8			
SVPP <sup>R/L</sup> 1010F -11	●			10	10	80	-	-	14.5	-	-	0.2	SB-2570TR	FT-8			
	●			12	12	100	-	-	16.5	-	-						

### Applicable Inserts

Applications	Minute ap	Finishing	Finishing	Finishing / Precision	Low Feed	Low Feed / Precision
Ref. Page	B75	B75	B75	B76	B76	B76
Insert	CF	CK	GF	<sup>R/L</sup> -FSF	F <sup>R/L</sup> -U	F <sup>R/L</sup> -USF
Toolholder						
SVPPR...-08FF	-	VPGT0802..	-	VPET0802..	-	VPET0802..
SVPPR...-11FF	VPGT1103..	VPGT1103..	VPGT1103..	VPET1103..	VPGT1103..	VPET1103..
SVPP <sup>R/L</sup> ...-11	VPGT1103..	VPGT1103..	VPGT1103..	VPET1103..	VPGT1103..	VPET1103..

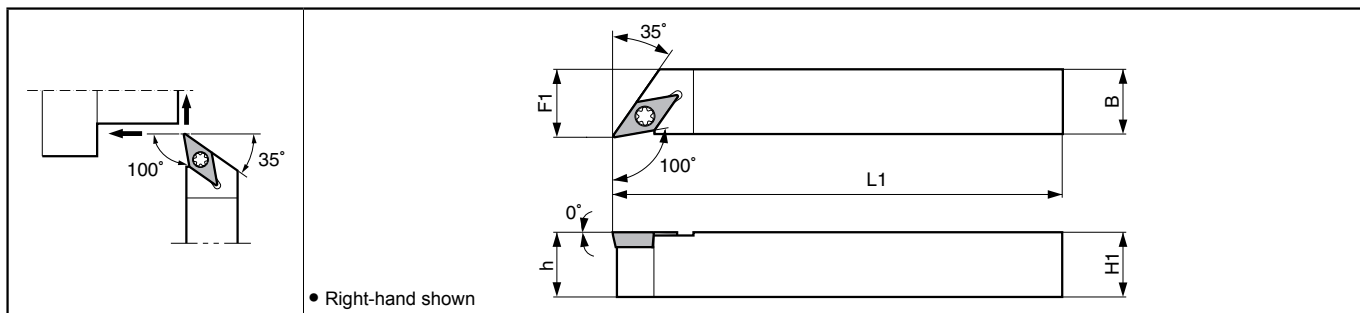
For recommended cutting conditions, see page [E38](#)

### Undercutting diameter of SVPP-FF / SVPP


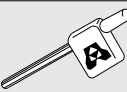


Corner-R (rε)	ap	øD (MIN)
0.2	0.5	ø20
	1	ø25



### SYXP-F (External / Facing / Copying)



#### Toolholder Dimensions

Description		Std.		Dimension (mm)			Standard Corner-R(ℓ)	Spare Parts		
								Clamp Screw	Wrench	
		R	L	H1=h	B	L1		F1		
SYXP <sup>R/L</sup>	0808F-06F	●	●	8	8	80	8.5	0.2	SB-2050TR	FT-6
	1010H-06F	●	●	10	10	100	10.5			

#### Applicable Inserts

Applications	Finishing	Low Feed
Ref. Page	<b>B80</b>	<b>B80</b>
Insert	<b><math>\frac{1}{4}</math>°-F</b>	<b>F<math>\frac{1}{4}</math>°-U</b>
Toolholder		
<b>SYXP<sup>F</sup>/L...-06F</b>	YPGT0602..	YPGT0602..

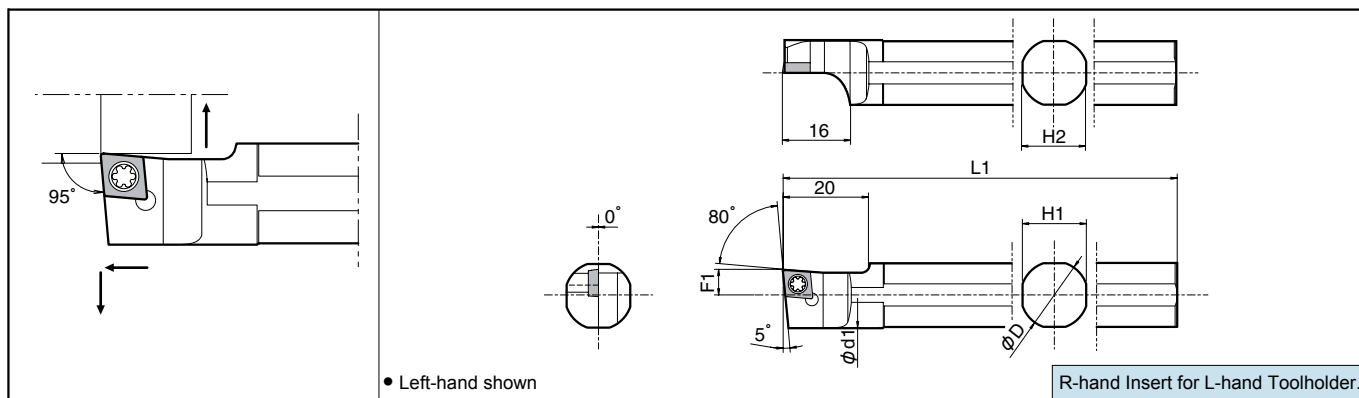
For recommended cutting conditions, see page [E38](#)

E


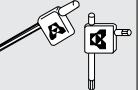
Small Tools



### S...SCLC (External / Facing)



#### Toolholder Dimensions

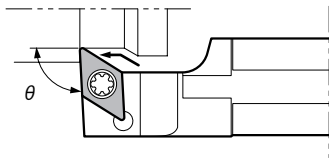
Description	Std.	Dimension (mm)						Standard Corner-R(r)	Spare Parts			
		øD	L1	F1	ød1	H1=H2			Clamp Screw	Wrench		
												
S12F -SCLCL06	●	12	80	6	13.4	11	0.4	SB-2560TR	FT-8			
S14H -SCLCL06	●	14	100		13							
S15F -SCLCL06	●	15.875	85		15.4	15						
S16F -SCLCL06	●	16			18.4	17						
S19G -SCLCL06	●	19.05	90		19.4	18						
S19K -SCLCL06	●		120									
S20G -SCLCL06	●	20	90	10	18.4	17	0.4	SB-4065TR	FT-15			
S20K -SCLCL06	●		120									
S19G -SCLCL09	●	19.05	90									
S19K -SCLCL09	●		120									
S20G -SCLCL09	●	20	90									
S20K -SCLCL09	●		120									
S25.0H-SCLCL09	●	25	100		24.4	23						
S25K -SCLCL09	●	25.4	120		24.8							

#### Applicable Inserts

Applications	Finishing	Finishing-Medium	Finishing-Medium	Low Feed	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B45	B45	B45	B48	B46	B46	B46	B46	C18	C10
Insert	GF	GK	GQ	(E/F)R.U	MQ	Without Chipbreaker	AH	R-A3	PCD	CBN
Toolholder										
S...SCLCL06	CCGT0602..	CCMT0602..	CCGT0602..	CCGT0602..	-	CCGW0602..	-	-	CCMT0602.. CCGW0602..	CCMW0602..
S...SCLCL09	CCGT09T3..	CCMT09T3..	CCGT09T3..	CCGT09T3..	CCMT09T3..	CCGW09T3..	CCGT09T3..	CCGT09T3..	CCMT09T3.. CCGW09T3..	CCMW09T3..

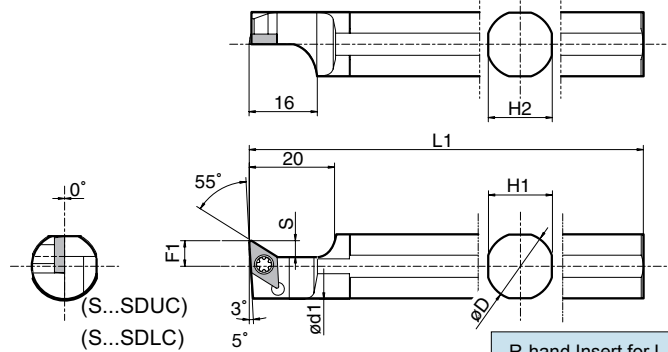
For recommended cutting conditions, see page [E38](#)

### S...SDUC (External / Copying) / S...SDLC (External / Copying)





$\theta = 93^\circ$  (S...SDUC)  
 $\theta = 95^\circ$  (S...SDLC)

• Left-hand Shown



R-hand Insert for L-hand Toolholder.

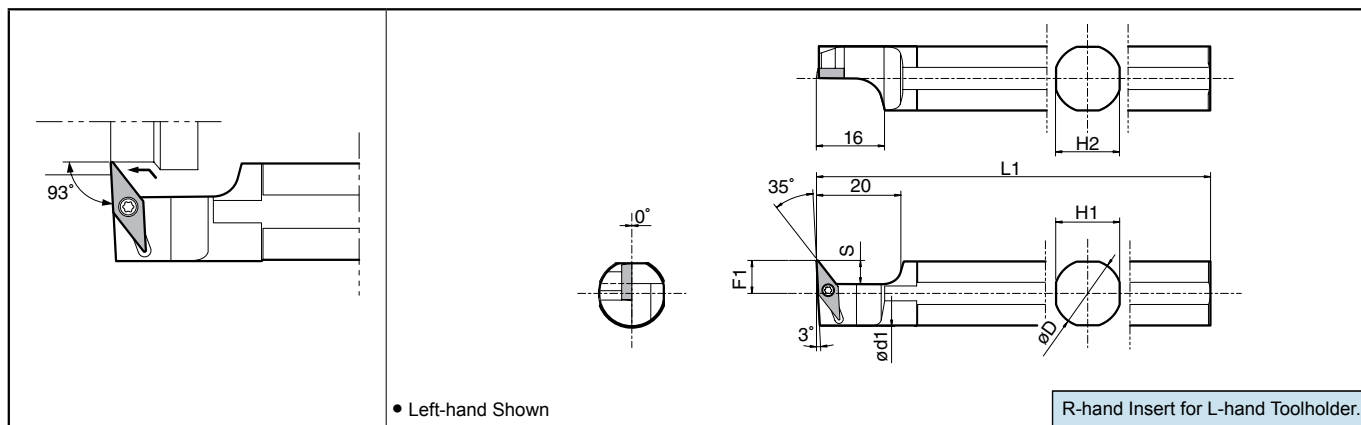
#### Toolholder Dimensions

Description	Std.	Dimension (mm)						Standard Corner-R(ε)	Spare Parts			
									Clamp Screw	Wrench		
		øD	L1	F1	ød1	H1=H2	S					
S14H -SDUCL07	●	14	100	6	13.4	13	3.8	0.4	SB-2560TR	FT-8		
S15F -SDUCL07	●	15.875	85		15.4	15						
S19G -SDUCL07	●	19.05	90		18.4	17						
S19K -SDUCL07	●		120									
S20G -SDUCL07	●	20	90		19.4	18						
S20K -SDUCL07	●		120									
S19G -SDUCL11	●	19.05	90	10	18.4	17	5.8	0.4	SB-4085TR	FT-15		
S19K -SDUCL11	●		120		19.4	18						
S20G -SDUCL11	●	20	90									
S20K -SDUCL11	●		120									
S22K -SDUCL11	●	22	120		24.4	23						
S25.0H-SDUCL11	●	25	100		24.8							
S25K -SDUCL11	●	25.4	120									
S12F -SDLCL07	●	12	80	6	13.4	11	3.8	0.4	SB-2560TR	FT-8		
S14H -SDLCL07	●	14	100		15.4	15						
S15F -SDLCL07	●	15.875	85		18.4	17						
S16F -SDLCL07	●	16										
S19G -SDLCL07	●	19.05	90		19.4	18						
S19K -SDLCL07	●		120									
S20G -SDLCL07	●	20	90		18.4	18						
S20K -SDLCL07	●		120									
S19G -SDLCL11	●	19.05	90	10	18.4	17	5.8	0.4	SB-4085TR	FT-15		
S19K -SDLCL11	●		120		19.4	18						
S20G -SDLCL11	●	20	90									
S20K -SDLCL11	●		120									
S22K -SDLCL11	●	22	120		24.4	23						
S25.0H-SDLCL11	●	25	100		24.8							
S25K -SDLCL11	●	25.4	120									

#### Applicable Inserts

Applications	Minute ap	Finishing	Finishing-Medium	Finishing-Medium	Medium	Medium	Finishing	Finishing / Precision	Low Feed	Finishing / Precision
Ref. Page	B52	B52	B53	B53	B54	B53	B55	B55	B56	B56
Insert	CF	GF	GK	GQ	FN-Z	Standard	R-F	R-FSF	(E / F) R-U	FR-USF
Toolholder										
S...SD○CL07	DCGT0702..	DCGT0702..	DCMT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCGT0702..	DCET0702..	DCGT0702..	DCET0702..
S...SD○CL11	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCGT11T3..	DCET11T3..	DCGT11T3..	DCET11T3..
Applications	Low Feed	Low Feed / Precision	Low Carbon Steel Finishing	Low Carbon Steel Finishing-Medium	Stainless Steel	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials
Ref. Page	B57	B57	B54	B54	B54	B57	B57	B57	C19	C11
Insert	(E / F) R-J	FR-JSF	XP	XQ	MQ	Without Chipbreaker	AH	R-A3	PCD	CBN
Toolholder										
S...SD○CL07	-	-	DCMT0702..	-	DCMT0702..	DCGW0702..	-	-	DCMT0702..	DCMW0702..
S...SD○CL11	DCGT11T3..	DCET11T3..	DCMT11T3..	DCMT11T3..	DCMT11T3..	DCGW11T3..	DCGT11T3..	DCGT11T3..	DCMT11T3..	DCMW11T3..

### S...SVUB(C) (External / Copying)



#### Toolholder Dimensions

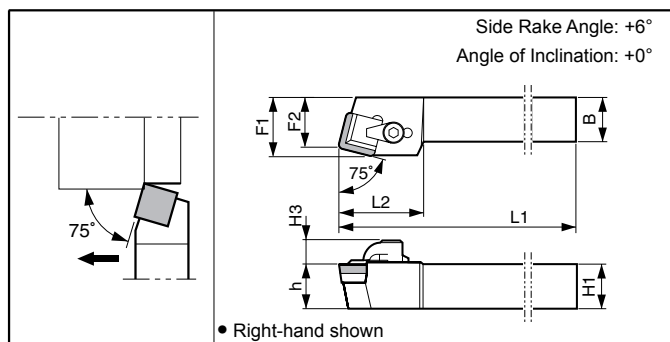
Description	Std.	Dimension (mm)							Standard Corner-R (°)	Spare Parts			
		ØD	L1	F1	Ød1	H1=H2	S			Clamp Screw	Wrench		
S12F -SVUCL08	●	12	80	7.5	13.4	11	5.5	0.4		SB-2050TR	FT-6		
S14H -SVUCL08	●	14	100										
S15F -SVUCL08	●	15.875	85	8	15.4	15							
S16F -SVUCL08	●	16											
S19G -SVUBL11	●	19.05	90	10.5	18.4	17	8	0.4		SB-2570TR	FT-8		
S19K -SVUBL11	●		120										
S20G -SVUBL11	●	20	90		19.4	18							
S20K -SVUBL11	●		120										
S25.0H -SVUBL11	●	25	100		24.4	23							
S25K -SVUBL11	●	25.4	120										

#### Applicable Inserts

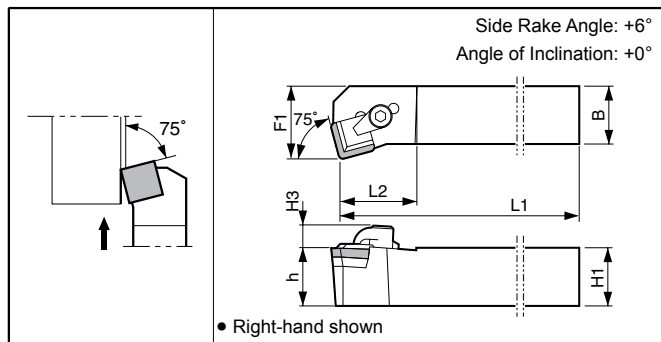
Applications	Finishing	Finishing	Finishing-Medium	Finishing	Finishing / Precision	Finishing-Medium	Medium	Non-ferrous Metals	Hard Materials	
Ref. Page	B72	B72, B73	B72, B73	B72	B72	B73	B72, B73	C22	C14	
Insert	GP	VF	HQ	R-F	R-FSF	R-Y	FN-Z	PCD	CBN	
Toolholder										
S...SVUCL08	—	VCMT0802..	VCMT0802..	—	—	—	—	VCMT0802..	VCGW0802..	
S...SVUBL11	VBMT1103..	VBMT1103..	VBMT1103..	VBGT1103..	VBET1103..	VBGT1103..	VBGT1103.. VCGT1103..	VBMT1103..	VBGW1103..	

For recommended cutting conditions, see page [E38](#)

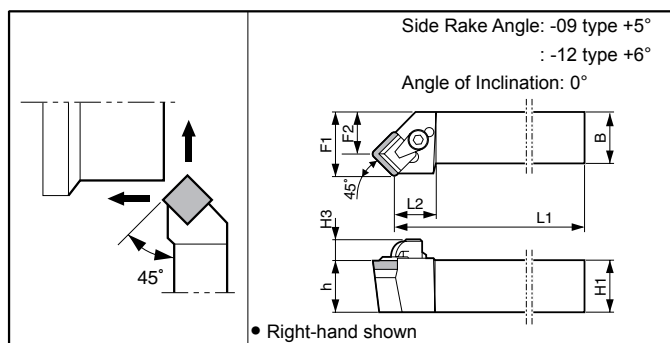
### CSBP (External)



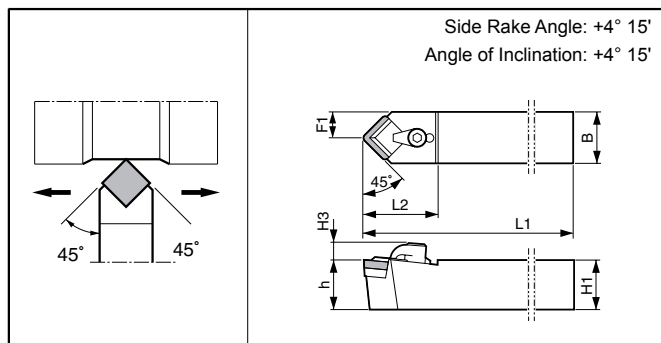
### CSKP (Facing)








### CSSP (External / Facing / Chamfering)



### CSDP (External / Chamfering)



#### Toolholder Dimensions

Description		Std.			Dimension (mm)						Standard Corner-R(R°)	Spare Parts					
		R	N	L	H1=h	H3	B	L1	L2	F1		F2	Clamp Set	Wrench	Shim	Shim Screw	Chipbreaker
																	
CSBP <sup>R/L</sup>	1212F -09N	●		●	12	7.5	12	80	23	15.7	13	0.4	CPS-2P	LW-2.5	-	-	CB-S3220
	1616H -09N	●			16	7.5	16	100	21	20	-	0.4	CPS-2P	LW-2.5	-	-	CB-S3220
CSKP <sup>R/L</sup>	2020K -12N	●			20	8.5	20	125	28	25	-	0.8	CPS-3	LW-3	KPS-42	SP3X8	CB-S4220
	2525M -12N	●			25		150	32									
CSSP <sup>R/L</sup>	1212F -09N	●		●	12	7.5	12	80	15	16	9	0.4	CPS-2P	LW-2.5	-	-	CB-S3220
	1616H -09N	●		●	16		16	100	16	20	13						
	2020K -12N	●		●	20	8.5	20	125	19	25	16	0.8	CPS-3	LW-3	KPS-42	SP3X8	CB-S4220
	2525M -12N	●		●	25		25	150		32	23						
CSDPN	2020K -12N		●		20	8.5	20	125	32	10	-	0.8	CPS-3	LW-3	KPS-42	SP3X8	CB-S4220
	2525M -12N		●		25		25	150		12.5							

• Chipbreaker is not included. Purchase separately.

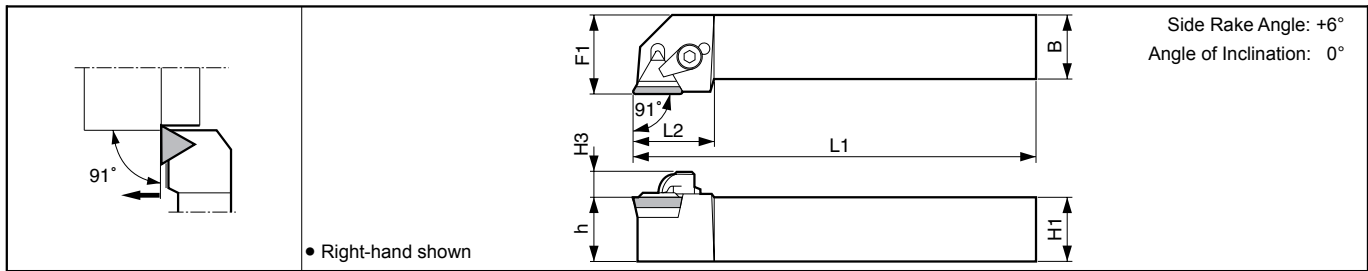
#### Applicable Inserts

Applications	Medium cutting	Medium cutting	Finishing-Medium	Cast Iron	Cast Iron	Non-ferrous Metals				
Ref. Page	B61	B61	B61	B61	B92	C23				
Insert	G	Standard	<sup>R/L</sup>	Without Chipbreaker	Ceramic	PCD				
Toolholder										
<b>CSBP<sup>R/L</sup>...-09N</b>	SPMR0903..	SPMR0903..	SPGR0903..	SPMN0903.. SPGN0903..	SPGN0903..	-				
<b>CSKP<sup>R/L</sup>...-09N</b>	SPMR0903..	SPMR0903..	SPGR0903..	SPMN0903.. SPGN0903..	SPGN0903..	-				
<b>CSKP<sup>R/L</sup>...-12N</b>	SPMR1203..	SPMR1203..	SPGR1203..	SPMN1203.. SPGN1203..	SPGN1203..	SPGN1203..				
<b>CSSP<sup>R/L</sup>...-09N</b>	SPMR0903..	SPMR0903..	SPGR0903..	SPMN0903.. SPGN0903..	SPGN0903..	-				
<b>CSSP<sup>R/L</sup>...-12N</b>	SPMR1203..	SPMR1203..	SPGR1203..	SPMN1203.. SPGN1203..	SPGN1203..	SPGN1203..				
<b>CSDPN...-12N</b>	SPMR1203..	SPMR1203..	SPGR1203..	SPMN1203.. SPGN1203..	SPGN1203..	SPGN1203..				

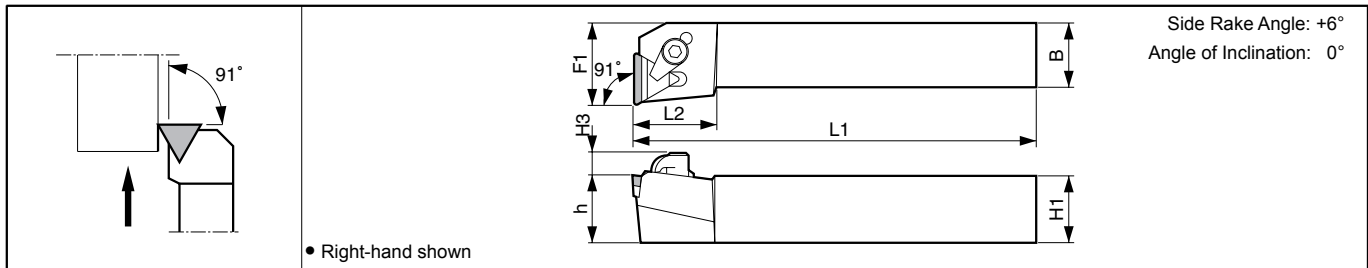
• CSKP<sup>R/L</sup>: L-hand Insert for R-hand Toolholder.  
• CSSP<sup>R/L</sup>: At External Turning, R-hand Insert for R-hand Toolholder, L-hand Insert for L-hand Toolholder.  
At Facing, L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

For recommended cutting conditions,  
see page [E38](#)

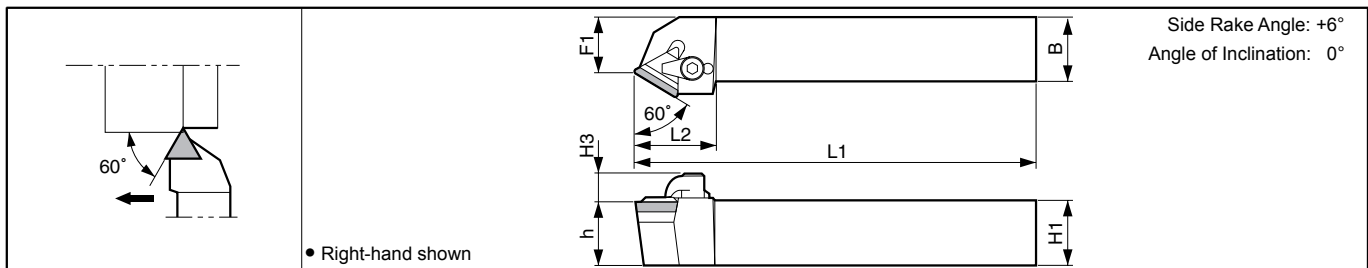
### CTGP (External)








### CTFP (Facing)



### CTTP (External / Chamfering)



### Toolholder Dimensions

Description		Std.		Dimension (mm)							Standard Corner-R(°)	Spare Parts									
		R	L	H1=h	H3	B	L1	L2	F1			Clamp Set	Wrench	Shim	Shim Screw	Chipbreaker					
																					
CTGP <sup>R/L</sup>	1212F -11N	●	●	12	8	12	80	18	16	0.4	CPS-2P	LW-2.5	-	-	CB-T2212						
	1616H -11N	●	●	16		16	100	20													
	2020K -16N	●	●	20	8.5	20	125	26	25							0.8	CPS-3	LW-3	KPT-32	SP3X8	CB-T3220
	2525M -16N	●	●	25		25	150	32													
CTFP <sup>R/L</sup>	1212F -11N	●	●	12	8	12	80	18	16	0.4	CPS-2P	LW-2.5	-	-	CB-T2212						
	1616H -11N	●	●	16		16	100	20													
	2020K -16N	●	●	20	8.5	20	125	22	25							0.8	CPS-3	LW-3	KPT-32	SP3X8	CB-T3220
	2525M -16N	●	●	25		25	150	32													
CTTP <sup>R/L</sup>	1212F -11N	●	●	12	8	12	80	22.5	9	0.4	CPS-2P	LW-2.5	-	-	CB-T2212						
	1616H -11N	●	●	16		16	100	13													
	2020K -16N	●	●	20	8.5	20	125	28	17							0.8	CPS-3	LW-3	KPT-32	SP3X8	CB-T3220
	2525M -16N	●	●	25		25	150	22													

• Chipbreaker is not included. Purchase separately.

### Applicable Inserts

Applications	Finishing	Finishing	Finishing-Medium	Medium cutting	Medium cutting	Finishing-Medium	Cast Iron	Cast Iron	Non-ferrous Metals	Hard Materials
Ref. Page	B70	B70	B70	B70	B70	B70	B70	B92	C23	C15
Insert	GP	DP	HQ	G	Standard	%/- □	Without Chipbreaker	Ceramic	PCD	CBN
Toolholder										
<b>CTGP<sup>R/L</sup>...-11N</b>	TPMR1103..	TPMR1103..	TPMR1103..	TPMR1103..	TPMR1103..	TPGR1103..	TPMN1103.. TPGN1103..	TPGN1103..	TPGN1103..	TPGN1103..
<b>CTGP<sup>R/L</sup>...-16N</b>	TPMR1603..	TPMR1603..	TPMR1603..	TPMR1603..	TPMR1603..	TPGR1603..	TPMN1603.. TPGN1603..	TPGN1603..	TPGN1603..	TPGN1603..
<b>CTFP<sup>R/L</sup>...-11N</b>	TPMR1103..	TPMR1103..	TPMR1103..	TPMR1103..	TPMR1103..	TPGR1103..	TPMN1103.. TPGN1103..	TPGN1103..	TPGN1103..	TPGN1103..
<b>CTFP<sup>R/L</sup>...-16N</b>	TPMR1603..	TPMR1603..	TPMR1603..	TPMR1603..	TPMR1603..	TPGR1603..	TPMN1603.. TPGN1603..	TPGN1603..	TPGN1603..	TPGN1603..
<b>CTTP<sup>R/L</sup>...-11N</b>	TPMR1103..	TPMR1103..	TPMR1103..	TPMR1103..	TPMR1103..	TPGR1103..	TPMN1103.. TPGN1103..	TPGN1103..	TPGN1103..	TPGN1103..
<b>CTTP<sup>R/L</sup>...-16N</b>	TPMR1603..	TPMR1603..	TPMR1603..	TPMR1603..	TPMR1603..	TPGR1603..	TPMN1603.. TPGN1603..	TPGN1603..	TPGN1603..	TPGN1603..

• CTGP<sup>R/L</sup>: L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

For recommended cutting conditions, see page [E38](#)

● : Std. Item ○ : Check Availability R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)

E



Small Tools

### Recommended Cutting Conditions - External Turning (Positive Insert)

[ap indicates radius]

ISO Classification	Workpiece Material	Hardness	Cutting Range	Application	Recommended Chipbreaker	Recommended Grade	Corner-R (r)	Lower Limit - Recommendation - Upper Limit		
								Vc (m/min)	ap (mm)	f (mm/rev)
*P	Low Carbon Steel Low Carbon Alloy  S10C,SCM415 SS400,SCr415 STKM, SP material etc.	HB ≤ 300	Precision Finishing	Continuous	FSF	PR1025	0.05	80 - 100 - 120	0.05 - 0.07 - 0.15	0.03 - 0.05 - 0.1
			Precision Finishing (Molded Chipbreaker)	Interrupted	CF	PR1025	0.2	60 - 80 - 100	0.05 - 0.1 - 0.2	0.03 - 0.1 - 0.15
			Finishing	Continuous	GF	PR1025	0.2	80 - 100 - 120	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2
			Finishing-Medium	Interrupted	GQ	PR1025	0.4	60 - 80 - 100	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2
			Low Feed & Large ap	Continuous	J, U	PR1025	0.2	60 - 80 - 100	0.3 - 1.5 - 3.0	0.03 - 0.05 - 0.1
	Medium Carbon Steel Medium Carbon Alloy  S45C SCM435 etc.	HB ≤ 330	Precision Finishing	Continuous	FSF	PR1025	0.05	80 - 100 - 120	0.05 - 0.07 - 0.15	0.03 - 0.05 - 0.1
			Precision Finishing (Molded Chipbreaker)	Interrupted	CF	PR1025	0.2	60 - 80 - 100	0.05 - 0.1 - 0.2	0.03 - 0.1 - 0.15
			Finishing	Continuous	GF	PR1025	0.2	80 - 100 - 120	0.02 - 0.05 - 0.1	0.02 - 0.05 - 0.12
			Finishing-Medium	Interrupted	GQ	PR1025	0.4	60 - 80 - 100	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2
			Low Feed & Large ap	Continuous	J, U	PR1025	0.2	60 - 80 - 100	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.2
	High Carbon Alloy  SKD11 SKD61 etc.	HB ≤ 280	Precision Finishing	Continuous	FSF	PR1025	0.05	80 - 100 - 120	0.3 - 1.5 - 3.0	0.03 - 0.05 - 0.1
			Precision Finishing (Molded Chipbreaker)	Interrupted	CF	PR1025	0.2	60 - 80 - 100	0.3 - 1.0 - 2.0	0.03 - 0.05 - 0.1
			Finishing	Continuous	GF	PR1025	0.2	80 - 100 - 120	0.5 - 2.0 - 3.5	0.02 - 0.05 - 0.1
			Finishing-Medium	Interrupted	GQ	PR1025	0.4	60 - 80 - 100	0.05 - 0.07 - 0.15	0.03 - 0.1 - 0.15
			Low Feed & Large ap	Continuous	J, U	PR1025	0.2	60 - 80 - 100	0.05 - 0.1 - 0.2	0.03 - 0.1 - 0.15
M	Stainless Steel SUS303,SUS304 SUS316,SUS420J2 etc.	HB ≤ 220	Finishing	Continuous	GF	PR1225	0.2	80 - 100 - 120	0.1 - 0.3 - 0.5	0.03 - 0.05 - 0.1
			Medium	Interrupted	GQ	PR1225	0.4	60 - 80 - 100	0.3 - 0.5 - 1.0	0.05 - 0.1 - 0.15
	Stainless Steel SUS630 etc.	HB ≤ 300	Finishing	Continuous	GF	PR1225	0.2	40 - 60 - 80	0.5 - 1.0 - 1.5	0.07 - 0.12 - 0.15
			Medium	Interrupted	GQ	PR1225	0.4	30 - 50 - 70	0.5 - 1.0 - 1.5	0.05 - 0.1 - 0.15
	Gray Cast Iron FC200,FC250, FC300 etc.	HB ≤ 250	Finishing	Continuous	Conventional	CA4505	0.4	100 - 120 - 150	0.2 - 0.5 - 1.0	0.1 - 0.15 - 0.2
			Medium	Interrupted	Conventional	CA4505	0.8	80 - 100 - 120	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.15
K	Nodular Cast Iron FCD450,FCD600 etc.	HB ≤ 270	Finishing	Continuous	Conventional	CA4515	0.4	80 - 100 - 120	0.2 - 0.5 - 1.0	0.1 - 0.15 - 0.2
			Medium	Interrupted	Conventional	CA4515	0.8	60 - 80 - 100	0.2 - 0.5 - 1.0	0.05 - 0.1 - 0.15
	Non-ferrous Metals Copper Alloy Aluminum Aluminum Alloy (Si 10% or less) etc.	HB ≤ 100	High Speed Finishing (Rainbow-colored finish)	Continuous	Without Chipbreaker	KPD001	0.2	150 - 250 - 350	0.05 - 0.1 - 0.3	0.05 - 0.1 - 0.15
			Finishing	Continuous	F, FSF	KW10	0.2	100 - 150 - 200	0.05 - 0.3 - 0.5	0.02 - 0.07 - 0.1
	Titanium Alloy Ti-6Al-4V etc.	HB ≤ 400	Precision Finishing (Rainbow-colored finish)	Continuous	Without Chipbreaker	KPD001	0.2	100 - 120 - 150	0.05 - 0.1 - 0.3	0.03 - 0.07 - 0.1
			Medium	Interrupted	FSF,USF	KW10	0.4	30 - 50 - 70	0.1 - 0.5 - 1.0	0.03 - 0.1 - 0.2
S	Heat-Resistant Alloys Inconel625 Inconel718 etc.	HB ≤ 350	Finishing	Continuous	F, U	KW10	0.4	10 - 30 - 50	0.1 - 0.3 - 0.5	0.03 - 0.05 - 0.1
			Finishing	Interrupted	Without Chipbreaker	KW10	0.8	10 - 30 - 50	0.2 - 0.5 - 0.7	0.03 - 0.05 - 0.1
	Hardened Steel Hard materials SKD11,SKD61 etc.	40 ~ 50 HRC	Finishing	Continuous	GF	PR1225	0.4	40 - 60 - 80	0.1 - 0.3 - 0.5	0.03 - 0.05 - 0.1
			Finishing	Interrupted	SE	KBN05M	0.2	80 - 120 - 150	0.1 - 0.3 - 0.5	0.02 - 0.07 - 0.1
		50 ~ 68 HRC	Finishing	Continuous	SET,MET	KBN25M	0.4	60 - 100 - 120	0.1 - 0.3 - 0.5	0.02 - 0.07 - 0.1
			Finishing	Interrupted						

\* For machining free-cutting steels, such as 11SMn (SUM), etc., use PR1005 at Vc=200m/min or less. For ap and f, refer to specs for low carbon steels.



## Recommended Cutting Conditions - Back Turning

● KTKF ● E12

Workpiece Material		MEGACOAT		PVD Coated Carbide		Carbide		Remarks
		PR1225		PR1025		KW10		
		Grooving	Traversing	Grooving	Traversing	Grooving	Traversing	
Carbon steel / Alloy steel (SxxC・SCM etc.)	Cutting speed (m/min)	60 ~ 150		★ 60 ~ 150		-		Wet
	Feed rate (mm/rev)	0.01 ~ 0.03	0.02 ~ 0.15	0.01 ~ 0.03	0.02 ~ 0.15	-		
Stainless Steel (SUS304 etc.)	Cutting speed (m/min)	★ 60 ~ 130		50 ~ 120		-		
	Feed rate (mm/rev)	0.01 ~ 0.02	0.02 ~ 0.1	0.01 ~ 0.02	0.02 ~ 0.1	-		
Cast Iron (FC・FCD etc.)	Cutting speed (m/min)	-		-		50 ~ 100		
	Feed rate (mm/rev)	-		-		0.01 ~ 0.02	0.02 ~ 0.15	
Aluminum	Cutting speed (m/min)	-		-		200 ~ 450		
	Feed rate (mm/rev)	-		-		0.01 ~ 0.03	0.02 ~ 0.15	
Brass	Cutting speed (m/min)	-		-		100 ~ 200		
	Feed rate (mm/rev)	-		-		0.01 ~ 0.05	0.02 ~ 0.2	

Workpiece Material		PCD		Remarks
		KPD001		
		Grooving	Traversing	
Carbon steel / Alloy steel (SxxC・SCM etc.)	Cutting speed (m/min)	-		Wet
	Feed rate (mm/rev)	-		
Stainless Steel (SUS304 etc.)	Cutting speed (m/min)	-		
	Feed rate (mm/rev)	-		
Cast Iron (FC・FCD etc.)	Cutting speed (m/min)	-		
	Feed rate (mm/rev)	-		
Aluminum	Cutting speed (m/min)	200 ~ 500		
	Feed rate (mm/rev)	0.01 ~ 0.03	0.02 ~ 0.12	
Brass	Cutting speed (m/min)	100 ~ 350		
	Feed rate (mm/rev)	0.01 ~ 0.05	0.02 ~ 0.15	

● ABS15, ABW15, ABW23 ● E9~E11

Workpiece Material		MEGACOAT		PVD Coated Carbide		Carbide		Remarks
		PR1225		PR1025 (PR930)		KW10		
		Grooving	Traversing	Grooving	Traversing	Grooving	Traversing	
Carbon steel / Alloy steel (SxxC・SCM etc.)	Cutting speed (m/min)	80 ~ 100		★ 80 ~ 100		-		Wet
	Feed rate (mm/rev)	0.02	0.02 ~ 0.07	0.02	0.02 ~ 0.07	-		
Stainless Steel (SUS304 etc.)	Cutting speed (m/min)	★ 40 ~ 60		30 ~ 50		-		
	Feed rate (mm/rev)	0.02	0.02 ~ 0.05	0.02	0.02 ~ 0.05	-		
Aluminum	Cutting speed (m/min)	-		-		150 ~ 200		
	Feed rate (mm/rev)	-		-		0.02	0.02 ~ 0.10	

★ : 1st Choice




E



Small Tools




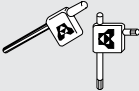
### Alternative Toolholder Reference Table for Small Tools (Back Clamp)

Conventional Toolholder						Alternative Toolholder			
Insert Shape	Description	Length (mm)	Spare Parts			Description	Length (mm)	Remarks	Ref. Page
			Anchor Pin	Lock Screw	Wrench				
									
ABS.. 40	AABSR0810K-40F	125	LPA-11	HSB4x8R	FH-2	-	-	No Alternative	-
	AABSR1010K-40F	125				AABSR1010JX-40F	120	E9	
	AABSR1212M-40F	150				AABSR1212JX-40F	120		
	AABSR1616M-40F	150				AABSR1616JX-40F	120		
ABW.. 40	AABWR0810K-40F	125	LPA-11	HSB4x8R	FH-2	-	-	No Alternative	-
	AABWR1010K-40F	125				AABWR1010JX-40F	120	E10	
	AABWR1212M-40F	150				AABWR1212JX-40F	120		
	AABWR1616M-40F	150				AABWR1616JX-40F	120		
ABW.. 50	AABWR0810K-50F	125	LPA-11	HSB4x8R	FH-2	-	-	No Alternative	-
	AABWR1010K-50F	125				AABWR1010JX-50F	120	E11	
	AABWR1212M-50F	150				AABWR1212JX-50F	120		
	AABWR1616M-50F	150				AABWR1616JX-50F	120		
CC..	ACLC <sup>®</sup> /L0810K-06F	125	LPA-11	HSB4x8R (R-hand toolholder)	FH-2	SCLC <sup>®</sup> /L0808F-06FF	120	Clamping system is different.	E21
	ACLC <sup>®</sup> /L1010K-06F	125				ACLC <sup>®</sup> /L1010JX-06FF	120	E20	
	ACLC <sup>®</sup> /L1010K-09F	125	LPA-13	HSB4x8L (L-hand toolholder)		ACLC <sup>®</sup> /L1010JX-09FF	120		
	ACLC <sup>®</sup> /L1212M-09F	150				ACLC <sup>®</sup> /L1212JX-09FF	120		
	ACLC <sup>®</sup> /L1616M-09F	150				LPA-17	ACLC <sup>®</sup> /L1616JX-09FF		120
DC..	ADJC <sup>®</sup> /L0810K-07F	125	LPA-11	HSB4x8R (R-hand toolholder)	FH-2	SDJC <sup>®</sup> /L0808F-07FF	120	Clamping system is different.	E23
	ADJC <sup>®</sup> /L1010K-07F	125				ADJC <sup>®</sup> /L1010JX-07FF	120	E22	
	ADJC <sup>®</sup> /L1010K-11F	125	LPA-13	HSB4x8L (L-hand toolholder)		ADJC <sup>®</sup> /L1010JX-11FF	120		
	ADJC <sup>®</sup> /L1212M-11F	150				ADJC <sup>®</sup> /L1212JX-11FF	120		
	ADJC <sup>®</sup> /L1616M-11F	150				LPA-17	ADJC <sup>®</sup> /L1616JX-11FF		120
	ADNCR0810K-07F	125	LPA-11	HSB4x8R	FH-2	-	-	No Alternative	-
	ADNCR1010K-07F	125				SDNCN1010JX-07	120	Clamping system is different. Neutral	E25
	ADNCR1010K-11F	125				SDNCN1010JX-11	120		
	ADNCR1212M-11F	150				SDNCN1212JX-11	120		
ADNCR1616M-11F	150	LPA-17	SDNCN1616JX-11	120					
VB..	AVJB <sup>®</sup> /L1010K-11F	125	LPF-11	HSB4x8R (R-hand toolholder) HSB4x8L (L-hand toolholder)	FH-2	AVJB <sup>®</sup> /L1010JX-11FF	120	Clamping system is different.	E28
	AVJB <sup>®</sup> /L1212M-11F	150	LPF-1113			AVJB <sup>®</sup> /L1212JX-11FF	120		
	AVJB <sup>®</sup> /L1616M-11F	150	LPF-1117			AVJB <sup>®</sup> /L1616JX-11FF	120		
	AVVB <sup>®</sup> /L1010K-11F	125	LPF-11	HSB4x8R (R-hand toolholder) HSB4x8L (L-hand toolholder)	FH-2	SVVBN1010JX-11	120	Clamping system is different. Neutral	E29
	AVVB <sup>®</sup> /L1212M-11F	150	LPF-1113			SVVBN1212JX-11	120		
	AVVB <sup>®</sup> /L1616M-11F	150	LPF-1117			SVVBN1616JX-11	120		

Note) The corresponding replacements may be different from the conventional parts in insert clamping system or insert size. Make sure their specifications referring to the catalog or other documents.





### Alternative Toolholder Reference Table for Small Tools (Screw Clamp)

Insert Shape	Conventional Toolholder				Alternative Toolholder			
	Description	Length (mm)	Spare Parts		Description	Length (mm)	Remarks	Ref. Page
			Clamp Screw	Wrench				
								
ABS.. 40	SABSR0810K-40F	125	SB-3080TR	FT-10	-	-	No Alternative	-
	SABSR1010K-40F	125			SABSR1010JX-40F	120		E9
	SABSR1212M-40F	150			SABSR1212JX-40F	120		
	SABSR1616M-40F	150			SABSR1616JX-40F	120		
ABW.. 40	SABWR0810K-40F	125	SB-3080TR	FT-10	-	-	No Alternative	-
	SABWR1010K-40F	125			SABWR1010JX-40F	120		E10
	SABWR1212M-40F	150			SABWR1212JX-40F	120		
	SABWR1616M-40F	150			SABWR1616JX-40F	120		
ABW.. 50	SABWR0810K-50F	125	SB-3080TR	FT-10	-	-	No Alternative	-
	SABWR1010K-50F	125			SABWR1010JX-50F	120		E11
	SABWR1212M-50F	150			SABWR1212JX-50F	120		
	SABWR1616M-50F	150			SABWR1616JX-50F	120		
CC..	SCAC <sup>®</sup> /L0808K-06	125	SB-2570TR	FT-8	SCLC <sup>®</sup> /L0808F-06FF	85	Cutting edge angle is different.	E21
	SCAC <sup>®</sup> /L1010K-06	125			SCLC <sup>®</sup> /L1010JX-06FF	120		
	SCAC <sup>®</sup> /L1010K-09	125	SB-4085TR	FT-15	SCLC <sup>®</sup> /L1010JX-09FF	120		
	SCAC <sup>®</sup> /L1212M-09	150			SCLC <sup>®</sup> /L1212JX-09FF	120		
	SCAC <sup>®</sup> /L1616M-09	150			SCLC <sup>®</sup> /L1616JX-09FF	120		
	SCACR1212F-09FF	85	SB-4085TR	FT-15	SCLCR1212JX-09FF	120		
	SCLC <sup>®</sup> /L0808E-06	70	SB-2570TR	FT-8	SCLC <sup>®</sup> /L0808F-06FF	85		
DC..	SDJC <sup>®</sup> /L0808F-07F	80	SB-2570TR	FT-8	SDJC <sup>®</sup> /L0808F-07FF	85		E23
	SDJC <sup>®</sup> /L1010F-07F	80			SDJC <sup>®</sup> /L1010JX-07FF	120		
	SDJC <sup>®</sup> /L1010F-11F	80	SB-4085TR	FT-15	SDJC <sup>®</sup> /L1010JX-11FF	120		
	SDJC <sup>®</sup> /L1212H-11F	100			SDJC <sup>®</sup> /L1212JX-11FF	120	Short length type	E24
	SDJC <sup>®</sup> /L1616H-11F	100			SDJC <sup>®</sup> /L1616JX-11FF	120		
	SDLC <sup>®</sup> /L1010F-07FF	80	SB-2570TR	FT-8	SDLC <sup>®</sup> /L1010JX-07FF	120		
	SDLC <sup>®</sup> /L1212H-07FF	100			SDLC <sup>®</sup> /L1212F-07FF	85		
	SDLC <sup>®</sup> /L1212JX-07FF	120			SDLC <sup>®</sup> /L1212JX-07FF	120		
	SDLC <sup>®</sup> /L1616H-07FF	100	SB-4085TR	FT-15	SDLC <sup>®</sup> /L1616JX-07FF	120		
	SDLC <sup>®</sup> /L1212H-11FF	100			SDLC <sup>®</sup> /L1212JX-11FF	120		
	SDLC <sup>®</sup> /L1616H-11FF	100			SDLC <sup>®</sup> /L1616JX-11FF	120		
	SDNC <sup>®</sup> /L1010F-07F	80	SB-2570TR	FT-8	SDNC <sup>®</sup> /L1010JX-07F	120	Insert size is different. Neutral	E25
	SDNC <sup>®</sup> /L1010F-11F	80	SB-4085TR	FT-15	SDNC <sup>®</sup> /L1010JX-07F	120		
	SDNC <sup>®</sup> /L1010F-11F	80	SB-4085TR	FT-15	SDNCN1010JX-11	120		
	SDNC <sup>®</sup> /L1212H-11F	100	SB-4085TR	FT-15	SDNCN1212F-11	85		
	SDNC <sup>®</sup> /L1212H-11F	100	SB-4085TR	FT-15	SDNCN1212JX-11	120		
	SDNC <sup>®</sup> /L1616H-11F	100	SB-4085TR	FT-15	SDNCN1616JX-11	120		
	SDNCN0808E-07	70	SB-2570TR	FT-8	SDNCN0808F-07	85		
	SDNCN1010F-07	80			SDNCN1010JX-07	120		
	SDNCN1212H-07	100			SDNCN1212JX-07	120		
	SDNCN1212H-11	100	SB-4085TR	FT-15	SDNCN1212F-11	85	Short length type	
	SDNCN1212H-11	100	SB-4085TR	FT-15	SDNCN1212JX-11	120		
	SDXC <sup>®</sup> /L1010F-07	80	SB-2570TR	FT-8	SDXC <sup>®</sup> /L1010JX-07	120		E24
	SDXC <sup>®</sup> /L1010F-11	80	SB-4085TR	FT-15	SDXC <sup>®</sup> /L1010JX-11	120		
	SDXC <sup>®</sup> /L1212H-11	100			SDXC <sup>®</sup> /L1212JX-11	120		
	SDXC <sup>®</sup> /L1616H-11	100			SDXC <sup>®</sup> /L1616JX-11	120		
DP..	SDLP <sup>®</sup> /L0808F-07F	80	SB-2570TR	FT-8	SDLP <sup>®</sup> /L0808F-07FF	85		E26
	SDLP <sup>®</sup> /L1010F-07F	80			SDLP <sup>®</sup> /L1010JX-07FF	120		
	SDLP <sup>®</sup> /L1010F-11F	80	SB-4085TR	FT-15	SDLP <sup>®</sup> /L1010JX-11FF	120		
	SDLP <sup>®</sup> /L1212H-11F	100			SDLP <sup>®</sup> /L1212JX-11FF	120		
	SDLP <sup>®</sup> /L1616H-11F	100			SDLP <sup>®</sup> /L1616JX-11FF	120		

Note) The corresponding replacements may be different from the conventional parts in insert clamping system or insert size. Make sure their specifications referring to the catalog or other documents.



### Alternative Toolholder Reference Table for Small Tools (Screw Clamp)

Insert Shape	Conventional Toolholder				Alternative Toolholder			
	Description	Length (mm)	Spare Parts		Description	Length (mm)	Remarks	Ref. Page
			Clamp Screw	Wrench				
								
VB..	SVJB <sup>®</sup> /1010F-11F	80	SB-2570TR	FT-8	SVJB <sup>®</sup> /1010JX-11FF	120		E28
	SVJB <sup>®</sup> /1212H-11F	100			SVJB <sup>®</sup> /1212JX-11FF	120		
	SVJB <sup>®</sup> /1616H-11F	100			SVJB <sup>®</sup> /1616JX-11FF	120		
	SVPB <sup>®</sup> /1010F-11	80			SVPB <sup>®</sup> /1010JX-11	120		
	SVPB <sup>®</sup> /1212H-11	100	SB-2570TR	FT-8	SVPB <sup>®</sup> /1212JX-11	120		E29
	SVPB <sup>®</sup> /1616H-11	100			SVPB <sup>®</sup> /1616JX-11	120		
	SVVBN1212H-11	100			SVVBN1212JX-11	120		
	SVLP <sup>®</sup> /1010F-08FF	80			SVLP <sup>®</sup> /1010JX-08FF	120		
VP..	SVLP <sup>®</sup> /1212H-08FF	100	SB-2050TR	FT-6	SVLP <sup>®</sup> /1212F-08FF	85	Short length type	E30
	SVLP <sup>®</sup> /1616H-08FF	100			SVLP <sup>®</sup> /1212JX-08FF	120		
	SVLP <sup>®</sup> /1010F-11F	80			SVLP <sup>®</sup> /1616JX-08FF	120		
	SVLP <sup>®</sup> /1212H-11F	100			SVLP <sup>®</sup> /1010JX-08FF	120	Insert size is different.	
	SVLP <sup>®</sup> /1616H-11F	100	SB-2570TR	FT-8	SVLP <sup>®</sup> /1212F-11FF	85	Short length type	E30
					SVLP <sup>®</sup> /1212JX-11FF	120		
					SVLP <sup>®</sup> /1616JX-11FF	120		
	SVPBR1010F-11	80	SB-2570TR	FT-8	SVPBR1010JX-11	120	Insert relief angle is different.	E29
					SVPBR1010JX-11FF		Without Offset	E31
	SVPBR1212H-11	100			SVPBR1212JX-11	120	Insert relief angle is different.	E29
					SVPBR1212JX-11FF		Without Offset	E31
	SVPBR1616H-11	100			SVPBR1616JX-11	120	Insert relief angle is different.	E29
					SVPBR1616JX-11FF		Without Offset	E31
	SVPPL1616H-11	100	SB-2570TR	FT-8	SVPBL1616JX-11	120	Insert relief angle is different.	E29

Note) The corresponding replacements may be different from the conventional parts in insert clamping system or insert size. Make sure their specifications referring to the catalog or other documents.

### Alternative Toolholder Reference Table for Small Tools (Screw Clamp)

#### Toolholders for Back Turning

Insert Shape	Conventional Toolholder				Alternative Toolholder			
	Description	Length (mm)	Spare Parts		Description	Length (mm)	Remarks	Ref. Page
			Clamp Screw	Wrench				
								
TKFB..	KTKE <sup>®</sup> /1010K-12	125	SB-4590TRWN	LTW-10S	KTKE <sup>®</sup> /1010JX-12	120		E12
	KTKE <sup>®</sup> /1212M-12	150			KTKE <sup>®</sup> /1212JX-12	120		
	KTKE <sup>®</sup> /1616M-12	150			KTKE <sup>®</sup> /1616JX-12	120		
	KTKE <sup>®</sup> /1010K-16	125			KTKE <sup>®</sup> /1010JX-16	120		
	KTKE <sup>®</sup> /1212M-16	150			KTKE <sup>®</sup> /1212JX-16	120		
	KTKE <sup>®</sup> /1616M-16	150			KTKE <sup>®</sup> /1616JX-16	120		

Note) The corresponding replacements may be different from the conventional parts in insert clamping system or insert size. Make sure their specifications referring to the catalog or other documents.