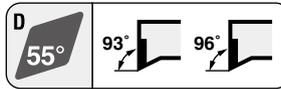
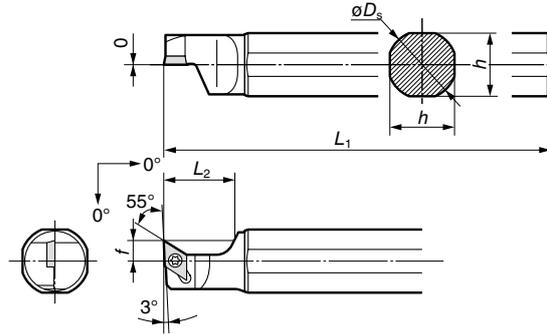
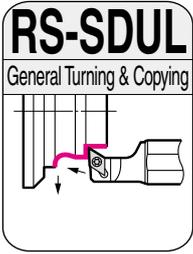


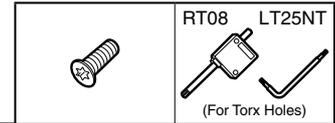
# RS-SDUL/RS-SDXL Type



## General Turning



### Parts

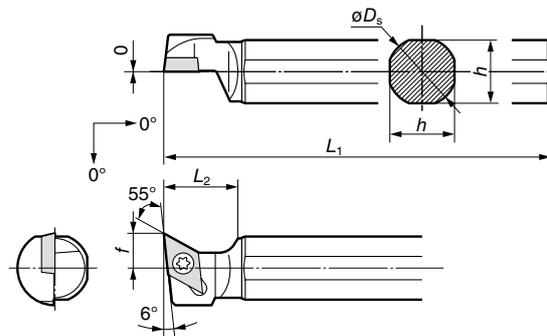
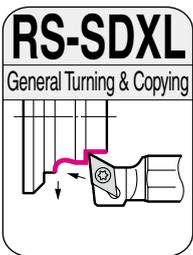


### Holder

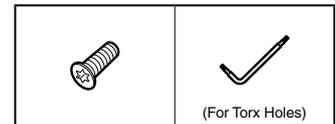
Above figures show left hand tools.

Cat. No.	Stock	Dimensions (mm)						Applicable Insert	Screw	Wrench
		$\phi D_s$	$h$	$L_1$	$f$	$L_2$				
RS14F-SDUL07	●	14	13	80	6.0	20	DC□□0702	BFTX02507NT	RT08	
RS15H-SDUL07	●	15.875	15	100	6.0	20				
RS16F-SDUL07	●	16	15	80	6.0	20				
RS16X-SDUL07	●	16	15	120	6.0	20				
RS19X-SDUL07	●	19.05	18	120	6.0	20				
RS20X-SDUL07S	●	20	19	95	6.0	20				
RS20X-SDUL07	●	20	19	120	6.0	20				
RS22X-SDUL07	●	22	21	120	6.0	20	DC□□11T3	BFTX0410NT	LT25NT	
RS19X-SDUL11	●	19.05	18	120	10.0	20				
RS20X-SDUL11S	●	20	19	95	10.0	20				
RS20X-SDUL11	●	20	19	120	10.0	20				
RS22X-SDUL11	●	22	21	120	10.0	20				
RS25X-SDUL11	●	25	24	120	10.0	20				
RS25M-SDUL11	●	25.4	24	150	10.0	20				

\* Right handed or neutral handed inserts are applicable. [Insert selection](#) From D20



### Parts



### Holder

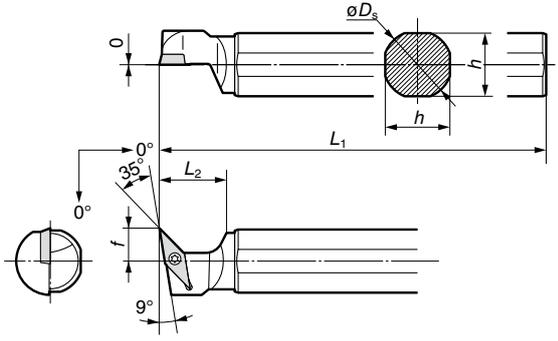
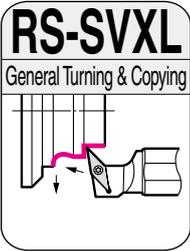
Above figures show left hand tools.

Cat. No.	Stock	Dimensions (mm)						Applicable Insert	Screw	Wrench
		$\phi D_s$	$h$	$L_1$	$f$	$L_2$				
RS19X-SDXL11	●	19.05	18	120	10.0	20	DC□□11T3	BFTX0410NT	LT25NT	
RS20X-SDXL11S	●	20	19	95	10.0	20				
RS20X-SDXL11	●	20	19	120	10.0	20				
RS25X-SDXL11	●	25	24	120	10.0	20				

\* Right handed or neutral handed inserts are applicable. [Insert selection](#) From D20



## General Turning



### Parts

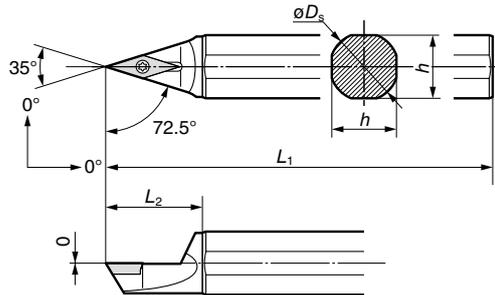
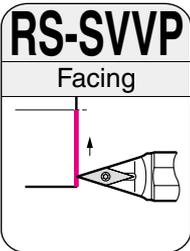
	(For Torx Holes)
Screw	Wrench
BFTX02507NT	RT08

### Holder

Above figures show left hand tools.

Cat. No.	Stock	Dimensions (mm)						Applicable Insert
		$\phi D_s$	$h$	$L_1$	$f$	$L_2$		
RS15H-SVXL11	●	15.875	15	100	10.0	20	VC□□1103	
RS19X-SVXL11	●	19.05	18	120	10.0	20		
RS20X-SVXL11S	●	20	19	95	10.0	20		
RS20X-SVXL11	●	20	19	120	10.0	20		
RS22X-SVXL11	●	22	21	120	10.0	20		
RS25X-SVXL11	●	25.4	24	150	10.0	20		

\* Right handed or neutral handed inserts are applicable. [Insert selection](#) From D32



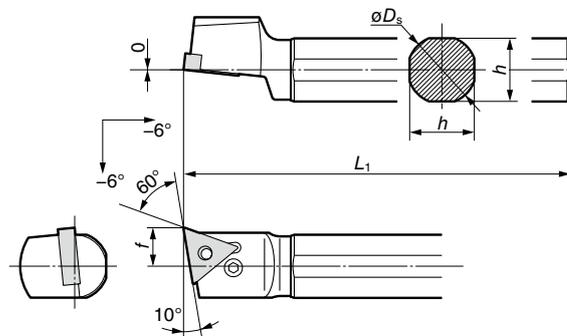
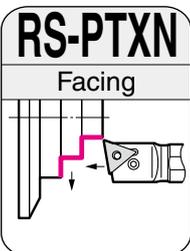
### Parts

	(For Torx Holes)
Screw	Wrench
BFTX02507NT	RT08

### Holder

Cat. No.	Stock	Dimensions (mm)						Applicable Insert
		$\phi D_s$	$h$	$L_1$	$f$	$L_2$		
RS19X-SVVPN11	●	19.05	18	120	9.0	27	VP□□1103	
RS22X-SVVPN11	●	22	21	120	10.5	27		

[Insert selection](#) D33



### Parts

		(For Hexagonal Holes)
Lever Pin	Screw	Wrench
LCL33NT	LCS33NT	LH020NT

### Holder

Above figures show left hand tools.

Cat. No.	Stock	Dimensions (mm)						Applicable Insert
		$\phi D_s$	$h$	$L_1$	$f$			
RS19X-PTXNL16	●	19.05	18	120	11.0		TN□□1604	
RS20X-PTXNL16	●	20	19	120	11.0			
RS25M-PTXNL16	●	25.4	24	150	13.0			

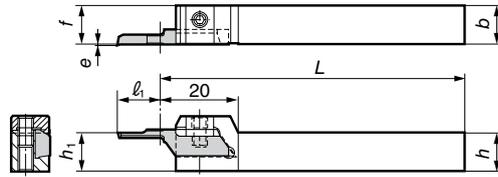
\* Right handed or neutral handed inserts are applicable. [Insert selection](#) From B54

# SEC-MINI Boring Tool Holders CKB Type



Sumi Small

## Square Shank

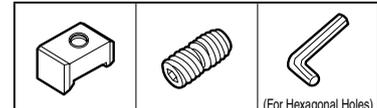


Please refer to facing page E15 for  $e$ ,  $l_1$  dimensions.

### Holder

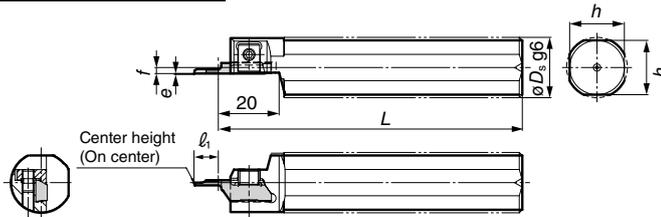
Cat. No.	Stock	Dimensions (mm)					Clamp	Double Screw	Wrench
		$h$	$b$	$L$	$f$	$h_1$			
CKB R1010-16	●	10	10	100	10	10	CKBW16	WB4-8	LH020
CKB R1212-16	●	12	12	125	12	12			
CKB R1616-16	●	16	16	125	16	16			
CKB R2020-16	●	20	20	125	20	20			
CKB R2525-16	●	25	25	150	25	25			

### Spare Parts



## Round Shank (Offset Small)

Sumi Small



Please refer to facing page E15 for  $e$ ,  $l_1$  dimensions.

### Holder

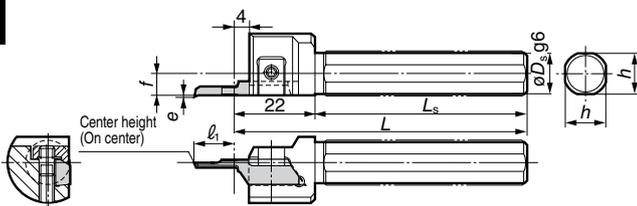
Cat. No.	Stock	Dimensions (mm)					Clamp	Double Screw	Wrench
		$\phi D_s$	$h$	$L$	$f$				
S1905H-CKB RS-16	●	19.05	17	100	2		CKBW16	WB4-8	LH020
S20H-CKB RS-16	●	20	18	100	2				
S22K-CKB RS-16	●	22	19	125	2				
S25K-CKB RS-16	●	25	23	125	2				
S254K-CKB RS-16	●	25.4	23	125	2				

### Spare Parts



## Round Shank

Sumi Small

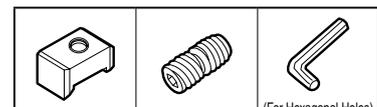


Please refer to facing page E15 for  $e$ ,  $l_1$  dimensions.

### Holder

Cat. No.	Stock	Dimensions (mm)					Clamp	Double Screw	Wrench
		$\phi D_s$	$h$	$L$	$L_s$	$f$			
S10F-CKB R-16	●	10	9	80	58	5	CKBW16	WB4-8	LH020
S12F-CKB R-16	●	12	11	80	58	6			
S16H-CKB R-16	●	16	15	100	78	8			
S19K-CKB R-16	●	19.05	17	125	103	8			
S20K-CKB R-16	●	20	18	125	103	10			

### Spare Parts



# SEC-MINI Boring Tool Holders

## CKB Type

### ■ Insert

#### ● KBMX Type, KBMX-T Type (Boring)

Cat. No.	ACZ310	Min. Bore Dia. $\phi D_m$	Dimensions (mm)				
			F	e	$r_\epsilon$	$l$	$l_1$
KBMX R0103-05	●	1.0	4.00	0.20	0.05	20.5	3
KBMX R0103-20	●	1.0	4.00	0.20	0.20	20.5	3
KBMX R01506-05	●	1.5	4.05	0.25	0.05	23.5	6
KBMX R01506-20	●	1.5	4.05	0.25	0.20	23.5	6
KBMX R0206-05	●	2.0	4.05	0.25	0.05	23.5	6
KBMX R0206-20	●	2.0	4.05	0.25	0.20	23.5	6
KBMX R0311-05	●	3.0	4.10	0.30	0.05	28.5	11
KBMX R0311-20	●	3.0	4.10	0.30	0.20	28.5	11
KBMX R0411-05	●	4.0	4.30	0.50	0.05	28.5	11
KBMX R0411-20	●	4.0	4.30	0.50	0.20	28.5	11
KBMX R0420-05	●	4.0	4.30	0.50	0.05	37.5	20
KBMX R0420-20	●	4.0	4.30	0.50	0.20	37.5	20
KBMX R0511-05	●	5.0	4.50	0.70	0.05	28.5	11
KBMX R0511-20	●	5.0	4.50	0.70	0.20	28.5	11
KBMX R0520-05	●	5.0	4.50	0.70	0.05	37.5	20
KBMX R0520-20	●	5.0	4.50	0.70	0.20	37.5	20

Cat. No.	ACZ160	Min. Bore Dia. $\phi D_m$	Dimensions (mm)				
			F	e	$r_\epsilon$	$l$	$l_1$
KBMX R0103-05T	●	1.0	4.00	0.20	0.05	20.5	3
KBMX R0103-20T	●	1.0	4.00	0.20	0.20	20.5	3
KBMX R01506-05T	●	1.5	4.05	0.25	0.05	23.5	6
KBMX R01506-20T	●	1.5	4.05	0.25	0.20	23.5	6
KBMX R0206-05T	●	2.0	4.05	0.25	0.05	23.5	6
KBMX R0206-20T	●	2.0	4.05	0.25	0.20	23.5	6
KBMX R0311-05T	●	3.0	4.10	0.30	0.05	28.5	11
KBMX R0311-20T	●	3.0	4.10	0.30	0.20	28.5	11
KBMX R0411-05T	●	4.0	4.30	0.50	0.05	28.5	11
KBMX R0411-20T	●	4.0	4.30	0.50	0.20	28.5	11
KBMX R0511-05T	●	5.0	4.50	0.70	0.05	28.5	11
KBMX R0511-20T	●	5.0	4.50	0.70	0.20	28.5	11

#### ● KBMZ Type (Back Boring)

Cat. No.	ACZ310	Min. Bore Dia. $\phi D_m$	Dimensions (mm)				
			F	e	$r_\epsilon$	$l$	$l_1$
KBMZ R0411-05	●	4.0	5.10	1.3	0.05	28.5	9
KBMZ R0411-20	●	4.0	5.10	1.3	0.20	28.5	9
KBMZ R0511-05	●	5.0	5.10	1.3	0.05	28.5	9
KBMZ R0511-20	●	5.0	5.10	1.3	0.20	28.5	9

#### ● KBMG Type (Internal Grooving)

Cat. No.	ACZ310	Min. Bore Dia. $\phi D_m$	Dimensions (mm)				
			F	e	w	$r_\epsilon$	$l$
KBMG R0411-05	●	4.0	4.90	1.1	1.00	0.05	28.5
KBMG R0411-10	●	4.0	4.90	1.1	2.00	0.10	28.5
KBMG R0511-05	●	5.0	5.10	1.3	1.00	0.05	28.5
KBMG R0511-10	●	5.0	5.10	1.3	2.00	0.10	28.5

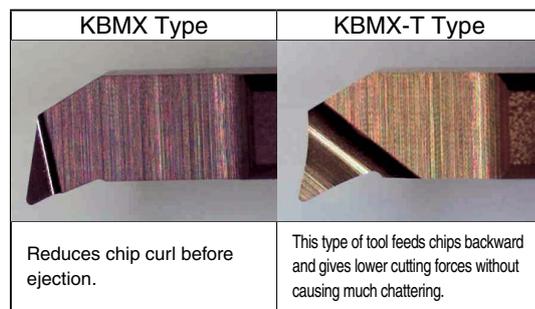
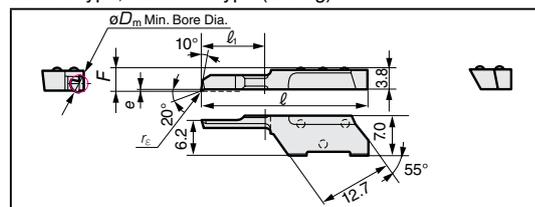
#### ● KBMF Type (End Grooving)

Cat. No.	ACZ160	Min. Bore Dia. $\phi D_m$	Dimensions (mm)					Max. groove depth (mm)
			F	e	w	$r_\epsilon$	$l$	
KBMF R0615-05	●	6.0	4.0	0.2	1.5	0.05	21.8	4.0
KBMF R0620-05	●	6.0	4.0	0.2	2.0	0.05	21.8	4.0
KBMF R0630-05	●	6.0	4.0	0.2	3.0	0.05	21.8	4.0

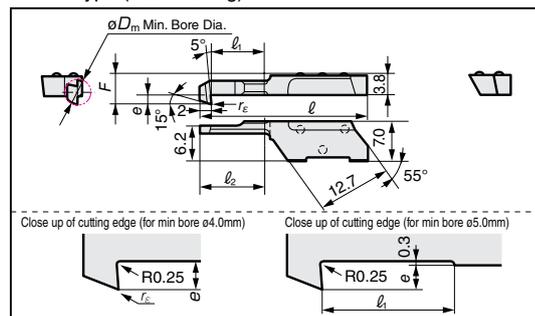
#### ● KBMX Type (SUMIDIA / Boring)

Cat. No.	DAE200	Min. Bore Dia. $\phi D_m$	Dimensions (mm)				
			F	e	$r_\epsilon$	$l$	$l_1$
KBMX R0311-10	●	3.0	4.1	0.3	0.1	28.5	11
KBMX R0411-10	●	4.0	4.3	0.5	0.1	28.5	11
KBMX R0511-10	●	5.0	4.5	0.7	0.1	28.5	11

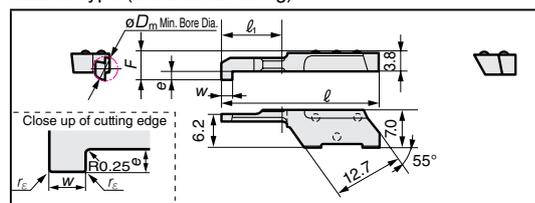
#### KBMX Type, KBMX-T Type (Boring)



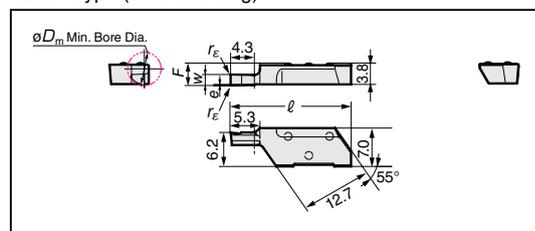
#### KBMZ Type (Back Boring)



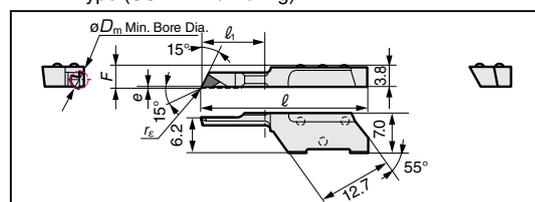
#### KBMG Type (Internal Grooving)



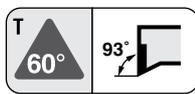
#### KBMF Type (End Grooving)



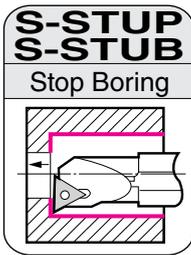
#### KBMX Type (SUMIDIA / Boring)



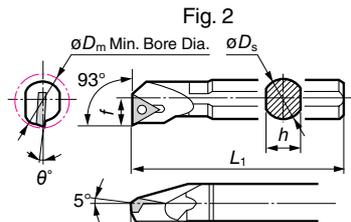
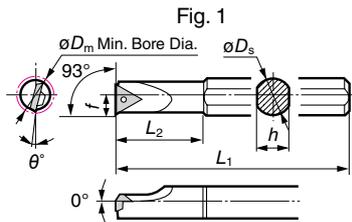
# SEC-Boring Bars S-STUP/S-STUB/B-STUP Type



## Finish-Medium Cut



Steel

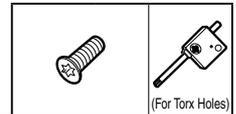


■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

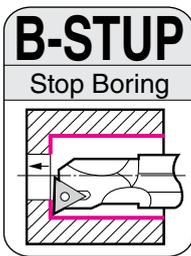
Above figures show right hand tools.

Sumi Small

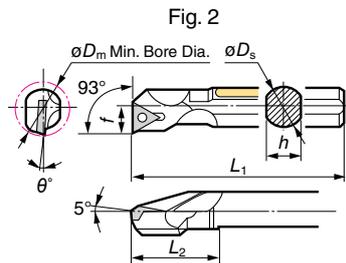
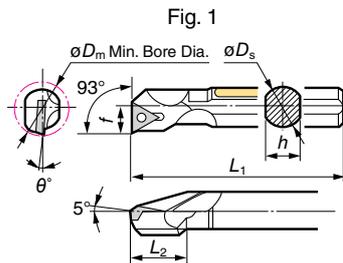
### ■ Spare Parts



Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)							Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
			R	L	Min. Bore Dia. øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	L <sub>2</sub>	θ°					
Steel	S08H-STUP R/L0601-08	BBPT-508 R/L	●	●	8	8	7	100	4.0	30	-12	1	TP □□0601□□	BFTX0204A	0.5	TRX06
	S08H-STUP R/L0802-10	BBPT-608 R/L	●	●	10	8	7	100	5.0	13	-10	1	TP □□0802□□	BFTX02505N	1.1	TRX08
	S08H-STUP R/L0902-10	—	●	●	10	8	7	100	5.0	13	-10	2	TP □□0902□□	BFTX0306A	2.0	TRX10
	S10K-STUP R/L1103-12	BBPT-210 R/L	●	●	12	10	9	125	6.0	15	-8	2	TP □□1103□□	BFTX0307A	2.0	
	S12M-STUP R/L1103-14	BBPT-212 R/L14	●	●	14	12	11	150	7.0	17	-7			BFTX0306A	2.0	
	S12M-STUP R/L1103-16	BBPT-212 R/L	●	●	16	12	11	150	8.0	17	-6			BFTX0307A	2.0	
	S16R-STUP R/L1103-18	BBPT-216 R/L18	●	●	18	16	15	200	9.0	18	-4	2	TP □□1103□□	BFTX0307A	2.0	
	S16R-STUP R/L1103-20	BBPT-216 R/L	●	●	20	16	15	200	10.0	18	-2			BFTX0407A	2.0	
	S20S-STUP R/L1103-22	BBPT-220 R/L	●	●	22	20	18	250	11.0	18	-2			BFTX0409N	3.4	TRX15
	S25T-STUP R/L1103-28	BBPT-225 R/L	●	●	28	25	22	300	14.0	27	-2	BFTX0410A				
	S20S-STUP R/L1603-22	—	●	●	22	20	18	250	11.0	18	-3	2	TP □□1603□□	BFTX0407A	3.4	
	S25T-STUP R/L1603-28	—	●	●	28	25	22	300	14.0	18	-1			BFTX0409N	3.4	TRX15
	S20S-STUP R/L1604-22	—	●	●	22	20	18	250	12.5	18	-5			BFTX0410A		
	S20S-STUP R/L1604-25	BBPT-320 R/L	▲	▲	25	20	18	250	12.5	18	-3	2	TP □□1604□□	BFTX0410A	3.4	
	S25T-STUP R/L1604-28	BBPT-325 R/L	●	●	28	25	22	300	14.0	18	-2					



Anti-vibration



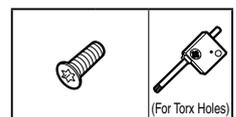
■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

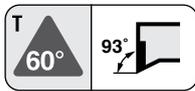
SumiTurn Bar

Sumi Small

### ■ Spare Parts

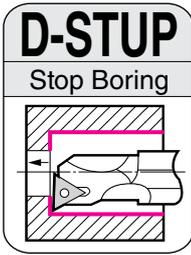


Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)							Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
			R	L	Min. Bore Dia. øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	L <sub>2</sub>	θ°					
Anti-vibration	B08H-STUP R/L0802-10	XBPT-608 R/L	●	●	10	8	7	100	5.0	13	-10	1	TP □□0802□□	BFTX0204A	0.5	TRX06
	B10K-STUP R/L1103-12	XBPT-210 R/L	●	●	12	10	9	125	6.0	15	-8	1	TP □□1103□□	BFTX0306A	2.0	TRX10
	B12M-STUP R/L1103-14	XBPT-212 R/L14	●	●	14	12	11	150	7.0	17	-7			BFTX0307A	2.0	
	B12M-STUP R/L1103-16	XBPT-212 R/L	●	●	16	12	11	150	8.0	17	-6			BFTX0306A	2.0	
	B16R-STUP R/L1103-18	XBPT-216 R/L18	●	●	18	16	15	200	9.0	18	-4	2	TP □□1103□□	BFTX0307A	2.0	
	B16R-STUP R/L1103-20	XBPT-216 R/L	●	●	20	16	15	200	10.0	18	-2			BFTX0407A	2.0	
	B20S-STUP R/L1103-22	XBPT-220 R/L	●	●	22	20	18	250	11.0	18	-2			BFTX0409N	2.0	TRX15
	B25T-STUP R/L1103-28	XBPT-225 R/L	●	●	28	25	22	300	14.0	18	-2	BFTX0410A				
	B32T-STUP R/L1103-40	XBPT-232 R/L	●	●	40	32	30	300	20.0	50	-2	2	TP □□1604□□	BFTX0410A	3.4	
	B20S-STUP R/L1604-25	XBPT-320 R/L	●	●	25	20	18	250	12.5	18	-3			BFTX0410A	3.4	TRX15
	B25T-STUP R/L1604-28	XBPT-325 R/L	●	●	28	25	22	300	14.0	18	-2					
B32T-STUP R/L1604-40	XBPT-332 R/L	●	●	40	32	30	300	20.0	53	-2	2					

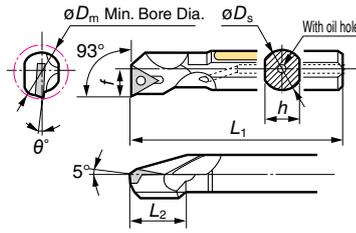


# SEC-Boring Bars D-STUP/C-STUP/C-STUB Type

## Finish-Medium Cut



Anti-vibration with oil hole



### Spare Parts

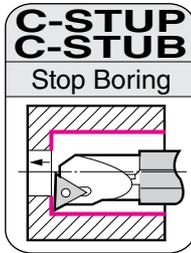


(For Torx Holes)

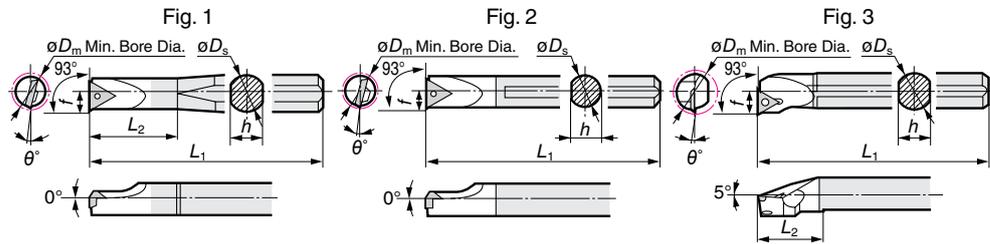
■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)							Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
			R	L	$\theta D_m$	$\theta D_s$	$h$	$L_1$	$f$	$L_2$	$\theta^\circ$				
Anti-vibration with oil hole	D12M-STUP R/L1103-14	XBPT-212 R/L H14	●	●	14	12	11	150	7	17	-7	TP □□1103□□	BFTX0306A	2.0	TRX10
	D16R-STUP R/L1103-18	XBPT-216 R/L H18	●	●	18	16	15	200	9	18	-4		BFTX0307A	2.0	
	D20S-STUP R/L1103-22	XBPT-220 R/L H22	●	●	22	20	18	250	11	18	-2		BFTX0307A	2.0	



Carbide  
Carbide Long  
Carbide Short



Above figures show right hand tools.

### Spare Parts



(For Torx Holes)

■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)							Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
			R	L	$\theta D_m$	$\theta D_s$	$h$	$L_1$	$f$	$L_2$	$\theta^\circ$					
Carbide Standard Length	C08H-STUB R/L0601-08	WBPT-508 RS/LS	●	●	8	8	7.0	100	4.0	50	-12	1	TB □□0601□□	BFTX0204A	0.5	TRX06
	C08H-STUB R/L0601-08K	WBPT-508 RSK/LSK *	●	●	8	6	5.7	100	4.0	—	-12	2		BFTX0204N	0.5	
	C08H-STUP R/L0802-10	WBPT-608 RS/LS	●	●	10	8	7.0	100	5.0	18	-10	3	TP □□0802□□	BFTX0204A	0.5	TRX06
	C10K-STUP R/L1103-12	WBPT-210 RS/LS	●	●	12	10	9.0	125	6.0	19	-8	3	TP □□1103□□	BFTX0306A	2.0	TRX10
	C12M-STUP R/L1103-14	WBPT-212 RS/LS14	●	●	14	12	11.0	150	7.0	25	-7			BFTX0307A	2.0	
	C12M-STUP R/L1103-16	WBPT-212 RS/LS	●	●	16	12	11.0	150	8.0	25	-6			BFTX0306A	2.0	
	C16R-STUP R/L1103-18	WBPT-216 RS/LS18	●	●	18	16	15.0	200	9.0	30	-4			BFTX0306A	2.0	
	C16R-STUP R/L1103-20	WBPT-216 RS/LS	●	●	20	16	15.0	200	10.0	30	-2			BFTX0307A	2.0	
	C20S-STUP R/L1103-22	WBPT-220 RS/LS	●	●	22	20	18.0	250	11.0	35	-2			BFTX0307A	2.0	
C20S-STUP R/L1604-25	WBPT-320 RS/LS	●	●	25	20	18.0	250	12.5	35	-3	3	TP □□1604□□	BFTX0410A	3.4	TRX15	
Carbide Long Type	C08M-STUB R/L0601-08	WBPT-508 R/L	●	●	8	8	7.0	150	4.0	50	-12	1	TB □□0601□□	BFTX0204A	0.5	TRX06
	C08M-STUP R/L0802-10	WBPT-608 R/L	●	●	10	8	7.0	150	5.0	18	-10	3	TP □□0802□□	BFTX0204A	0.5	TRX06
	C10Q-STUP R/L1103-12	WBPT-210 R/L	●	●	12	10	9.0	180	6.0	19	-8	3	TP □□1103□□	BFTX0306A	2.0	TRX10
	C12R-STUP R/L1103-14	WBPT-212 R/L14	●	●	14	12	11.0	200	7.0	25	-7			BFTX0307A	2.0	
	C16S-STUP R/L1103-18	WBPT-216 R/L18	●	●	18	16	15.0	250	9.0	30	-4			BFTX0306A	2.0	
	C16S-STUP R/L1103-20	WBPT-216 R/L	●	●	20	16	15.0	250	10.0	30	-2			BFTX0307A	2.0	
Carbide Short Type	C16M-STUP R/L1103-18	WBPT-216 RE/LE18	●	●	18	16	15.0	150	9.0	30	-4	3	TP □□1103□□	BFTX0306A	2.0	TRX10
	C16M-STUP R/L1103-20	WBPT-216 RE/LE	●	●	20	16	15.0	150	10.0	30	-2			BFTX0307A	2.0	
	C20M-STUP R/L1103-22	WBPT-220 RE/LE	●	●	22	20	18.0	150	11.0	35	-2	3	TP □□1604□□	BFTX0410A	3.4	TRX15
	C20M-STUP R/L1604-25	WBPT-320 RE/LE	●	●	25	20	18.0	150	12.5	35	-3			BFTX0410A	3.4	

C08H-STUB R/L0601-08K requires the sold separately sleeve HBB616.

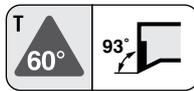
The actual product marked with an asterisk (\*) is provided with ISO Cat. No.

Sleeve	Stock
HBB 616	●

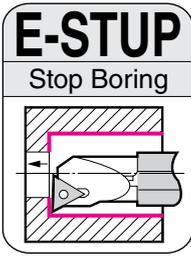
Adaptor sleeve is optional

E Boring Bars

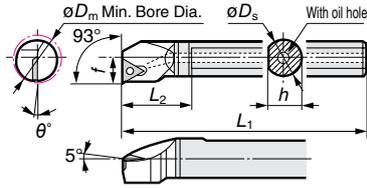
# SEC-Boring Bars E-STUP Type



## Finish-Medium Cut



Carbide  
Oil Hole



Sumi Small

■ Holder Right handed toolholders are applicable with left handed or neutral inserts.

### ■ Spare Parts

	(For Torx Holes)

Shank	Cat. No.	Conventional Cat. No.	Stock	Min. Bore Dia.	Dimensions (mm)						Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
					R	$\theta D_m$	$\theta D_s$	h	$L_1$	f				
Carbide with oil hole	<b>E08H-STUP R0802-10</b>	WBPT-608 RH	●	10	8	7.5	100	5	18	-10	TP □□0802○○	BFTX0204A	0.5	TRX06
	<b>E10K-STUP R1103-12</b>	WBPT-210 RH	●	12	10	9.5	125	6	19	-8	TP □□1103○○	BFTX0306A	2.0	TRX10
	<b>E12M-STUP R1103-14</b>	WBPT-212 RH14	●	14	12	11.5	150	7	25	-7				
	<b>E12M-STUP R1103-16</b>	WBPT-212 RH	●	16	12	11.5	150	8	25	-6				
	<b>E16R-STUP R1103-18</b>	WBPT-216 RH18	●	18	16	15.5	200	9	30	-4				
	<b>E16R-STUP R1103-20</b>	WBPT-216 RH	●	20	16	15.5	200	10	30	-2				



Boring Bars



# SEC-Boring Bars STUP/STUB Type

■ Insert ( Coated / Cermet / Carbide)

## ● 5°/11° Relief G-Class

TBGT TPGT FW		Stock					Dimensions (mm)		
		T1500Z	T2000Z	T1000A	T1500A	T1200A	Inscribed circle	Thickness	Nose Radius
Cat. No.									
TBGT 060102R-FW		●			●	▲	3.97	1.59	0.2
060102L-FW		●	▲		●	▲			0.2
060104R-FW		●			●	▲			0.4
060104L-FW		●	▲		●	▲			0.4
TPGT 080202R-FW		●		●	●	▲	4.76	2.38	0.2
080202L-FW		●	▲	●	●	▲			0.2
080204R-FW		●		●	●	▲			0.4
080204L-FW		●	▲	●	●	▲			0.4

## ● 5°/11° Relief G-Class

TBGT TPGT W		Stock								Dimensions (mm)				
		AC530U	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	GT0E	Inscribed circle	Thickness	Nose Radius
Cat. No.														
TBGT 060102R-W		●	●		▲	●	●	▲	●	●	●	3.97	1.59	0.2
060102L-W		●	●		▲	●	●	▲	●	●	0.2			
060104R-W		●	●		▲	●	●	▲	●	●	0.4			
060104L-W		●	●		▲	●	●	▲	●	●	0.4			
TPGT 080202R-W		●	●		▲	●	●	▲	●	●	4.76	2.38	0.2	
080202L-W		●	●		▲	●	●	▲	●	●			0.2	
080204R-W		●	●		▲	●	●	▲	●	●			0.4	
080204L-W		●	●		▲	●	●	▲	●	●			0.4	

TBGT TPGT FX		Stock						Dimensions (mm)		
		AC510U	AC520U	AC530U	T1000A	T1500A	T1200A	Inscribed circle	Thickness	Nose Radius
Cat. No.										
TBGT 060102R-FX		●		●				3.97	1.59	0.2
060102L-FX		●		●						0.2
060104R-FX		●		●						0.4
060104L-FX		●		●						0.4
TPGT 080202R-FX			●	●				4.76	2.38	0.2
080202L-FX			●	●						0.2
080204R-FX			●	●						0.4
080204L-FX			●	●						0.4
TPGT 090204L-FX					●	●	▲	5.56	2.38	0.4
TPGT 110302R-FX			●	●						0.2
110302L-FX			●	●				6.35	3.18	0.2
110304R-FX			●	●						0.4
110304L-FX			●	●						0.4
110308R-FX			●	●						0.8
110308L-FX			●	●				0.8		

TBGW TPGW —		Stock						Dimensions (mm)		
		AC503U	AC510U	T1000A	T1500A	T110A	T1200A	GT0E	Inscribed circle	Thickness
Cat. No.										
TBGW 060102								3.97	1.59	0.2
060104										0.4
TPGW 080202				●	●		▲	4.76	2.38	0.2
TPGW 110302		●								0.2
110304		●	●	●	●	▲	●	6.35	3.18	0.4
110308		●	●	●	●	▲	●			0.8
TPGW 160404			●				●	9.525	4.76	0.4

TBGT TPGT FY		Stock							Dimensions (mm)					
		AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T1200A	Inscribed circle	Thickness	Nose Radius	
Cat. No.														
TBGT 060101R-FY			●								3.97	1.59	0.1	
060101L-FY			●										0.1	
060102R-FY			●					●	▲	0.2				
060102L-FY			●					●	▲	0.2				
060104R-FY			●					●	▲	0.4				
060104L-FY			●					●	▲	0.4				
TPGT 0802003R-FY		●	●							4.76	2.38	0.03		
0802003L-FY		●	●									0.03		
080201R-FY		●	●									0.1		
080201L-FY		●	●									0.1		
080202R-FY		●	●				●	▲	0.2					
080202L-FY		●	●				●	▲	0.2					
080204R-FY		●	●				●	▲	0.4					
080204L-FY		●	●				●	▲	0.4					
TPGT 1103003R-FY		●	●									6.35	3.18	0.03
1103003L-FY		●	●											0.03
110301R-FY		●	●							0.1				
110301L-FY		●	●							0.1				
110302R-FY		●	●			▲	●	▲	0.2					
110302L-FY		●	●			▲	●	▲	0.2					
110304R-FY		●	●			▲	●	▲	0.4					
110304L-FY		●	●			▲	●	▲	0.4					
110308R-FY		●	●				●	▲	0.8					
110308L-FY		●	●				●	▲	0.8					

TBGT TPGT AY		Stock								Dimensions (mm)		
		H1								Inscribed circle	Thickness	Nose Radius
Cat. No.												
TBGT 060101R-AY		●								3.97	1.59	0.1
060101L-AY		●										0.1
060102R-AY		●										0.2
060102L-AY		●										0.2
060104R-AY		●										0.4
060104L-AY		●										0.4
TPGT 080201R-AY		●								4.76	2.38	0.1
080201L-AY		●										0.1
080202R-AY		●										0.2
080202L-AY		●										0.2
080204R-AY		●										0.4
080204L-AY		●										0.4
TPGT 110301R-AY		●								6.35	3.18	0.1
110301L-AY		●										0.1
110302R-AY		●										0.2
110302L-AY		●										0.2
110304R-AY		●										0.4
110304L-AY		●										0.4

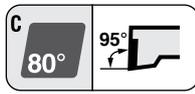
## ● 11° Relief G-Class

TPGT SD		Stock								Dimensions (mm)		
		AC510U	AC530U	T1500Z	T3000Z	T2000Z	T1000A	T1500A	ST10P	GT0E	Inscribed circle	Thickness
Cat. No.												
TPGT 110302R-SD			●							6.35	3.18	0.2
110302L-SD			●									0.2
110304R-SD			●									0.4
110304L-SD			●									0.4
110308R-SD			●									0.8
110308L-SD			●									0.8
TPGT 160402R-SD										9.525	4.76	0.2
160402L-SD												0.2
160404R-SD												0.4
160404L-SD												0.4
160408R-SD												0.8
160408L-SD												0.8

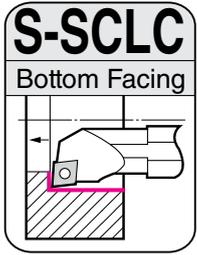
▲ mark : To be replaced by new item (Please confirm stock availability)

Boring Bars

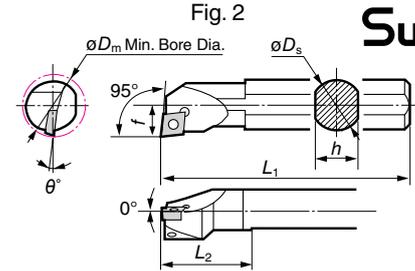
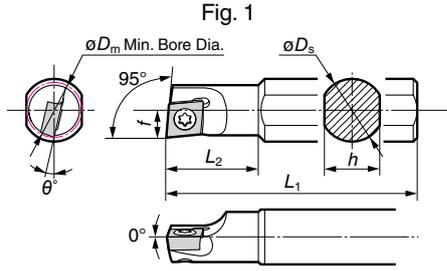
# SEC-Boring Bars S-SCLC/B-SCLC Type



## Finish-Medium Cut



**Steel**



**Sumi Small**

### ■ Spare Parts

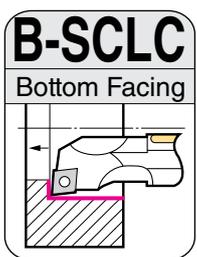
**■ Holder** Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

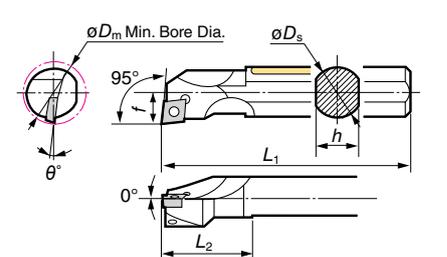
Shank	Cat. No.	Conventional Cat. No.	Stock		Min. Bore Dia. øD <sub>m</sub>	Dimensions (mm)						Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
			R	L		øD <sub>s</sub>	h	L <sub>1</sub>	f	L <sub>2</sub>	θ°					
Steel	S08H-SCLC R/L03X1-05	—	●	●	5	8	7	100	2.5	24	-15	1	CC □□03X1□□	BFTX016033	0.2	TRX06
	S08H-SCLC R/L03X1-06	—	●	●	6	8	7	100	3.0	28	-13	1	CC □□04X1□□	BFTX0203N	0.5	
	S08H-SCLC R/L04X1-07	—	●	●	7	8	7	100	3.5	32	-13	1	CC □□04X1□□	BFTX0203N	0.5	
	S08H-SCLC R/L04X1-08	—	●	●	8	8	7	100	4.0	37	-11	1	CC □□04X1□□	BFTX0203N	0.5	
	S08H-SCLC R/L0602-10	S08H-SCLC R/L06	●	●	10	8	7	100	5.5	19	-13	2	CC □□0602□□	BFTX02505N	1.1	TRX08
	S10K-SCLC R/L0602-12	S10K-SCLC R/L06-12	●	●	12	10	9	125	6.0	21	-12		CC □□0602□□	BFTX02506N	1.5	
	S10K-SCLC R/L0602-13	S10K-SCLC R/L06	▲	▲	13	10	9	125	7.0	21	-12		CC □□0602□□	BFTX02506N	1.5	
	S12M-SCLC R/L0602-14	S12M-SCLC R/L06-14	●	●	14	12	11	150	7.0	25	-10	2	CC □□09T3□□	BFTX0407N	3.0	TRX15
	S12M-SCLC R/L0602-16	S12M-SCLC R/L06	▲	▲	16	12	11	150	9.0	25	-10		CC □□09T3□□	BFTX0409N	3.4	
	S16R-SCLC R/L0602-18	—	●	●	18	16	15	200	9.0	27	-8		CC □□09T3□□	BFTX0407N	3.0	
	S16R-SCLC R/L09T3-18	—	●	●	18	16	15	200	9.0	30	-10	2	CC □□09T3□□	BFTX0407N	3.0	TRX15
	S16R-SCLC R/L09T3-20	S16R-SCLC R/L09	▲	▲	20	16	15	200	11.0	30	-8		CC □□09T3□□	BFTX0409N	3.4	
	S20S-SCLC R/L09T3-22	—	●	●	22	20	18	250	11.0	30	-8		CC □□1204□□	BFTX0511N	5.0	
	S20S-SCLC R/L09T3-25	S20S-SCLC R/L09	▲	▲	25	20	18	250	13.0	30	-7	CC □□1204□□	BFTX0511N	5.0	TRX20	
	S25T-SCLC R/L09T3-27	—	●	●	27	25	23	300	13.5	35	-6	CC □□1204□□	BFTX0511N	5.0	TRX20	
S25T-SCLC R/L1204-32	S25T-SCLC R/L12	▲	▲	32	25	23	300	17.0	38	-6	CC □□1204□□	BFTX0511N	5.0	TRX20		

**SumiTurn**

**Sumi Small**



**Anti-vibration**



### ■ Spare Parts

**■ Holder** Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

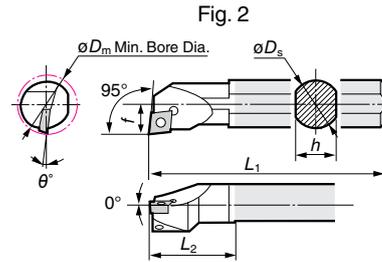
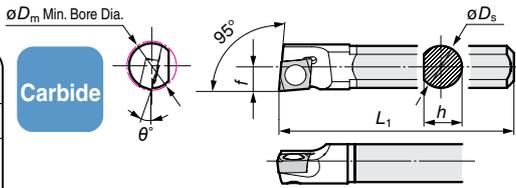
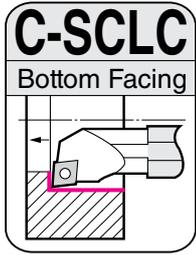
Above figures show right hand tools.

Shank	Cat. No.	Stock		Min. Bore Dia. øD <sub>m</sub>	Dimensions (mm)						Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench	
		R	L		øD <sub>s</sub>	h	L <sub>1</sub>	f	L <sub>2</sub>	θ°					
Anti-vibration	B08H-SCLC R/L0602-10	●	●	10	8	7	100	5.5	19	-13	CC □□0602□□	BFTX02505N	1.1	TRX08	
	B10K-SCLC R/L0602-12	●	●	12	10	9	125	6.0	21	-12		CC □□0602□□	BFTX02506N		1.5
	B12M-SCLC R/L0602-14	●	●	14	12	11	150	7.0	25	-10		CC □□0602□□	BFTX02506N		1.5
	B12M-SCLC R/L0602-16	●	●	16	12	11	150	9.0	25	-10	CC □□09T3□□	BFTX0407N	3.0	TRX15	
	B16R-SCLC R/L09T3-20	●	●	20	16	15	200	11.0	30	-8		CC □□09T3□□	BFTX0409N		3.4
	B20S-SCLC R/L09T3-25	●	●	25	20	18	250	13.0	30	-7		CC □□09T3□□	BFTX0409N		3.4
	B25T-SCLC R/L1204-32	●	●	32	25	23	300	17.0	38	-6	CC □□1204□□	BFTX0511N	5.0	TRX20	



# SEC-Boring Bars C-SCLC/E-SCLC Type

## Finish-Medium Cut



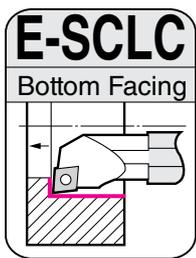
Sumi Small

■ Holder Right handed toolholders are applicable with left handed or neutral inserts.

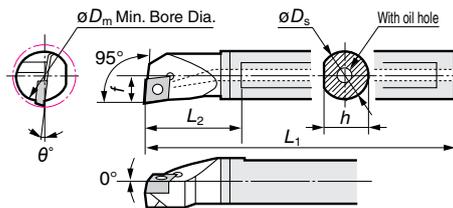
Shank	Cat. No.	Conventional Cat. No.	Stock R	Min. Bore Dia. $\phi D_m$	Dimensions (mm)							Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
					$\phi D_s$	$h$	$L_1$	$f$	$L_2$	$\theta^\circ$						
Carbide	C04G-SCLC R03X1-05*	C04G-SCLC R03X1-05*	●	5	4	3.8	90	2.5	—	-15	1	CC □□03X1□□	BFTX016033	0.2	TRX06	
	C05H-SCLC R03X1-06*	C05H-SCLC R03X1-06*	●	6	5	4.4	100	3.0	—	-13	1	CC □□04X1□□	BFTX0203N	0.5	TRX06	
	C06J-SCLC R04X1-07*	C06J-SCLC R04X1-07*	●	7	6	5.4	110	3.5	—	-13	1	CC □□04X1□□	BFTX0203N	0.5	TRX06	
	C07K-SCLC R04X1-08*	C07K-SCLC R04X1-08*	●	8	7	6.4	125	4.0	—	-11	1	CC □□04X1□□	BFTX0203N	0.5	TRX06	
	C08H-SCLC R0602-10	C08H-SCLC R06	●	10	8	7.0	100	5.5	19	-13	2	CC □□0602□□	BFTX02505N	1.1	TRX08	
	C10K-SCLC R0602-12	C10K-SCLC R06-12	●	12	10	9.0	125	6.0	21	-12			BFTX02506N	1.5		
	C10K-SCLC R0602-13	C10K-SCLC R06	●	13	10	9.0	125	7.0	21	-12	2	CC □□0602□□	BFTX02506N	1.5	TRX08	
	C12M-SCLC R0602-14	C12M-SCLC R06-14	●	14	12	11.0	150	7.0	25	-10	2	CC □□09T3□□	BFTX0407N	3.4	TRX15	
	C16R-SCLC R09T3-20	C16R-SCLC R09	●	20	16	15.0	200	11.0	30	-8	BFTX0409N	3.4				
	C20S-SCLC R09T3-25	C20S-SCLC R09	●	25	20	18.0	250	13.0	35	-7	2	CC □□09T3□□	BFTX0409N	3.4		

\* Requires the separately sold sleeve.

Sleeve	Stock	$\phi D_s$	Applicable Holder
HBB 416	●	4	C04G-SCLC R03X1-05*
HBB 516	●	5	C05H-SCLC R03X1-06*
HBB 616	●	6	C06J-SCLC R04X1-07*
HBB 716	●	7	C07K-SCLC R04X1-08*



Carbide  
Oil Hole

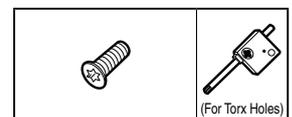


Sumi Small

■ Holder Right handed toolholders are applicable with left handed or neutral inserts.

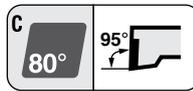
Shank	Cat. No.	Conventional Cat. No.	Stock R	Min. Bore Dia. $\phi D_m$	Dimensions (mm)							Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
					$\phi D_s$	$h$	$L_1$	$f$	$L_2$	$\theta^\circ$					
Carbide with oil hole	E08H-SCLC R0602-10	E08H-SCLC R06	●	10	8	7.5	100	5.5	18	-13	CC □□0602□□	BFTX02505N	1.1	TRX08	
	E10K-SCLC R0602-13	E10K-SCLC R06	●	13	10	9.5	125	7.0	19	-12		BFTX02506N	1.5		
	E12M-SCLC R0602-16	E12M-SCLC R06	●	16	12	11.5	150	9.0	25	-10	CC □□09T3□□	BFTX0407N	3.4	TRX15	
	E16R-SCLC R09T3-20	E16R-SCLC R09	●	20	16	15.5	200	11.0	30	-8		BFTX0407N	3.4		

■ Spare Parts

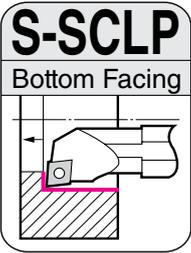


Boring Bars

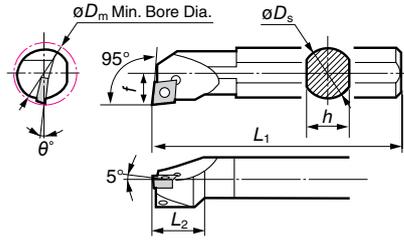
# SEC-Boring Bars S-SCLP/B-SCLP/D-SCLP Type



## Finish-Medium Cut



**Steel**

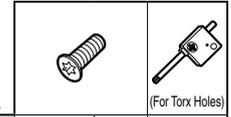


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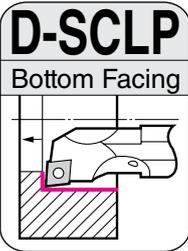
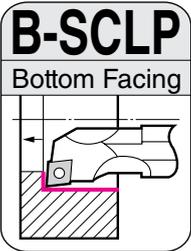
■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

### ■ Spare Parts

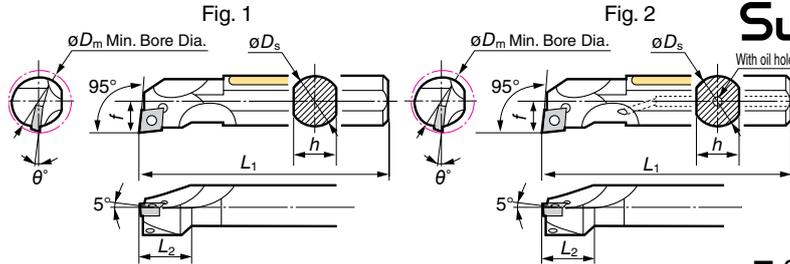


Shank	Cat. No.	Conventional Cat. No.	Stock		Min. Bore Dia. $\phi D_m$	$\phi D_s$	Dimensions (mm)						Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
			R	L			$h$	$L_1$	$f$	$L_2$	$\theta^\circ$					
Steel	<b>S10K-SCLP R/L0802-12</b>	BBPC-010 R/L	●	●	12	10	9	125	6.0	12.0	-5	CP □□0802□□	BFTX0305A	2.0	TRX10	
	<b>S12M-SCLP R/L0802-14</b>	BBPC-012 R/L14	●	●	14	12	11	150	7.0	10.6	-5					
	<b>S12M-SCLP R/L0802-16</b>	BBPC-012 R/L	▲	▲	16	12	11	150	8.0	15.0	-3					
	<b>S12M-SCLP R/L0903-16</b>	—	—	●	●	16	12	11	150	8.0	23.0	-6	CP □□0903□□	BFTX0407A	3.4	TRX15
	<b>S16R-SCLP R/L0903-18</b>	BBPC-316 R/L18	●	●	18	16	15	200	9.0	18.0	-4					
	<b>S16R-SCLP R/L0903-20</b>	BBPC-316 R/L	▲	▲	20	16	15	200	10.0	18.0	-3					
	<b>S20S-SCLP R/L0903-22</b>	BBPC-320 R/L22	●	●	22	20	18	250	11.0	18.0	-2					
	<b>S20S-SCLP R/L0903-25</b>	BBPC-320 R/L	▲	▲	25	20	18	250	12.5	18.0	0					
	<b>S25T-SCLP R/L0903-27</b>	—	—	●	●	27	25	22	300	13.5	18.0	-2				
	<b>S25T-SCLP R/L0903-28</b>	BBPC-325 R/L	▲	▲	28	25	22	300	14.0	35.0	-2					
<b>S25T-SCLP R/L1204-28</b>	BBPC-425 R/L	▲	▲	28	25	22	300	14.0	17.4	-2	CP □□1204□□	BFTX0509A	5.0	TRX20		



**Anti-vibration**

**Anti-vibration with oil hole**



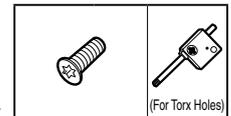
**SumiTurn** *cool* Bar

**Sumi Small**

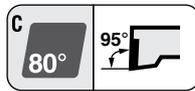
■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

### ■ Spare Parts

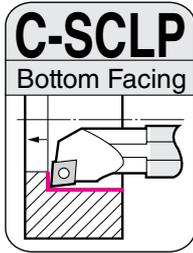


Shank	Cat. No.	Conventional Cat. No.	Stock		Min. Bore Dia. $\phi D_m$	$\phi D_s$	Dimensions (mm)						Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
			R	L			$h$	$L_1$	$f$	$L_2$	$\theta^\circ$						
Anti-vibration	<b>B12M-SCLP R/L0802-14</b>	XBPC-012 R/L14	●	●	14	12	11	150	7	10.6	-5	1	CP □□0802□□	BFTX0305A	2.0	TRX10	
	<b>B16R-SCLP R/L0903-18</b>	XBPC-316 R/L18	●	●	18	16	15	200	9	18.0	-4	1	CP □□0903□□	BFTX0407A	3.4	TRX15	
	<b>B20S-SCLP R/L0903-22</b>	XBPC-320 R/L22	●	●	22	20	18	250	11	18.0	-2						
Anti-vibration with oil hole	<b>D12M-SCLP R/L0802-14</b>	XBPC-012 R/L H14	●	●	14	12	11	150	7	10.6	-5	2	CP □□0802□□	BFTX0305A	2.0	TRX10	
	<b>D16R-SCLP R/L0903-18</b>	XBPC-316 R/L H18	●	●	18	16	15	200	9	18.0	-4	2	CP □□0903□□	BFTX0407A	3.4	TRX15	
	<b>D20S-SCLP R/L0903-22</b>	XBPC-320 R/L H22	●	●	22	20	18	250	11	18.0	-2						

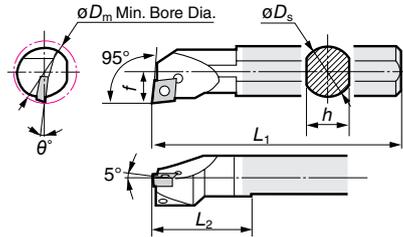


# SEC-Boring Bars C-SCLP Type

**Finish-Medium Cut**

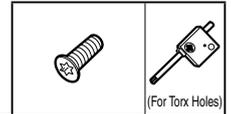


**Carbide**



**Sumi Small**

■ Spare Parts



■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)							Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
			R	L	$\phi D_m$	$\phi D_s$	h	$L_1$	f	$L_2$	$\theta^\circ$				
Carbide	<b>C10K-SCLP R/L0802-12</b>	WBPC-010 R/L S	●	●	12	10	9	125	6	19	-5	CP □□0802□□	BFTX0305A	2.0	TRX10
	<b>C12M-SCLP R/L0802-14</b>	WBPC-012 R/L S14	●	●	14	12	11	150	7	25	-5				
	<b>C12M-SCLP R/L0802-16</b>	WBPC-012 R/L S	●	●	16	12	11	150	8	25	-3				
	<b>C16R-SCLP R/L0903-18</b>	WBPC-316 R/L S18	●	●	18	16	15	200	9	30	-4	CP □□0903□□	BFTX0407A	3.4	TRX15
	<b>C16R-SCLP R/L0903-20</b>	WBPC-316 R/L S	●	●	20	16	15	200	10	30	-3				

■ Insert ( Coated / Cermet / Carbide)

● 11° Relief G-Class

CPGT SD	Cat. No.	Stock						Dimensions (mm)					
		AC510U	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	G10E	Inscribed circle	Thickness	Nose Radius
	CPGT 080202N-SD	●									7.94	2.38	0.2
	080204N-SD	●	●	▲							7.94	2.38	0.4
	080208N-SD	●	●	▲							7.94	2.38	0.8
	CPGT 090302N-SD	●									9.525	3.18	0.2
	090304N-SD	●	●	▲							9.525	3.18	0.4
	090308N-SD	●	●	▲							9.525	3.18	0.8
	CPGT 120402N-SD	●									12.70	4.76	0.2
	120404N-SD	●	●	▲							12.70	4.76	0.4
	120408N-SD	●	●	▲							12.70	4.76	0.8

● 11° Relief M-Class

CPMT LB	Cat. No.	Stock						Dimensions (mm)					
		AC820P	AC830P	AC6030M	AC6040M	T1500Z	T3000Z	T1500A	Inscribed circle	Thickness	Nose Radius		
	CPMT 090304N-LB	●	●	●	●	●	●	●	●	●	9.525	3.18	0.4
	090308N-LB	●	●	●	●	●	●	●	●	●	9.525	3.18	0.8

● 11° Relief M-Class

CPMT FB	Cat. No.	Stock						Dimensions (mm)		
		AC530U	T1500Z	T3000Z	T1000A	T1500A	Inscribed circle	Thickness	Nose Radius	
	CPMT 080204N-FB	●	●	●	●	●	7.94	2.38	0.4	
	CPMT 090304N-FB	●	●	●	●	●	9.525	3.18	0.4	
	090308N-FB	●	●	●	●	●	9.525	3.18	0.8	

CPMT SU	Cat. No.	Stock						Dimensions (mm)			
		AC810P	AC820P	AC830P	AC610M	AC630M	T1500Z	T3000Z	T1000A	T1500A	Inscribed circle
	CPMT 080204N-SU	●	●	●	●	●	7.94	2.38	0.4		
	080208N-SU	●	●	●	●	●	7.94	2.38	0.8		
	CPMT 090304N-SU	●	●	●	●	●	9.525	3.18	0.4		
	090308N-SU	●	●	●	●	●	9.525	3.18	0.8		

CPMT LU	Cat. No.	Stock						Dimensions (mm)			
		AC810P	AC820P	AC2000	AC630M	T1500Z	T3000Z	T1000A	T1500A	T1200A	Inscribed circle
	CPMT 080204N-LU	●	▲	●	●	●	7.94	2.38	0.4		
	CPMT 090304N-LU	●	▲	●	●	●	9.525	3.18	0.4		
	090308N-LU	●	▲	●	●	●	9.525	3.18	0.8		

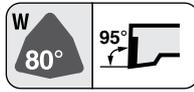
CPMT MU	Cat. No.	Stock						Dimensions (mm)		
		AC810P	AC820P	AC2000	AC630M	AC405K	AC415K	AC420K	AC410K	Inscribed circle
	CPMT 080204N-MU	●	▲	●	●	●	7.94	2.38	0.4	
	080208N-MU	●	▲	●	●	●	7.94	2.38	0.8	
	CPMT 090304N-MU	●	▲	●	●	●	9.525	3.18	0.4	
	090308N-MU	●	▲	●	●	●	9.525	3.18	0.8	

CPMT LUW	Cat. No.	Stock						Dimensions (mm)		
		AC810P	AC820P	AC2000	AC630M	T1500Z	T3000Z	T1500A	Inscribed circle	Thickness
	CPMT 090304N-LUW	●	▲	●	●	●	9.525	3.18	0.4	
	090308N-LUW	●	▲	●	●	●	9.525	3.18	0.8	

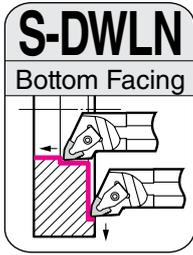
CPMW I	Cat. No.	Stock				Dimensions (mm)		
		AC405K	AC415K	AC420K	AC410K	Inscribed circle	Thickness	Nose Radius
	CPMW 080204	●	●	●	▲	7.94	2.38	0.4
	080208	●	●	●	▲	7.94	2.38	0.8
	CPMW 090304	●	●	●	▲	9.525	3.18	0.4
	090308	●	●	●	▲	9.525	3.18	0.8

▲ mark : To be replaced by new item (Please confirm stock availability)

# SEC-Boring Bars S-DWLN/S-PWLN Type

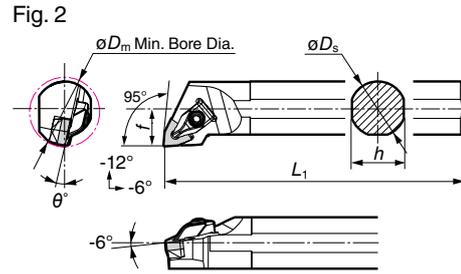
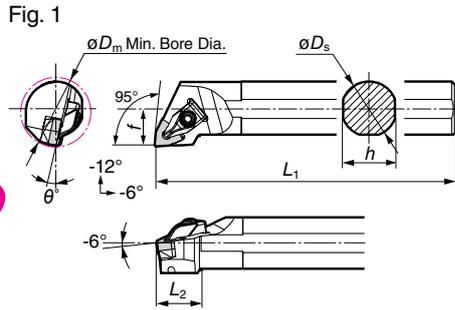


## General Boring

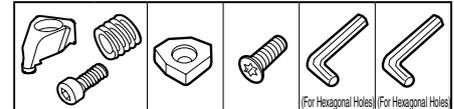


Steel

New



### Spare Parts

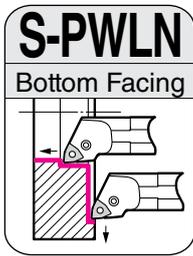


### Holder

Direction of applicable inserts differs according to work material (\*Refer to note at bottom of page E48) Above figures show right hand tools.

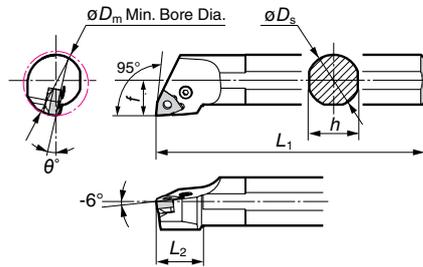
Shank	Cat. No.	Stock		Dimensions (mm)							Fig.	Applicable Insert		Clamp Set	Recommended Tightening Torque (N.m)	Shim	Shim Screw	Wrench for Upper Surface	Wrench for Lower Surface
		R	L	$\theta D_m$	$\theta D_s$	$h$	$L_1$	$f$	$L_2$	$\theta^\circ$		Cat. No.	Featured page						
Steel	S32S-DWLN R/L0604-40			40	32	30	250	22.0	29	-10	1	WN □□0604□□	B67	SCP-4	5.0	WNS0603B	BFTX0307N	LH040	LH025
	S25R-DWLN R/L0804-32			32	25	23	200	17.0	26	-12									
	S32S-DWLN R/L0804-40			40	32	30	250	22.0	26	-12	1	WN □□0804□□	From B68	SCP-2	5.0	WNS0803B	BFTX0307N	LH040	LH025
	S40T-DWLN R/L0804-50			50	40	37	300	27.0	26	-12									
	S50U-DWLN R/L0804-63			63	50	47	350	31.5	—	-12	2								

Clamp Set Parts



Steel

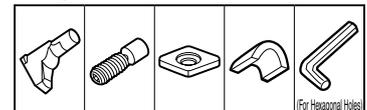
New



### Insert



### Spare Parts



### Holder

Right handed toolholders are applicable with right handed or neutral inserts. Left handed toolholders are applicable with left handed or neutral inserts. Above figures show right hand tools.

Shank	Cat. No.	Stock		Dimensions (mm)							Fig.	Applicable Insert		Lever Pin	Clamp Bolt	Shim	Shim Pin	Wrench
		R	L	$\theta D_m$	$\theta D_s$	$h$	$L_1$	$f$	$L_2$	$\theta^\circ$		Cat. No.	Featured page					
Steel	S32S-PWLN R/L0604-40			40	32	30	250	22	29	-10		WN □□0604□□	B67	LCL3	LCS3	LSW317	LSP3	LH025
	S32S-PWLN R/L0804-40			40	32	30	250	22	29	-10								
	S40T-PWLN R/L0804-50			50	40	37	300	27	29	-10		WN □□0804□□	From B68	LCL4	LCS4	LSW42B	LSP4	LH030

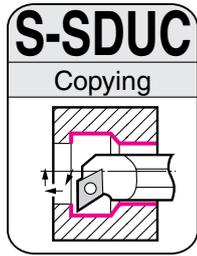
### \* Applicable Inserts for DWLN and PWLN Types

When machining internal diameters: Right handed toolholders are applicable with left handed or neutral inserts. Left handed toolholders are applicable with right handed or neutral inserts. When face grooving: Right handed toolholders are applicable with right handed or neutral inserts. Left handed toolholders are applicable with left handed or neutral inserts.

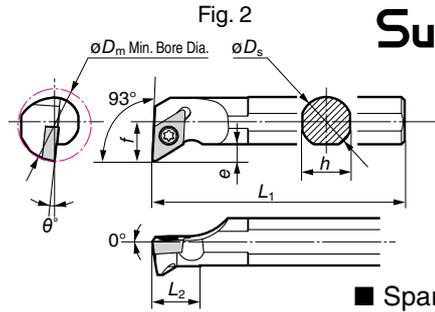
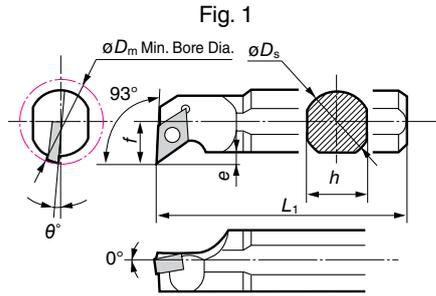


# SEC-Boring Bars S-SDUC/B-SDUC/C-SDUC Type

## Internal Copying



Steel



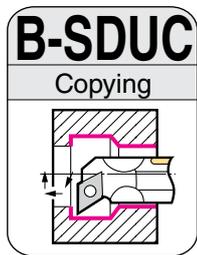
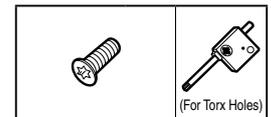
Sumi Small

■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

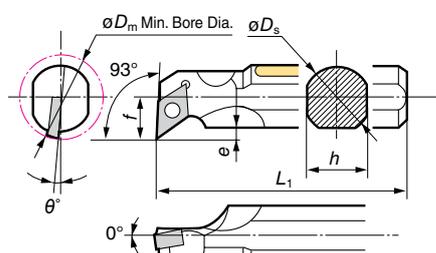
Above figures show right hand tools.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)							Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench	
			R	L	Min. Bore Dia. øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	e	θ°						L <sub>2</sub>
Steel	S10M-SDUC R/L0702-13	S10M-SDUC R/L07	●	●	13	10	9	150	7.0	2.5	-8	—	1	DC □□0702□□	BFTX02506N	1.5	TRX08
	S12M-SDUC R/L0702-16	S12M-SDUC R/L07	●	●	16	12	11	150	9.0	3.5	-8	—					
	S16Q-SDUC R/L0702-20	—	●	●	20	16	15	180	11.0	4.0	-6	—					
	S16N-SDUC R/L0702-20	S16N-SDUC R/L07	●	●	20	16	15	160	11.0	4.0	-6	—					
	S16Q-SDUC R/L11T3-23	—	●	●	23	16	15	180	12.5	5.5	-6	15	2	DC □□11T3□□	BFTX0409N	3.4	TRX15
	S20R-SDUC R/L11T3-25	—	●	●	25	20	18	200	13.0	4.5	-6	—					
	S20N-SDUC R/L11T3-25	S20N-SDUC R/L11	●	●	25	20	18	160	13.0	4.5	-6	—	1	DC □□11T3□□	BFTX0409N	3.4	TRX15
	S25S-SDUC R/L11T3-32	—	●	●	32	25	22	250	17.0	7.0	-6	—					
	S25Q-SDUC R/L11T3-32	S25Q-SDUC R/L11	●	●	32	25	22	180	17.0	7.0	-6	—					

■ Spare Parts



Anti-vibration



SumiTurn *Bar*

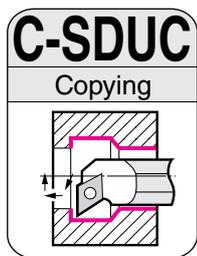
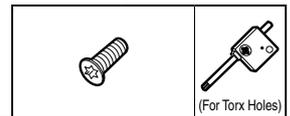
Sumi Small

■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

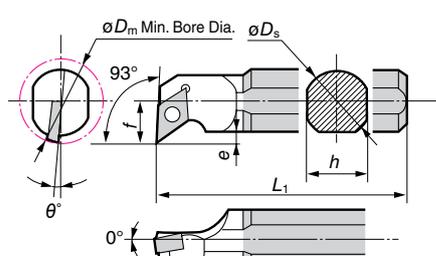
Above figures show right hand tools.

Shank	Cat. No.	Stock		Dimensions (mm)							Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L	Min. Bore Dia. øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	e	θ°				
Anti-vibration	B10M-SDUC R/L0702-13	●	●	13	10	9	150	7	2.5	-8	DC □□0702□□	BFTX02506N	1.5	TRX08
	B12M-SDUC R/L0702-16	●	●	16	12	11	150	9	3.5	-8				
	B16R-SDUC R/L0702-20	●	●	20	16	15	200	11	4.0	-6	DC □□11T3□□	BFTX0409N	3.4	TRX15
	B20S-SDUC R/L11T3-25	●	●	25	20	18	250	13	4.5	-6				
	B25S-SDUC R/L11T3-32	●	●	32	25	22	250	17	7.0	-6				

■ Spare Parts



Carbide



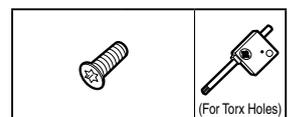
Sumi Small

■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

Shank	Cat. No.	Stock		Dimensions (mm)							Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L	Min. Bore Dia. øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	e	θ°				
Carbide	C10M-SDUC R/L0702-13	●	●	13	10	9	150	7	2.5	-8	DC □□0702□□	BFTX02506N	1.5	TRX08
	C12M-SDUC R/L0702-16	●	●	16	12	11	150	9	3.5	-8				
	C16R-SDUC R/L0702-20	●	●	20	16	15	200	11	4.0	-6	DC □□11T3□□	BFTX0409N	3.4	TRX15
	C20S-SDUC R/L11T3-25	●	●	25	20	18	250	13	4.5	-6				

■ Spare Parts

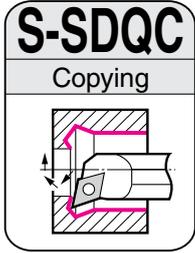


Boring Bars

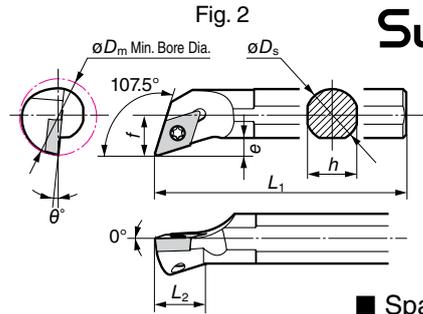
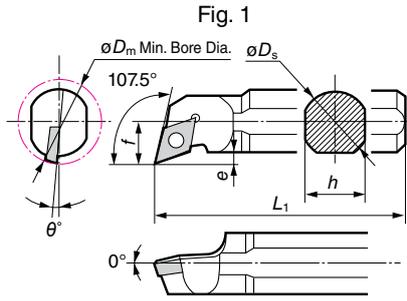
# SEC-Boring Bars S-SDQC/B-SDQC Type



## Internal Copying



**Steel**

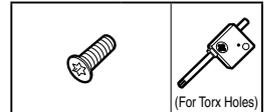


**SumiSmall**

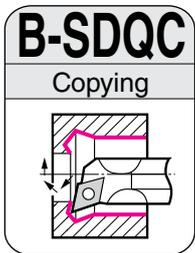
### ■ Spare Parts

**■ Holder** Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

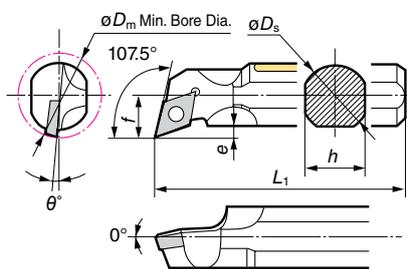
Above figures show right hand tools.



Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)							Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench	
			R	L	Min. Bore Dia. øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	e	θ°						L <sub>2</sub>
Steel	S10M-SDQC R/L0702-13	S10M-SDQC R/L07	●	●	13	10	9	150	7.0	2.5	-8	—	1	DC □□0702□□	BFTX02506N	1.5	TRX08
	S12M-SDQC R/L0702-16	S12M-SDQC R/L07	●	●	16	12	11	150	9.0	3.5	-8	—					
	S16Q-SDQC R/L0702-20	—	●	●	20	16	15	180	11.0	4.0	-6	—					
	S16N-SDQC R/L0702-20	S16N-SDQC R/L07	●	●	20	16	15	160	11.0	4.0	-6	—					
	S16Q-SDQC R/L11T3-23	—	●	●	23	16	15	180	12.5	5.5	-6	15	2	DC □□11T3□□	BFTX0409N	3.4	TRX15
	S20R-SDQC R/L11T3-25	—	●	●	25	20	18	200	13.0	4.5	-6	—					
	S20N-SDQC R/L11T3-25	S20N-SDQC R/L11	●	●	25	20	18	160	13.0	4.5	-6	—					
	S25S-SDQC R/L11T3-32	—	●	●	32	25	22	250	17.0	7.0	-6	—					
S25Q-SDQC R/L11T3-32	S25Q-SDQC R/L11	●	●	32	25	22	180	17.0	7.0	-6	—	1					



**Anti-vibration**



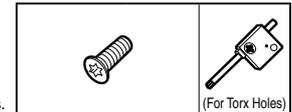
**SumiTurn** *Bar*

**SumiSmall**

### ■ Spare Parts

**■ Holder** Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

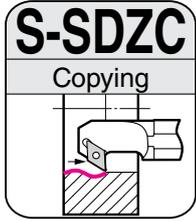


Shank	Cat. No.	Stock		Dimensions (mm)							Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L	Min. Bore Dia. øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	e	θ°				
Anti-vibration	B10M-SDQC R/L0702-13	●	●	13	10	9	150	7	2.5	-8	DC □□0702□□	BFTX02506N	1.5	TRX08
	B12M-SDQC R/L0702-16	●	●	16	12	11	150	9	3.5	-8				
	B16R-SDQC R/L0702-20	●	●	20	16	15	200	11	4.0	-6				
	B20S-SDQC R/L11T3-25	●	●	25	20	18	250	13	4.5	-6	DC □□11T3□□	BFTX0409N	3.4	TRX15
	B25S-SDQC R/L11T3-32	●	●	32	25	22	250	17	7.0	-6				

# SEC-Boring Bars S-SDZC Type

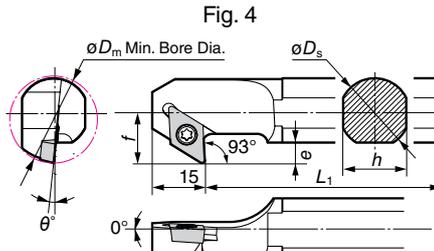
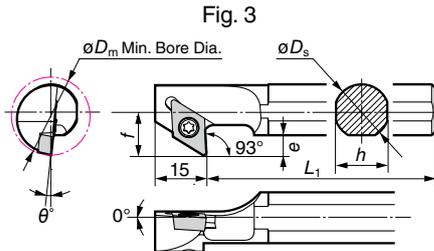
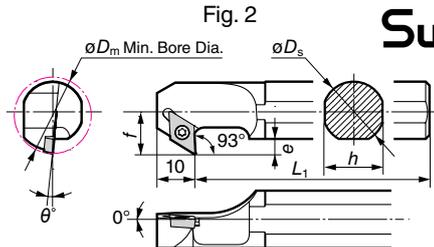
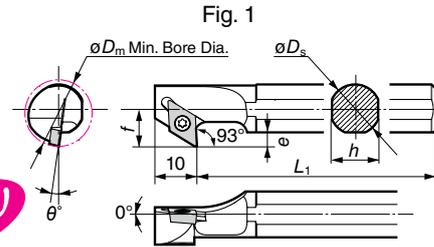


## Internal Copying



Steel

New



Sumi Small

### ■ Spare Parts

■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

Shank	Cat. No.	Stock		Min. Bore Dia.	Dimensions (mm)							Fig.	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L		$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$	$e$	$\theta^\circ$					
Steel	S10M-SDZC R/L0702-13			13	10	9	150	7.5	3.0	-8	1	DC □□0702□□	BFTX02506N	1.5	TRX08	
	S12M-SDZC R/L0702-16	●		16	12	11	150	9.0	3.5	-8						
	S16Q-SDZC R/L0702-20	●		20	16	15	180	11.0	4.0	-6	2	DC □□11T3□□	BFTX0409N	3.4	TRX15	
	S16Q-SDZC R/L11T3-23	●		23	16	15	180	13.0	6.0	-6						
	S20R-SDZC R/L11T3-25			25	20	18	200	14.5	6.0	-6	4	DC □□11T3□□	BFTX0409N	3.4	TRX15	
	S25S-SDZC R/L11T3-32			32	25	22	250	17.0	7.0	-6						

■ Insert ( Coated)

● 7° Relief E-Class

DCET FX	Cat. No.	Stock		Dimensions (mm)		
		ACZ150		Inscribed circle	Thickness	Nose Radius
DCET 0702003R-FX		●				0.03
DCET 0702003L-FX		●				0.03
DCET 0702008R-FX		●				0.08
DCET 0702008L-FX		●				0.08
DCET 070201R-FX		●		6.35	2.38	0.1
DCET 070201L-FX		●				0.1
DCET 0702018R-FX		●				0.18
DCET 0702018L-FX		●				0.18
DCET 070204R-FX		●				0.4
DCET 070204L-FX		●				0.4
DCET 11T3003R-FX		●		9.525	3.97	0.03
DCET 11T3003L-FX		●				0.03
DCET 11T3008R-FX		●				0.08
DCET 11T3008L-FX		●				0.08
DCET 11T301R-FX		●				0.1
DCET 11T301L-FX		●				0.1
DCET 11T3018R-FX		●				0.18
DCET 11T3018L-FX		●				0.18
DCET 11T304R-FX		●				0.4
DCET 11T304L-FX		●				0.4

● 7° Relief E-Class

DCET FY	Cat. No.	Stock		Dimensions (mm)		
		ACZ150		Inscribed circle	Thickness	Nose Radius
DCET 0702003R-FY		●				0.03
DCET 0702003L-FY		●				0.03
DCET 0702008R-FY		●				0.08
DCET 0702008L-FY		●				0.08
DCET 070201R-FY		●		6.35	2.38	0.1
DCET 070201L-FY		●				0.1
DCET 0702018R-FY		●				0.18
DCET 0702018L-FY		●				0.18
DCET 070204R-FY		●				0.4
DCET 070204L-FY		●				0.4
DCET 11T3003R-FY		●		9.525	3.97	0.03
DCET 11T3003L-FY		●				0.03
DCET 11T3008R-FY		●				0.08
DCET 11T3008L-FY		●				0.08
DCET 11T301R-FY		●				0.1
DCET 11T301L-FY		●				0.1
DCET 11T3018R-FY		●				0.18
DCET 11T3018L-FY		●				0.18
DCET 11T304R-FY		●				0.4
DCET 11T304L-FY		●				0.4

E Boring Bars

# SEC-Boring Bars SDUC/SDQC Type



■ Insert (SUMIBORON / SUMIDIA)

- 7° Relief G-Class
- SUMIBORON One-use Type
- (▲ : 1pc. per package stock, ▲ : 1pc. per package and 10pc. per package stock)

NU-DCGW	Stock	Stock					Dimensions (mm)		
		BN1000	BN2000	BN250	BN7000	BN700	Inscribed circle	Thickness	Nose Radius
Cat. No.									
NU-DCGW 070202	●	●	▲	●	●	6.35	2.38	0.2	
070204	●	●	▲	●	0.4				
070208	●	●	▲	●	0.8				
070202LT	—	—	—	—	0.2				
070204LT	—	—	—	—	0.4				
070208LT	—	—	—	—	0.8				
070202LS	—	—	▲	—	0.2				
070204LS	—	—	▲	—	0.4				
070208LS	—	—	▲	—	0.8				
070202HS	—	●	▲	—	0.2				
070204HS	—	●	▲	—	0.4				
NU-DCGW 11T302	●	●	▲	●	●	9.525	3.97	0.2	
11T304	●	●	▲	●	●			0.4	
11T308	●	●	▲	●	●			0.8	
11T312	●	●	▲	●	●			1.2	
11T302LF	—	—	—	●	●			0.2	
11T304LF	—	—	—	●	●			0.4	
11T302LT	—	—	—	—	—			0.2	
11T304LT	—	—	—	—	—			0.4	
11T308LT	—	—	—	—	—			0.8	
11T312LT	—	—	—	—	—			1.2	
11T302LS	—	—	▲	—	—			0.2	
11T304LS	—	—	▲	—	—			0.4	
11T308LS	—	—	▲	—	—			0.8	
11T312LS	—	—	▲	—	—			1.2	
11T302HS	—	●	▲	—	—			0.2	
11T304HS	—	●	▲	—	—			0.4	
11T308HS	—	●	▲	—	—			0.8	

\* LF: for sintered component and cast iron machining LT: for fine boring of hardened steel LS: Continuous cutting HS: for Strong Edge Type

- Uncoated SUMIBORON One-use Type/Multi corner
- (● : 1pc. per package stock, ● : 1pc. per package and 10pc. per package stock)

2NU-DCGW	Stock	Stock			Dimensions (mm)		
		BN2000	BN7000	BN7500	Inscribed circle	Thickness	Nose Radius
Cat. No.							
2NU-DCGW 070204	●	●	●	●	6.35	2.38	0.4
070208	●	●	●	0.8			
2NU-DCGW 11T302	●	●	●	0.2			
11T304	●	●	●	0.4			
11T308	●	●	●	0.8			
11T304WG	●	—	—	0.4			
11T308WG	●	—	—	0.8			
11T304WH	●	—	—	0.4			
11T308WH	●	—	—	0.8			
11T302LF	—	●	●	0.2			
11T304LF	—	●	●	0.4			
11T302LE	—	●	●	0.2			
11T304LE	—	●	●	0.4			
11T302LS	—	●	●	0.2			
11T304LS	—	●	●	0.4			

\* WG/WH: Wiper Insert LF/LE: for sintered component and cast iron machining LS: Continuous cutting

- Uncoated SUMIBORON Break Master

2NU-DCGT FV/LV	Stock	Stock			Dimensions (mm)		
		BN2000			Inscribed circle	Thickness	Nose Radius
Cat. No.							
2NU-DCGT 070204N-FV	●				6.35	2.38	0.4
2NU-DCGT 11T304N-FV	●						0.4
11T308N-FV	●				9.525	3.97	0.8
11T304N-LV	●						0.4
11T308N-LV	●						0.8

- 7° Relief G-Class
- SUMIDIA (NF Type)

NF-DCMT	Stock	Stock				Dimensions (mm)		
		DA1000	DA2200			Inscribed circle	Thickness	Nose Radius
Cat. No.								
NF-DCMT 070201	●	▲			6.35	2.38	0.1	
070202	●	▲		0.2				
070204	●	▲		0.4				
NF-DCMT 11T301	●	▲			9.525	3.97	0.1	
11T302	●	▲		0.2				
11T304	●	▲		0.4				
11T308	●	▲		0.8				

- SUMIDIA (Break Master)

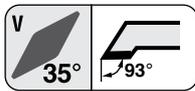
NF-DCMT LD/GD	Stock	Stock				Dimensions (mm)		
		DA1000				Inscribed circle	Thickness	Nose Radius
Cat. No.								
NF-DCMT 070202N-LD	●				6.35	2.38	0.2	
070204N-LD	●			0.4				
070202N-GD	●			0.2				
070204N-GD	●			0.4				
NF-DCMT 11T302N-LD	●				9.525	3.97	0.2	
11T304N-LD	●			0.4				
11T308N-LD	●			0.8				
11T302N-GD	●			0.2				
11T304N-GD	●			0.4				
11T308N-GD	●			0.8				

\*LD: For Finishing, GD: For Medium Finishing

NU-DCMT DM	Stock	Stock				Dimensions (mm)		
		DA150				Inscribed circle	Thickness	Nose Radius
Cat. No.								
NU-DCMT 070202R-DM	●				6.35	2.38	0.2	
070202L-DM	●			0.2				
070204R-DM	●			0.4				
070204L-DM	●			0.4				
NU-DCMT 11T302R-DM	●				9.525	3.97	0.2	
11T302L-DM	●			0.2				
11T304R-DM	●			0.4				
11T304L-DM	●			0.4				

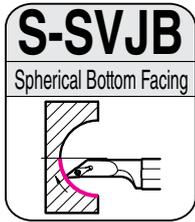
- SUMIDIA

DCMT	Stock	Stock				Dimensions (mm)		
		DA150	DA2200			Inscribed circle	Thickness	Nose Radius
Cat. No.								
DCMT 070201	●	▲			6.35	2.38	0.1	
070202	●	▲		0.2				
070204	●	▲		0.4				
DCMT 11T301	●	▲			9.525	3.97	0.1	
11T302	●	▲		0.2				
11T304	●	▲		0.4				

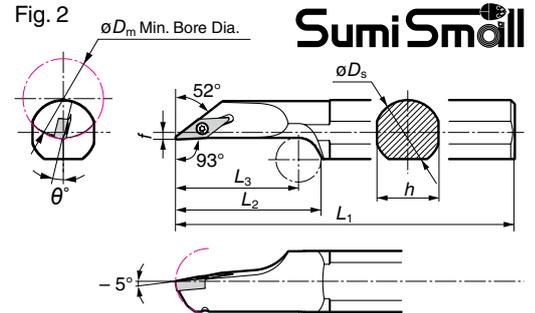
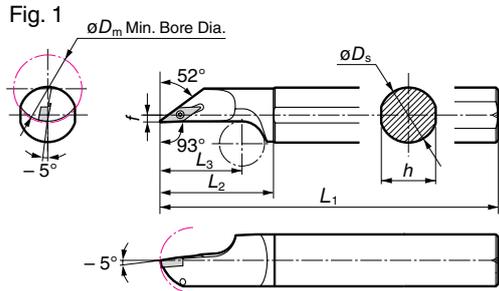


# SEC-Boring Bars S-SVJB/B-SVJB/S-SVJC Type

## Internal Copying



Steel



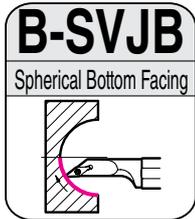
Sumi Small

### Holder

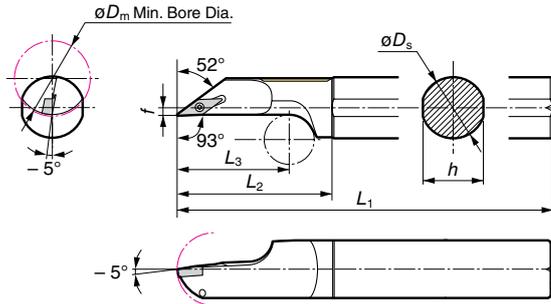
Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts. Above figures show right hand tools.

Shank	Cat. No.	Stock		Min. Bore Dia.	Dimensions (mm)							Fig.	Applicable Insert Cat. No.	Pin	Bolt	Shim	Screw	Recommended Tightening Torque (N·m)	Wrench	Screw Spanner
		R	L		øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	L <sub>2</sub>	L <sub>3</sub>									
Steel	S20R-SVJB R/L1103-25	●	●	25	20	19	200	2.0	42	29	—	1	VB□□1103□□	—	—	—	BFTX02508NV*	1.5	TRX08	—
	S25S-SVJB R/L1103-30	●	●	30	25	24	250	3.5	50	36	—	1	VB□□1103□□	—	—	—	BFTX02508NV*	1.5	TRX08	—
	S32T-SVJB R/L1604-40	●	●	40	32	30	300	3.5	75	60	-8	2	VB□□1604□□	VP32B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020
	S40T-SVJB R/L1604-50	●	●	50	40	37	300	4.5	95	75	-7	2	VB□□1604□□	VP40B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020

\* Changed from those in the 2013-2014 General Catalog.



Anti-vibration



SumiTurn X-Bar

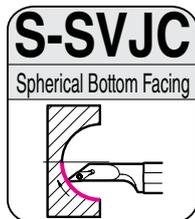
Sumi Small

### Holder

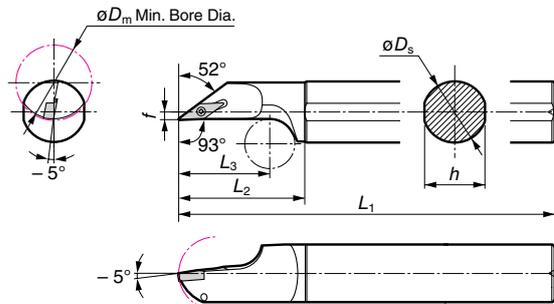
Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts. Above figures show right hand tools.

Shank	Cat. No.	Stock		Min. Bore Dia.	Dimensions (mm)						Applicable Insert Cat. No.	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L		øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	L <sub>2</sub>				
Anti-vibration	B20R-SVJB R/L1103-25	●	●	25	20	19	200	2.0	55	37.5	VB□□1103□□	BFTX02508NV*	1.5	TRX08
	B25S-SVJB R/L1103-30	●	●	30	25	24	250	3.5	62	45	VB□□1103□□	BFTX02508NV*	1.5	TRX08

\* Changed from those in the 2013-2014 General Catalog.



Steel



Sumi Small

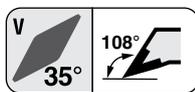
### Holder

Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts. Above figures show right hand tools.

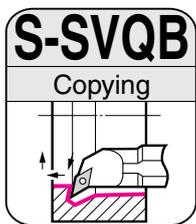
Shank	Cat. No.	Stock		Min. Bore Dia.	Dimensions (mm)						Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L		øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	L <sub>2</sub>				
Steel	S12M-SVJC R/L0802-16	●	●	16	12	11	150	2.0	30	21	VC□□0802□□	BFTX0204N	0.5	TRX06
	S16Q-SVJC R/L0802-20	●	●	20	16	15	180	2.0	40	29	VC□□0802□□	BFTX0204N	0.5	TRX06

Boring Bars

# SEC-Boring Bars S-SVQB/B-SVQB/C-SVQB Type

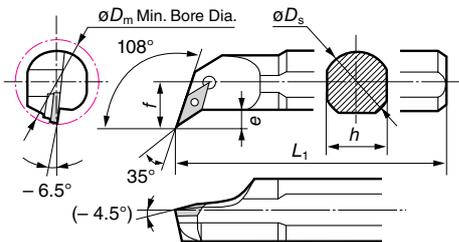


## Internal Copying



**Steel**

*New*

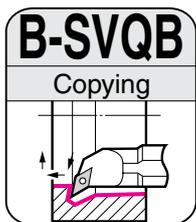


■ **Holder** Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts. Above figures show right hand tools.

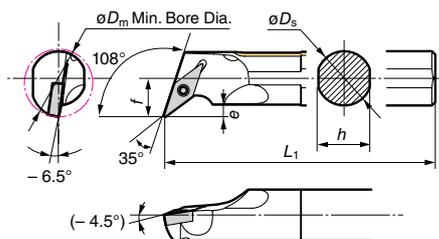
### ■ Spare Parts

Pin	Bolt	Shim	Screw	Recommended Tightening Torque (N·m)	Wrench	Screw Spanner
—	—	—	BFTX02508NV	1.5	TRX08	—
VP32B VP40B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020

Shank	Cat. No.	Stock		Min. Bore Dia.					Dimensions (mm)	Applicable Insert	Pin	Bolt	Shim	Screw	Recommended Tightening Torque (N·m)	Wrench	Screw Spanner
		R	L	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$									
Steel	<b>S20R-SVQB R/L1103-25</b>	●	●	25	20	18	200	14.5	5.5	VB □ □ 1103 □ □	—	—	—	BFTX02508NV	1.5	TRX08	—
	<b>S25S-SVQB R/L1103-32</b>	●	●	32	25	23	250	19.0	7.5	—	—	—	—	—	—	—	
	<b>S25S-SVQB R/L1604-34</b>	●	●	34	25	23	250	20.5	9.0	VB □ □ 1604 □ □	—	—	—	—	—	—	
	<b>S32T-SVQB R/L1604-40</b>	●	●	40	32	30	300	22.0	9.0	—	—	—	—	—	—	—	
	<b>S40T-SVQB R/L1604-50</b>	●	●	50	40	37	300	27.0	10.0	—	—	—	—	—	—	—	



**Anti-vibration**

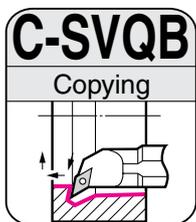


■ **Holder** Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts. Above figures show right hand tools.

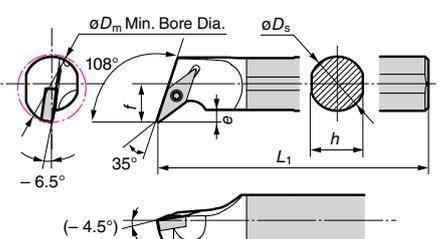


Shank	Cat. No.	Stock		Min. Bore Dia.					Dimensions (mm)	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$					
Anti-vibration	<b>B16R-SVQB R/L1103-20</b>	●	●	20	16	15	200	11.5	4	VB □ □ 1103 □ □	BFTX02508NV*	1.5	TRX08
	<b>B20R-SVQB R/L1103-25</b>	●	●	25	20	18	200	14.5	5	—	—	—	—

\* Changed from those in the 2013-2014 General Catalog.



**Carbide**



■ **Holder** Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts. Above figures show right hand tools.



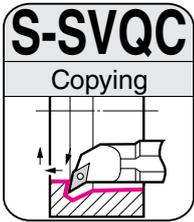
Shank	Cat. No.	Stock		Min. Bore Dia.					Dimensions (mm)	Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$					
Carbide	<b>C16R-SVQB R/L1103-20</b>	●	●	20	16	15	200	11.5	4	VB □ □ 1103 □ □	BFTX02508NV*	1.5	TRX08
	<b>C20R-SVQB R/L1103-25</b>	●	●	25	20	18	200	14.5	5	—	—	—	—

\* Changed from those in the 2013-2014 General Catalog.

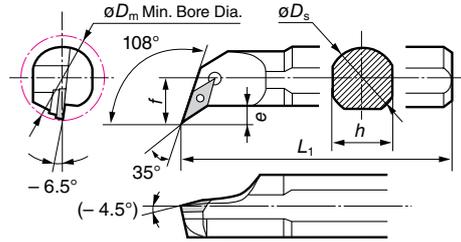
# SEC-Boring Bars S-SVQC/S-SVUB Type



## Internal Copying



Steel

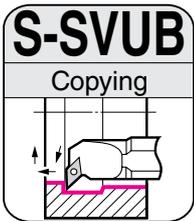


### Spare Parts

Pin	Bolt	Shim	Screw	Recommended Tightening Torque (N·m)	Wrench	Screw Spanner
—	—	—	BFTX0204N	0.5	TRX06	—
—	—	—	BFTX02508NV	1.5	TRX08	—
—	—	—	BFTX03508	2.0	TRX10	—
VP32B	BH03504	SVP32				LH020
VP40B						

Holder Right handed toolholders are applicable with left handed or neutral inserts. Left handed toolholders are applicable with right handed or neutral inserts. Above figures show right hand tools.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)						Applicable Insert	Pin	Bolt	Shim	Screw	Recommended Tightening Torque (N·m)	Wrench	Screw Spanner
			R	L	øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	e								
Steel	S10M-SVQC R/L0802-14	—	●	●	14	10	9	150	8.5	4.5	VC□□0802□□	—	—	—	BFTX0204N	0.5	TRX06	—
	S12M-SVQC R/L0802-16	—	●	●	16	12	11	150	9.5	4.5	VC□□1103□□	—	—	—	BFTX02508NV	1.5	TRX08	—
	S16Q-SVQC R/L1103-20	—	●	●	20	16	15	180	11.5	4.5	VC□□1103□□	—	—	—	BFTX03508	2.0	TRX10	—
	S25R-SVQC R/L1604-35	S25R-SVQC R/L16	▲	▲	35	25	23	200	20.5	9.0	VC□□1604□□	VP32B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020
	S32S-SVQC R/L1604-40	S32S-SVQC R/L16	▲	▲	40	32	30	250	22.0	9.0	VC□□1604□□	VP40B						
S40T-SVQC R/L1604-50	S40T-SVQC R/L16	▲	▲	50	40	37	300	27.0	10.0									



Steel

New

Fig. 1

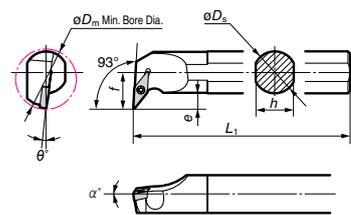


Fig. 2

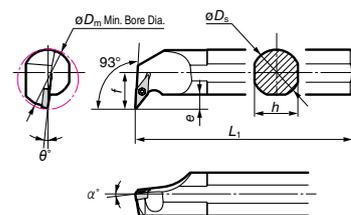
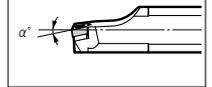


Fig. 3



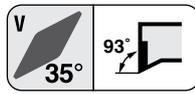
### Spare Parts

Pin	Bolt	Shim	Screw	Recommended Tightening Torque (N·m)	Wrench	Screw Spanner
—	—	—	BFTX02508NV	1.5	TRX08	—
—	—	—	BFTX03508	2.0	TRX10	—
VP32B	BH03504	SVP32				LH020
VP40B						

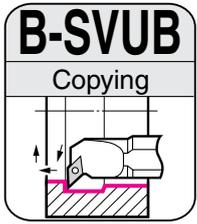
Holder Right handed toolholders are applicable with left handed or neutral inserts. Left handed toolholders are applicable with right handed or neutral inserts. Above figures show right hand tools.

Shank	Cat. No.	Stock		Dimensions (mm)										Applicable Insert	Pin	Bolt	Shim	Screw	Recommended Tightening Torque (N·m)	Wrench	Screw Spanner
		R	L	øD <sub>m</sub>	øD <sub>s</sub>	h	L <sub>1</sub>	f	e	θ	α	Fig.									
Steel	S20R-SVUB R/L1103-28	●	●	28	20	18	200	17.5	7.5	-7.5	-3.0	1	VB□□1103□□	—	—	—	BFTX02508NV	1.5	TRX08	—	
	S25S-SVUB R/L1103-32	●	●	32	25	23	250	19.0	7.5	-6.5	-2.5	2	VB□□1103□□	—	—	—	BFTX02508NV	1.5	TRX08	—	
	S25S-SVUB R/L1604-34	●	●	34	25	23	250	20.5	9.0			2	VB□□1604□□	VP32B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020	
	S32T-SVUB R/L1604-40	●	●	40	32	30	300	23.5	10.5	-7.5	-3.0	3	VB□□1604□□	VP32B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020	
	S40T-SVUB R/L1604-50	●	●	50	40	37	300	29.5	12.5				VB□□1604□□	VP40B							

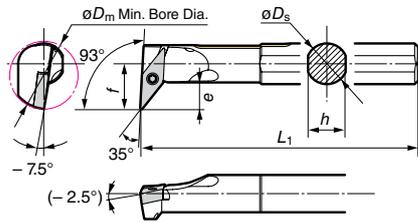
# SEC-Boring Bars B-SVUB/C-SVUB/S-SVUC Type



## Internal Copying



Anti-vibration



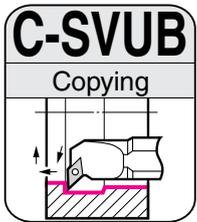
Sumi Small

Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

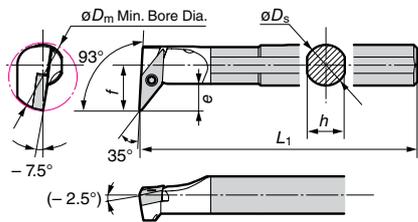
Above figures show right hand tools.

Shank	Cat. No.	Stock		Dimensions (mm)						Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$	$e$				
Anti-vibration	B12M-SVUB R/L1103-20	●		20	12	11	150	13.5	8	VB □□1103□□	BFTX02508NV*	1.5	TRX08
	B16R-SVUB R/L1103-25	●		25	16	15	200	16.5	9				

\* Changed from those in the 2013-2014 General Catalog.



Carbide



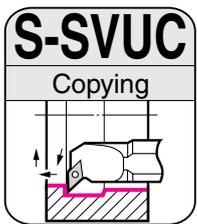
Sumi Small

Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

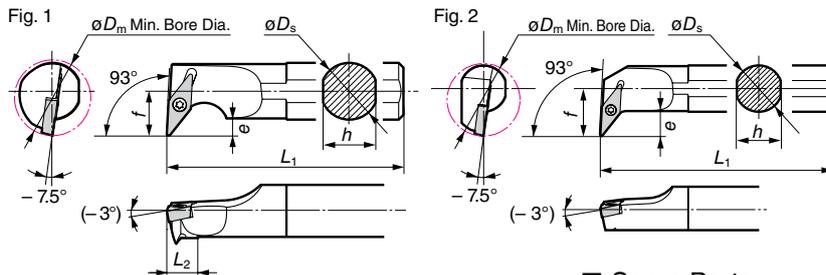
Above figures show right hand tools.

Shank	Cat. No.	Stock		Dimensions (mm)						Applicable Insert	Screw	Recommended Tightening Torque (N·m)	Wrench
		R	L	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$	$e$				
Carbide	C12M-SVUB R/L1103-20	●		20	12	11	150	13.5	8	VB □□1103□□	BFTX02508NV*	1.5	TRX08
	C16R-SVUB R/L1103-25	●		25	16	15	200	16.5	9				

\* Changed from those in the 2013-2014 General Catalog.



Steel



### Spare Parts

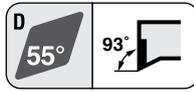
Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

Above figures show right hand tools.

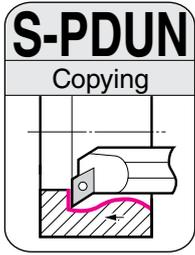
Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)						Fig.	Applicable Insert	Pin	Bolt	Shim	Screw	Recommended Tightening Torque (N·m)	Wrench	Screw Spanner	
			R	L	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$	$L_2$										$e$
Steel	S12M-SVUC R/L0802-16	—	●		16	12	11	150	9.5	6.5	3.5	1	VC □□0802□□	—	—	—	BFTX0204N	0.5	TRX06	—
	S16Q-SVUC R/L0802-20	—	●		20	16	15	180	11.5	—	3.5	2	VC □□0802□□	—	—	—	BFTX02508NV	1.5	TRX08	—
	S16Q-SVUC R/L1103-25	—	●		25	16	15	180	16.5	—	8.5	2	VC □□1103□□	—	—	—	BFTX03508	2.0	TRX10	—
	S25R-SVUC R/L1604-35	S25R-SVUC R/L16	▲▲	▲	35	25	23	200	20.5	—	9.0	3	VC □□1604□□	VP32B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020
	S32S-SVUC R/L1604-40	S32S-SVUC R/L16	▲▲	▲	40	32	30	250	22.0	—	9.0	3	VC □□1604□□	VP40B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020
S40T-SVUC R/L1604-50	S40T-SVUC R/L16	▲▲	▲	50	40	37	300	27.0	—	10.0	3	VC □□1604□□	VP40B	BH03504	SVP32	BFTX03508	2.0	TRX10	LH020	



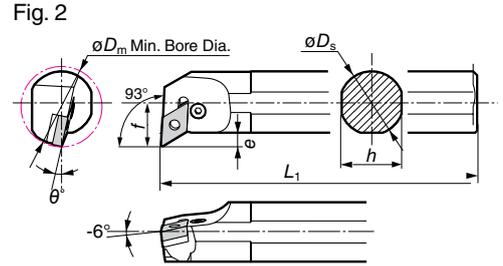
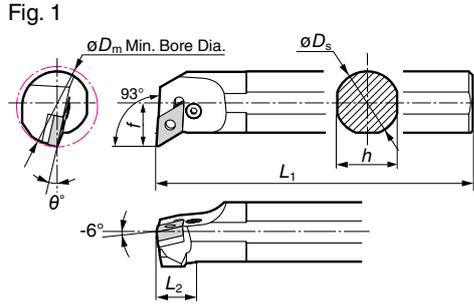
# SEC-Boring Bars S-PDUN/S-EDUN Type



## Copying



Steel

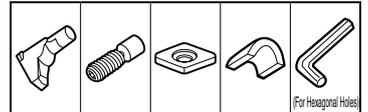


■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

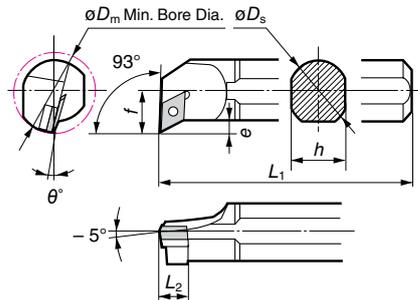
Above figures show right hand tools.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)										Fig.	Applicable Insert Cat. No.	Lever Pin	Clamp Bolt	Shim	Shim Pin	Wrench
			R	L	$\theta D_m$	$\theta D_s$	$h$	$L_1$	$f$	$L_2$	$e$	$\theta^\circ$									
Steel	S25R-PDUN R/L1104-32	—	●	●	32	25	22	200	17.0	20	7.0	-15	1	DN □ □ 1104 □ □	B30	LCL3	LCS3	LSD317	LSP3	LH025	
Steel	S32S-PDUN R/L1504-40	—	●	●	40	32	30	250	22.0	20	7.0	-12	1	DN □ □ 1504 □ □	From B31	LCL4	LCS4	LSD42	LSP4	LH030	
Steel	S32S-PDUN R/L1504-44	S32S-PDUN R/L15	●	●	44	32	30	250	22.0	20	7.0	-10	1	DN □ □ 1504 □ □	From B31	LCL4	LCS4	LSD42	LSP4	LH030	
Steel	S40T-PDUN R/L1504-50	—	●	●	50	40	37	300	27.0	20	8.5	-12	2								
Steel	S50U-PDUN R/L1504-63	—	●	●	63	50	47	350	31.5	—	8.0	-12	2								

### ■ Spare Parts



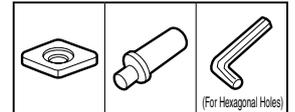
Steel



### ■ Insert



### ■ Spare Parts



■ Holder Right handed toolholders are applicable with left handed or neutral inserts.  
Left handed toolholders are applicable with right handed or neutral inserts.

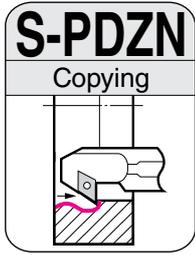
Above figures show right hand tools.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)										Fig.	Applicable Insert Cat. No.	Shim	Eccentric Shaft	Wrench
			R	L	$\theta D_m$	$\theta D_s$	$h$	$L_1$	$f$	$L_2$	$e$	$\theta^\circ$							
Steel	S25R-EDUN R/L1104-34	BDUN325 R/L	●	●	34	25	23	200	17	20	5.5	-12	DN □ □ 1104 □ □	B30	SDW323	CPB34	LH025		
Steel	S32S-EDUN R/L1504-44	BDUN432 R/L	●	●	44	32	30	250	22	20	7.0	-10	DN □ □ 1504 □ □	From B31	SDW423	CPB43	LH030		

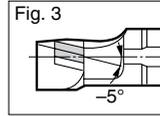
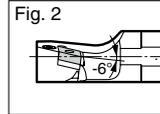
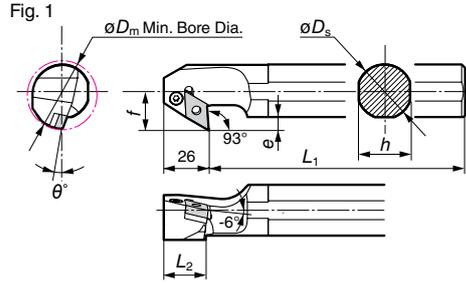


# SEC-Boring Bars S-PDZN/S-EDZN/S-DTR55C Type

## Copying



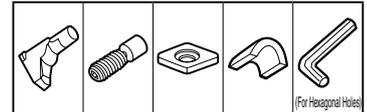
Steel



### Insert

· DNMG150408N-GE  
(Representative example)

### Spare Parts

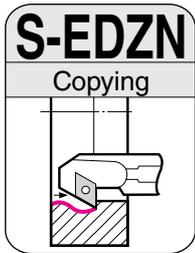


### Holder

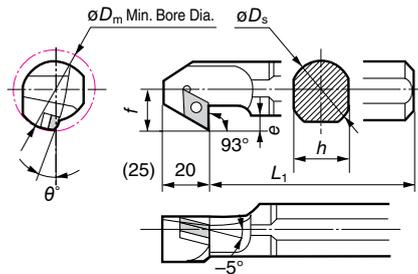
Right handed toolholders are applicable with **right handed** or neutral inserts.  
Left handed toolholders are applicable with **left handed** or neutral inserts.

Above figures show right hand tools.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)							Fig.	Applicable Insert Cat. No.	Featured page	Lever Pin	Clamp Bolt	Shim	Shim Pin	Wrench
			R	L	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$	$e$									
Steel	S32S-PDZN R/L1504-40	—	●	●	40	32	30	250	22.0	7.0	2	DN □ □ 1504 □ □	From B31	LCL4	LCS4	LSD42	LSP4	LH030	
	S32S-PDZN R/L1504-44	S32S-PDZN R/L15	●	●	44	32	30	250	22.0	7.0	1								
	S40T-PDZN R/L1504-50	—	●	●	50	40	37	300	27.0	8.5	2								
	S50U-PDZN R/L1504-63	—	●	●	63	50	47	350	31.5	8.0	3								



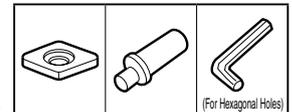
Steel



### Insert

· DNMG150408N-GE  
(Representative example)

### Spare Parts



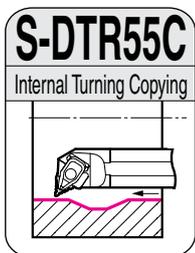
### Holder

Right handed toolholders are applicable with **right handed** or neutral inserts.  
Left handed toolholders are applicable with **left handed** or neutral inserts.

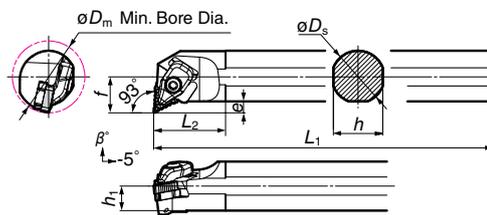
Above figures show right hand tools.

Shank	Cat. No.	Conventional Cat. No.	Stock		Dimensions (mm)										Applicable Insert		
			R	L	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$	$L_2$	$e$	$\theta^\circ$	Cat. No.	Featured page	Shim	Eccentric Shaft	Wrench
Steel	S25R-EDZN R/L1104-34	BDZN325 R/L	●	●	34	25	23	200	17	—	5.5	-12	DN □ □ 1104 □ □	B30	SDW323	CPB34	LH025
	S32S-EDZN R/L1504-44	BDZN432 R/L	●	●	44	32	30	250	22	—	7.0	-10	DN □ □ 1504 □ □	From B31	SDW423	CPB43	LH030

## Internal Copying



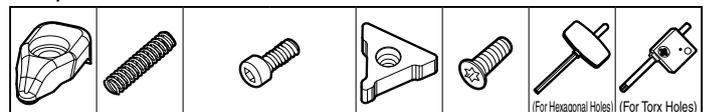
Steel



### Insert

Ref. Page : C12  
· TRM51708-GU  
(Representative example)

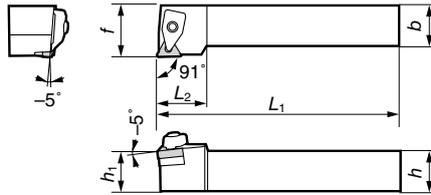
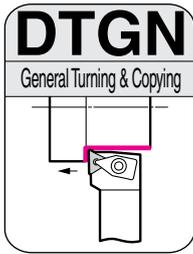
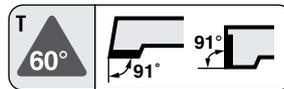
### Spare Parts



### Holder

Cat. No.	Stock	Min. Bore Dia.	Dimensions (mm)								Clamp	Spring	Cap Screw	Recommended Tightening Torque (N·m)	Shim	Shim Screw	Wrench	Shim Wrench
			R	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$f$	$L_2$	$\beta^\circ$								
S32S-DTR55C R-17	●	44	32	30	250	22	42	-12	7.0	15.0	TRCP3	S-SP4-20	BX0520	3.5 to 4.5	TRW5505	BFTX0307N	TSW040	TRX10(*)
S40T-DTR55C R-17	●	50	40	37	300	25	42	-10	6.2	18.5								

\* Item is sold separately.



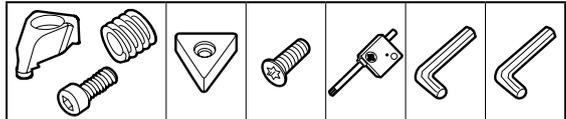
### Insert



- (1) 3NC-TNGA160416 (4) 6NC-TNGA160416
- (2) 3NC-TNGA160420 (5) 6NC-TNGA160420
- (3) 3NC-TNGA160424 (6) 6NC-TNGA160424

### Parts

\*Item is sold separately.

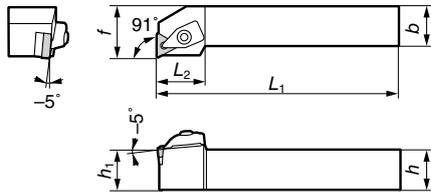
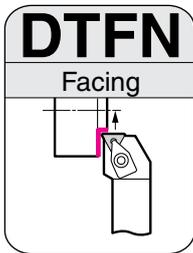


### Holder

Above figures show right hand tools

Cat. No	Stock		Dimensions (mm)						Applicable Insert	Clamp Set	Recommended Tightening Torque (N·m)	Shim	Shim Screw	Shim Spanner	Wrench for Upper Surface	Wrench for Lower Surface
	R	L	h	b	L <sub>1</sub>	f	h <sub>1</sub>	L <sub>2</sub>								
DTGN R/L 2525M16-R24	●	●	25	25	150	32	25	32	○ NC-TNGA1604 ○	SCP-1	5.0	TNS1604-R24	BFTX 0307N	TRX10 (*)	LH040	LH025
R/L 3225P16-R24	●	●	32	25	170	32	32	32								
R/L 3232P16-R24	●	●	32	32	170	40	32	32								

\* Holders are intended for use with inserts with a nose radius of 1.6mm, 2.0mm, or 2.4mm. They cannot be used with other sizes.



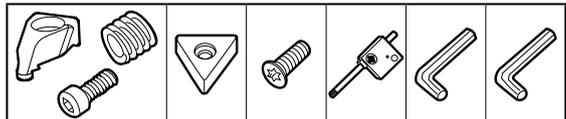
### Insert



- (1) 3NC-TNGA160416 (4) 6NC-TNGA160416
- (2) 3NC-TNGA160420 (5) 6NC-TNGA160420
- (3) 3NC-TNGA160424 (6) 6NC-TNGA160424

### Parts

\*Item is sold separately.



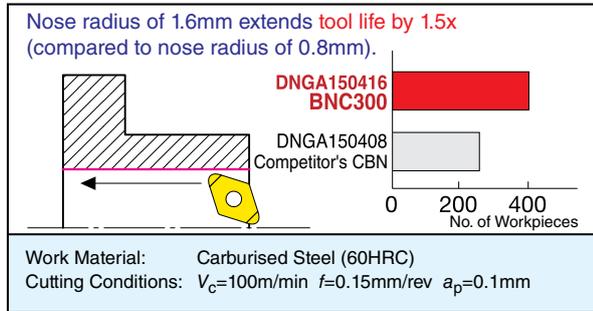
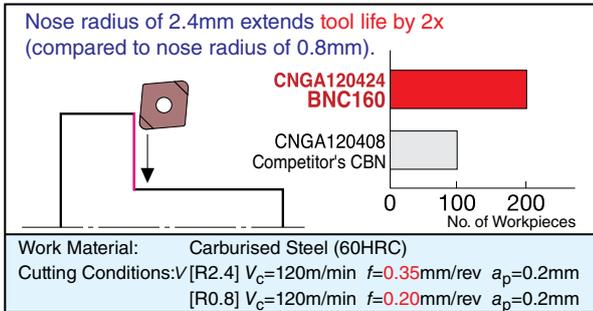
### Holder

Above figures show right hand tools

Cat. No	Stock		Dimensions (mm)						Applicable Insert	Clamp Set	Recommended Tightening Torque (N·m)	Shim	Shim Screw	Shim Spanner	Wrench for Upper Surface	Wrench for Lower Surface
	R	L	h	b	L <sub>1</sub>	f	h <sub>1</sub>	L <sub>2</sub>								
DTFN R/L 2525M16-R24	●	●	25	25	150	32	25	30	○ NC-TNGA1604 ○	SCP-1	5.0	TNS1604-R24	BFTX 0307N	TRX10 (*)	LH040	LH025

\* Holders are intended for use with inserts with a nose radius of 1.6mm, 2.0mm, or 2.4mm. They cannot be used with other sizes.

## Application Example (Automotive Component)



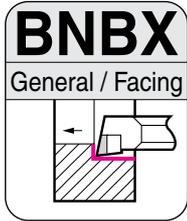
### Insert

#### Single-sided Type

Appearance	Insert	No. of Cutting Edges	Coated CBN					Dimensions (mm)				
			BNC2010	BNC2020	BNC160	BNC200	BNC300	Nose Radius	Cutting Edge Length	Inscribed Circle	Thickness	Hole
	2NC-CNGA 120416	2	●	●	●	●	●	1.6	3.3			
	120420		●	●	●	●	●	2.0	3.2	12.70	4.76	5.16
	120424		●	●	●	●	●	2.4	3.1			
	2NC-DNGA 150416	2	●	●	●	●	●	1.6	3.4			
	150420		●	●	●	●	●	2.0	3.0	12.70	4.76	5.16
	150424		●	●	●	●	●	2.4	2.7			
	3NC-TNGA 160416	3	●	●	●	●	●	1.6	3.3			
	160420		●	●	●	●	●	2.0	3.0	9.525	4.76	3.81
	160424		●	●	●	●	●	2.4	2.7			

#### Double-sided Type

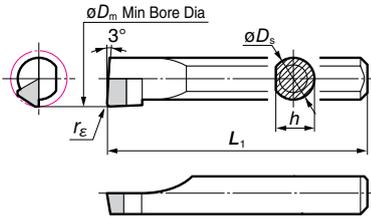
Appearance	Insert	No. of Cutting Edges	Coated CBN					Dimensions (mm)				
			BNC2010	BNC2020	BNC160	BNC200	BNC300	Nose Radius	Cutting Edge Length	Inscribed Circle	Thickness	Hole
	4NC-CNGA 120416	4	●	●	●	●	●	1.6	3.3			
	120420		●	●	●	●	●	2.0	3.2	12.70	4.76	5.16
	120424		●	●	●	●	●	2.4	3.1			
	4NC-DNGA 150416	4	●	●	●	●	●	1.6	3.4			
	150420		●	●	●	●	●	2.0	3.0	12.70	4.76	5.16
	150424		●	●	●	●	●	2.4	2.7			
	6NC-TNGA 160416	6	●	●	●	●	●	1.6	3.3			
	160420		●	●	●	●	●	2.0	3.0	9.525	4.76	3.81
	160424		●	●	●	●	●	2.4	2.7			



- Newly developed high rigidity slit-clamping system, excellent for small hole boring
  - Maximum overhang of L/D=5 possible.
  - Minimal bar deformation produces excellent boring accuracy.
  - Minimal vibration produces superior surface finish.
  - Easy bar indexing without sleeve removal.
- BN2000 for hardened steel and BN7000 for powdered metal are available

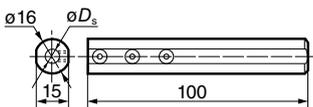
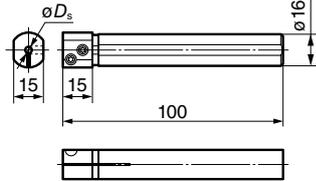
### ■ Brazed Boring Bar

Cat. No.	Stock				Min. Bore Dia.	Dimensions (mm)					Applicable Sleeve
	BN2000	BN250	BN7000	BN700	$\phi D_m$	$\phi D_s$	$h$	$L_1$	$r_\epsilon$		
<b>BNBX 020R</b>	●	▲	●	●	2.5	2.0	1.8	40	0.2	HBX 2016	
<b>025R</b>	●	▲	●	●	3.0	2.5	2.2	40	0.2	HBX 2516	
<b>030R</b>	●	▲	●	●	3.5	3.0	2.7	40	0.2	HBX 3016	
<b>035R</b>	●	▲	●	●	4.0	3.5	3.2	40	0.2	HBX 3516	
<b>040R</b>	●	▲	●	●	4.5	4.0	3.7	40	0.2	HBX 4016	
<b>045R</b>	●	▲	●	●	5.0	4.5	4.2	40	0.2	HBX 4516	
<b>050R</b>	●	▲	●	●	5.5	5.0	4.7	60	0.2	HBX 5016	
<b>055R</b>	●	▲	●	●	6.0	5.5	5.2	60	0.2	HBX 5516	
<b>060R</b>	●	▲	●	●	6.5	6.0	5.7	60	0.2	HBX 6016	
<b>BNBX 065R</b>	●	▲			7.0	6.5	6.2	60	0.2	HBB 6516	
<b>070R</b>	●	▲			7.5	7.0	6.7	80	0.2	HBB 716	
<b>075R</b>	●	▲			8.0	7.5	7.2	80	0.2	HBB 7516	
<b>080R</b>	●	▲			8.5	8.0	7.7	80	0.2	HBB 816	



### ■ Adaptor Sleeve

Cat. No.	Stock	Diameter ( $\phi D_s$ )	Applicable Bar
<b>HBX 2016</b>	●	2.0	BNBX 020R
<b>2516</b>	●	2.5	BNBX 025R
<b>3016</b>	●	3.0	BNBX 030R
<b>3516</b>	●	3.5	BNBX 035R
<b>4016</b>	●	4.0	BNBX 040R
<b>4516</b>	●	4.5	BNBX 045R
<b>5016</b>	●	5.0	BNBX 050R
<b>5516</b>	●	5.5	BNBX 055R
<b>6016</b>	●	6.0	BNBX 060R
<b>HBB 6516</b>	●	6.5	BNBX 065R
<b>716</b>	●	7.0	BNBX 070R
<b>7516</b>	●	7.5	BNBX 075R
<b>816</b>	●	8.0	BNBX 080R



### ■ Parts (For Sleeve)

Screw	Recommended Tightening Torque (N·m)	Set Screw	Wrench	Applicable Sleeve
BFTX 0409N	3.4	BT06035T	TRD15	HBX 0000
—	—	BT0404	TH020	HBB 0000

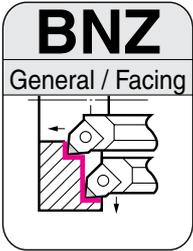
\* BNBX bars can be use with HBB type sleeves, however, HBX type sleeves are recommended for bars below  $\phi 6$ mm.

### ■ Recommended Cutting Conditions

Spindle speed $n$	More than 2,000min <sup>-1</sup>	Low speed may cause chattering and chipping on the cutting edge.
Depth of cut $a_p$	0.01 to 0.2mm	Excessive depth of cut may cause larger tool deformation resulting in deterioration of bore accuracy.
Feed rate $f$	0.01 to 0.1mm/rev	—

### ■ Important notes

- (1) Shorten overhang as much as possible (Max. L/D=5).
- (2) Even minor workpiece run-out may affect tool life.
- (3) Select a boring bar with a diameter closest to the bore diameter.
- (4) Although it is difficult to increase the rotational speed in small diameter boring applications, higher speeds are recommended whenever possible.



- $\phi 7$ mm minimum bore diameter with special insert.
- High rigidity indexable type boring bar with full carbide holder.
- Economical and easy tool management with one-use type inserts.

### Holder

	Cat. No.	Stock	Min. Bore Dia. $\phi D_m$	Dimensions (mm)			$\theta^\circ$
				$\phi D_s$	$h$	$L_1$	
	<b>BNZ 606R</b>	●	7.0	6.0	5.5	80	-14
	<b>608R</b>	●	9.0	8.0	7.5	100	-12
	<b>610R</b>	●	11.0	10.0	9.5	125	-10
	<b>612R</b>	●	13.0	12.0	11.0	130	-8
	<b>616R</b>	●	17.0	16.0	15.0	145	-6
	<b>620R</b>	●	21.0	20.0	19.0	160	-5

### Parts (for Holder)

Screw	Wrench
BFTX 0204N	TRX06
Recommended Tightening Torque (N·m)	0.5

Inserts are not included.

### Sleeve

	Cat. No.	Stock	Dimensions (mm) ( $\phi D_s$ )	Applicable Holder
		<b>HBB 616</b>	●	6.0
	<b>816</b>	●	8.0	BNZ 608R

### Parts (for Adapter Sleeve)

Set Screw	Wrench
BT0404	TH020

### Insert (1 piece pack)

	Stock					Dimension (mm)
	BN1000	BN2000	BN250	BN7000	BN700	Nose Radius ( $r_\epsilon$ )
	●	●	▲	●	●	0.2
	●	●	▲	●	●	0.4

### Insert (10 pieces pack)

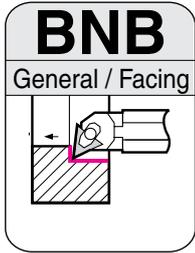
	Stock					Dimension (mm)
	BN1000	BN2000	BN250	BN7000	BN700	Nose Radius ( $r_\epsilon$ )
	●	▲				0.2
	●	▲				0.4

### Recommended Cutting Conditions

Spindle speed $n$	More than 2,000min <sup>-1</sup>	Low speed may cause chattering and chipping on the cutting edge.
Depth of cut $a_p$	0.03 to 0.2mm	Excessive depth of cut may cause larger tool deformation resulting in deterioration of bore accuracy.
Feed rate $f$	0.03 to 0.1mm/rev	—

### Important notes

- (1) Shorten overhang as much as possible (Max. L/D = 5).
- (2) Even minor workpiece run-out may affect tool life.
- (3) Select a boring bar with a diameter closest to the bore diameter.
- (4) Although it is difficult to increase the rotational speed in small diameter boring applications, higher speeds are recommended whenever possible.



- **High rigidity full carbide boring bar**
  - Minimal bar deformation produces excellent boring accuracy.
  - Minimal vibration produces superior surface finish.
- **Full-Top SUMIBORON insert enables 3 cutting edges**
- **Can be used with SUMIDIA inserts for non-ferrous metal machining**
- **Now with economical one-corner NF Type SUMIDIA insert**

### Holder

Cat. No.	Stock	Dimensions (mm)				
		Min. Bore Dia. $\phi D_m$	$\phi D_s$	$h$	$L_1$	$\theta^\circ$
<b>BNB 508R</b>	●	10.0	8.0	7.0	140	-9
<b>510R</b>	●	12.0	10.0	9.0	140	-8
<b>512R</b>	●	14.0	12.0	11.0	160	-6
<b>516R</b>	●	18.0	16.0	14.0	180	-5
<b>520R</b>	●	22.0	20.0	18.0	180	-4

Inserts are not included.

### Insert

TBGN	Cat. No.	Cat. No.								Dimension (mm)		
		SUMIBORON							SUMIDIA			
		BNX10	BNX20	BN2000	BN250	BN350	BN500	BN7000	BN700	DA150	DA1000	Nose Radius ( $r_\epsilon$ )
—	—	●	●	●	●	●	●	●	●	●	●	0.2
—	—	●	●	●	●	●	●	●	●	●	●	0.4
—	—	●	●	●	●	●	●	●	●	●	●	0.8
—	—	—	●	—	—	—	—	—	—	—	—	0.2
—	—	—	●	—	—	—	—	—	—	—	—	0.4
—	—	—	●	—	—	—	—	—	—	—	—	0.8
—	—	—	—	—	—	—	—	—	—	●	—	0.2
—	—	—	—	—	—	—	—	—	—	●	—	0.4

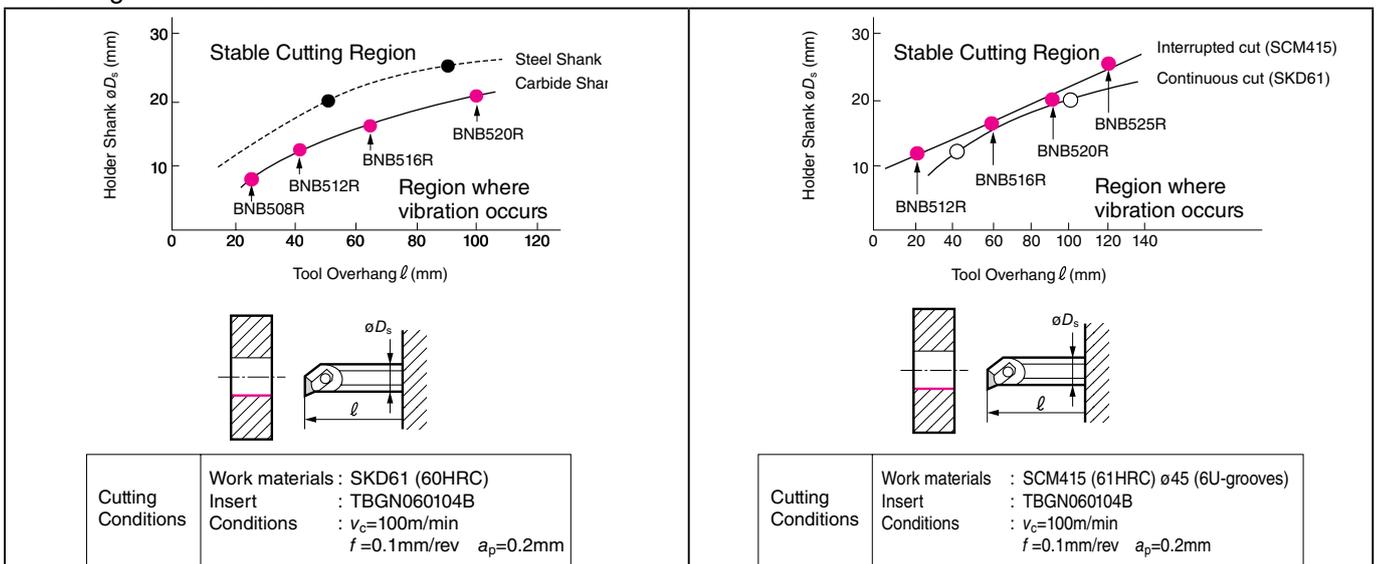
### Parts

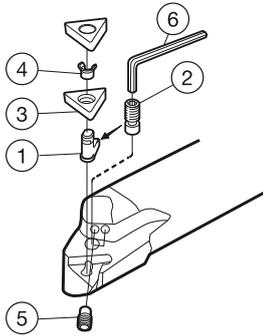
Clamp	Bolt	Nut	Wrench	Applicable Holder
—	BH0306	BNBW-2	—	BNB 508R
—	FBUP3-A0-9	BNBW-4	TH020	BNB 510R
—	—	—	—	BNB 512R
—	BH0310	BNBW-7	—	BNB 516R
—	—	—	—	BNB 520R

\*1 TBGN ○○○○○-BSTN is only available in BNX20 grade and it has a smaller negative land angle (-15°) as compared to the B type (-25°).

\*2 NF-TBGN is a single corner insert. (This is not a Full-Top insert)

### Cutting Performance



**T-Max® P boring bar for turning****Lever clamp design****Metric version**

	Spare parts					Included parts
	1	2	3	4	5	6
Ordering code	Lever	Screw	Shim	Shim pin	Nozzle	Key
A16R-PCLNR/L09HP	174.3-845-1	174.3-829			5691 026-13	170.3-864
A20S-PCLNR/L09HP	174.3-845-1	174.3-829			5691 026-13	170.3-864
A25T-PCLNR/L09HP	174.3-845-1	174.3-829			5691 026-13	170.3-864
A25T-PCLNR/L12HP	438.3-841-1	438.3-832M			5691 026-13	174.1-863
A32T-PCLNR/L12HP	174.3-848M	174.3-858	171.31-850M	174.3-861	5691 026-13	174.1-864
A40T-PCLNR/L12HP	174.3-848M	174.3-858	171.31-850M	174.3-861	5691 026-13	174.1-864
A50U-PCLNR/L19HP	174.3-849M	174.3-822M	171.31-851M	174.3-868	5691 026-13	3021 010-040
	Spare parts					Included parts
	1	2	3	4	5	6
Ordering code	Lever	Screw	Shim	Shim pin	Nozzle	Key
A25T-PDUNR/L11HP	5432 015-021	438.3-830			5691 026-13	174.1-870
A32T-PDUNR/L11HP	5432 001-01	174.3-820M	5322 255-01	174.3-860	5691 026-13	170.3-860
A40T-PDUNR/L15HP	174.3-847M	174.3-830	171.35-851M	174.3-861	5691 026-13	174.1-864
A50U-PDUNR/L15HP	174.3-847M	174.3-830	171.35-851M	174.3-861	5691 026-13	174.1-864
	Spare parts					Included parts
	1	2	3	4	5	6
Ordering code	Lever	Screw	Shim	Shim pin	Nozzle	Key
A25T-PSKNR/L12HP	438.3-841-1	438.3-832M			5691 026-13	174.1-863
A32T-PSKNR/L12HP	174.3-841M	174.3-821	174.3-851M	174.3-861	5691 026-13	174.1-864
A40T-PSKNR/L12HP	174.3-841M	174.3-821	174.3-851M	174.3-861	5691 026-13	174.1-864
A50U-PSKNR/L19HP	174.3-849M	174.3-822M	174.3-852M	174.3-862	5691 026-13	3021 010-040
	Spare parts				Included parts	
	1	2	5	6		
Ordering code	Lever	Screw	Nozzle	Key		
A16R-PTFNR/L11HP	174.3-846-1	174.3-829	5691 026-23	170.3-864		
A20S-PTFNR/L11HP	174.3-846-1	174.3-829	5691 026-23	170.3-864		
A25T-PTFNR/L11HP	174.3-846-1	174.3-829	5691 026-23	170.3-864		
	Spare parts				Included parts	
	1	2	5	6		
Ordering code	Lever	Screw	Nozzle	Key		
A25T-PWLNR/L08HP	438.3-841-1	438.3-832M	5691 026-13	174.1-863		

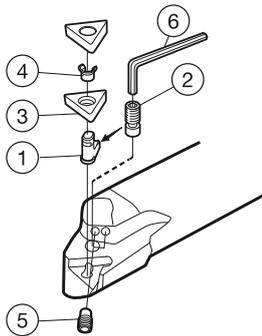
Keys (mm/Torx Plus) sizes, see page P4

For optional shims, see page A131.

For optional nozzles and nozzle keys, see page P3

# T-Max® P boring bar for turning

## Lever clamp design



### Inch version

	Spare parts					Included parts
	1	2	3	4	5	6
Ordering code	Lever	Screw	Shim	Shim pin	Nozzle	Key
A10R-PCLNR/L3HP	174.3-845-1	174.3-829			5691 026-13	170.3-864
A12S-PCLNR/L3HP	174.3-845-1	174.3-829			5691 026-13	170.3-864
A16T-PCLNR/L3HP	174.3-845-1	174.3-829			5691 026-13	170.3-864
A16T-PCLNR/L4HP	438.3-841-1	438.3-832M			5691 026-13	174.1-863
A20T-PCLNR/L4HP	174.3-848M	174.3-858	171.31-850M	174.3-861	5691 026-13	174.1-864
A24T-PCLNR/L4HP	174.3-848M	174.3-858	171.31-850M	174.3-861	5691 026-13	174.1-864
A32U-PCLNR/L6HP	174.3-849M	174.3-822M	171.31-851M	174.3-868	5691 026-13	3021 010-040
	Spare parts					Included parts
	1	2	3	4	5	6
Ordering code	Lever	Screw	Shim	Shim pin	Nozzle	Key
A16T-PDUNR/L3HP	5432 015-021	438.3-830	5322 255-01	174.3-860	5691 026-13	174.1-870
A20T-PDUNR/L3HP	5432 001-01	174.3-820M	171.35-856	174.3-861	5691 026-13	170.3-860
A24T-PDUNR/L4HP	174.3-847M	174.3-830	171.35-856	174.3-861	5691 026-13	174.1-864
A32U-PDUNR/L4HP	174.3-847M	174.3-830	171.35-856	174.3-861	5691 026-13	174.1-864
	Spare parts					Included parts
	1	2	3	4	5	6
Ordering code	Lever	Screw	Shim	Shim pin	Nozzle	Key
A16T-PSKNR/L4HP	438.3-841-1	438.3-832M			5691 026-13	174.1-863
A20T-PSKNR/L4HP	174.3-848M	174.3-858	174.3-851M	174.3-861	5691 026-13	174.1-864
A24T-PSKNR/L4HP	174.3-841M	174.3-821	174.3-851M	174.3-861	5691 026-13	174.1-864
A32U-PSKNR/L6HP	174.3-849M	174.3-822M	174.3-852M	174.3-862	5691 026-13	3021 010-040
	Spare parts				Included parts	
	1	2	5	6		
Ordering code	Lever	Screw	Nozzle	Key		
A10R-PTFNR/L2HP	174.3-846-1	174.3-829	5691 026-23	170.3-864		
A12S-PTFNR/L2HP	174.3-846-1	174.3-829	5691 026-23	170.3-864		
A16T-PTFNR/L2HP	174.3-846-1	174.3-829	5691 026-13	170.3-864		
	Spare parts				Included parts	
	1	2	5	6		
Ordering code	Lever	Screw	Nozzle	Key		
A16T-PWLNR/L4HP	438.3-841-1	438.3-832M	5691 026-13	174.1-863		

Keys (mm/Torx Plus) sizes, see page P4

For optional shims, see page A131.

For optional nozzles and nozzle keys, see page P3