

THE NEW VALUE FRONTIER



Dynamic Bar

Inch-Size and Metric-Size Availability

AeroDynamic Design for

- Improved chip evacuation
- Reduced chattering
- Stable Machining



AeroDynamic Design

Improved Chip Control
and Rigidity

ADVANCING PRODUCTIVITY

New Boring Bar

Dynamic Bar

Aerodynamic design generated from the latest computer simulation technology

Kyocera engineers used state-of-the-art stress analysis technology to design the Dynamic Bar. The result is a new boring bar with maximum structural thickness for higher tool holder rigidity and controlled chattering for stable machining.

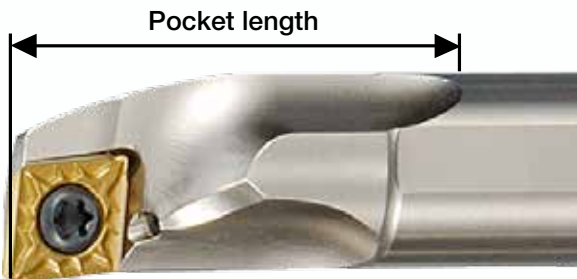
Large chip pocket provides superior chip evacuation

■ Superior Chip Evacuation

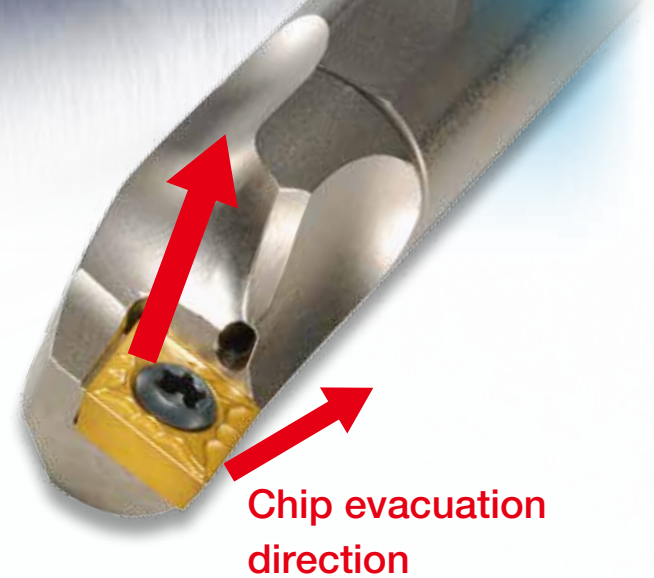
	Dynamic Bar	Competitor A	Competitor B
Inside the workpiece			

In the boring bars of Competitor A and Competitor B, chips remain inside the workpiece. In the new Dynamic Bar, all chips are evacuated from the workpiece.

■ Comparison of pocket length

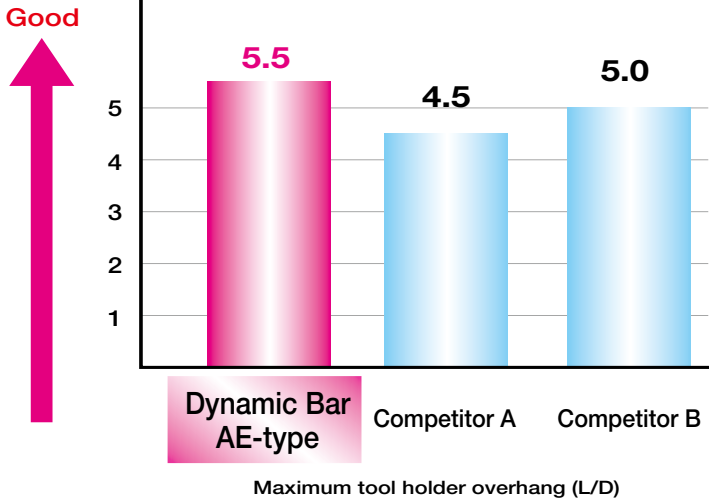


item/description	Pocket length	
	Dynamic Bar	Competitor A
A16-SCLPR09-18 type	1.45"	1.14"
A20-SCLCR09-22 type	1.89"	1.26"



Introducing a New Boring Bar with Improved Rigidity, Chip Evacuation, and Chattering Resistance!

■ Anti-chatter Vibration Performance



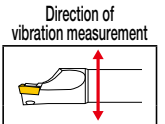
<cutting conditions>
 SCM415
 Vc=500 sfm, doc=0.02", f=0.004 ipr
 S16-SCLPR09type, CPMH090304L-Y

■ Comparison of Surface Finish

Even at high cutting speeds, the anti-vibration features of the Dynamic Bar produce stable machining.

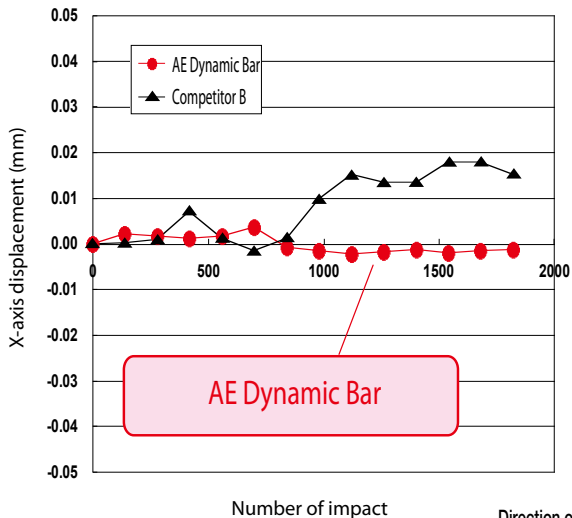
	Dynamic Bar	Competitor A	Competitor B
surface wall			
surface roughness	 Ra=0.4μm Rz=2.3μm	 Ra=0.6μm Rz=3.6μm	 Ra=3.4μm Rz=14.0μm
Oscillatory waveform			

<cutting conditions>
 SCM415, Vc=700 sfm, doc=0.002",
 f=0.004 ipr, A16Q-SCLPR09-18type,
 CPMT090304XP (PV7020), L/D=4, External coolant

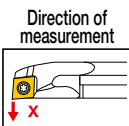


■ Cutting Point Precision

The AE type Dynamic Bar maintains high cutting edge positional accuracy through the use of a special alloy, thereby achieving high precision machining.



<cutting conditions>
 SCM435, Vc=600 sfm, doc=0.08", f=0.008",
 S/A16Q-SCLPR09-18type, CPMH090308(CA5525),
 L/D=4, External coolant



■ Inch-size Toolholder Availability

·Excellent Bar (AE)

The Excellent Bar with internal coolant hole* is made from a special tool steel with rigidity comparable to heavy metal.

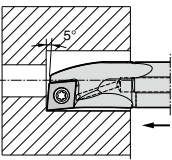
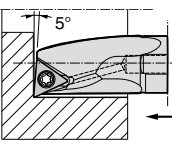
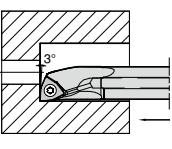
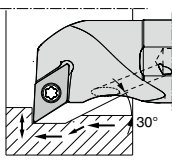
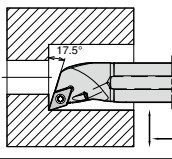
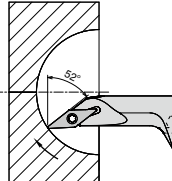
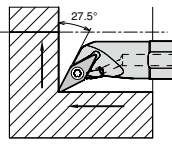


* The following three bars do not have internal coolant holes:
 S04H-STLB % 1.2AE, S06H-SWUB % 1.2AE, S06H-SWUB % 1.5AE

■ Metric-size Toolholder Availability

- Excellent Bar (AE)
- Steel Shank Bar
- Carbide Shank Bar

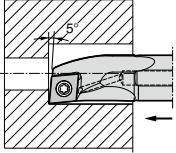
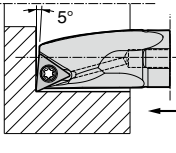
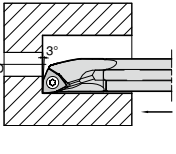
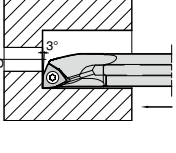
■ Inch Lineup

Application	Overview Shape	Boring Bar Type	Shank Type Max.Overhang Length (L/D)	Coolant Hole		Min.Bore Dia. ϕ A(inch)														Ref. Page for Toolholder							
				Yes	No	.240	.312	.392	.413	.450	.480	.512	.551	.580	.630	.700	.770	.787	.790		.825	.930	.980	1.180	1.200	1.240	1.300
Boring / Internal Facing		A...SCLC-AE	Excellent L/D = ~5.5	●						●																	8-9
		A...SCLP-AE	Excellent L/D = ~5.5	●					●	●																	10-11
		A...STLP(B)-AE	Excellent L/D = ~5.5	●				●	●																	●	16-17
		S...STLB-AE	Excellent L/D = ~5.5		○			●																			
Boring		A...SWUP(B)-AE	Excellent L/D = ~5.5	●						●																	24-25
		S...SWUB-AE	Excellent L/D = ~5.5		○		●	●																			
Copying		A...SDUC-AE	Excellent L/D = ~5.5	●																							12-13
		A...SDQC-AE	Excellent L/D = ~5.5	●																							14
		A...SVJB(C)-AE	Excellent L/D = ~5.5	●																							20-21
		A...SVPB(C)-AE	Excellent L/D = ~5.5	●																							

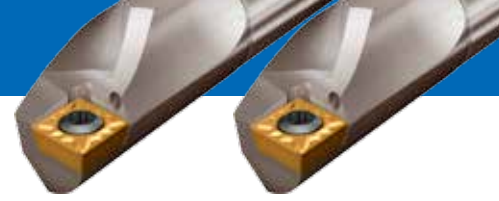
Min.Bore Dia. ϕ A is indicated by the figure under ● depending on the boring bar size.

Dynamic Bar Product Lineup

Metric Lineup

Application	Overview Shape	Boring Bar Type	Shank Type Max.Overhang Length (L/D)	Coolant Hole		Min.Bore Dia. ϕA (mm)																								Ref.Page for Toolholder
				Yes	No	5	6	7	8	10	12	13	14	16	18	20	22	23	25	26	27	30	31	32	34	40	50			
Boring/Internal Facing		A...SCLC-AE	Excellent L/D = ~5.5	●						●	●		●		●		●											8-9		
		S...SCLC-AE	Excellent L/D = ~5.5	○		●	●	●	●																					
		S...SCLC-A	Steel L/D = ~4	○							●	●		●		●		●												
		C...SCLC-A	Carbide L/D = ~7	○		●	●	●	●																					
		E...SCLC-A	Carbide L/D = ~7	●							●	●		●		●		●												
		A...SCLP-AE	Excellent L/D = ~5.5	●										●		●	●	●											10-11	
		S...SCLP-A	Steel L/D = ~4	○										●		●	●	●												
		E...SCLP-A	Carbide L/D = ~7	●											●		●	●	●											
		E...STLP-A C...STLB-A	Carbide L/D = ~7	●	○					●					●		●	●	●											16-17
	A...STLP-AE S...STLB-AE	Excellent L/D = ~5.5	●	○					●					●		●	●	●												
	S...STLB(P)-A	Steel L/D = ~4	○						●					●		●	●	●												
		A...STLC-AE	Excellent L/D = ~5.5	●										●		●	●	●											18	
		S...STLC-A	Steel L/D = ~4	○											●		●	●												
	Boring		S...SWUB(P)-A	Steel L/D = ~4	○		●	●	●	●				●		●	●	●										24-25		
			S...SWUB-AE	Excellent L/D = ~5.5	○		●	●	●	●																				
A...SWUB(P)-AE			Excellent L/D = ~5.5	●											●		●	●	●											
C...SWUB-A			Carbide L/D = ~7	○		●	●	●																						
E...SWUB(P)-A			Carbide L/D = ~7	●											●		●	●	●											

Min.Bore Dia. ϕA is indicated by the figure under ● depending on the boring bar size.

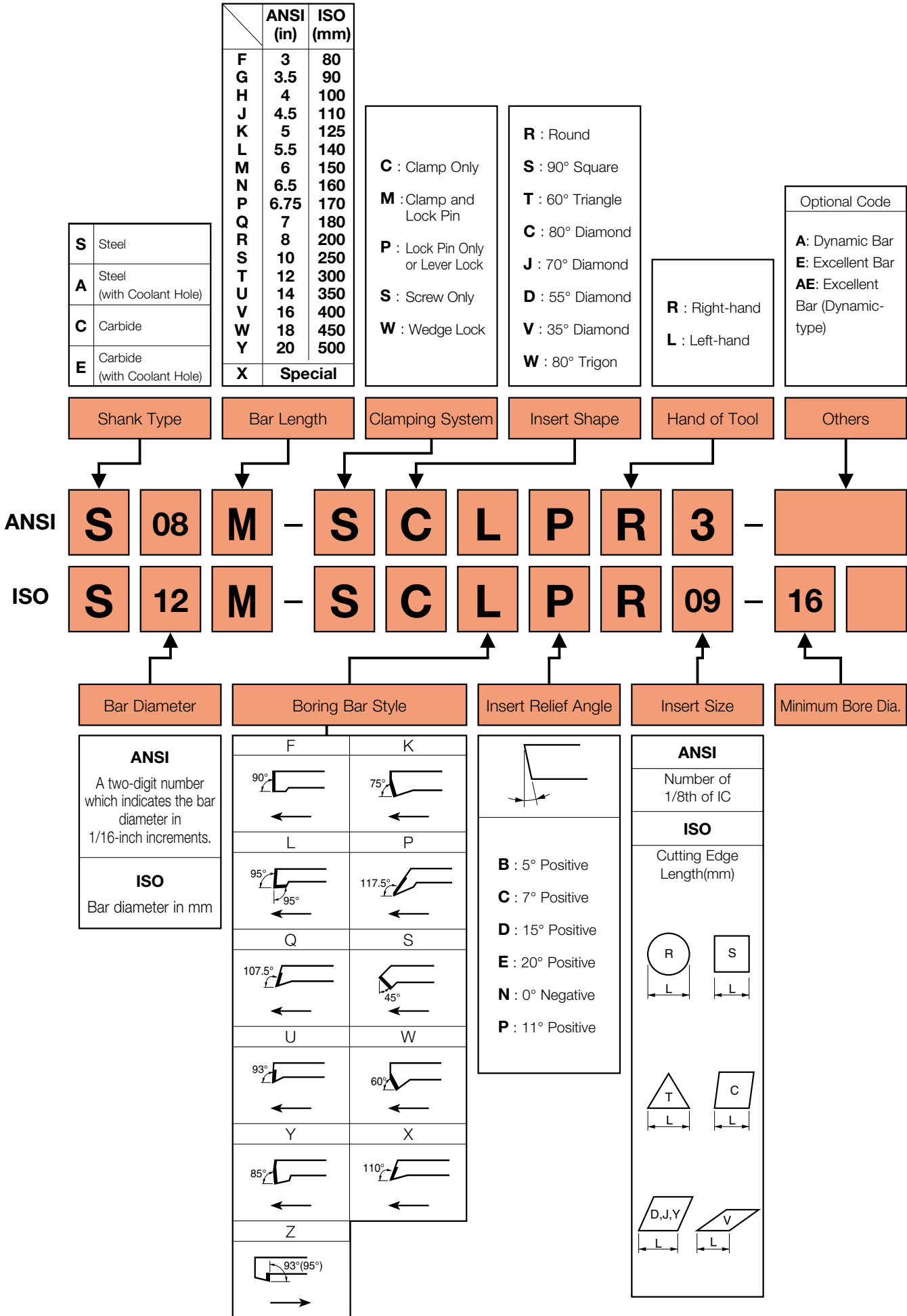


■ Metric Lineup

Application	Overview Shape	Boring Bar Type	Shank Type Max.Overhang Length (L/D)	Coolant Hole		Min.Bore Dia. ϕA (mm)																	Ref Page for Toolholder					
				Yes	No	5	6	7	8	10	12	13	14	16	18	20	22	23	25	26	27	30		31	32	34	40	50
Copying		A...SDUC-AE Excellent L/D = ~5.5	●												●	●	●	●		●		●					12-13	
		S...SDUC-A Steel L/D = ~4	○													●	●	●	●		●		●					
		E...SDUC-A Carbide L/D = ~7	●													●	●	●	●		●		●					
		A...SDQC-AE Excellent L/D = ~5.5	●													●	●	●		●			●				14	
		S...SDQC-A Steel L/D = ~4	○													●	●	●		●			●					
		E...SDQC-A Carbide L/D = ~7	●													●	●	●	●		●		●					
		A...SVJB(C)-AE A...SVJP-AE Excellent L/D = ~5.5	●														●	●		●		●			●	●	20-21	
		S...SVJB(C)-A S...SVJP-A Steel L/D = ~4	○														●	●		●		●			●	●		
		E...SVPB(C)-A Carbide L/D = ~7	●														●	●		●		●			●	●		
		A...SVPB(C)-AE Steel L/D = ~5.5	●														●	●		●		●			●	●	20-21	
		S...SVPB(C)-A Steel L/D = ~4	○														●	●		●		●			●	●		
		E...SVPB(C)-A Carbide L/D = ~7	●														●	●		●		●			●	●		
	A...SVUB(C)-AE Steel L/D = ~5.5	●														●	●		●			●			●	22-23		
	S...SVUB(C)-A Steel L/D = ~4	○														●	●		●		●			●	●			
	E...SVUB(C)-A Carbide L/D = ~7	●														●	●		●		●			●	●			
Back Boring		A...SDZC-AE Excellent L/D = ~5.5	●													●	●		●		●			●	●	15		
		S...SDZC-A Steel L/D = ~4	○														●	●		●		●			●		●	
		E...SDZC-A Carbide L/D = ~7	●														●	●		●		●			●		●	
		A...SVZB(C)-AE Excellent L/D = ~5.5	●														●	●		●				●	●	22-23		
		S...SVZB(C)-A Steel L/D = ~4	○														●	●		●				●	●			

Min.Bore Dia. ϕA is indicated by the figure under ● depending on the boring bar size.

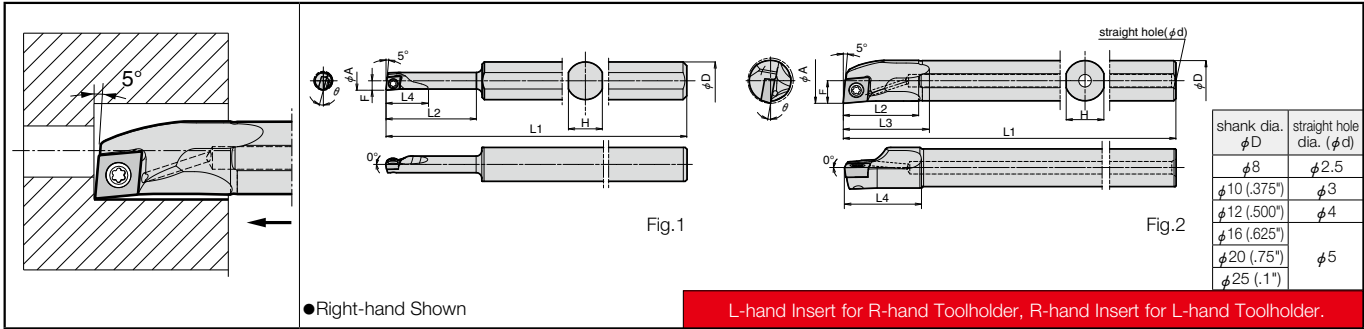
Dynamic Bar Identification System





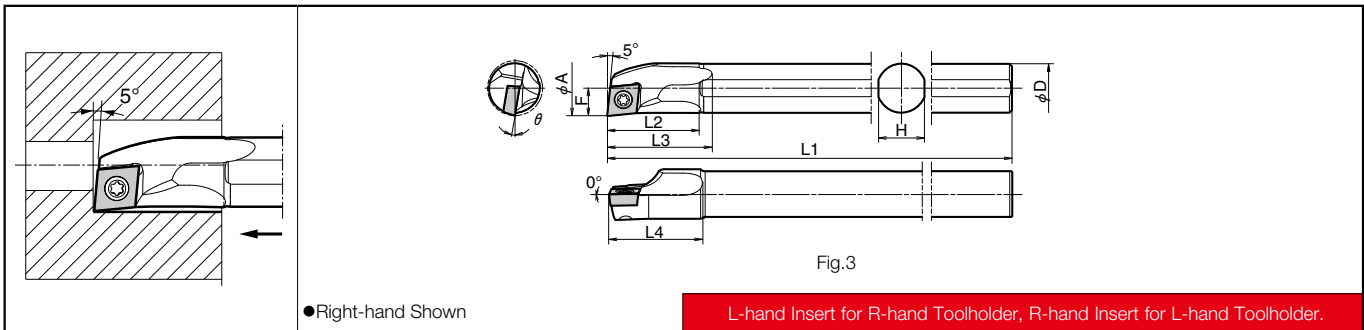
■A/S-SCLC-AE Excellent Bar (Boring/Internal Facing)

Max. Overhang Length L/D≈5.5



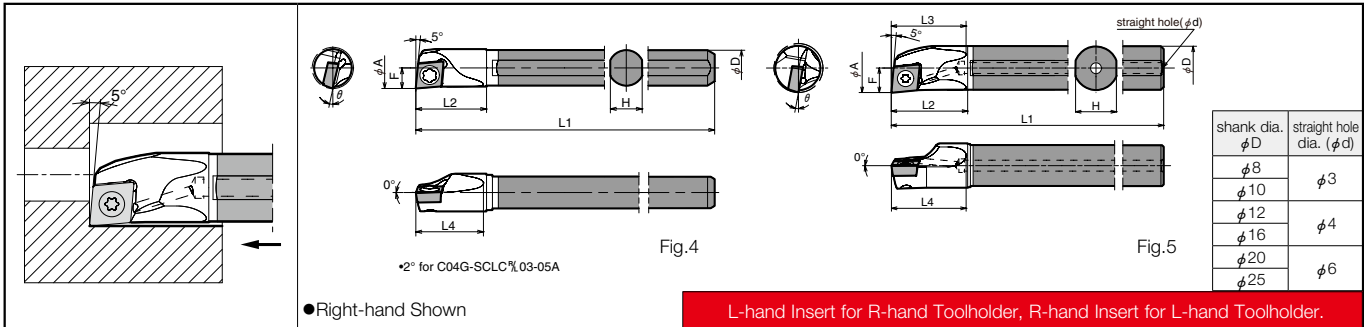
■S-SCLC-A Steel Bar (Boring/Internal Facing)

Max. Overhang Length L/D≈4



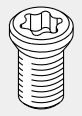
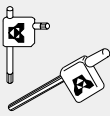
■C/E-SCLC-A Carbide Shank Bar (Boring/Internal Facing)

Max. Overhang Length L/D≈7



Dynamic Bar [CC□□ Insert]

■ Toolholder Dimensions

Description	Stock		Unit	Min. Bore Dia.	Dimension							w	Std. Coner R (rε)	Coolant Hole	Shape	Spare Parts		
	R	L			φA	φD	H	L1	L2	L3	L4					F	Clamp Screw	Wrench
																		
Excellent Bar	●	●	inch	0.480	0.375	0.336	6	0.787	0.937	0.803	0.236	12°	1/64	Yes	Fig.2	SB-2545TR	FT-8	
	●	●		0.600	0.500	0.461	6	0.945	1.217	0.969	0.276	10°						
	●	●		0.770	0.625	0.586	8	1.181	1.339	1.205	0.354	10°						
	●	●		0.930	0.750	0.711	10	1.417	1.874	1.437	0.413	8°						
	●	●		1.200	1.000	0.961	12	1.811	2.189	1.827	0.531	6°						
Excellent Bar	○	○	mm	5	10	9	100	24	-	11	2.5	15°	0.2	No	Fig.1	SB-1635TR	FT-6	
	○	○		6				28		13	3	13°						
	○	○		7				32		15	3.5	13°						
	○	○		8				37		15	4	11°						
	○	○	mm	10	8	7	120	16	20	17	5	14°	0.4	Yes	Fig.2	SB-2545TR	FT-8	
	○	○		12	10	9	140	20	25	21	6	12°						
	○	○		14	12	11	150	24	30	25	7	10°						
○	○	mm	18	16	15	180	30	34	31	9	10°	0.4	Yes	Fig.2	SB-4065TR	FT-15		
○	○		22	20	19	200	36	49	37	11	8°							
○	○		27	25	24	250	46	55	46	13.5	6°							
Steel Bar	○	○	mm	10	8	7	120	16	20	17	5	14°	0.4	No	Fig.3	SB-2545TR	FT-6	
	○	○		12	10	9	140	20	25	21	6	12°						
	○	○		14	12	11	150	24	30	25	7	10°						
	○	○		18	16	15	180	30	34	31	9	10°						
	○	○		22	20	19	200	36	49	37	11	8°						
	○	○		27	25	24	250	46	55	46	13.5	6°						
Carbide Shank Bar	○	○	mm	5	4	3.8	90	9	-	8	2.5	15°	0.2	No	Fig.4	SB-1635TR	FT-6	
	○	○		6	5	4.4	100	11		11	3	13°						
	○	○		7	6	5.4	110	12		12	3.5	13°						
	○	○		8	7	6.4	125	13		13	4	11°						
	○	○	mm	10	8	7	140	16	15	15	5	14°	0.4	Yes	Fig.5	SB2545TR	FT-8	
	○	○					90											
	○	○		12	10	9	160	20	19	19	6	12°						
	○	○					105											
	○	○		14	12	11	180	23	22	22	7	10°						
	○	○					120											
	○	○		18	16	15	220	28	27	27	9	10°						
	○	○					145											
	○	○		22	20	19	250	32	31	31	11	8°						
○	○	165																
○	○	300																
○	○	27	25	24	300	38	37	37	13.5	6°								
○	○				200													

●: Stock Standard
○: World Express

■ Applicable Inserts

Toolholder	Insert			
	Cermet / Coated / Carbide	Ceramic	CBN	PCD
----SCLC % 03----	CCET1109_ CCGT1109_	-	CCMW1109_	-
----SCLC % 04----	CCET1411_ CCGT1411_	-	CCMW1411_	CCGW1411_
---SCLC % 2 ---SCLC % 06----	CCGW215_ CCMT215_	-	CCMW215_	CCMT215_ CCGW215_
---SCLC % 3 ---SCLC % 09---	CCET32.5_ CCGT32.5_	-	CCMW32.5_	CCMT32.5_ CCGW32.5_



Max. Overhang Length L/D≈5.5

■A-SCLP-AE Excellent Bar (Boring/Internal Facing)

Fig.1

shank dia. φD	straight hole dia. (φd)
(.312")	φ2.5
φ10 (.375")	φ3
φ12 (.500")	φ4
φ16 (.625")	
φ20 (.75")	φ5
φ25 (.1")	

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■S-SCLP-A Steel Bar (Boring/Internal Facing)

Max. Overhang Length L/D≈4

Fig.2

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■E-SCLP-A Carbide Shank Bar (Boring/Internal Facing)

Max. Overhang Length L/D≈7

Fig.3



shank dia. φD	straight hole dia. (φd)
φ10	φ3
φ12	φ4
φ16	
φ20	φ6
φ25	

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

Dynamic Bar [CP□□ Insert]

■ Toolholder Dimensions

Description	Stock		Unit	Min. Bore Dia.	Dimension							W	Std. Coner R (r°)	Coolant Hole	Shape	Spare Parts		
	R	L			φA	φD	H	L1	L2	L3	L4					F	Clamp Screw	Wrench
																		
Excellent Bar	●	●	inch	0.413	0.312	0.273	5	0.630	0.760	0.669	0.197	10°	1/64	Yes	Fig.1	SB-2545TR	FT-8	
	●	●		0.480	0.375	0.336	6	0.787	0.961	0.791	0.236	5°				SB-3060TR	FT-10	
	●	●		0.580	0.500	0.461	6	0.945	1.201	0.961	0.276	4°				SB-4065TR	FT-15	
	●	●		0.700	0.625	0.586	8	1.181	1.461	1.189	0.354	3.5°						
	●	●		0.825	0.750	0.711	10	1.417	1.780	1.421	0.413	2°						
	●	●		1.200	1.000	0.961	12	1.811	2.185	1.815	0.531	0°						
Excellent Bar	○	○	mm	12	10	9	140	20	25	20	6	5°	0.4	Yes	Fig.1	SB-3060TR	FT-10	
	○	○		14	12	11	150	24	29	24	7	4°				SB-4065TR	FT-15	
	○	○		16					31	24	8							
	○	○		18	16	15	180	30	37	30	9	3.5°						
	○	○		22	20	19	200	36	47	37	11	2°						
	○	○		27	25	24	250	46	55	46	13.5	0°						
Steel Bar	○	○	mm	12	10	9	140	20	25	20	6	5°	0.4	No	Fig.2	SB-3060TR	FT-10	
	○	○		14					29	24	7	4°				SB-4065TR	FT-15	
	○	○		16	12	11	150	24	31	24	8							
	○	○		18	16	15	180	30	37	30	9	3.5°						
	○	○		22	20	19	200	36	47	37	11	2°						
	○	○		27	25	24	250	46	55	46	13.5	0°						
Carbide Shank Bar	○	○	mm	12	10	9	160	20	19	19	6	5°	0.4	Yes	Fig.3	SB-3060TR	FT-10	
	○	○					105											
	○	○					80											
	○	○		14	12	11	180	23	22	22	7	4°						
	○	○					120											
	○	○					90											
	○	○		18	16	15	220	28	27	27	9	3.5°						
	○	○					145											
	○	○					110											
	○	○		22	20	19	250	32	31	31	11	2°						
	○	○					165											
	○	○					125											
	○	○		27	25	24	300	38	37	37	13.5	0°						
	○	○					200											
○	○																	

●: Stock Standard
○: World Express

■ Applicable Inserts

Toolholder	Insert			
	Cermet / Coated / Carbide	Ceramic	CBN	PCD
----SCLP% 2	CPGT215_	-	-	-
----SCLP% 2.5	CPMB2515_ CPMH2515_	-	CPGB2515_	CPMH2515_
----SCLP% 08----	CPMT2515_	-	CPGB2515_	CPMH2515_
----SCLP% 3	CPMB32_ CPMH32_	-	CPGB32_	CPMH32_
----SCLP% 09---	CPMT32_	-	CPGB32_	CPMH32_



Max. Overhang Length L/D≈5.5

■A-SDUC-AE Excellent Bar (Copying)

inner hole dia. of A16Q-SDUC%07-14AE (φ2.5)
inner hole dia. of A20R-SDUC%11-20AE (φ3)

outer hole dia. (φ5)

straight hole(φd)

shank dia. φD	straight hole dia. (φd)
φ10	φ3
φ12	φ4
φ16	
φ20	φ5
φ25	

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■S-SDUC-A Steel Bar (Copying)

Max. Overhang Length L/D≈4

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■E-SDUC-A Carbide Shank Bar (Copying)

Max. Overhang Length L/D≈7

straight hole(φd)



shank dia. φD	straight hole dia. (φd)
φ10	φ3
φ12	φ4
φ16	
φ20	φ6
φ25	

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

Dynamic Bar [DC□□ Insert]

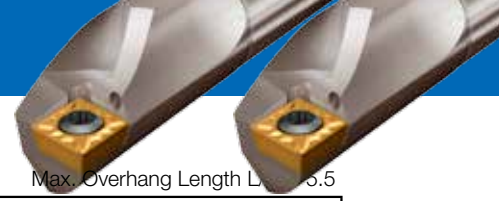
■ Toolholder Dimensions

Description	Stock		Unit	Min. Bore Dia.	Dimension								w	Std. Coner R (rε)	Coolant Hole	Shape	Spare Parts		
	R	L			φA	φD	H	L1	L2	L3	L4	F					S	Clamp Screw	Wrench
																			
Excellent Bar	A06M-SDUC^R 2AE	●	●	inch	0.551	0.375	0.336	6	0.748	-	0.756	0.341	0.130	5°	1/64	Yes	Fig.1	SB-2560TR	FT-8
	A08M-SDUC^R 2AE	●	●		0.630	0.500	0.461	6	0.827	-	0.988	0.360	0.130						
	A10R-SDUC^R 2AE	●	●		0.787	0.625	0.586	8	0.827	-	1.031	0.459	0.130						
	A12S-SDUC^R 3AE	●	●		1.063	0.750	0.711	10	0.866	-	1.386	0.650	0.240						
	A16T-SDUC^R 3AE	●	●		1.300	1.000	0.961	12	0.945	-	1.461	0.748	0.240						
Excellent Bar	A16Q-SDUC^R 07-14AE	○	○	mm	14	16	15	180	28	-	23	10.8	4.4	5°	0.4	Yes	Fig.1	SB-2560TR	FT-8
	A20R-SDUC^R 11-20AE	○	○		20	20	19	200	48	-	30	15.6	6.1						
	A10L-SDUC^R 07-14AE	○	○		14	10	9	140	19	-	20	8.7	3.3						
	A12M-SDUC^R 07-16AE	○	○		16	12	11	150	21	-	24	9.7							
	A16Q-SDUC^R 07-20AE	○	○		20	16	15	180		-	26	11.7	6.1						
	A16Q-SDUC^R 11-23AE	○	○		23				-	31	14.5								
	A20R-SDUC^R 11-27AE	○	○		27	20	19	200	23	-	36	16.5							
	A25S-SDUC^R 11-32AE	○	○		32	25	24	250	24	-	39	19							
Steel Bar	S16Q-SDUC^R 07-14A	○	○	mm	14	16	15	180	28	-	23	10.8	4.4	5°	0.4	No	Fig.3	SB-2560TR	FT-8
	S20R-SDUC^R 11-20A	○	○		20	20	19	200	48	-	30	15.6	6.1						
	S10L-SDUC^R 07-14A	○	○		14	10	9	140	19	-	20	8.7	3.3						
	S12M-SDUC^R 07-16A	○	○		16	12	11	150	21	-	24	9.7							
	S16Q-SDUC^R 07-20A	○	○		20	16	15	180		-	26	11.7	6.1						
	S16Q-SDUC^R 11-23A	○	○		23				-	31	14.5								
	S20R-SDUC^R 11-27A	○	○		27	20	19	200	23	-	36	16.5							
	S25S-SDUC^R 11-32A	○	○		32	25	24	250	24	-	39	19							
Carbide Shank Bar	E10N-SDUC^R 07-14A	○	○	mm	14	10	9	160	20	-	19	8.7	3.3	5°	0.4	Yes	Fig.5	SB-2560TR	FT-8
	E10N-SDUC^R 07-14A-2/3	○	○					105											
	E12Q-SDUC^R 07-16A	○	○		16	12	11	180	23	-	22	9.7							
	E12Q-SDUC^R 07-16A-2/3	○	○					120											
	E16X-SDUC^R 07-20A	○	○		20	16	15	220	28	-	26	11.7							
	E16X-SDUC^R 07-20A-2/3	○	○					145											
	E16X-SDUC^R 11-23A	○	○		23	16	15	220	-	27	14.5								
	E16X-SDUC^R 11-23A-2/3	○	○					145											
	E20S-SDUC^R 11-27A	○	○		27	20	19	250	32	-	31	16.5							
	E20S-SDUC^R 11-27A-2/3	○	○					165											
E25T-SDUC^R 11-32A	○	○	32	25	24	300	38	-	37	19									
E25T-SDUC^R 11-32A-2/3	○	○				200													

●: Stock Standard
○: World Express

■ Applicable Inserts

Toolholder	Insert			
	Cermet / Coated / Carbide	Ceramic	CBN	PCD
---SDUC ^R 2	DCGT215_ DCGW215_	-	DCMW215_	DCMT215_
---SDUC ^R 07----	DCMT215_	-	DCMW215_	DCMT215_
---SDUC ^R 3	DCGT325_ DCGW325_	-	DCMW325_	DCMT325_
---SDUC ^R 11----	DCMT325_	-	DCMW325_	DCMT325_
---SDQC ^R 2	DCGT215_ DCGW215_	-	DCMW215_	DCMT215_
---SDQC ^R 07----	DCMT215_	-	DCMW215_	DCMT215_
---SDQC ^R 3	DCGT325_ DCGW325_	-	DCMW325_	DCMT325_
---SDQC ^R 11----	DCMT325_	-	DCMW325_	DCMT325_
---SDZC ^R 2	DCGT215_ DCGW215_	-	DCMW215_	DCMT215_
---SDZC ^R 07----	DCMT215_	-	DCMW215_	DCMT215_
---SDZC ^R 3	DCGT325_ DCGW325_	-	DCMW325_	DCMT325_
---SDZC ^R 11----	DCMT325_	-	DCMW325_	DCMT325_



Max. Overhang Length L/D=5.5

■A-SDQC-AE Excellent Bar (Copying)

shank dia. ϕD	straight hole dia. (ϕd)
$\phi 10$	$\phi 3$
$\phi 12$	$\phi 4$
$\phi 16$	
$\phi 20$	$\phi 5$
$\phi 25$	

Fig.1

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■S-SDQC-A Steel Bar (Copying)

Max. Overhang Length L/D= ~ 4

Fig.2

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■E-SDQC-A Carbide Shank Bar (Copying)

Max. Overhang Length L/D= ~ 7

shank dia. ϕD	straight hole dia. (ϕd)
$\phi 10$	$\phi 3$
$\phi 12$	
$\phi 16$	$\phi 4$
$\phi 20$	
$\phi 25$	$\phi 6$

Fig.3

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■ Toolholder Dimensions

(Applicable Inserts p.13)

Description	Stock		Unit	Min. Bore Dia.	Dimension										Std. Coner R (°E)	Coolant Hole	Shape	Spare Parts				
	R	L			ϕA	ϕD	H	L1	L2	L3	L4	F	S	w				Clamp Screw	Wrench			
Excellent Bar	●	●	inch	0.512	0.375	0.336	6	0.736				0.783	0.295	0.083	10°	1/64	Yes	Fig.1	SB-2560TR	FT-8		
	●	●		0.630	0.500	0.461	6	0.866				1.051	0.364	0.102	8°				SB-2560TR	FT-8		
	●	●		0.787	0.625	0.586	8	0.984				1.256	0.443	0.102	6°				SB-4065TR	FT-15		
	●	●		0.980	0.750	0.711	10	1.220				1.390	0.565	0.146	5°							
Excellent Bar	○	○	mm	13	10	9	140	19				21	7.5	2.1	10°	0.4	Yes	Fig.1	SB-2560TR	FT-8		
	○	○		16	12	11	150	22				25	9.25	2.6	8°				SB-2560TR	FT-8		
	○	○		20	16	15	180	25				32	11.3	2.6	6°				SB-4065TR	FT-15		
	○	○		25	20	19	200	31				37	14.4	3.7	5°							
	○	○		30	25	24	250	38				45	16.9	3.7	4°							
Steel Bar	○	○	mm	13	10	9	140	19				21	7.5	2.1	10°	0.4	No	Fig.2	SB-2560TR	FT-8		
	○	○		16	12	11	150	22				25	9.25	2.6	8°				SB-4065TR	FT-15		
	○	○		20	16	15	180	25				32	11.3	2.6	6°							
	○	○		25	20	19	200	31				37	14.4	3.7	5°							
	○	○		30	25	24	250	38				45	16.9	3.7	4°							
Carbide Shank Bar	○	○	mm	13	10	9	160	20				19	7.5	2.1	10°	0.4	Yes	Fig.3	SB-2560TR	FT-8		
	○	○					105															
	○	○		16	12	11	180	23				22	9.25	2.6	8°						SB-4065TR	FT-15
	○	○					120															
	○	○		20	16	15	220	28				27	11.3	2.6	6°							
	○	○					145															
	○	○		25	20	19	250	32				31	14.4	3.7	5°							
	○	○					165															
	○	○		30	25	24	300	38				37	16.9	3.7	4°							
	○	○					200															

■A-SDZC-AE Excellent Bar (Back Boring)

Max. Overhang Length L/D≈5.5

inner hole dia. of A16Q-SDZC%07-14AE (φ2.5)
inner hole dia. of A20R-SDZC%11-20AE (φ3)
outer hole dia. (φ5)

straight hole (φd)

shank dia. φD	straight hole dia. (φd)
φ10	φ3
φ12	φ4
φ16	φ5
φ20	
φ25	

●Right-hand Shown

R-hand Insert for R-hand Toolholder, L-hand Insert for L-hand Toolholder

■S-SDZC-A Steel Bar (Back Boring)

Max. Overhang Length L/D≈4

●Right-hand Shown

R-hand Insert for R-hand Toolholder, L-hand Insert for L-hand Toolholder

■E-SDZC-A Carbide Shank Bar (Back Boring)

Max. Overhang Length L/D≈7

●Right-hand Shown

R-hand Insert for R-hand Toolholder, L-hand Insert for L-hand Toolholder

shank dia. φD	straight hole dia. (φd)
φ10	φ3
φ12	φ4
φ16	φ6
φ20	

■ Toolholder Dimensions

(Applicable Inserts p.13)

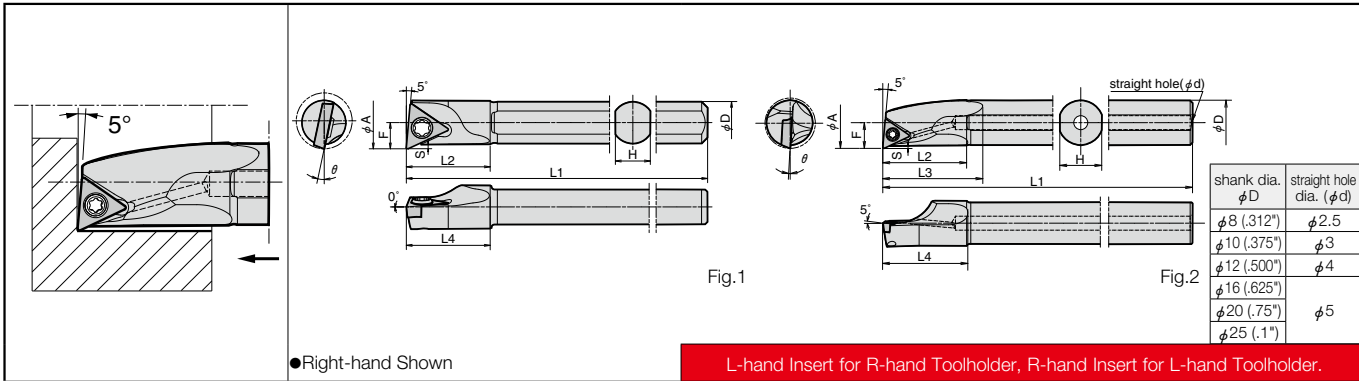
Description	Stock		Unit	Min. Bore Dia.	Dimension								w	Std. Coner R (R)	Coolant Hole	Shape	Spare Parts					
	R	L			φA	φD	H	L1	L2	L4	L5	F					S	Clamp Screw	Wrench			
Excellent Bar	○	○	mm	14	16	15	180	30		10	10.8	4.4	5°	0.4	Yes	Fig.1	SB-2545TR	FT-8				
	○	○		20	20	19	200	40		15	15.6	6.1					SB-4065TR	FT-15				
	○	○		14	10	9	140	14		9.5	8.7	3.3					Fig.2	SB-2545TR	FT-8			
	○	○		16	12	11	150	14		10.5	9.7	3.3						SB-2560TR				
	○	○		20	16	15	180	14		10.5	11.7	3.3				Fig.3	No	Fig.4	SB-2545TR	FT-8		
	○	○		23	16	15	180	15		15	14.5	6.1							SB-4065TR	FT-15		
	○	○		27	20	19	200	15		15	16.5	6.1						Fig.4	No	Fig.4	SB-2545TR	FT-8
	○	○		32	25	24	250	15		15	19	6.1										
Steel Bar	○	○	mm	14	16	15	180	30		10	10.8	4.4	5°	0.4	No	Fig.3	Fig.4	SB-2545TR	FT-8			
	○	○		20	20	19	200	40		15	15.6	6.1						SB-4065TR	FT-15			
	○	○		14	10	9	140	14		9.5	8.7	3.3					Fig.4	No	Fig.4	SB-2545TR	FT-8	
	○	○		16	12	11	150	14		10.5	9.7	3.3										SB-2560TR
	○	○		20	16	15	180	14		10.5	11.7	3.3				Fig.4	No	Fig.4	SB-4065TR	FT-15		
	○	○		23	16	15	180	15		15	14.5	6.1										
	○	○		27	20	19	200	15		15	16.5	6.1										
	○	○		32	25	24	250	15		15	19	6.1										

●: Stock Standard
○: World Express



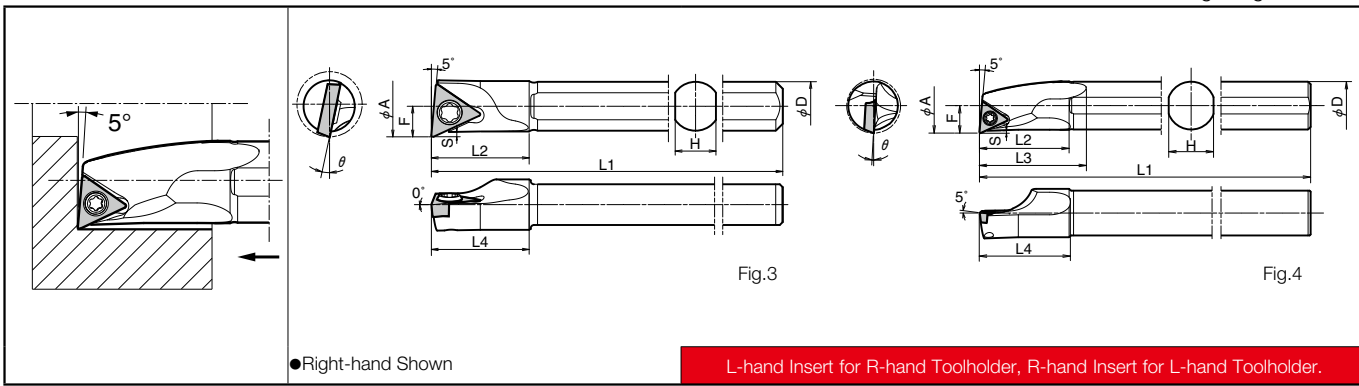
■A/S-STLB(P)-AE Excellent Bar (Boring/Internal Facing)

Max. Overhang Length L/D~5.5



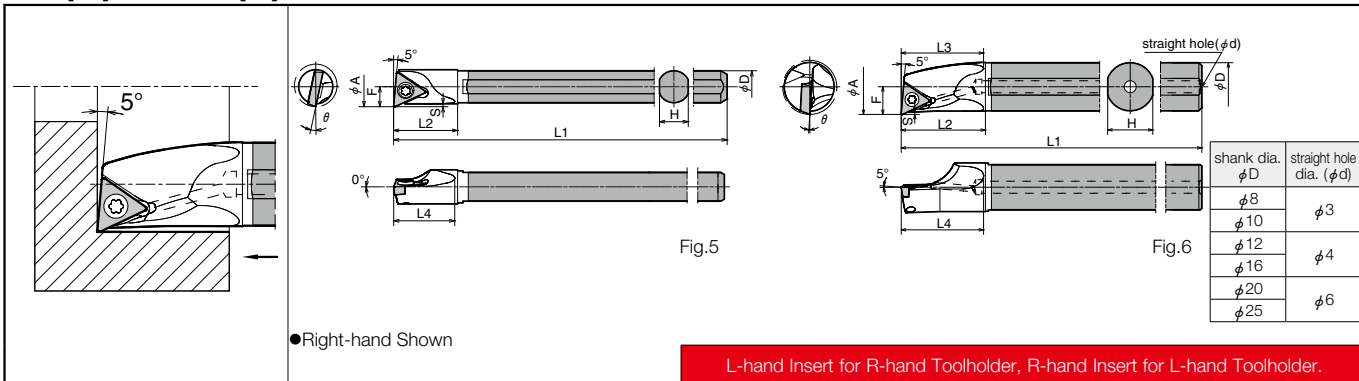
■S-STLB(P)-A Steel Bar (Boring/Internal Facing)

Max. Overhang Length L/D~4





■E(C)-STLB(P)-A Carbide Shank Bar (Boring/Internal Facing)

Max. Overhang Length L/D~7



Dynamic Bar [TB□□,TP□□ Insert]

Toolholder Dimensions

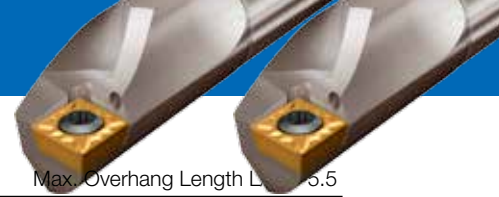
Description	Stock		Unit	Min. Bore Dia.	Dimension									w	Std. Coner R (rε)	Coolant Hole	Shape	Spare Parts		
	R	L			φA	φD	H	L1	L2	L3	L4	F	S					Clamp Screw	Wrench	
																				
Excellent Bar	●	●	inch	0.312	0.250	0.211	4	0.472	-	0.469	0.150	0.025	12°	0.008	No	Fig.1	SB-2035TR	FT-6		
	●	●		0.392	0.312	0.273	5	0.630	0.839	0.650	0.201	0.031	12°				Fig.2	SB-2545TR	FT-8	
	●	●		0.480	0.375	0.336	6	0.787	0.949	0.807	0.244	0.036	8°					SB-3060TR	FT-10	
	●	●		0.480	0.375	0.336	6	0.787	0.961	0.807	0.236	0.030	10°			1/64	Yes	Fig.2	SB-3060TR	FT-10
	●	●		0.580	0.500	0.461	6	0.945	1.228	0.953	0.283	0.032	7°							
	●	●		0.700	0.625	0.586	8	1.181	1.402	1.193	0.362	0.036	3.5°							
	●	●		0.825	0.750	0.711	10	1.417	1.744	1.425	0.421	0.031	2°							
	●	●		1.280	1.000	0.961	12	1.811	2.173	1.815	0.539	0.031	0°							
	●	●		1.280	1.000	0.961	12	1.811	2.173	1.815	0.539	0.031	0°							
Excellent Bar	○	○	mm	8	6	5	100	12	-	12	3.8	0.5	12°	0.4	Yes	Fig.2	SB-2035TR	FT-6		
	○	○		10	8	7	120	16	22	16	5	0.5	10°				Fig.2	SB-2545TR	FT-8	
	○	○		12	10	9	140	20	25	20	6.2	0.9	8°					Fig.2	SB-3060TR	FT-10
	○	○		12	10	9	140	20	26	20	6	0.7	10°							
	○	○		14	12	11	150	24	30	24	7.2	0.8	7°							
	○	○		18	16	15	180	30	36	30	9.2	0.7	3.5°							
	○	○		22	20	19	200	36	46	37	11.2	0.7	2°							
	○	○		27	25	24	250	46	55	46	13.7	0.7	0°							
	Steel Bar	○		○	mm	8	6	5	100	12	-	12	3.8			0.5	12°	0.4	No	Fig.3
○		○	10	8		7	120	16	22	16	5	0.5	10°	Fig.4	SB-2545TR	FT-8				
○		○	12	10		9	140	20	25	20	6.2	0.9	8°		Fig.4	SB-3060TR	FT-10			
○		○	12	10		9	140	20	26	20	6	0.7	10°							
○		○	14	12		11	150	24	30	24	7.2	0.8	7°							
○		○	18	16		15	180	30	36	30	9.2	0.7	3.5°							
○		○	22	20		19	200	36	46	37	11.2	0.7	2°							
○		○	27	25		24	250	46	55	46	13.7	0.7	0°							
Carbide Shank Bar		○	○	mm		8	6	5.4	110	12	-	12	3.8	0.5	12°	0.4	Yes			Fig.5
	○	○	10		8	7	140	16	15	15	5	0.5	10°	Fig.6	SB-2545TR			FT-8		
	○	○	12		10	9	160	20	19	19	6.2	0.9	8°						Fig.6	
	○	○	12		10	9	105	20	19	19	6	0.7	10°							
	○	○	12		10	9	80	20	19	19	6	0.7	10°							
	○	○	12		10	9	160	20	19	19	6	0.7	10°							
	○	○	12		10	9	105	20	19	19	6	0.7	10°							
	○	○	12		10	9	80	20	19	19	6	0.7	10°							
	○	○	14		12	11	180	23	22	22	7.2	0.8	7°							
	○	○	14		12	11	120	23	22	22	7.2	0.8	7°							
	○	○	14		12	11	90	23	22	22	7.2	0.8	7°							
	○	○	18		16	15	220	28	27	27	9.2	0.7	3.5°							
	○	○	18		16	15	145	28	27	27	9.2	0.7	3.5°							
	○	○	18		16	15	110	28	27	27	9.2	0.7	3.5°							
	○	○	22		20	19	250	32	31	31	11.2	0.7	2°							
	○	○	22		20	19	165	32	31	31	11.2	0.7	2°							
○	○	22	20	19	125	32	31	31	11.2	0.7	2°									
○	○	27	25	24	300	38	37	37	13.7	0.7	0°									
○	○	27	25	24	200	38	37	37	13.7	0.7	0°									

●: Stock Standard
○: World Express

Applicable Inserts

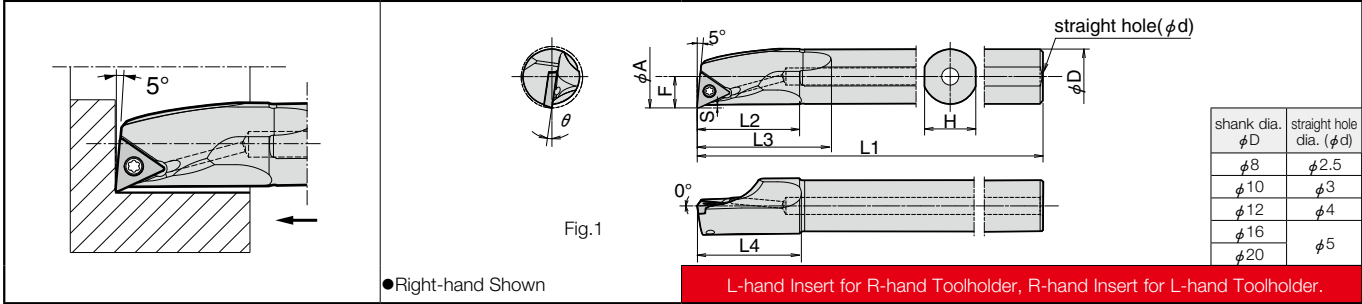
Toolholder	Insert			
	Cermet / Coated / Carbide	Ceramic	CBN	PCD
---STLB ^{R/L} 1.2	TBGW121_, TBGT121_	-	-	TBGW121_
---STLB ^{R/L} 06----	TBMT121_	-	-	TBMT121_
---STLP ^{R/L} 1.8	TPGB1815_, TPGH1815_	-	TPGB1815_	TPGB1815_
---STLP ^{R/L} 09----	TPMT1815_	-	-	TPMH1815_
---STLP ^{R/L} 2	TPGB22_, TPET22_	-	TPGB22_	TPGB22_
---STLP ^{R/L} 11----	TPGH22_, TPMT22_	-	-	TPMH22_
---STLP ^{R/L} 3	TPGB32_, TPGH32_	-	TPGB32_	TPGB32_
---STLP ^{R/L} 16----	TPMT32_	-	-	TPMH32_

Dynamic Bar [TC□□ Insert]



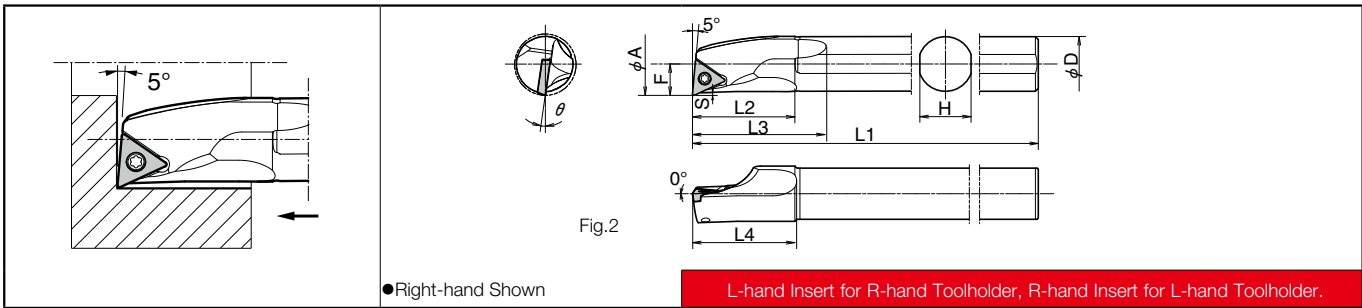
■ A-STLC-AE Excellent Bar (Boring/Internal Facing)

Max. Overhang Length L/D ≈ 5.5



■ S-STLC-A Steel Bar (Boring/Internal Facing)

Max. Overhang Length L/D ≈ 4



■ Toolholder Dimensions

Description	Stock		Unit	Min. Bore Dia.	Dimension								w	Std. Corner R. (rε)	Coolant Hole	Shape	Spare Parts		
	R	L			ϕA	ϕD	H	L1	L2	L3	L4	F					S	Clamp Screw	Wrench
Excellent Bar	A08X-STLC [®] /09-10AE	○	○	mm	10	8	7	120	16	22	16	5	0.5	14°	0.4	Yes	Fig.1	SB-2250TR	FT-7
	A10L-STLC [®] /09-12AE	○	○		12	10	9	140	20	26	20	6.2	0.9	12°				SB-2560TR	FT-8
	A10L-STLC [®] /11-12AE	○	○		14	12	11	150	24	30	25	7.2	0.7	10°				SB-2560TR	FT-8
	A12M-STLC [®] /11-14AE	○	○		18	16	15	180	30	39	31	9.2	0.7	8°				SB-2560TR	FT-8
	A16Q-STLC [®] /11-18AE	○	○		22	20	19	200	36	44	36	11.2	0.7	6°				SB-2560TR	FT-8
	A20R-STLC [®] /11-22AE	○	○		10	8	7	120	16	22	16	5	0.5	14°				SB-2250TR	FT-7
Steel Bar	S08X-STLC [®] /09-10A	○	○	mm	12	10	9	140	20	26	20	6.2	0.9	12°	0.4	No	Fig.2	SB-2250TR	FT-7
	S10L-STLC [®] /09-12A	○	○		14	12	11	150	24	30	25	7.2	0.7	10°				SB-2560TR	FT-8
	S10L-STLC [®] /11-12A	○	○		18	16	15	180	30	39	31	9.2	0.7	8°				SB-2560TR	FT-8
	S12M-STLC [®] /11-14A	○	○		22	20	19	200	36	44	36	11.2	0.7	6°				SB-2560TR	FT-8
	S16Q-STLC [®] /11-18A	○	○		10	8	7	120	16	22	16	5	0.5	14°				SB-2250TR	FT-7
	S20R-STLC [®] /11-22A	○	○		12	10	9	140	20	26	20	6.2	0.9	12°				SB-2560TR	FT-8

●: Stock Standard
○: World Express

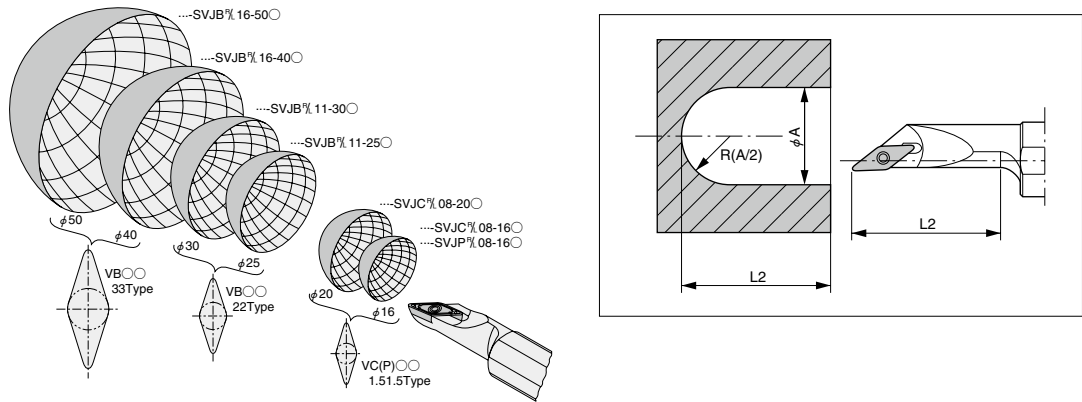
■ Applicable Inserts

Toolholder	Insert			
	Cermet / Coated / Carbide	Ceramic	CBN	PCD
....STLC [®] /09....	TCMT1815_	-	-	-
....STLC [®] /11....	TCGT215_, TCMT215_	-	-	-

Dynamic Bar [VB□□,VC□□,VP□□ Insert]

◆ Application of ○...SVJB(C)-○ / ...SVJP-○ [Ref. Page for Toolholder 20]

1. Application Range



2. Machining Method

Case with No Existing Hole	Finishing
<p>(Note) Feed rate shall be under. 002ipr (f=0.05mm/rev) at internal facing.</p>	
<p>Case with Drilled Hole</p> <p>(Note) Feed rate shall be under. 002ipr (f=0.05mm/rev) at internal facing.</p>	<p>Machining Process ① Finish the internal face first. ② Next, finish the internal diameter.</p>

3. Caution

When machining past the center of the workpiece, insert breakage may occur.

Fix the insert edge at the center of the workpiece

Adjust the machining program of radius smaller by corner-R (rε) value.

Machining of this kind is available, but the oblique part may be scratched by chips.

For internal profiling, D.O.C. "ap" should be less than the value of Corner-R (rε)

Burrs may occur, if D.O.C. "ap" is bigger than Corner-R.

Dynamic Bar [VB□□,VC□□,VP□□ Insert]



Max. Overhang Length L/D≈5.5

■A-SVJP(C)(B)-AE Excellent Bar (Internal Spherical Machining/Internal Facing)

Please see **F37** for cutting

Fig.1 Fig.2

◆No shim for SVJP(C) % 08 & SVJB % 11

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

shank dia. ϕD	straight hole dia. (ϕd)
$\phi 12$	$\phi 4$
$\phi 16$	
$\phi 20$	
$\phi 25$	$\phi 5$
$\phi 32$	
$\phi 40$	

■S-SVJP(C)(B)-A Steel Bar (Internal Spherical Machining/Internal Facing)

Max. Overhang Length L/D≈4

Please see **F35** for cutting

Fig.3 Fig.4

◆No shim for SVJP(C) % 08 & SVJB % 11

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■A-SVPC(B)-AE Excellent Bar (Copying/Undercutting)

Max. Overhang Length L/D≈5.5

Fig.5 Fig.6

◆No shim for SVPC % 08 & SVPB % 11

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

shank dia. ϕD	straight hole dia. (ϕd)
$\phi 10$	$\phi 3$
$\phi 12$	$\phi 4$
$\phi 16$	
$\phi 20$	$\phi 5$
$\phi 25$	
$\phi 32$	

■S-SVPC(B)-A Steel Bar (Copying/Undercutting)

Max. Overhang Length L/D≈4

Fig.7 Fig.8

◆No shim for SVPC % 08 & SVPB % 11

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■E-SVPC(B)-A Carbide Shank Bar (Copying/Undercutting)

Max. Overhang Length L/D≈7

Fig.9 Fig.10

◆No shim for SVPC % 08 & SVPB % 11

●Right-hand Shown

L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

shank dia. ϕD	straight hole dia. (ϕd)
$\phi 10$	$\phi 3$
$\phi 12$	$\phi 4$
$\phi 16$	
$\phi 20$	$\phi 6$
$\phi 25$	

Dynamic Bar [VB□□,VC□□,VP□□ Insert]

Toolholder Dimensions

Description	Stock		Unit	Min. Bore Dia.	Dimension									w	Std. Corner R (r°)	Coolant Hole	Shape	Spare Parts		
	R	L			φA	φD	H	L1	L2	L3	L4	F	S					Clamp Screw	Wrench	
Excellent Bar	●	●	inch	0.984	0.750	0.711	10	1.476	-	1.173	0.079	-	5°	1/64	Yes	Fig.1	SB-2050TR	FT-6		
	●	●	inch	1.180	1.000	0.961	12	1.772	-	1.280	0.138	-	5°							
	○	○	mm	16	12	11	150	26	-	-	2	-	5°	0.4	Yes	Fig.1	SB-2050TR	FT-6		
	○	○		16	12	11	150	26	-	-	2	-	5°							
	○	○		20	16	15	180	36	-	-	2	-	5°							
	○	○		25	20	19	200	37.5	-	-	2	-	5°							
	○	○		30	25	24	250	45	-	-	3.5	-	5°							
	○	○		40	32	31	250	60	-	-	3.5	-	8°							
	○	○		50	40	39	300	75	-	-	4.5	-	7°							
Steel Bar	○	○	mm	16	12	11	150	26	-	-	2	-	5°	0.4	No	Fig.3	SB-2050TR	FT-6		
	○	○		16	12	11	150	26	-	-	2	-	5°							
	○	○		20	16	15	180	36	-	-	2	-	5°							
	○	○		25	20	19	200	37.5	-	-	2	-	5°							
	○	○		30	25	24	250	45	-	-	3.5	-	5°							
	○	○		40	32	31	250	60	-	-	3.5	-	8°							
	○	○		50	40	39	300	75	-	-	4.5	-	7°							
	Excellent Bar	●		●	inch	0.630	0.375	0.336	6	0.945	-	0.843	0.335			0.118	8°	1/64	Yes	Fig.1
●		●	0.790	0.500		0.461	6	1.142	-	1.000	0.433	0.177	8°							
●		●	mm	0.980	0.625	0.586	8	1.378	-	1.283	0.531	0.197	5°	0.4	Yes	Fig.5	SB-2570TR			FT-8
●		●		1.180	0.750	0.711	10	1.575	-	1.528	0.610	0.197	5°							
●		●		1.240	1.000	0.961	12	2.008	-	1.937	0.709	0.197	13°							
○		○		14	10	9	140	24	-	21	8.5	3	8°							
○		○		18	12	11	150	29	-	26	11	4.5	8°							
○		○		22	16	15	180	35	-	33	13.5	5	5°							
○		○		26	20	19	200	41	-	39	15.5	5	5°							
○		○	31	25	24	250	51	-	49	18	5	13°								
○		○	40	32	31	250	54	-	53	23	6.5	9°								
Steel Bar	○	○	mm	14	10	9	140	24	-	21	8.5	3	8°	0.4	No	Fig.7	SB-2050TR	FT-6		
	○	○		18	12	11	150	29	-	26	11	4.5	8°							
	○	○		22	16	15	180	35	-	33	13.5	5	5°							
	○	○		26	20	19	200	41	-	39	15.5	5	5°							
	○	○		31	25	24	250	51	-	49	18	5	13°							
	○	○		40	32	31	250	54	-	53	23	6.5	9°							

●: Stock Standard
○: World Express

Spare Parts

Description	Spare Parts		
	Shim	Shim Screw	Wrench
○32S-SVJB%16-40A○	SVN-32N	SS-4N	LW-4
○40T-SVJB%16-50A○			
○25○-SVPB%16-31A○			
○32S-SVPB%16-40A○			
A16T-SVPB%3AE			

Applicable Inserts

Toolholder	Insert			
	Cermet / Coated / Carbide	Ceramic	CBN	PCD
---SVJC%08---	VCMT1515_	-	VCGW1515_	VCMT1515_
---SVJB%2	VBGT22_, VBET22_	-	VBGW22_	VBMT22_
---SVJB%11---	VBMT22_	-	VBGW22_	VBMT22_
---SVJB%16---	VBGT33_, VBMT33_	-	VBGW33_, VCGW33_	VBMT33_
---SVJB%16---	VCGT33_, VCMT33_	-	VBMW33_	VCMW33_
---SVJP%08---	VPET1515_	-	-	-
---SVPC%1.5	VCMT1515_	-	VCGW1515_	VCMT1515_
---SVPB%2	VBGT22_, VBET22_, VBMT22_	-	VBGW22_	VBMT22_
---SVPB%11---	VCGT22_, VCMT22_	-	VBGW22_	VBMT22_
---SVPB%3	VBGT33_, VBMT33_	-	VBGW33_, VCGW33_	VBMT33_
---SVPB%16---	VCGT33_, VCMT33_	-	VBMW33_	VCMW33_

Dynamic Bar [VB□□,VC□□ Insert]



Max. Overhang Length L/D≈5.5

■A-SVUC(B)-AE Excellent Bar (Copyining)

inner hole dia. of A12M-SVUC%08-16AE (φ3)
 inner hole dia. of A16G-SVUB%11-20AE (φ3)
 inner hole dia. of A20R-SVUB%11-25AE (φ3)
 inner hole dia. of A32S-SVUB%16-40AE (φ5)

Fig.1 Fig.2

❖No shim for SVUC%08 and SVUB%11

shank dia. φD	outer hole dia.	straight hole dia. (φd)
φ12	φ4	-
φ16	φ5	-
φ20	φ5	-
φ25	-	φ5
φ32	-	φ5

●Right-hand Shown
 L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■S-SVUC(B)-A Steel Bar (Copyining)

Max. Overhang Length L/D≈4

Fig.3 Fig.4

❖No shim for SVUC%08 and SVUB%11

●Right-hand Shown
 L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■E-SVUC(B)-A Carbide Shank Bar (Copyining)

Max. Overhang Length L/D≈7

Fig.5

shank dia. φD	straight hole dia. (φd)
φ12	φ4
φ16	φ4
φ20	φ6
φ25	φ6

●Right-hand Shown
 L-hand Insert for R-hand Toolholder, R-hand Insert for L-hand Toolholder.

■A-SVZC(B)-AE Excellent Bar (Back Boring)

Max. Overhang Length L/D≈5.5

inner hole dia. of A12M-SVZC%08-16AE (φ3)
 inner hole dia. of A16G-SVZB%11-20AE (φ3)
 inner hole dia. of A20R-SVZB%11-25AE (φ3)
 inner hole dia. of A32S-SVZB%16-40AE (φ5)

Fig.6 Fig.7

❖No shim for SVZC%08 and SVZB%11

shank dia. φD	outer hole dia.	straight hole dia. (φd)
φ12	φ4	-
φ16	φ5	-
φ20	φ5	-
φ25	-	φ5
φ32	-	φ5

●Right-hand Shown
 R-hand Insert for R-hand Toolholder, L-hand Insert for L-hand Toolholder

■S-SVZC(B)-A Steel Bar (Back Boring)



Max. Overhang Length L/D≈4

Fig.8 Fig.9

❖No shim for SVZC%08 and SVZB%11

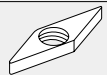


●Right-hand Shown
 R-hand Insert for R-hand Toolholder, L-hand Insert for L-hand Toolholder

Toolholder Dimensions

Description	Stock		Unit	Min. Bore Dia.	Dimension								w	Std. Coner R (rε)	Coolant Hole	Shape	Spare Parts		
	R	L			φA	φD	H	L1	L2	L4	L5	F					S	Clamp Screw	Wrench
																			
Excellent Bar	●	●	inch	0.630	0.500	0.461	6	1.004	0.906	-	0.453	0.217	8°	1/64	Yes	Fig.1	SB-2050TR	FT-6	
	●	●		0.790	0.625	0.586	8	1.280	1.063	-	0.630	0.315	8°				SB-2570TR	FT-8	
	●	●		0.980	0.750	0.711	10	0.000	0.000	-	0.000	0.315	7°				SB-40125TRN	FT-15	
	●	●		1.340	1.000	0.961	12	1.583	1.453	-	0.807	0.335	13°				SB-2050TR	FT-6	
Excellent Bar	○	○	mm	16	12	11	150	25.5	23	-	11.5	5.5	8°	0.4	Yes	Fig.1	SB-2050TR	FT-6	
	○	○		20	16	15	180	32.5	27	-	16	8	8°				SB-2570TR	FT-8	
	○	○		25	20	19	200	40.5	31	-	18	8	7°				SB-40125TRN	FT-15	
	○	○		34	25	24	250	40	37	-	20.5	8.5	13°				SB-2050TR	FT-6	
Steel Bar	○	○	mm	16	12	11	150	25.5	23	-	11.5	5.5	8°	0.4	No	Fig.3	SB-2050TR	FT-6	
	○	○		20	16	15	180	32.5	27	-	16	8	8°				SB-2570TR	FT-8	
	○	○		25	20	19	200	40.5	31	-	18	8	7°				SB-40125TRN	FT-15	
	○	○		34	25	24	250	40	37	-	20.5	8.5	13°				SB-2050TR	FT-6	
Excellent Bar	●	●	inch	0.630	0.500	0.461	6	1.299	0.579	-	0.453	0.217	8°	1/64	Yes	Fig.1	SB-2050TR	FT-6	
	●	●		0.790	0.625	0.586	8	1.673	0.799	-	0.630	0.315	8°				SB-2570TR	FT-8	
	●	●		0.980	0.750	0.711	10	1.988	0.894	-	0.709	0.315	7°				SB-40125TRN	FT-15	
	●	●		1.340	1.000	0.961	12	1.870	1.362	-	0.807	0.335	13°				SB-2050TR	FT-6	
Excellent Bar	○	○	mm	16	12	11	150	25.5	7.5	11.5	5.5	8°	0.4	Yes	Fig.6	SB-2050TR	FT-6		
	○	○		20	16	15	180	32.5	10	16	8	8°				SB-2570TR	FT-8		
	○	○		25	20	19	200	40.5	10	18	8	7°				SB-40125TRN	FT-15		
	○	○		34	25	24	250	30	17.5	20.5	8.5	13°				SB-2050TR	FT-6		
Steel Bar	○	○	mm	16	12	11	150	25.5	7.5	11.5	5.5	8°	0.4	No	Fig.8	SB-2050TR	FT-6		
	○	○		20	16	15	180	32.5	10	16	8	8°				SB-2570TR	FT-8		
	○	○		25	20	19	200	40.5	10	18	8	7°				SB-40125TRN	FT-15		
	○	○		34	25	24	250	30	17.5	20.5	8.5	13°				SB-2050TR	FT-6		

●: Stock Standard
○: World Express

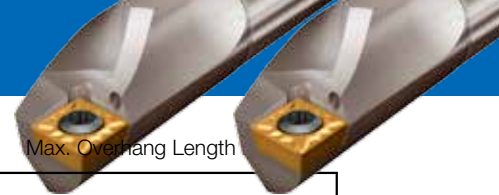
Spare Parts

Description	Spare Parts		
	Shim	Shim Screw	Wrench
○25S-SVUB ^{1/2} 16-34A○ ○32S-SVUB ^{1/2} 16-40A○ ○25S-SVZB ^{1/2} 16-34A○ ○32S-SVZB ^{1/2} 16-40A○	 SVN-32N	 SS-4N	 LW-4

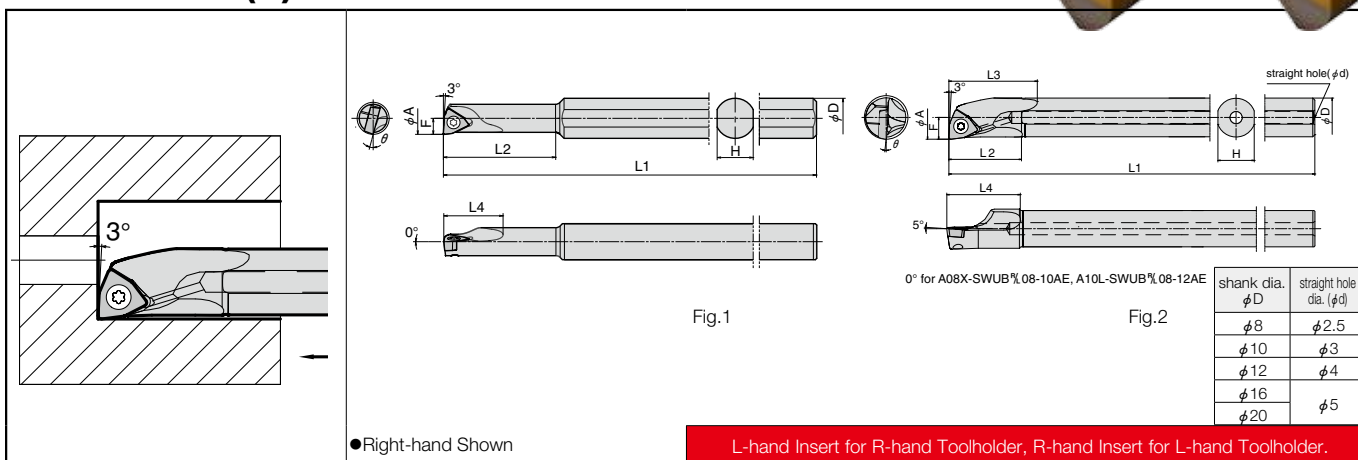
Applicable Inserts

Toolholder	Insert			
	Cermet / Coated / Carbide	Ceramic	CBN	PCD
---SVUC ^{1/2} 1.5 ---SVUC ^{1/2} 08---	VCMT1515_	-	VCGW1515_	VCMT1515_
---SVUB ^{1/2} 2 ---SVUB ^{1/2} 11----	VBGT22_, VBET22_, VBMT22_ VCGT22_, VCMT22_	-	VBGW22_	VBMT22_
---SVUB ^{1/2} 3 ---SVUB ^{1/2} 16----	VBGT33_, VBMT33_ VCGT33_, VCMT33_	-	VBGW33_, VCGW33_	VBMT33_
---SVZC ^{1/2} 1.5 ---SVZC ^{1/2} 08---	VCMT1515_	-	VCGW1515_	VCMT1515_
---SVZB ^{1/2} 2 ---SVZB ^{1/2} 11----	VBGT22_, VBET22_, VBMT22_ VCGT22_, VCMT22_	-	VBGW22_	VBMT22_
---SVZB ^{1/2} 3 ---SVZB ^{1/2} 16----	VBGT33_, VBMT33_ VCGT33_, VCMT33_	-	VBGW33_, VCGW33	VBMT33_

Dynamic Bar [WB□□,WP□□ Insert]

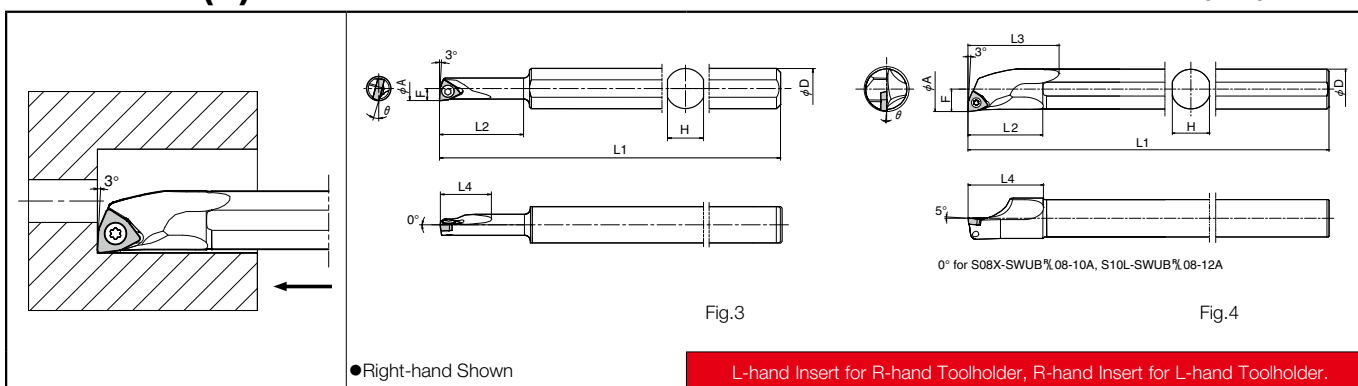


■S/A-SWUB(P)-AE Excellent Bar (Boring)



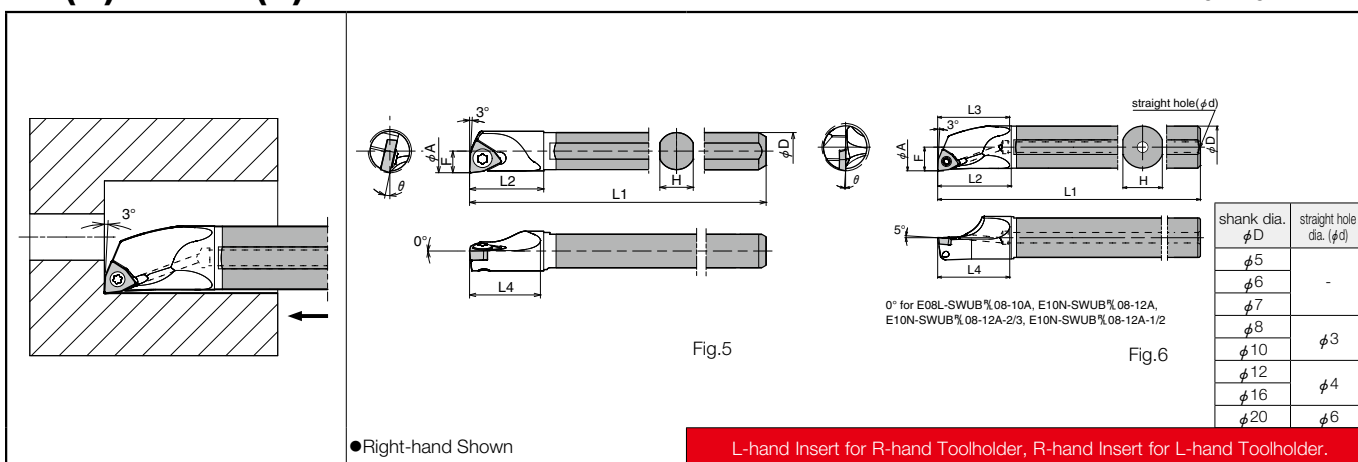
■S-SWUB(P)-A Steel Bar (Boring)

Max. Overhang Length L/D \approx 4



■E(C)-SWUB(P)-A Carbide Shank Bar (Boring)



Max. Overhang Length L/D \approx 7



■ Applicable Inserts

Toolholder	Insert			
	Cermet / Coated / Carbide	Ceramic	CBN	PCD
....SWUB%1.2	WBG121_, WBGW121_	-	WBGW121_	WBMT121_
....SWUB%06....	WBMT121_	-	WBGW121_	WBMT121_
....SWUB%1.5	WBG1515_, WBGW1515_	-	WBGW1515_	WBMT1515_
....SWUB%08....	WBMT1515_	-	WBGW1515_	WBMT1515_
....SWUP%2	WPG1215_, WPMT215_	-	WPGW215_	WPMT215_
....SWUP%11....	WPGW215_, WPMW215_	-	WPGW215_	WPMT215_
....SWUP%3	WPG132_, WPMT32_	-	WPGW32_	-
....SWUP%16....	WPGW32_, WPMW32_	-	WPGW32_	-

Toolholder Dimensions

Description		Stock		Unit	Min. Bore Dia.	Dimension								w	Std. Corner R (R)	Coolant Hole	Shape	Spare Parts		
		R	L			ϕA	ϕD	H	L1	L2	L3	L4	F					S	Clamp Screw	Wrench
																				
Excellent Bar	S06H-SWUB% 1.2AE	●	●	inch	0.240	0.375	0.336	4	0.827	-	0.504	0.118	-	15°	0.01	No	Fig.1	SB-2035TR	FT-6	
	S06H-SWUB% 1.5AE	●	●		0.312	0.375	0.336	4	1.102	-	0.583	0.157	-	15°						
	A06M-SWUB% 1.5AE	●	●		0.472	0.375	0.336	6	0.787	0.945	0.795	0.236	-	10°						
	A08M-SWUP% 2AE	●	●		0.630	0.500	0.461	6	0.945	1.220	0.957	0.276	-	4°	1/64	Yes	Fig.2	SB-2050TR	FT-8	
	A10R-SWUP% 3AE	●	●		0.770	0.625	0.586	8	1.181	1.433	1.193	0.354	-	3.5°						
	A12S-SWUP% 3AE	●	●		0.930	0.750	0.711	10	1.417	1.740	1.425	0.413	-	2°						
	A16T-SWUP% 3AE	●	●		1.200	1.000	0.961	12	1.811	2.169	1.827	0.531	-	0°						
Excellent Bar	S10H-SWUB% 06-06AE	○	○	mm	6	10	9	100	21	-	13	3	-	15°	0.2	No	Fig.1	SB-2035TR	FT-6	
	S10H-SWUB% 06-07AE	○	○		7	10	9	100	24.5	-	15	3.5	-	13°						
	S10H-SWUB% 08-08AE	○	○		8	10	9	100	28	-	15	4	-	15°						
	A08X-SWUB% 08-10AE	○	○		10	8	7	120	16	21	16	5	-	13°	0.4	Yes	Fig.2	SB-2050TR	FT-8	
	A10L-SWUB% 08-12AE	○	○		12	10	9	140	20	25	20	6	-	10°						
	A12M-SWUP% 11-14AE	○	○		14	12	11	150	24	30	24	7	-	4°						
	A16Q-SWUP% 11-18AE	○	○		18	16	15	180	30	37	30	9	-	1°						
	A16Q-SWUP% 16-18AE	○	○		18	16	15	180	30	37	30	9	-	3.5°	0.8			SB-4065TR	FT-15	
	A20R-SWUP% 16-22AE	○	○		22	20	19	200	36	46	37	11	-	2°						
Steel Bar	S10H-SWUB% 06-06A	○	○	mm	6	10	9	100	21	-	13	3	-	15°	0.2		Fig.3	SB-2035TR	FT-6	
	S10H-SWUB% 06-07A	○	○		7	10	9	100	25	-	15	3.5	-	13°						
	S10H-SWUB% 08-08A	○	○		8	10	9	100	28	-	15	4	-	15°						
	S08X-SWUB% 08-10A	○	○		10	8	7	120	16	21	16	5	-	13°	0.4		Fig.4	SB-2050TR	FT-8	
	S10L-SWUB% 08-12A	○	○		12	10	9	140	20	25	20	6	-	10°						
	S12M-SWUP% 11-14A	○	○		14	12	11	150	24	30	24	7	-	4°						
	S16Q-SWUP% 11-18A	○	○		18	16	15	180	30	37	30	9	-	1°						
	S16Q-SWUP% 16-18A	○	○		18	16	15	180	30	37	30	9	-	3.5°	0.8			SB-4065TR	FT-15	
	S20R-SWUP% 16-22A	○	○		22	20	19	200	36	46	37	11	-	2°						
Carbide Shank Bar	C05H-SWUB% 06-06A	○	○	mm	6	5	4.4	100	11	-	11	3	-	13°	0.2	No	Fig.5	SB-2035TR	FT-6	
	C06J-SWUB% 06-07A	○	○		7	6	5.4	110	12	-	12	3.5	-	13°						
	C07K-SWUB% 08-08A	○	○		8	7	6.4	125	13	-	13	4	-	13°						
	E08L-SWUB% 08-10A	○	○		10	8	7	140	16	15	15	5	-	13°						
	E10N-SWUB% 08-12A	○	○		12	10	9	160	20	19	19	6	-	10°						
	E10N-SWUB% 08-12A-2/3	○	○					105					-							
	E10N-SWUB% 08-12A-1/2	○	○					80					-							
	E12Q-SWUP% 11-14A	○	○		14	12	11	180	23	22	22	7	-	4°						
	E12Q-SWUP% 11-14A-2/3	○	○					120					-							
	E12Q-SWUP% 11-14A-1/2	○	○					90					-							
	E16X-SWUP% 11-18A	○	○		18	16	15	220	28	27	27	9	-	1°						
	E16X-SWUP% 11-18A-2/3	○	○					145					-							
	E16X-SWUP% 11-18A-1/2	○	○					110					-							
	E16X-SWUP% 16-18A	○	○					220					-	3.5°						
	E16X-SWUP% 16-18A-2/3	○	○					145					-							
	E16X-SWUP% 16-18A-1/2	○	○					110					-							
E20S-SWUP% 16-22A	○	○	22	20	19	250	32	31	31	11	-	2°								
E20S-SWUP% 16-22A-2/3	○	○				165					-									
E20S-SWUP% 16-22A-1/2	○	○				125					-									

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