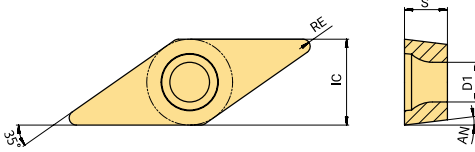


Turning Inserts Positive 35° (V)

(mm)



Product code	IC	S	D1	AN
VB_1103_	6.35	3.18	2.80	5°
VB_1604_	9.52	4.76	4.40	5°

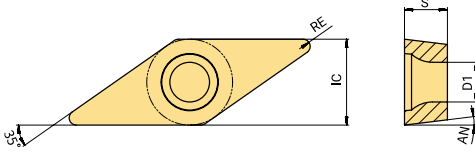
ISO Turning Inserts

Inserts	Product code	RE (mm)	Recommended parameters		Machining conditions														
			f (mm/rev)	ap (mm)	● Good Conditions ● General Conditions ✖ Bad Conditions														
					P				M				K				N		S
					AT202	AT210A	AC052P	AC152P	AC252P	AC350P	AC100M	AC200M	AP200U	AP301M	AC100K	AC102K	AC202K	AW100K	AP100S
Finishing		VBGT 110305FP-LF	<0.05	0.05-0.20	0.35-3.00														
		110301FP-LF	<0.10	0.05-0.20	0.35-3.00									○	●				
		110302FP-LF	0.20	0.05-0.20	0.35-3.00									●	●				
		110304FP-LF	0.40	0.05-0.20	0.35-3.00									●	●				
		160401FP-LF	<0.10	0.05-0.20	0.35-3.00									○	●				
		160402FP-LF	0.20	0.05-0.20	0.35-3.00									○	●				
		VBGT 110301FP-UF	0.10	0.02-0.15	0.10-1.40									●	●				
		110302FP-UF	0.20	0.02-0.15	0.20-1.40									●	●				
		110304FP-UF	0.40	0.03-0.20	0.20-1.40									●	●				
		160401FP-UF	0.10	0.02-0.15	0.10-1.40									○	●				
		160402FP-UF	0.20	0.02-0.15	0.20-1.40									○	●				
			VBGT 110301F-UF	0.10	0.02-0.15	0.10-1.40		○											
	110302F-UF		0.20	0.02-0.15	0.20-1.40		●												
	110304F-UF		0.40	0.03-0.20	0.20-1.40		●												
	160401F-UF		0.10	0.02-0.15	0.10-1.40		○												
	160402F-UF		0.20	0.02-0.15	0.20-1.40		●												
			VBGT 110301E-UF	0.10	0.02-0.15	0.10-1.40		○							●	●			
		110302E-UF	0.20	0.02-0.15	0.20-1.40		●							●	●				●
110304E-UF		0.40	0.03-0.20	0.20-1.40		●							●	●				●	
160401E-UF		0.10	0.02-0.15	0.10-1.40		○							○	●				●	
160402E-UF		0.20	0.02-0.15	0.20-1.40		●							●	●				●	
Profiling			VBMT 110302E-BS	0.20	0.10-0.32	0.70-2.10	●	●	●	○									
	110304E-BS		0.40	0.05-0.16	0.35-3.10	●	●	●	○										
	110308E-BS		0.80	0.10-0.32	0.70-3.10	●	●	●	○										
	160402E-BS		0.20	0.04-0.14	0.30-1.50	●	●	●	○										
	160404E-BS		0.40	0.06-0.18	0.40-3.30	●	●	●	○										
	160408E-BS		0.80	0.12-0.36	0.80-3.30	●	●	●	○	○									
	160412E-BS		1.20	0.18-0.54	1.20-3.30	●	●	●	○										
Finishing		VBMT 110302E-PA1	0.20	0.04-0.25	0.10-1.00	●	●	●	●										
		160404E-PA1	0.40	0.04-0.25	0.10-1.00	●	●	●	●										
		160408E-PA1	0.80	0.05-0.30	0.10-1.00	●	●	●	●										
		VBMT 110304E-PB1	0.40	0.04-0.14	0.30-1.40	●	●		●	○		●	●	●	●				
		110308E-PB1	0.80	0.09-0.28	0.60-1.40	●	●		○	○		●	●	●	●				
		160402E-PB1	0.20	0.02-0.07	0.15-2.10	●	●		○	●		●	●	●	●				
		160404E-PB1	0.40	0.04-0.14	0.30-2.10	●	●		○	○		●	●	●	●				
		160408E-PB1	0.80	0.09-0.28	0.60-2.10	●	●	○	●	●		●	●	●	●				

● : Standard stock ○ : Made-to-Order

Turning Inserts Positive 35° (V)

(mm)



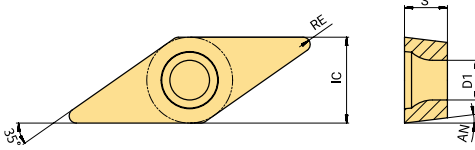
Product code	IC	S	D1	AN
VB_1103_	6.35	3.18	2.80	5°
VB_1604_	9.52	4.76	4.40	5°

Inserts	Product code	RE (mm)	Recommended parameters		Machining conditions															
					● Good Conditions ● General Conditions ✖ Bad Conditions															
					P				M				K				N			
		f (mm/rev)	ap (mm)	AT202	AT210A	AC052P	AC152P	AC252P	AC350P	AC100M	AC200M	AP200U	AP301M	AC100K	AC102K	AC202K	AW100K	AP100S		
Finishing	VBMT 110304-F2K	0.40	0.08-0.20	0.50-2.00	●	●														
	160404-F2K	0.40	0.08-0.20	0.50-2.00	●	●														
	160408-F2K	0.80	0.10-0.25	0.50-2.00	●	●														
Semi-finishing	VBMT 110304E-PC2	0.40	0.05-0.16	0.35-2.10	●	●				●	●	●	●						●	
	110308E-PC2	0.80	0.10-0.32	0.70-2.10	●	●				●	●	●	●						●	
	160404E-PC2	0.40	0.05-0.16	0.35-3.10	●	●	●			●	●	●	●						●	
	160408E-PC2	0.80	0.10-0.32	0.70-3.10	●	●	●			●	●	●	●						●	
	160412E-PC2	1.20	0.16-0.48	1.05-3.10			●			●	●	●	●						●	
Medium	VBMT 160404E-KC2	0.40	0.06-0.18	0.40-3.30	●	●		●	○		●	●	●			●	●			
	160408E-KC2	0.80	0.12-0.36	0.80-3.30	●	●	●	●	●		●	●	●			●	●			
	160412E-KC2	1.20	0.18-0.54	1.20-3.30	●	●	●	●	○		●	●	●			●	●			
Finishing	VBET 1103003FR-F	<0.03	0.01-0.18	0.10-0.30									○	●						
	1103003FL-F	<0.03	0.01-0.18	0.10-0.30									○	●						
	1103005FR-F	<0.05	0.01-0.18	0.10-0.30									○	●						
	1103005FL-F	<0.05	0.01-0.18	0.10-0.30									○	●						
	110301FR-F	<0.10	0.01-0.18	0.10-0.30		○							○	●						
	110301FL-F	<0.10	0.01-0.18	0.10-0.30		○							○	●						
	110302FR-F	<0.20	0.01-0.18	0.10-0.30		●							○	●						
	110302FL-F	<0.20	0.01-0.18	0.10-0.30		○							○	●						

● : Standard stock ○ : Made-to-Order

Turning Inserts Positive 35° (V)

(mm)



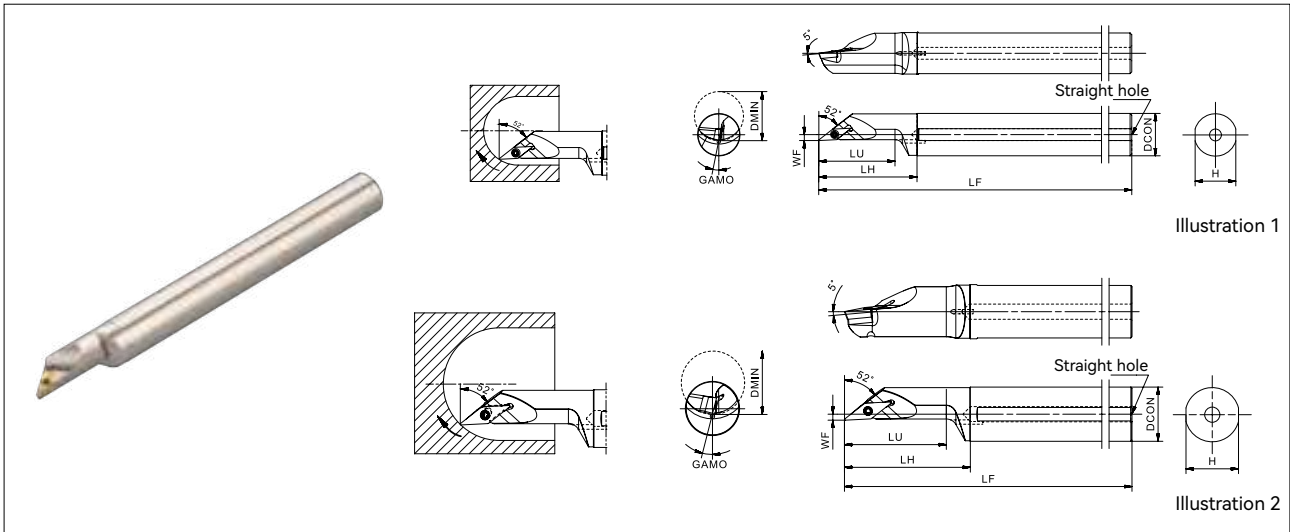
Product code	IC	S	D1	AN
VP_0802_	4.76	2.38	2.30	11°
VP_1103_	6.35	3.18	2.80	11°
VP_2205_	12.70	5.56	5.50	11°

ISO Turning Inserts

Inserts	Product code	RE (mm)	Recommended parameters		Machining conditions															
			f (mm/rev)	ap (mm)	● Good Conditions ● General Conditions ✖ Bad Conditions															
					P				M				K				N		S	
		AT202	AT210A	AC052P	AC152P	AC252P	AC350P	AC100M	AC200M	AP200U	AP301M	AC100K	AC102K	AC202K	AW100K	AP100S				
Finishing		VPGT 1103005FP-LF	<0.05	0.05-0.20	0.35-3.00															
		110301FP-LF	<0.10	0.05-0.20	0.35-3.00															
		110302FP-LF	0.20	0.05-0.20	0.35-3.00															
		VPGT 110301FP-UF	0.10	0.02-0.15	0.10-1.40															
		110302FP-UF	0.20	0.02-0.15	0.20-1.40															
		VPGT 110301F-UF	0.10	0.02-0.15	0.10-1.40		○													
	110302F-UF	0.20	0.02-0.15	0.20-1.40		○														
	VPGT 220520E-NC2	2.00	0.24-1.00	1.60-5.50															●	
	220520F-NC2	2.00	0.24-1.00	1.60-5.50															●	
		VPET 080201FR-F	<0.10	0.02-0.15	0.05-0.20		○													
080201FL-F		<0.10	0.02-0.15	0.05-0.20		○														
080202FR-F		<0.20	0.02-0.15	0.05-0.20		○														
080202FL-F		<0.20	0.02-0.15	0.05-0.20		●														
Low feed		VPET 080201FR-M	<0.10	0.01-0.06	0.20-1.50		○													
		080201FL-M	<0.10	0.01-0.06	0.20-1.50		○													
		080202FR-M	<0.20	0.01-0.06	0.20-1.50		○													
		080202FL-M	<0.20	0.01-0.06	0.20-1.50		●													
		VPET 110301FR-M	<0.10	0.01-0.06	0.20-2.00		○													
		110301FL-M	<0.10	0.01-0.06	0.20-2.00		○													
		110302FR-M	<0.20	0.01-0.06	0.20-2.00		●													
		110302FL-M	<0.20	0.01-0.06	0.20-2.00		○													
		110304FR-M	<0.40	0.01-0.06	0.20-2.00		●													
		110304FL-M	<0.40	0.01-0.06	0.20-2.00		○													

● : Standard stock ○ : Made-to-Order

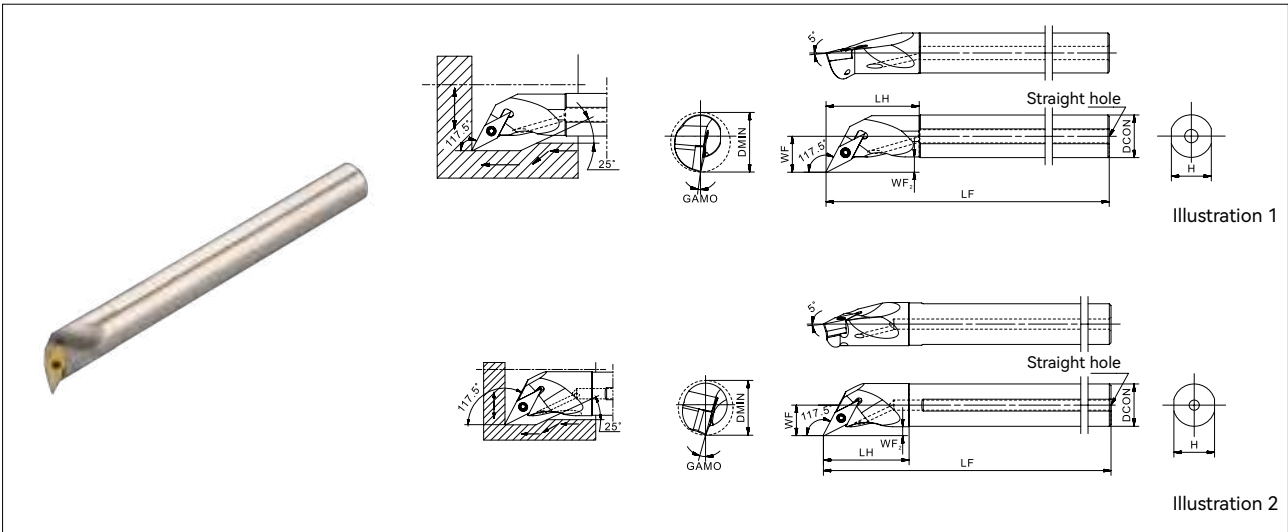
A-SVJC/B Steel Boring Bar (Internal Face/Internal Profile Boring)



Product code	Stock		Minimum boring hole diameter (mm)	Dimension							Insert corner radius (RE)	Internal coolant illustration	Spare parts					Insert		
	R	L		DCON	H	LF	LU	LH	WF	GAMO			Shim	Shim screw	Wrench (Shim screw)	Screw	Wrench			
																			DMIN	
A12M-SVJPR/L08-16	○	○	16	12	11	150	26	33	2	5°	0.2	With	1	-	-	-	SP020050	FT-TP06	VP*T 0802...	
A12M-SVJCR/L08-16	○	○												-	-	-				VC*T 0802...
A16Q-SVJCR/L08-20	○	○												20	16	15				
A20R-SVJBR/L11-25	○	○	25	20	19	200	37.5	48	2	0.4	With	2	-	-	-	SP025064	FT-TP08	VB*T 1103...		
A25S-SVJBR/L11-30	●	●	30	25	24	250	45	58	3.5				-	-	-					
A32S-SVJBR/L16-40	○	○	40	32	31		300	60	74	8°	0.4	With	2	S-SVN16032	SH050084X	LT-H3.5	SP035120	FT-TP15	VB*T 1604...	
A40T-SVJBR/L16-50	○	○	50	40	39	75		91	4.5	7°				-	-	-	-	-	-	-

● : Standard stock ○ : Made-to-Order

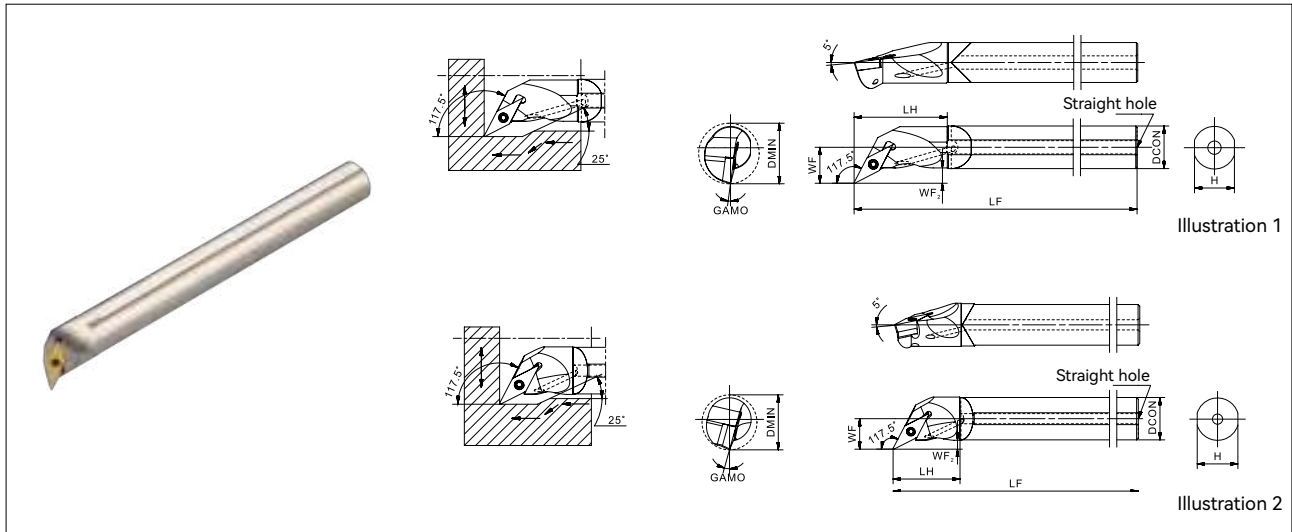
A-SVPP/B Steel Boring Bar (Internal Profile/Internal Undercut Boring)



Product code	Stock		Minimum boring hole diameter (mm)	Dimension							Insert corner radius (RE)	Internal coolant	Illustration	Spare parts					Insert		
	R	L		DCON	H	LF	LH	WF	WF2	GAMO				Shim	Shim screw	Wrench (Shim screw)	Screw	Wrench			
			DMIN																		
A10K-SVPPR/L08-14	○	○	14	10	9	125	24	8.5	3	8°	0.4	With	1	-	-	-	SP020050	FT-TP06	VP*T 0802...		
A12M-SVPBR/L11-18	○	○	18	12	11	150	29	11	4.5					-	-	-	-	-	-	-	-
A16Q-SVPBR/L11-22	●	●	22	16	15	180	35	13.5	5.5	5°				-	-	-	SP025064	FT-TP08	VB*T 1103...		
A20R-SVPBR/L11-26	○	○	26	20	19	200	41	15.5	5					-	-	-	-	-	-	-	-
A25S-SVPBR/L16-31	○	○	31	25	24	250	51	18	5	13°				2	S-SVN16032	SH050084X	LT-H3.5	SP035120	FT-TP15	VB*T 1604...	
A32S-SVPBR/L16-40	○	○	40	32	31		54	23	6.5	9°											

● : Standard stock ○ : Made-to-Order

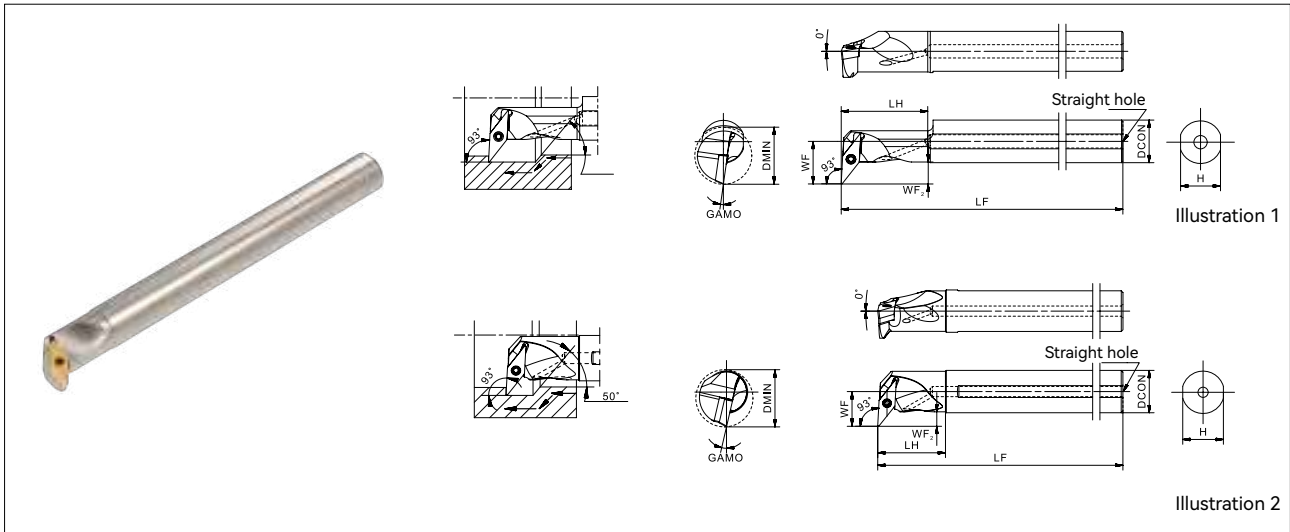
E-SVPP/B Carbide Boring Bar (Internal Profile/Internal Undercut Boring)



Product code	Stock		Minimum boring hole diameter (mm)	Dimension							Insert corner radius (RE)	Insert coolant	Internal coolant illustration	Spare parts					Insert						
				DCON	H	LF	LH	WF	WF2	GAMO				Shim	Shim screw	Wrench (Shim screw)	Screw	Wrench							
	R	L	DMIN																						
E10M-SVPPR/L08-14	○	○	14	10	9	150	21.5	8.5	3	8°	0.4	With	1	-	-	-	SP020050	FT-TP06	VP*T 0802...						
E12M-SVPBR/L11-18	○	○	18	12	11		23	11	4.5					-	-	-	-	-	-	-	-	-	-		
E16Q-SVPBR/L11-22	●	●	22	16	15	180	35	13.5	5.5	5°				0.4	With	1	-	-	-	SP025064	FT-TP08	VB*T 1103...			
E20R-SVPBR/L11-26	○	○	26	20	19	200	32	15.5	5								-	-	-	-	-	-	-	-	-
E25S-SVPBR/L16-31	○	○	31	25	24	250	38	18	5	13°							0.4	With	2	S-SVN16032	SH050084X	LT-H3.5	SP035120	FT-TP15	VB*T 1604...

● : Standard stock ○ : Made-to-Order

A-SVIP/B Steel Boring Bar (Internal Profile Boring)

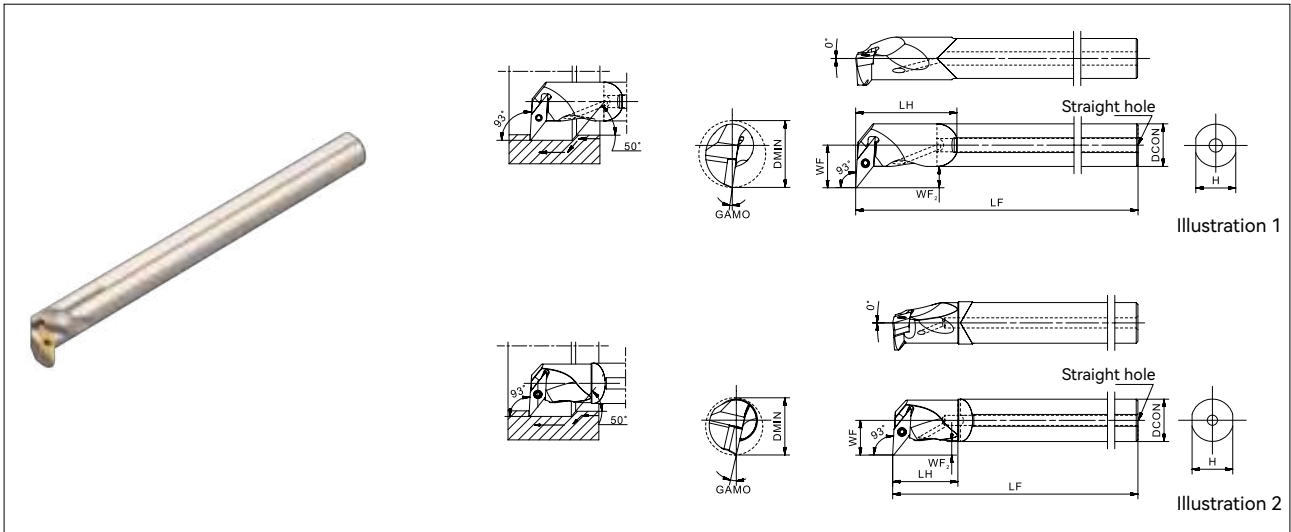


Product code	Stock		Minimum boring hole diameter (mm)	Dimension							Insert corner radius (RE)	Insert coolant	Illustration	Spare parts					Insert		
	R	L		DCON	H	LF	LH	WF	WF2	GAMO				Shim	Shim screw	Wrench (Shim screw)	Screw	Wrench			
			DMIN																		
A12M-SVUPR/L08-16	○	○	16	12	11	150	25.5	11.5	5.5	8°	0.4	With	1	-	-	-	SP020050	FT-TP06	VP* T 0802...		
A16Q-SVUBR/L11-20	●	●	20	16	15	180	32.5	16	8					-	-	-	SP025064	FT-TP08	VB* T 1103...		
A20R-SVUBR/L11-25	●	●	25	20	19	200	40.5	18	7°	-				-	-	-	-	-	-	-	
A25S-SVUBR/L16-34	●	○	34	25	24	250	40	20.5	8.5	13°				-	-	-	-	-	-	-	-
A32S-SVUBR/L16-40	○	○	40	32	31	250	84	28	12	9°				2	S-SVN16032	SH050084X	LT-H3.5	SP035120	FT-TP15	VB* T 1604...	

● : Standard stock ○ : Made-to-Order

Turning Tools

E-SVUP/B Carbide Boring Bar (Internal Profile Boring)



Product code	Stock		Minimum boring hole diameter (mm)	Dimension							Insert corner radius (RE)	Internal coolant	Illustration	Spare parts					Insert
	R	L		DCON	H	LF	LH	WF	WF2	GAMO				Shim	Shim screw	Wrench (Shim screw)	Screw	Wrench	
			DMIN																
E12M-SVUPR/L08-18	○	○	18	12	11	150	23	11.5	5.5	8°	0.4	With	1						VP*T 0802...
E16Q-SVUBR/L11-25	●	●	25	16	15	180	28	16	8	8°				-	-	-	SP020050	FT-TP06	VP*T 0802...
E20R-SVUBR/L11-29	○	○	29	20	19	200	32	18	8	7°				-	-	-	SP025064	FT-TP08	VB*T 1103...
E25S-SVUBR/L16-34	●	○	34	25	24	250	38	20.5	8.5	13°				2	S-SVN16032	SH050084X	LT-H3.5	SP035120	FT-TP15

● : Standard stock ○ : Made-to-Order