

THE NEW VALUE FRONTIER

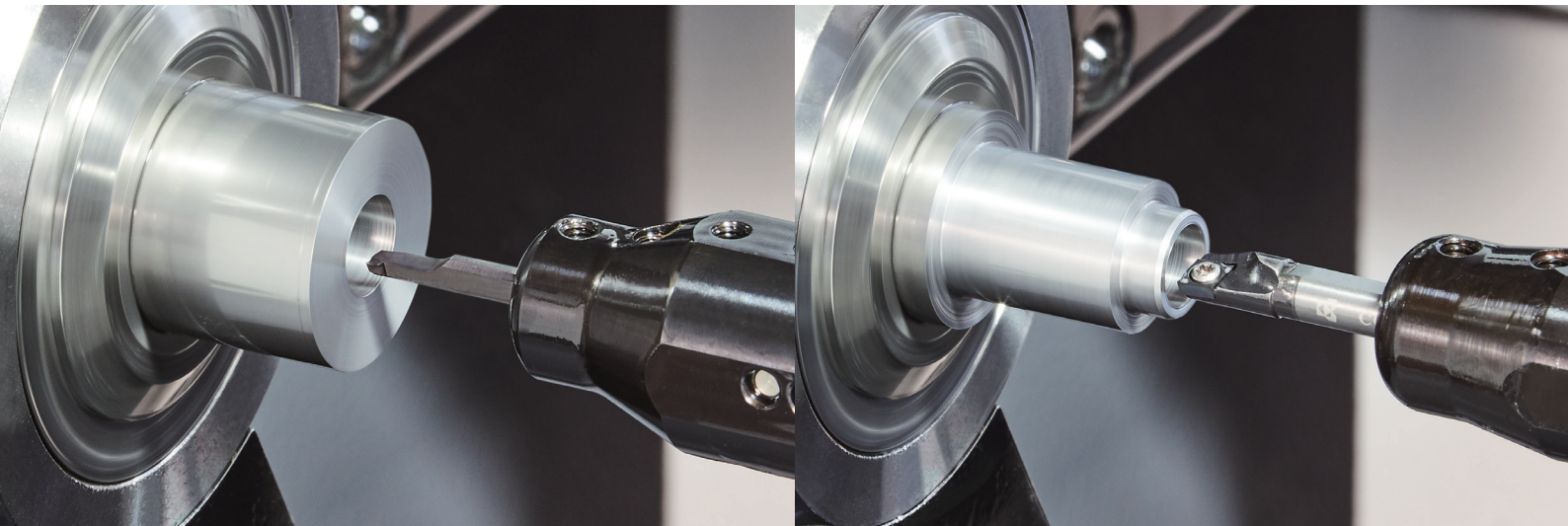


Small Internal Machining

EZ Bar

Small Internal Machining

EZ Bar Series



Easy Adjustment and High Precision for a Wide Range of Machining Applications

The EZ Bar prevents deviation with high-rigidity clamping

Unique design provides a smooth supply of coolant

Indexable boring bar "EZ Bar PLUS" added to lineup

NEW Lineup Expansion with EZ Bar PLUS

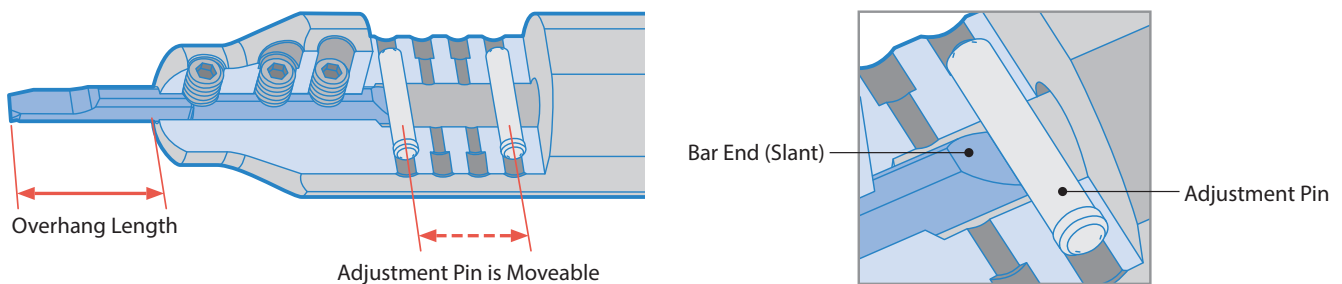


EZ Bar Series

Min. Bore Dia. $\phi 2$ - Easy Adjustment and High Precision
 Large Tooling Lineup for a Wide Application Range

1 Adjustable Overhang Length (EZ Adjust Structure)

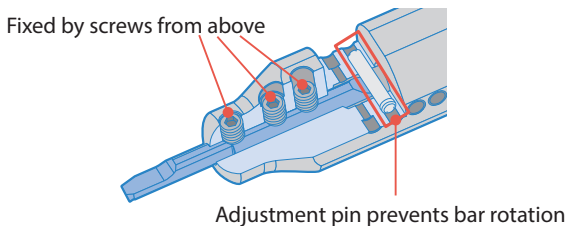
For CT sleeves with coolant holes and HP sleeves with positioning function, the overhang length can be set by moving adjustment pins



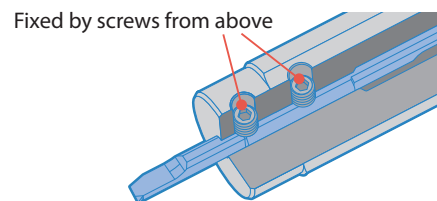
2 Minimized Deviation of Cutting Diameter

The adjustment pin prevents the bar from rotating during machining

EZ Bar

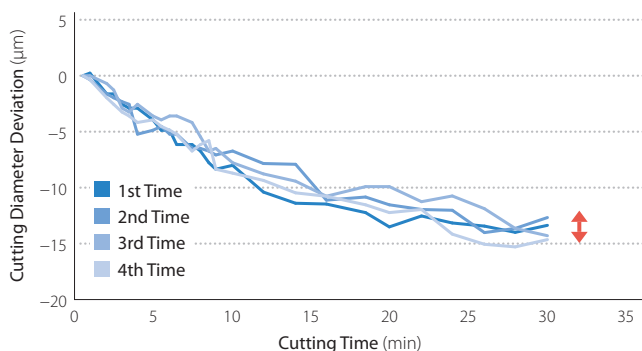


Competitor

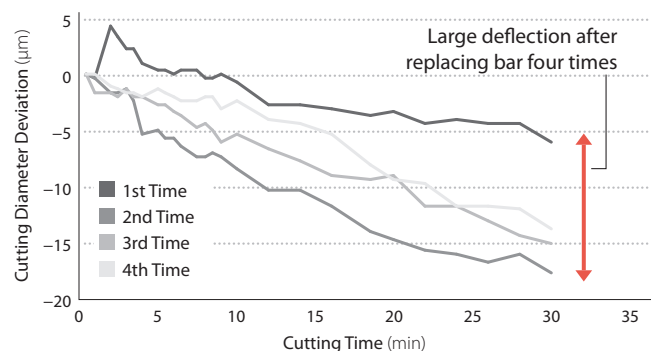


Cutting Diameter Deviation Comparison (In-house Evaluation)

EZ Bar



Competitor A



Cutting Condition: $V_c = 66$ m/min, $a_p = 0.1$ mm, $f = 0.02$ mm/rev, Wet (Oil-base) Workpiece: SK4

3 Large Tooling Lineup for a Wide Application Range

Can be used for boring, turning, internal grooving, face grooving, and threading (See page 3)
 Large lineup of sleeves allows for an optimized tool selection for various applications

How to Select Bars (High Precision)

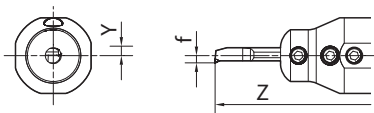
Select the HP bar for high precision and the ST bar for cost reduction (tolerances are different).

HP (Precision-oriented)



ST (Cost-oriented)



Bar Setting	Bar Tolerance	Offset (f)	Longitudinal Direction (Z)	Cutting Edge Height (Y)	Min. Bore Dia.
 <p>Y = Cutting Edge Height Z = Longitudinal Direction f = Offset</p>	HP	± 0.025 mm	± 0.05 mm	+ 0.05 mm / 0 mm	Same as Shank Dia.
	ST	± 0.06 mm	± 0.1 mm	+ 0.06 mm / 0 mm	Different than Shank Dia.

How to Select Bars (Chipbreakers)

Chipbreakers for Various Applications

H Chipbreaker without Lead Angle



Recommended ap:
More than 0.2 mm

1st Recommendation/
General Purpose
Extended Reach Available
(Description: ... HP ... -LT)
Uncoated Carbide Grade
GW05 added to the lineup

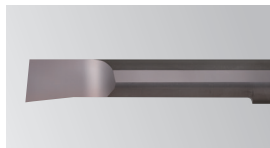
F Chipbreaker with Lead Angle



Recommended ap:
Less than 0.2 mm

Finishing/Sharpness
Oriented

NB Chipbreaker (without Chipbreaker)



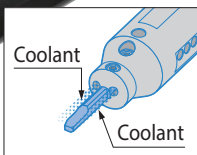
Non-ferrous Metal Machining
PCD • CBN Inserts Available

How to Select Sleeves

Choose between three types of sleeves

EZH-CT

with EZ Adjust Structure
with Coolant Hole



Smooth coolant flow due to special head design

EZH-HP

with EZ Adjust
Structure



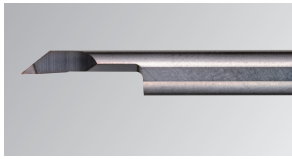
EZH-ST

for Cost Oriented
Machining

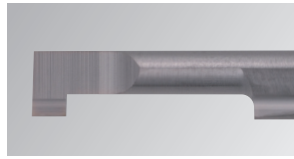


New Lineup of Internal Profiling, Internal Grooving, Face Grooving and Threading Bars

Internal Profiling (EZVB)



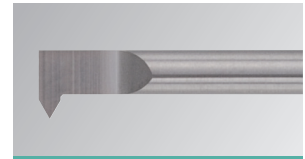
Internal Grooving (EZG)



Face Grooving (EZFG)



Threading (EZT)



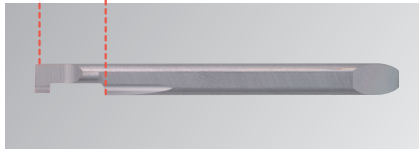
Minimum Bore Diameter 3 mm
Available for Threading M4 Metric Screw Threads

Two different overhang lengths (L2 dimension) are available for internal grooving (EZG)

Standard Type (Description:-)



Short Type (Description: Indicated with "S" at the end of description)



High Rigidity and Anti-chattering

Chip Evacuation (In-house Evaluation)

S45C

EZG EZGR040040-200 (Groove Width 2 mm)			
f (mm/rev)	0.01	0.02	0.03

Cutting Condition: Vc = 80 m/min, Groove Depth 1.0 mm (ap = 0.2 x 5 Times) Wet

SUS304

EZG EZGR040040-200 (Groove Width 2 mm)		
f (mm/rev)	0.01	0.02

Cutting Condition: Vc = 60 m/min, Groove Depth 1.0 mm (ap = 0.2 x 5 Times) Wet

Stable machining with chip control oriented chipbreaker

Chip Evacuation (In-house Evaluation)

EZVB

ap \ f	0.01 (mm/rev)	0.03 (mm/rev)	0.05 (mm/rev)
0.07 (mm)			
0.05 (mm)			
0.03 (mm)			

Competitor B

ap \ f	0.01 (mm/rev)	0.03 (mm/rev)	0.05 (mm/rev)
0.07 (mm)			
0.05 (mm)			
0.03 (mm)			

Internal Spherical Profiling



Cutting Condition: Vc = 100 m/min, Wet Workpiece: SUS304

Indexable EZ Bar for Small Diameter Boring

EZ Bar PLUS

High Precision Solid Bar with Convenience of Indexable Inserts
Reduces Machining Costs

1 Minimum Bore Diameter 5 mm

Carbide or steel bars can be selected depending on the machining purpose



Carbide Bar

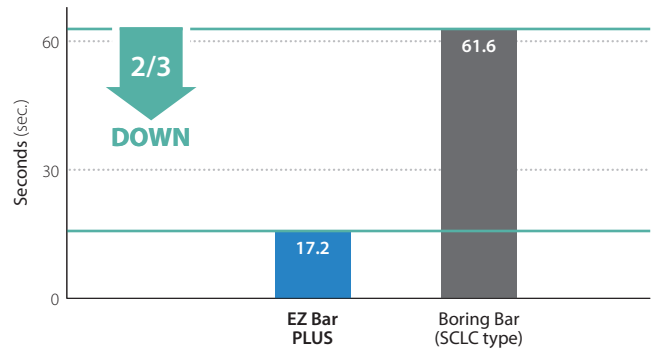


Steel Bar

2 Reduces Installing Times by 1/3

The EZ adjust structure features much lower mounting times compared to conventional boring bars

Mounting Time Comparison (In-house Evaluation)

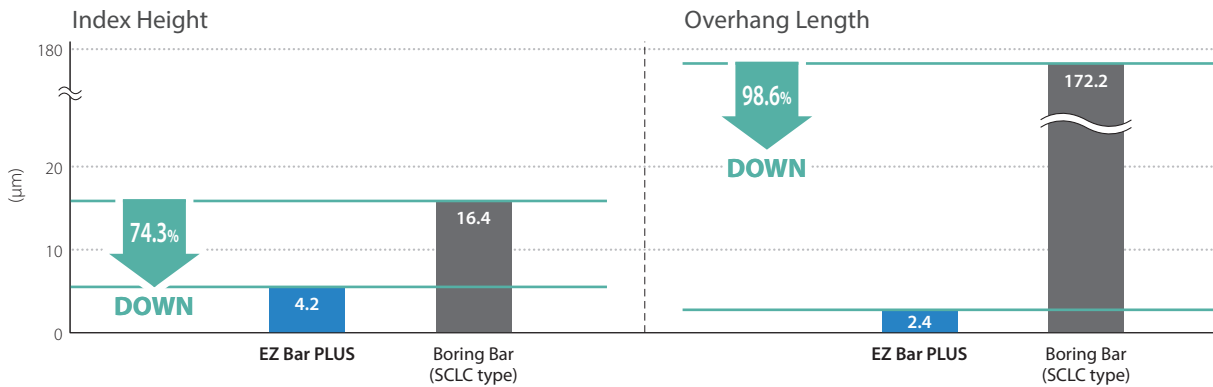


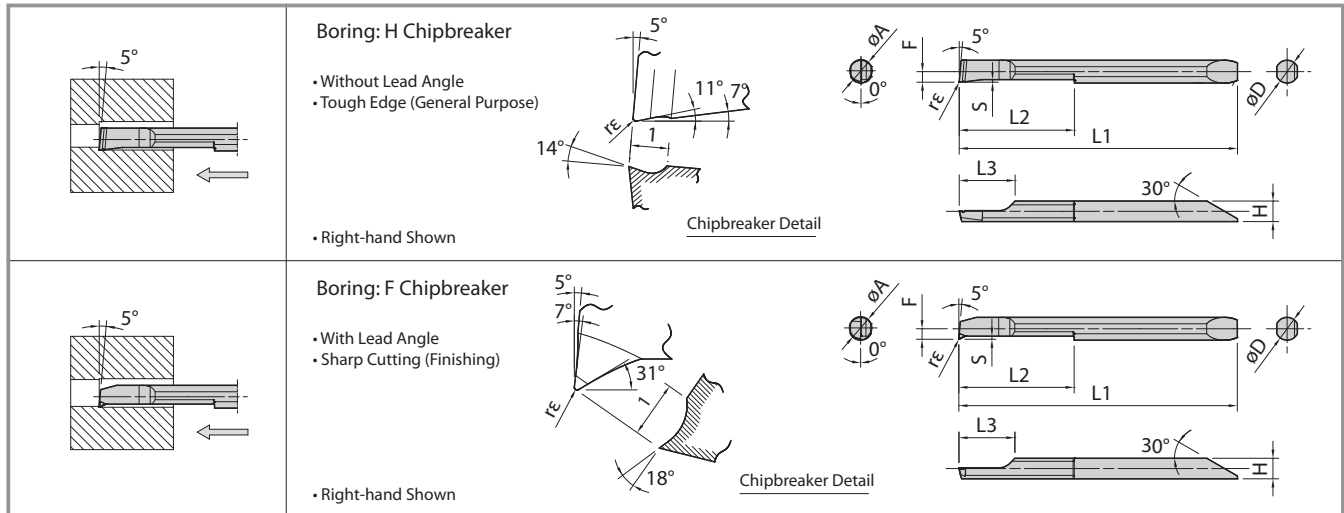
*Average values from 5 tests

3 Excellent and Accurate Repeatability

The EZ adjust structure features higher repeatability accuracy compared with conventional boring bars

Repeatability Comparison (In-house Evaluation)





EZ Bar Dimensions

Description	Min. Bore Dia.	Dimensions (mm)								Grades		Applicable Sleeve	
		øA	øD	H	L1	L2	L3	F	S	rε	MEGACOAT		Carbide
											PR1225		GW05
EZBR 020020HP-008H	2	2	1.8	32	8	4.9	0.85	0.25	0.08 ±0.015	●	●	EZH020...	
020020HP-008H-LT				36	12					●	●		
025025HP-008H	2.5	2.5	2.3	35	10.5	6.9	1.1	0.3	0.15 ±0.02	●	●	EZH025...	
025025HP-008H-LT				39.5	15					●	●		
025025HP-015H				35	10.5					●	●		
030030HP-008H	3	3	2.7	38.9	13	9.8	1.35	0.4	0.08 ±0.015	●	●	EZH030...	
030030HP-008H-LT				47.9	18					●	●		
030030HP-015H				38.9	13					●	●		
035035HP-008H	3.5	3.5	3.2	41.9	15	11.8	1.6	0.5	0.08 ±0.015	●	●	EZH035...	
035035HP-008H-LT				51.9	21					●	●		
035035HP-015H				41.9	15					●	●		
040040HP-008H	4	4	3.6	48.8	20	13.8	1.85	0.6	0.08 ±0.015	●	●	EZH040...	
040040HP-008H-LT				60.8	28					●	●		
040040HP-015H				48.8	20					●	●		
050050HP-008H	5	5	4.6	58.1	25	15.8	2.35	0.7	0.08 ±0.015	●	●	EZH050...	
050050HP-008H-LT				73.1	35					●	●		
050050HP-015H				58.1	25					●	●		
060060HP-008H	6	6	5.6	66.1	30	17.8	2.85	0.9	0.08 ±0.015	●	●	EZH060...	
060060HP-008H-LT				83.1	42					●	●		
060060HP-015H				66.1	30					●	●		
EZBR 020020HP-005F	2	2	1.8	32	8	4.9	0.85	0.25	0.05 ±0.01	●	●	EZH020...	
025025HP-005F	2.5	2.5	2.3	35	10.5	6.9	1.1	0.3	0.15 ±0.02	●	●	EZH025...	
025025HP-015F										●	●		
030030HP-005F	3	3	2.7	38.9	13	9.8	1.35	0.4	0.05 ±0.01	●	●	EZH030...	
030030HP-015F										●	●		
035035HP-005F	3.5	3.5	3.2	41.9	15	11.8	1.6	0.5	0.05 ±0.01	●	●	EZH035...	
035035HP-015F										●	●		
040040HP-005F	4	4	3.6	48.8	20	13.8	1.85	0.6	0.05 ±0.01	●	●	EZH040...	
040040HP-015F										●	●		
050050HP-005F	5	5	4.6	58.1	25	15.8	2.35	0.7	0.05 ±0.01	●	●	EZH050...	
050050HP-015F										●	●		
060060HP-005F	6	6	5.6	66.1	30	17.8	2.85	0.9	0.05 ±0.01	●	●	EZH060...	
060060HP-015F										●	●		

Tolerance (of the reference pin): Offset ±0.025 mm, Overall Length ±0.05 mm, Edge Height +0.05/0 mm

Bars are Sold in 1 Piece Boxes

● : Std. Item

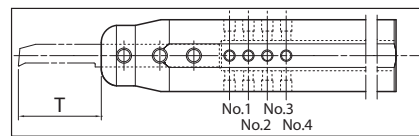
EZ Bar Identification System

EZ	B	R	020	020	HP - 008	H	
Bar Symbol (EZ Bar)	Application B:Boring Bar	Bar Hand R:Right-hand	Min. Bore Dia. 020: 2 mm 025: 2.5 mm	Shank Dia. 020: 2 mm 025: 2.5 mm	Precision HP: High Precision ST: Standard	Corner-R(ε) 008: 0.08 mm 015: 0.15 mm	Chipbreaker H: Chipbreaker (Without Lead Angle) H-LT: Chipbreaker (Extended Reach) F: Chipbreaker (With Lead Angle) NB: Without Chipbreaker

Extended Reach (...HP...-LT) Bar Overhang Length T (mm)

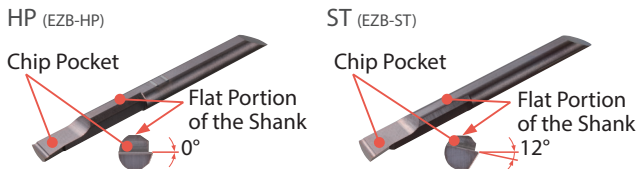
Description	Adjustment Pin Setting			
	No.1	No.2	No.3	No.4
EZBR 020020HP-008H-LT	12.5	8.5	—	—
025025HP-008H-LT	15.5	11.5	—	—
030030HP-008H-LT	22.5	18.5	14.5	—
035035HP-008H-LT	25.5	21.5	17.5	—
040040HP-008H-LT	32.5	28.5	24.5	20.5
050050HP-008H-LT	40.5	35.5	30.5	25.5
060060HP-008H-LT	47.5	42.5	37.5	32.5

*Additional machining is required for the dimensions in red.



How to Distinguish Bars

Chip Pocket Angles are Different



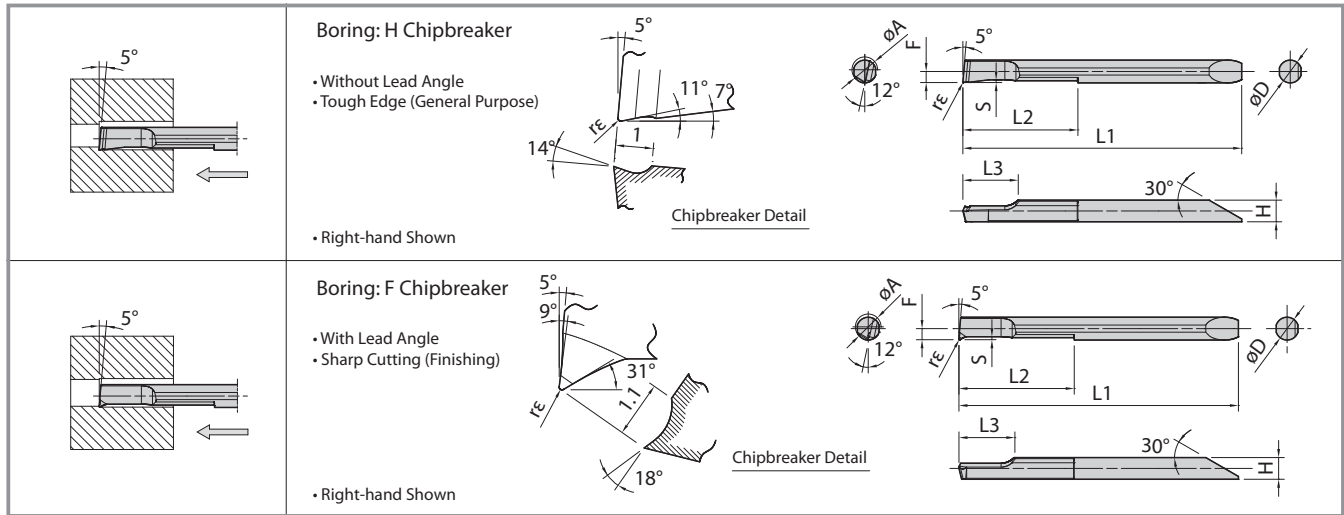
EZ Bar Compatibility

EZ Bar is Compatible with Conventional Tip Bars

Sleeve \ Bar	EZB ... HP	EZB ... ST	HPB ... (Conventional)
EZB ... HP	○	○	*1 *2 ○ (Compatible)
EZB ... ST	○	○	*1 ○ (Compatible)
HPB ... (Conventional)	*1 ○ (Compatible)	*1 ○ (Compatible)	○

*1: Some diameters of conventional tip bars are incompatible.

*2: Use conventional tip bars without adjustment pins. The overhang length of bar is not adjustable.

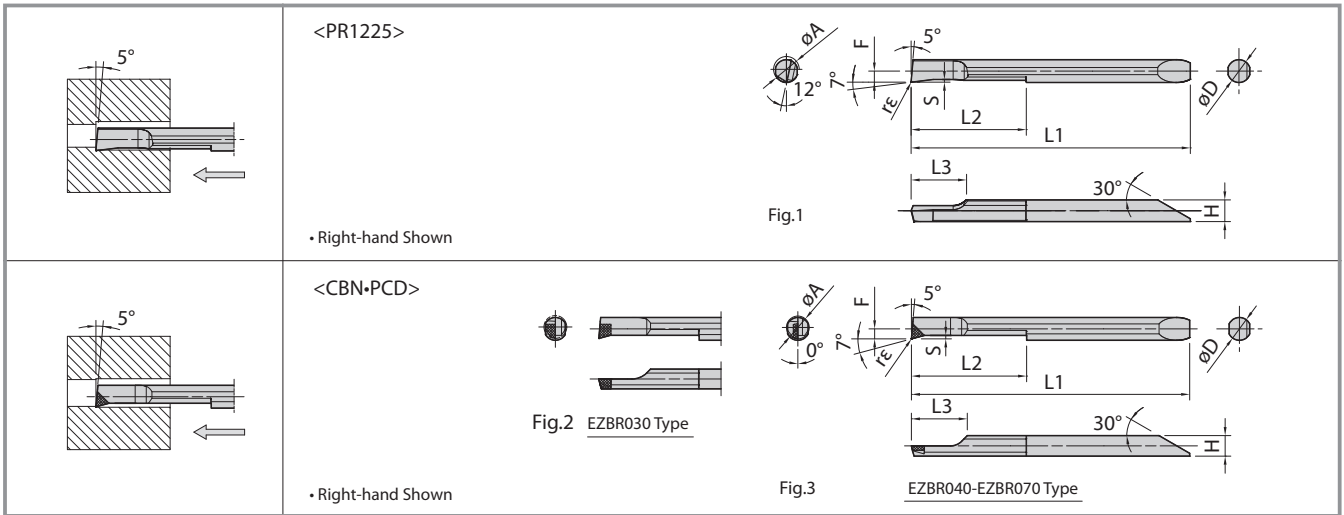


EZ Bar Dimension

Description	Min. Bore Dia.	Dimension (mm)								Grade	Applicable Sleeve	
		øA	øD	H	L1	L2	L3	F	S	rε		MEGACOAT
										PR1225		
EZBR 020017ST-008H	2	1.7	1.5	27.3	7	4.7	0.79	0.19	0.08 ±0.015	●	EZH017...	
025020ST-008H	2.5	2	1.82	32	8	4.8	0.94	0.16		●	EZH020...	
025020ST-015H									●	EZH025...		
030025ST-008H	3	2.5	2.3	35	10.5	4.8	1.19	0.15	0.08 ±0.015	●	EZH025...	
030025ST-015H									0.15 ±0.02	●	EZH030...	
035030ST-008H	3.5	3	2.8	39	13	6.8	1.44	0.18	0.08 ±0.015	●	EZH030...	
035030ST-015H									0.15 ±0.02	●	EZH035...	
040035ST-008H	4	3.5	3.3	42	15	6.7	1.69	0.24	0.08 ±0.015	●	EZH035...	
040035ST-015H									0.15 ±0.02	●	EZH040...	
045040ST-008H	4.5	4	3.8	49	20	9.7	1.94	0.27	0.08 ±0.015	●	EZH040...	
045040ST-015H									0.15 ±0.02	●	EZH050...	
055050ST-008H	5.5	5	4.8	58.2	25	9.7	2.44	0.33	0.08 ±0.015	●	EZH050...	
055050ST-015H									0.15 ±0.02	●	EZH060...	
065060ST-008H	6.5	6	5.8	66.2	30	11.8	2.94	0.38	0.08 ±0.015	●	EZH060...	
065060ST-015H									0.15 ±0.02	●	EZH070...	
075070ST-008H	7.5	7	6.8	74.2	35	11.7	3.44	0.44	0.08 ±0.015	●	EZH070...	
075070ST-015H									0.15 ±0.02	●	EZH017...	
EZBR 020017ST-005F	2	1.7	1.5	27.3	7	4.7	0.79	0.2	0.05 ±0.01	●	EZH017...	
025020ST-005F	2.5	2	1.82	32	8	4.8	0.94	0.16		0.15 ±0.02	●	EZH020...
025020ST-015F									0.05 ±0.01	●	EZH025...	
030025ST-005F	3	2.5	2.3	35	10.5	4.8	1.19	0.2	0.15 ±0.02	●	EZH025...	
030025ST-015F									0.05 ±0.01	●	EZH030...	
035030ST-005F	3.5	3	2.8	39	13	6.8	1.44	0.26	0.05 ±0.01	●	EZH030...	
035030ST-015F									0.15 ±0.02	●	EZH035...	
040035ST-005F	4	3.5	3.3	42	15	6.7	1.69	0.33	0.05 ±0.01	●	EZH035...	
040035ST-015F									0.15 ±0.02	●	EZH040...	
045040ST-005F	4.5	4	3.8	49	20	9.7	1.94	0.31	0.05 ±0.01	●	EZH040...	
045040ST-015F									0.15 ±0.02	●	EZH050...	
055050ST-005F	5.5	5	4.8	58.2	25	9.7	2.44	0.45	0.05 ±0.01	●	EZH050...	
055050ST-015F									0.15 ±0.02	●	EZH060...	
065060ST-005F	6.5	6	5.8	66.2	30	11.7	2.94	0.59	0.05 ±0.01	●	EZH060...	
065060ST-015F									0.15 ±0.02	●	EZH070...	
075070ST-005F	7.5	7	6.8	74.2	35	11.7	3.44	0.65	0.05 ±0.01	●	EZH070...	
075070ST-015F									0.15 ±0.02	●		

Tolerance: Offset ±0.06 mm, Overall Length ±0.1 mm, Edge Height +0.06/0 mm

Bars are Sold in 1 Piece Boxes
● : Std. Item



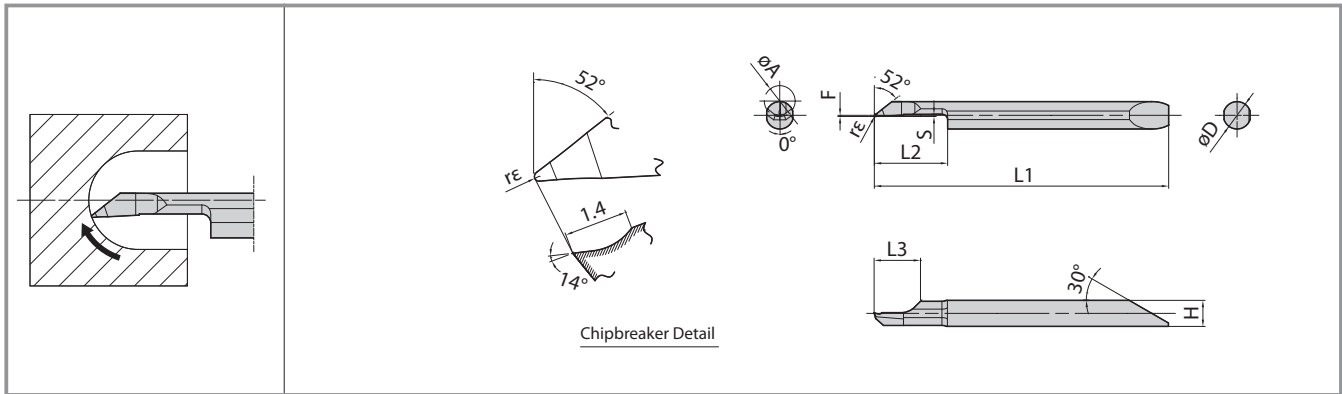
EZ Bar Dimensions

Description	Min. Bore Dia.	Dimensions (mm)								Drawing	Grade			Applicable Sleeve	
		øA	øD	H	L1	L2	L3	F	S		rε	MEGA COAT	MEGA COAT CBN		PCD
												PR1225	KBN05M		KPD001
EZBR 020017-005NB	2	1.7	1.5	27.3	7	4.7	0.79	0.2	0.05 ±0.015	Fig.1	●			EZH017...	
025020-005NB	2.5	2	1.82	32	8	4.8	0.94	0.16			●			EZH020...	
030025-005NB	3	2.5	2.3	35	10.5		1.19	0.16			●			EZH025...	
035030-005NB	3.5	3	2.8	39	13	6.8	1.44	0.19			●			EZH030...	
040035-005NB	4	3.5	3.3	42	15	6.7	1.69	0.25			●			EZH035...	
045040-005NB	4.5	4	3.8	49	20	9.7	1.94	0.28			●			EZH040...	
055050-005NB	5.5	5	4.8	58.2	25		2.44	0.33			●			EZH050...	
065060-005NB	6.5	6	5.8	66.2	30	11.7	2.94	0.39			●			EZH060...	
EZBR 075070-005NB	7.5	7	6.8	74.2	35		3.44	0.45	●			EZH070...			
EZBR 030030-003NB	3	3	2.6	38.8	13	6.8	1.25	0.3	0.035 ±0.015	Fig.2		●		EZH030...	
040040-003NB	4	4	3.6	48.8	20	9.8	1.75				●			EZH040...	
050050-003NB	5	5	4.6	58.1	25		2.25	0.5			●			EZH050...	
060060-003NB	6	6	5.6	66.1	30	11.8	2.75				●			EZH060...	
070070-003NB	7	7	6.6	74.1	35		3.25				●			EZH070...	
EZBR 040040-003NB	4	4	3.6	48.8	20	9.8	1.75		0.035 ±0.015	Fig.3			●	EZH040...	
050050-003NB	5	5	4.6	58.1	25		2.25	0.5			●			EZH050...	
060060-003NB	6	6	5.6	66.1	30	11.8	2.75				●			EZH060...	
070070-003NB	7	7	6.6	74.1	35		3.25				●			EZH070...	

Bars are Sold in 1 Piece Boxes
● : Std. Item

Edge Preparation

Carbide	Edge Preparation	Notes
PR1225	Shape Edge	—
KBN05M	T00815	0.08 mm × 15° Chamfered Cutting Edge
KPD001	Shape Edge	—



EZ Bar Dimensions

Description	Min. Bore Dia.	Dimensions (mm)							Grade	Applicable Sleeve	
		øA	øD	H	L1	L2	L3	F			S
EZVBR 035030-010	3.5	3	2.8	38	8	5.8	0.17	0.22	0.1 ±0.015	●	EZH030...
045040-010	4.5	4	3.8	43	10	6.8		0.26		●	EZH040...
055050-010	5.5	5	4.8	50.2	12	7.7		0.29		●	EZH050...
065060-010	6.5	6	5.8	55.2	14	8.6		0.32		●	EZH060...

Bars are Sold in 1 Piece Boxes
● : Std. Item

Recommended Cutting Conditions

H Chipbreaker EZB-HP •• H Type, EZB-ST••H Type

Workpiece	Insert Grade (Vc: m/min)		EZB020/025 Type		EZB030/035 Type		EZB040/045 Type		EZB050/055/060/065/075 Type		Notes
	MEGACOAT	Carbide	ap: (mm), f: (mm/rev)								
	PR1225	GW05	ap	f	ap	f	ap	f	ap	f	
Carbon Steel • Alloy Steel (S45C • SCM)	30 – 100	—	- 0.3	- 0.03	- 0.4	- 0.04	- 0.45	- 0.07	- 0.5	- 0.1	Wet
Stainless Steel (SUS304)	30 – 80	—	- 0.2	- 0.02	- 0.3	- 0.03	- 0.35	- 0.05	- 0.4	- 0.07	
Non-ferrous Metals (Aluminum • Brass)	—	- 100	- 0.3	- 0.05	- 0.4	- 0.06	- 0.45	- 0.1	- 0.5	- 0.15	

H Chipbreaker (Long Type)

Workpiece	Insert Grade (Vc: m/min)	EZB020/025/030/035 Type		EZB040/050/060 Type		Notes
		*Recommended Conditions for Overhang Length of 6xD				
	MEGACOAT	ap: (mm), f: (mm/rev)				
PR1225	ap	f	ap	f		
Carbon Steel • Alloy Steel (S45C • SCM)	30 – 60	- 0.3	- 0.05	- 0.4	- 0.1	Wet
Stainless Steel (SUS304)	10 – 40	- 0.25	- 0.05	- 0.3	- 0.07	

Recommended Cutting Conditions

F Chipbreaker EZB-HP •• F Type, EZB-ST •• F Type

Workpiece	Insert Grade (Vc: m/min)	EZB020/025 Type		EZB030/035 Type		EZB040/045 Type		EZB050/055/ 060/065/075 Type		Notes
	MEGACOAT	ap: (mm), f: (mm/rev)								
	PR1225	ap	f	ap	f	ap	f	ap	f	
Carbon Steel • Alloy Steel (S45C • SCM)	30 – 100	- 0.2	- 0.03	- 0.2	- 0.05	- 0.3	- 0.07	- 0.3	- 0.07	Wet
Stainless Steel (SUS304)	30 – 80		- 0.02		- 0.03	- 0.25	- 0.05	- 0.25	- 0.05	

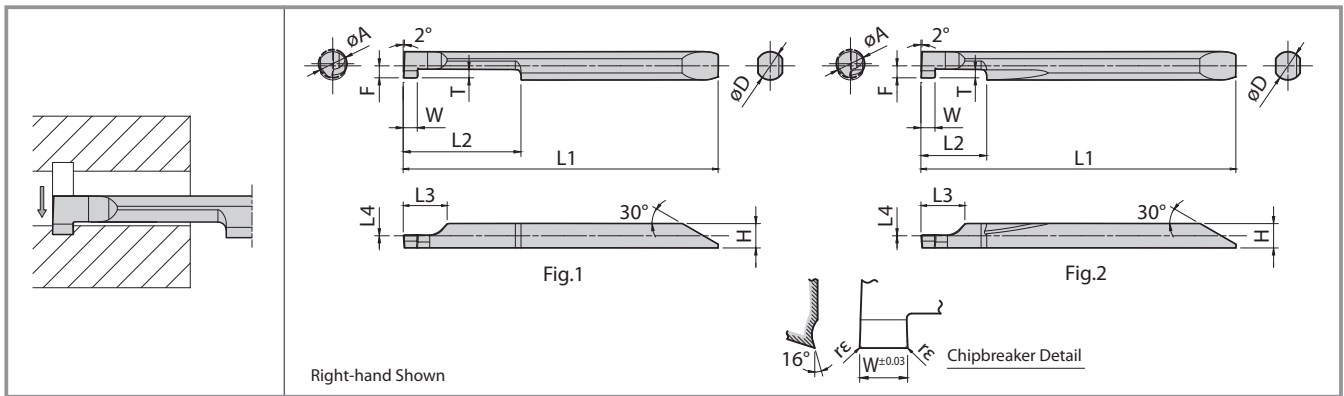
NB Chipbreaker (without Chipbreaker)

Workpiece	Insert Grade (Vc: m/min)	EZB020/025 Type		EZB030/035 Type		EZB040/045 Type		EZB055/ 065/075 Type		Notes
	MEGACOAT	ap: (mm), f: (mm/rev)								
	PR1225	ap	f	ap	f	ap	f	ap	f	
Carbon Steel • Alloy Steel (S45C • SCM)	30 – 100	- 0.3	- 0.03	- 0.4	- 0.04	- 0.45	- 0.07	- 0.5	- 0.1	Wet
Stainless Steel (SUS304)	30 – 80	- 0.2	- 0.02	- 0.3	- 0.03	- 0.35	- 0.05	- 0.4	- 0.07	
Non-ferrous Metals (Aluminum • Brass)	60 – 100	- 0.3	- 0.05	- 0.4	- 0.06	- 0.45	- 0.07	- 0.5	- 0.1	

Workpiece	Insert Grade (Vc: m/min)		EZB030 Type		EZB040/045 Type		EZB050/060/070 Type		Notes
	MEGACOAT CBN	PCD	ap: (mm), f: (mm/rev)						
	KBN05M	KPD001	ap	f	ap	f	ap	f	
Non-ferrous Metals (Aluminum • Brass)	—	- 300	—	—	- 0.45	- 0.1	- 0.5	- 0.15	Wet
Hard Materials (Heat-treated Steel)	- 100	—	- 0.07	- 0.03	- 0.10	- 0.05	- 0.15	- 0.07	

EZVB (Boring • Internal Facing • Internal Profiling)

Workpiece	Insert Grade (Vc: m/min)	EZVB035 Type		EZVB045 Type		EZVB055/065 Type		Notes
	MEGACOAT	ap: (mm), f: (mm/rev)						
	PR1225	ap	f	ap	f	ap	f	
Carbon Steel • Alloy Steel (S45C • SCM)	30 – 100	- 0.05	- 0.04	- 0.07	- 0.07	- 0.1	- 0.07	Wet
Stainless Steel (SUS304)	30 – 80	- 0.03	- 0.03	- 0.05	- 0.05	- 0.07	- 0.05	



EZ Bar Dimensions

Description	Min. Bore Dia.	Dimensions (mm)										Drawing	MEGACOAT	Applicable Sleeve								
		øA	W±0.03	rE	øD	H	L1	L2	L3	L4	F				T							
EZGR 040040-050	4	0.5	±0.013 0.05	4	3.45	44.7	12	6.2	0	1.7	1	Fig.2	PR1225	EZH040..								
EZGR 040040-100		1.0											●									
EZGR 040040-150		1.5											●									
EZGR 040040-200		2.0											●									
EZGR 050050-100	5	1.0		±0.013 0.05	5	4.3	52.8	20		0	2.15	1.5	Fig.1	●	EZH050..							
EZGR 050050-150		1.5												●								
EZGR 050050-200		2.0												●								
EZGR 060060-100	6	1.0			±0.013 0.05	6	5.15	60.7			20	0	2.65	2	Fig.1	●	EZH060..					
EZGR 060060-150		1.5														●						
EZGR 060060-200		2.0														●						
EZGR 070070-100	7	1.0				±0.013 0.05	7	6.2			63.7		25	0	3.05	2	Fig.1	●	EZH070..			
EZGR 070070-150		1.5																●				
EZGR 070070-200		2.0	●																			
EZGR 080070-100	8	1.0	±0.013 0.05				7	6.2	63.7		25		0		3.45	2	Fig.1	●	EZH070..			
EZGR 080070-150		1.5																●				
EZGR 080070-200		2.0																●				
EZGR 030030-050S	3	0.5		±0.013 0.05			3	2.5	38.7	5	10				1.25	0.8	Fig.2	●	EZH030..			
EZGR 030030-100S		1.0																●				
EZGR 040040-050S	4	0.5					±0.013 0.05	4	3.45	44.7					8	10		1.7	1	Fig.2	●	EZH040..
EZGR 040040-100S		1.0			●																	
EZGR 040040-150S		1.5			●																	
EZGR 040040-200S		2.0			●																	
EZGR 050050-100S	5	1.0			±0.013 0.05	5		4.3	52.8	10		10		2.15	1.5			Fig.2	●		EZH050..	
EZGR 050050-150S		1.5																	●			
EZGR 050050-200S		2.0																	●			
EZGR 060060-100S	6	1.0	±0.013 0.05			6		5.15	60.7	10			10	2.65	2				Fig.2		●	EZH060..
EZGR 060060-150S		1.5																			●	
EZGR 060060-200S		2.0																			●	
EZGR 070070-100S	7	1.0		±0.013 0.05		7		6.2	63.7	10	10			3.05	2		Fig.2				●	EZH070..
EZGR 070070-150S		1.5																			●	
EZGR 070070-200S		2.0					●															
EZGR 080070-100S	8	1.0				±0.013 0.05	7	6.2	63.7	10				10	3.45	2				Fig.2	●	EZH070..
EZGR 080070-150S		1.5																			●	
EZGR 080070-200S		2.0																			●	

Dimension T: Available Grooving Depth

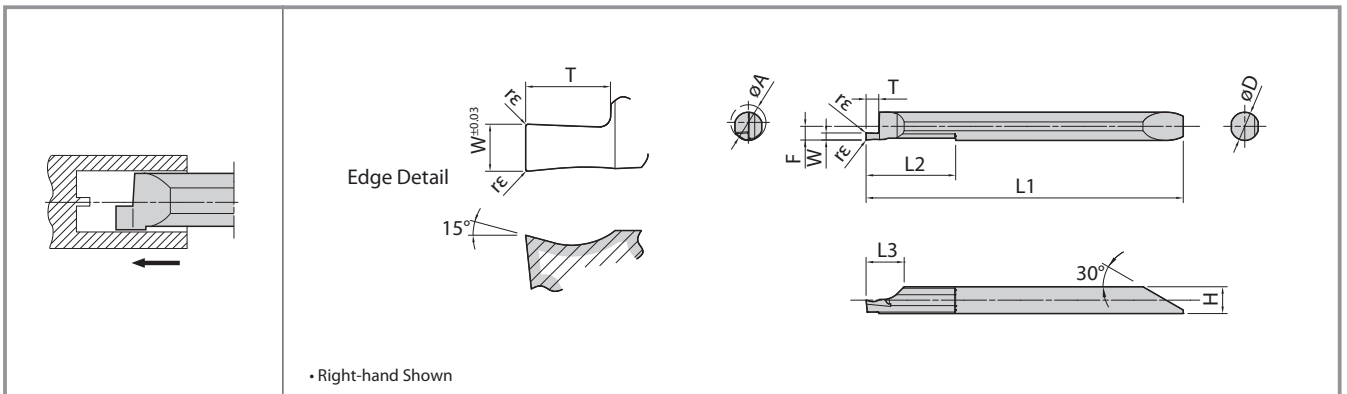
Bars are Sold in 1 Piece Boxes
● : Std. Item

Recommended Cutting Conditions

Workpiece	Insert Grade (Vc: m/min)	EZGR030030-...S	EZGR040040-... EZGR050050-... EZGR040040-...S EZGR050050-...S	EZGR060060-... EZGR070070-... EZGR080070-... EZGR060060-...S EZGR070070-...S EZGR080070-...S	Notes
	MEGACOAT				
	PR1225				
Carbon Steel • Alloy Steel (SxxC • SCM)	★ 30 – 100	- 0.02	- 0.03	- 0.05	Wet
Stainless Steel (SUS304)	★ 30 – 80	- 0.01	- 0.02	- 0.03	

★ : 1st Recommendation

EZFG (Face Grooving)



EZ Bar Dimensions

Description	Face Grooving Dia. ϕA		Dimensions (mm)										MEGACOAT	Applicable Sleeve
	MIN.	MAX.	$W^{\pm 0.03}$	$r\epsilon$	ϕD	H	L1	L2	L3	F	T	PR1225		
EZFGR 050040-100	5	∞	1.0	± 0.013 0.05	4	3.8	45.0	12	5.4	1.9	1.5	●	EZHO40..	
	(0)	(∞)	1.5								2.0	●		
EZFGR 060050-100	6	∞	1.0		5	4.8	53.2	25	6.9	2.4	1.5	●	EZHO50..	
			1.5								2.5	●		
			2.0								3.0	●		
EZFGR 080070-100	8	∞	1.0		7	6.8	64.2	25	7.9	3.4	2.0	●	EZHO70..	
			1.5								2.5	●		
			2.0								3.0	●		
			3.0								3.0	●		

Dimension T: Available Grooving Depth

Face grooving diameter ϕA MIN. (0) means that the initial groove can be made within MIN.-MAX. and then widened to the center.

Bars are Sold in 1 Piece Boxes

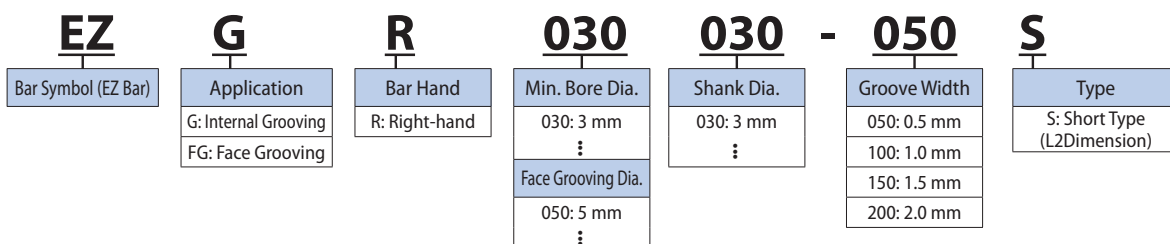
● : Std. Item

Recommended Cutting Conditions

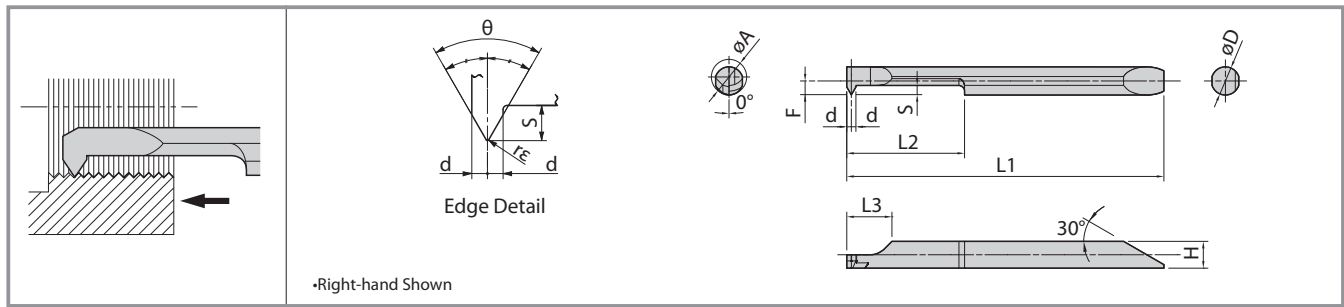
Workpiece	Insert Grade (Vc: m/min)	EZFGR050040-100 EZFGR060050-100 EZFGR080070-100	EZFGR050040-150 EZFGR060050-150 EZFGR080070-150	EZFGR060050-200 EZFGR080070-200	EZFGR080070-300	Notes
	MEGACOAT					
	PR1225					
Carbon Steel • Alloy Steel (SxxC • SCM)	★ 30 – 100	- 0.02	- 0.03	- 0.04	- 0.05	Wet
Stainless Steel (SUS304)	★ 30 – 80	- 0.01	- 0.02	- 0.02	- 0.03	

★ : 1st Recommendation

Bar Identification System (Internal Grooving, Face Grooving)



EZT (Threading)



EZ Bar Dimensions

Description	Min. Bore Dia.	Dimensions (mm)										MEGA COAT	Applicable Threads						
		øA	øD	H	L1	L2	L3	F	S	d	rε		θ	Metric		Unified		American National Pipe	
														Applicable Thread	Pitch (mm)	Applicable Thread	Pitch (mm)	Applicable Thread	Pitch (mm)
EZTR 030025-60-002	3.0	2.5	2.3	35.0	6.5	5.4	1.19	1.0	0.5	0.02 ^{+0.01}	60°	PR 1225	● M4 or more (M3.5 or more)	P0.5 - P0.8	No.8-32UNC No.8-36UNF or more	36 - 32	—	—	
	3.5	3.0	2.8	39.0	9.0	5.9	1.44	1.2	0.6				● M4.5 or more (M4.5 or more)	P0.5 - P1.0	No.10-24UNC No.8-36UNF or more	36 - 24	—	—	
	4.0	3.5	3.3	42.0	11.0	5.9	1.69	1.2	0.6				● M5 or more (M6 or more)	P0.75 - P1.25	No.12-24UNC No.12-28UNF or more	28 - 20	—	—	
	5.0	4.0	3.8	45.0	16.0	6.4	1.94	1.3	0.65				● M7 or more (M6 or more)	P0.75 - P1.5	1/4-20UNC 1/4-28UNF or more	28 - 18	—	—	
	6.0	5.0	4.8	53.2	20.0	7.4	2.44	1.6	0.8				● M8 or more (M7 or more)	P0.75 - P1.5	5/16-18UNC 5/16-24UNF or more	24 - 16	1/4NPT 3/8NPT	18	
	7.0	6.0	5.8	61.2	25.0	8.4	2.94	2.0	1.0				● M9 or more (M8 or more)	P0.75 - P1.75	3/8-16UNC 3/8-24UNF or more	24 - 16	1/4NPT or more	18,14	
EZTR 060050-55-008	6.0	5.0	4.8	53.2	20.0	7.4	2.44	1.6	0.8	0.085 ^{+0.015}	55°	Whitworth		Parallel Pipe/Tapered Pipe					
	8.0	7.0	6.8	64.2	25.0	8.9	3.44	2.0	1.0			● W10 TPI 24 or more	24 - 20	G1/16 or more R1/16 or more	28	—	—		
													● W11 TPI 220 or more	20 - 18	G1/8 or more R1/8 or more	28,19	—	—	

For American National Pipe (NPT), use EZTR.-60-004. See Page 14.
See back cover for applicable sleeves

ap & Number of Passes (Metric)

Pitch (mm)	Total ap (mm)	No. of Passes (Times)	1 Pass	2 Pass	3 Pass	4 Pass	5 Pass	6 Pass	7 Pass	8 Pass	9 Pass	10 Pass	11 Pass	12 Pass	13 Pass	14 Pass	15 Pass	16 Pass	17 Pass	18 Pass	19 Pass	20 Pass
0.5	0.3	9	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02											
0.7	0.42	10	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.02										
0.75	0.45	10	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03										
0.8	0.48	11	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03									
1.00	0.61	12	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.03									
1.25	0.77	14	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.04	0.04	0.04	0.04								
1.50	0.93	17	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03				
1.75	1.1	20	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03		

ap & Number of Passes (Whitworth)

TPI (TPI/inch)	Total ap (mm)	No. of Passes (Times)	1 Pass	2 Pass	3 Pass	4 Pass	5 Pass	6 Pass	7 Pass	8 Pass	9 Pass	10 Pass	11 Pass	12 Pass	13 Pass	14 Pass	15 Pass	16 Pass	17 Pass
24	0.65	13	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03				
20	0.81	15	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.03			
18	0.91	17	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	

ap & Number of Passes (Unified)

TPI (TPI/inch)	Total ap (mm)	No. of Passes (Times)	1 Pass	2 Pass	3 Pass	4 Pass	5 Pass	6 Pass	7 Pass	8 Pass	9 Pass	10 Pass	11 Pass	12 Pass	13 Pass	14 Pass	15 Pass	16 Pass	17 Pass	18 Pass
36	0.44	10	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.03	0.02	0.02								
32	0.5	11	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03							
28	0.55	12	0.07	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.03						
24	0.65	12	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.03							
20	0.78	14	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03					
18	0.88	17	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03		
16	0.99	18	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	

Bars are Sold in 1 Piece Boxes
● : Std. Item

Recommended Cutting Conditions

Workpiece	Recommended Insert Grade (Vc: m/min)	
	MEGACOAT	
	PR1225	
Carbon Steel • Alloy Steel (S45C • SCM435)	★ 30 – 100	
Stainless Steel (SUS304)	★ 30 – 80	
Non-ferrous Metals (Aluminum • Brass)	—	

<Note>

1)The standard cutting speed is Vc = 30 - 50 m/min. The table feed may not follow the expected conditions when machining small diameter workpieces at high speeds.

2)Coolant is recommended.

★ : 1st Recommendation

Application of Parallel Pipe and Tapered Pipe Thread

Parallel Pipe: G (PF), Rp (PS)

Applicable Thread		TPI (TPI/inch)	Internal Threading (G, Rp)		Same Root's Radius External Threading Internal Threading
min	Symbol (Previous Symbol)		Insert	Bore Dia.	
—	G 1/16 (—)	28	EZTR 060050-55-008	6.56	0.12
1 min	G 1/8 (PF 1/8)		080070-55-008	8.57	
2 min	G 1/4 (PF 1/4)	19	EZTR 080070-55-008	11.45	0.18
3 min	G 3/8 (PF 3/8)			14.95	

Tapered Pipe: R, Rc (PT) (BSPT)

Applicable Thread		TPI (TPI/inch)	Internal Threading (Rc)		Same Root's Radius External Threading Internal Threading
min	Symbol (Previous Symbol)		Insert	Bore Dia.	
—	R 1/16, Rc 1/16 (—)	28	EZTR 060050-55-008	—	0.12
1 min	R 1/8, Rc 1/8 (PT 1/8)		080070-55-008	—	
2 min	R 1/4, Rc 1/4 (PT 1/4)	19	EZTR 080070-55-008	—	0.18
3 min	R 3/8, Rc 3/8 (PT 3/8)			—	

When using "EZT" type for Parallel Pipe / Tapered Pipe threading, the thread's corners become sharp edged due to its partial profile, and the shape will not be the same as the standard shape for Parallel Pipe / Tapered Pipe.

ap & Number of Passes (Parallel Pipe / Tapered Pipe)

TPI (TPI/inch)	Total ap (mm)	No. of Passes (Times)	1 Pass	2 Pass	3 Pass	4 Pass	5 Pass	6 Pass	7 Pass	8 Pass	9 Pass	10 Pass	11 Pass	12 Pass	13 Pass	14 Pass	15 Pass	16 Pass	17 Pass	18 Pass
28	0.61	12	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03						
19	0.95	18	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03

Application for NPT

Applicable Thread	TPI (TPI/inch)	Internal Threading		
		Toolholder	Insert	
			Partial Profile	Full Profile
1/16 NPT 1/8 NPT	27	No Tools Available		
1/4 NPT 3/8 NPT	18	EZH Sleeve	EZTR060050-60-004 EZTR070060-60-004	—
1/2 NPT 3/4 NPT	14	EZH Sleeve	EZTR070060-60-004	—
1/2 NPT 3/4 NPT	14	SINR1616S-16 SINR2016S-16	—	16R14NPT

Application of NPTF Thread

NPTF is the thread for sealing pipes without using any sealing material.

Thread symbol is similar to NPT but the tolerance is different from that of NPT and the above bars are not available for NPTF.

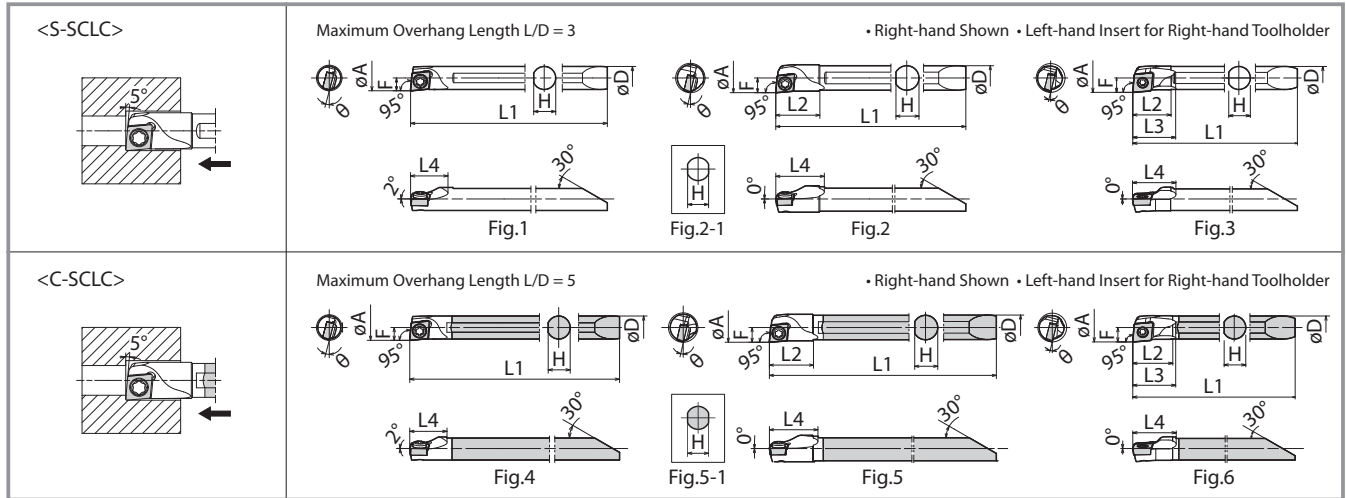
ap & Number of Passes (American National Pipe)

TPI (TPI/inch)	Total ap (mm)	No. of Passes (Times)	1 Pass	2 Pass	3 Pass	4 Pass	5 Pass	6 Pass	7 Pass	8 Pass	9 Pass	10 Pass	11 Pass	12 Pass	13 Pass	14 Pass	15 Pass	16 Pass	17 Pass	18 Pass	19 Pass
18	1.23	16	0.18	0.14	0.12	0.12	0.10	0.09	0.08	0.08	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02			
14	1.56	19	0.18	0.16	0.14	0.14	0.12	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02

EZ Bar PLUS (Indexable Boring Bar)

Applicable Inserts: 045X... = CC...03... 050X... = CC...03...
 060X... = CC...04... 070X... = CC...04...
 080X... = CC...06...

Toolholder Dimensions



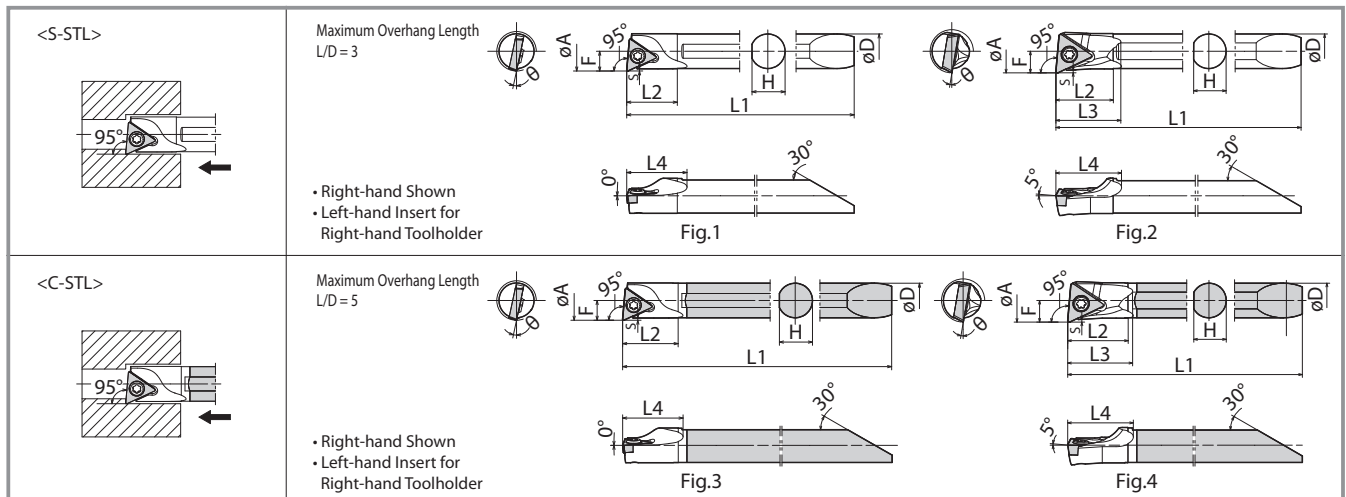
Description	Stock R	Min. Bore Dia. øA	Dimensions (mm)							θ	Std. Corner-R(re)	Coolant Hole	Drawing	Spare Parts		Applicable Sleeve		
			øD	H	L1	L2	L3	L4	F					Clamp Screw	Wrench			
Steel	S045X-SCLCR03-050EZ	●	5	4.5	4.3	42.4	—	—	8.5	2.5	15°	0.2	—	Fig.1	SB-1635TR	FT-6	EZH045...	
	S045X-SCLCR03-050EZP	●	5	4.5	4.3	42.4	—	—	7	2.5	15°						Fig.2	EZH050...
	S050X-SCLCR03-060EZP	●	6	5	4.7	48.4	9	—	10	3	13°			Fig.2-1	SB-2035TR	FT-6	EZH060...	
	S060X-SCLCR04-070EZ	●	7	6	5.4	53.9	11.8	—	11.5	3.5				11°			Fig.2	EZH070...
	S060X-SCLCR04-070EZP	●	7	6	5.7	54.4	10	—	11	3.5	11°			0.4	Fig.3	SB-2545TR	FT-8	EZH080...
	S070X-SCLCR04-080EZP	●	8	7	6.7	60.4	10.3	—	12	4	11°							Fig.5-1
S080X-SCLCR06-100EZP	●	10	8	7.5	69.5	13.3	15	15	5	14°	0.4	Fig.6	SB-2545TR	FT-8	EZH080...			
Carbide	C045X-SCLCR03-050EZ	●	5	4.5	4.3	51.4	—	—	8.5	2.5	15°	0.2	—	Fig.4	SB-1635TR	FT-6	EZH045...	
	C045X-SCLCR03-050EZP	●	5	4.5	4.3	51.4	—	—	7	2.5	15°						Fig.5	EZH050...
	C050X-SCLCR03-060EZP	●	6	5	4.7	58.4	9	—	10	3	13°			Fig.5-1	SB-2035TR	FT-6	EZH060...	
	C060X-SCLCR04-070EZ	●	7	6	5.4	65.9	11.8	—	11.5	3.5				11°			Fig.6	EZH070...
	C060X-SCLCR04-070EZP	●	7	6	5.7	66.4	10	—	11	3.5	11°			0.4	Fig.6	SB-2545TR	FT-8	EZH080...
	C070X-SCLCR04-080EZP	●	8	7	6.7	74.4	11	—	12	4	11°							Fig.6
	C080X-SCLCR06-100EZP	●	10	8	7.5	85.5	14	15	15	5	14°			0.4	Fig.6	SB-2545TR	FT-8	EZH080...

* The shapes of shanks (H) for S060X-SCLCR04-070EZ and C060X-SCLCR04-070EZ are shown in Fig. 2-1 and Fig. 5-1.

● : Std. Item

Toolholder Dimensions

Applicable Inserts: 070X... = TB...06...
 080X... = TP...09...



Description	Stock R	Min. Bore Dia. øA	Dimensions (mm)								θ	Std. Corner-R(re)	Coolant Hole	Drawing	Spare Parts		Applicable Sleeve	
			øD	H	L1	L2	L3	L4	F	S					Clamp Screw	Wrench		
Steel	S070X-STLBR06-080EZP*	●	8	7	6.7	60.4	10.3	—	12	4	0.4	12°	0.2	—	Fig.1	SB-2035TR	FT-6	EZH070...
	S080X-STLPR09-100EZP	●	10	8	7.5	69.5	13.3	15	15	5	0.5	10°	0.4		Fig.2	SB-2545TR	FT-8	EZH080...
Carbide	C070X-STLBR06-080EZP*	●	8	7	6.7	74.4	11	—	12	4	0.4	12°	0.2	—	Fig.3	SB-2035TR	FT-6	EZH070...
	C080X-STLPR09-100EZP	●	10	8	7.5	85.5	14	15	15	5	0.5	10°	0.4		Fig.4	SB-2545TR	FT-8	EZH080...

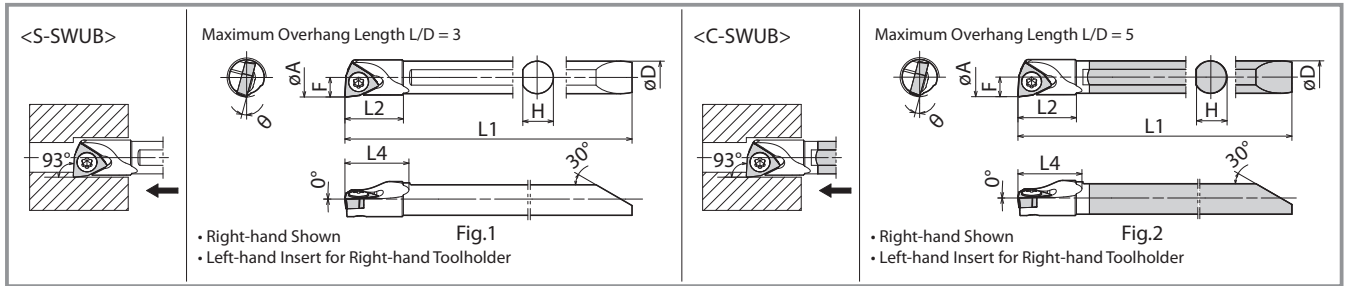
*TB**06**08 Inserts cannot be used

● : Std. Item

EZ Bar PLUS (Indexable Boring Bar)

Applicable Inserts: □ 050X... = WB...06... □ 060X... = WB...06...
□ 070X... = WB...08...

Toolholder Dimensions

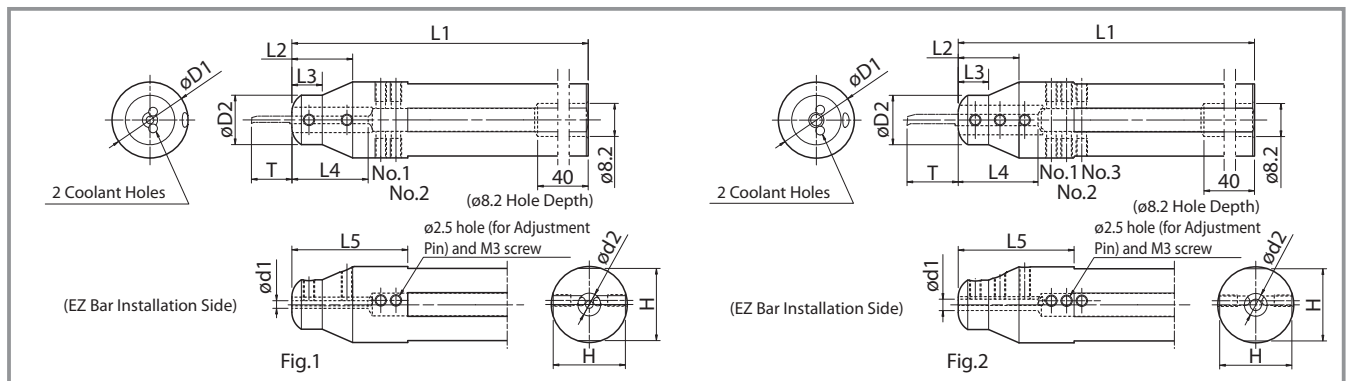


Description	Stock	Min. Bore Dia.	Dimensions (mm)								θ	Std. Corner-R(r_e)	Coolant Hole	Drawing	Spare Parts		Applicable Sleeve	
			R	ϕA	ϕD	H	L1	L2	L3	L4					F	S		Clamp Screw
Steel	S050X-SWUBR06-060EZP	●	6	5	4.7	48.4	9		10	3		15°	0.2	—	Fig.1	SB-2035TR	FT-6	EZH050...
	S060X-SWUBR06-070EZP	●	7	6	5.7	54.4	10	—	11	3.5	—	13°	—	—	—	—	—	EZH060...
	S070X-SWUBR08-080EZP	●	8	7	6.7	60.4	10.3		12	4		15°	—	—	—	—	—	EZH070...
Carbide	C050X-SWUBR06-060EZP	●	6	5	4.7	58.4	9		10	3		15°	0.2	—	Fig.2	SB-2035TR	FT-6	EZH050...
	C060X-SWUBR06-070EZP	●	7	6	5.7	66.4	10	—	11	3.5	—	13°	—	—	—	—	—	EZH060...
	C070X-SWUBR08-080EZP	●	8	7	6.7	74.4	11		12	4		15°	—	—	—	—	—	EZH070...

● : Std. Item

Applicable Sleeve

With Coolant Hole and EZ Adjust Structure



Sleeve Dimensions

Description	Stock	Dimensions (mm)										Bar Overhang Length T (mm)				Drawing	Applicable EZ Bar		
		$\phi d1$	$\phi D1$	$\phi D2$	$\phi d2$	H	L1	L2	L3	L4	L5	Adjustment Pin Setting							
												No.1	No.2	No.3	No.4				
EZH 01719CT-120	●	1.7	19.05	13	6	18	120	16	8	16	30.5	7.5	3.5	—	—	Fig.1	EZBR...017...		
	●		20			19	120				30.5								
	●		22			21	135				41.5								
	●		25			24	135				30.5								
	●		25.4			24.4	120				30.5								
EZH 02019CT-120	●	2	19.05	13	6	18	120	16	8	20	30.5	8.5	4.5	—	—	Fig.1	EZBR...020...		
	●		20			19	120				30.5								
	●		22			21	135				41.5								
	●		25			24	135				30.5								
	●		25.4			24.4	120				30.5								
EZH 02519CT-120	●	2.5	19.05	13	6	18	120	16	8	20	30.5	11	7	—	—	Fig.1	EZBR...025... EZTR...025...		
	●		20			19	120				30.5								
	●		22			21	135				41.5								
	●		25			24	135				30.5								
	●		25.4			24.4	120				30.5								
EZH 03019CT-120	●	3	19.05	13	6	18	120	16	8	21	30.5	13.5	9.5	5.5	—	Fig.2	EZBR...030... EZVR...030... EZGR...030... EZTR...030...		
	●		20			19	120				30.5								
	●		22			21	135				41.5								
	●		25			24	135				30.5								
	●		25.4			24.4	120				30.5								
EZH 03519CT-120	●	3.5	19.05	13	6	18	120	16	8	21	31.1	15.5	11.5	7.5	—	Fig.2	EZBR...035... EZTR...035...		
	●		20			19	120				31.1								
	●		22			21	135				41.5								
	●		25			24	135				31.1								
	●		25.4			24.4	120				31.1								

*L4 shows $\phi d1$ length

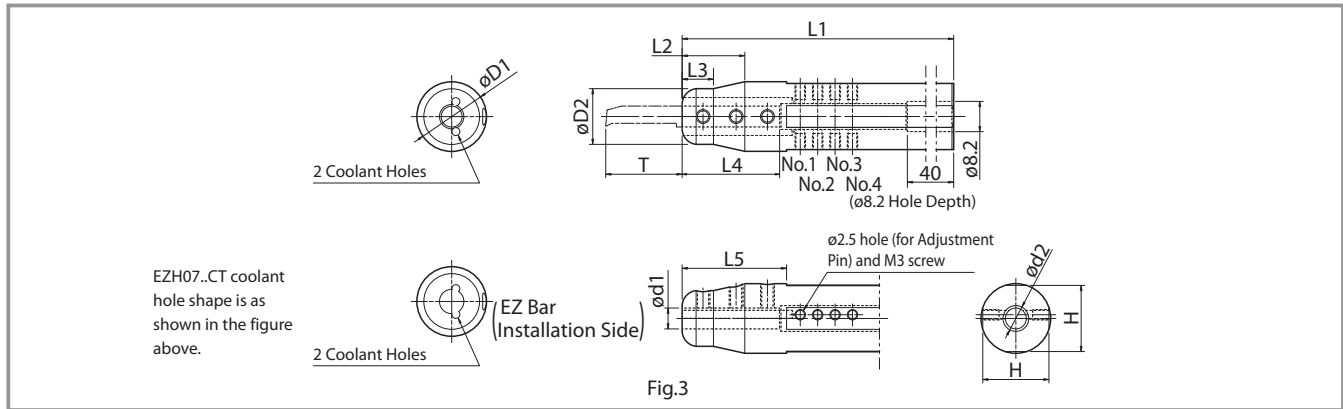
Choose sleeves ($\phi d1$) to match with ϕD dimension of the bar

Dimension T shows overhang length of the EZB Bar when attached to sleeve (with the exception of extended reach bars).

$\phi 8.2$ hole on the sleeve end is prepared with Rc1/8 threading. Please modify with additional machining if necessary. The sleeve hardness is 42HRC.

● : Std. Item

Applicable Sleeve



Sleeve Dimensions

Description	Stock	Dimensions (mm)										Bar Overhang Length ² T (mm)				Drawing	Applicable EZ Bar
		ød1	øD1	øD2	ød2	H	L1	L2	L3	*L4	L5	No.1	No.2	No.3	No.4		
EZH 04019CT-120	●	4	19.05	13	6	18	120	16	8	22	32.7	20.5	16.5	12.5	8.5	Fig.3	EZBR...040... EZVBR...040... EZGR...040... EZFRGR...040... EZTR...040...
EZH 04020CT-120	●		20			19	120				41.5						
EZH 04022CT-135	●		22			21	135				32.7						
EZH 04025.0CT-135	●		25			24	135										
EZH 04025.0CT-135	●		25.4			24.4	120										
EZH 05019CT-120	●	5	19.05	16	6	18	120	18	9	26	30.0	25.5 (15.5)	20.5 (10.5)	15.5 (—)	10.5 (—)	Fig.3	EZBR...050... EZVBR...050... EZGR...050... EZFRGR...050... EZTR...050... s/c050X...-060EZP
EZH 05020CT-120	●		20			19	120				44.0						
EZH 05022CT-135	●		22			21	135				30.0						
EZH 05025.0CT-135	●		25			24	135										
EZH 05025.4CT-120	●		25.4			24.4	120										
EZH 06019CT-120	●	6	19.05	16	7.4	18	120	18	9	28	30.0	30.5 (18.5)	25.5 (13.5)	20.5 (—)	15.5 (—)	Fig.3	EZBR...060... EZVBR...060... EZGR...060... EZTR...060... s/c060X...-070EZ s/c060X...-070EZP
EZH 06020CT-120	●		20			19	120				41.5						
EZH 06022CT-135	●		22			21	135				30.0						
EZH 06025.0CT-135	●		25			24	135										
EZH 06025.4CT-120	●		25.4			24.4	120										
EZH 07019CT-120	●	7	19.05	16	7.4	18	120	18	9	29	30.0	35.5 (21.5)	30.5 (16.5)	25.5 (11.5)	20.5 (—)	Fig.3	EZBR...070... EZGR...070... EZFRGR...070... EZTR...070... s/c070X...-080EZP
EZH 07020CT-120	●		20			19	120				44.0						
EZH 07022CT-135	●		22			21	135				30.0						
EZH 07025.0CT-135	●		25			24	135										
EZH 07025.4CT-120	●		25.4			24.4	120										

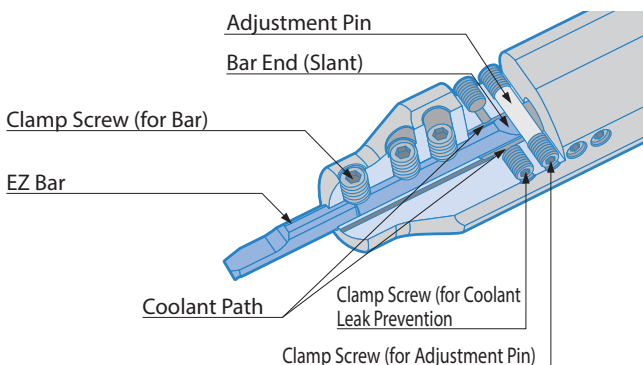
*1: L4 shows ød1 length

*2: Choose sleeves (ød1) to match with øD dimension of the bar
Dimension in () shows overhang length of the boring bar when installed into the sleeve.
Choose sleeves (ød1) to match with øD dimension of the EZ Bar

ø8.2 hole on the sleeve end is prepared with Rc1/8 threading. Please modify with additional machining if necessary. The sleeve hardness is 42HRC.

●: Std. Item

EZH-CT internal Structure

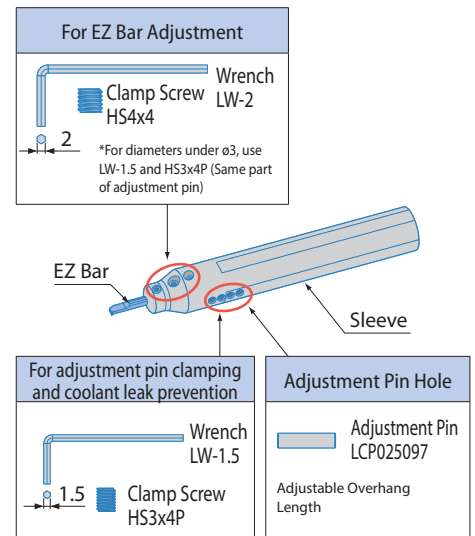


Parts (For EZH-CT Sleeves)

Description	Spare Parts				
	Clamp Screw	Wrench	Clamp Screw	Wrench	Adjustment Pin
EZH 017...CT-.. 020...CT-.. 025...CT-.. 030...CT-..	HS3x4P (For Adjustment Pin, Coolant Leak Prevention, and Bar)	LW-1.5 Tightening Torque 1 N·m	—	—	LCP025097
EZH 035...CT-.. 040...CT-.. 050...CT-.. 060...CT-.. 070...CT-..	HS3x4P (For Adjustment Pin, Coolant Leak Prevention, and Bar)	LW-1.5 Tightening Torque 1 N·m	HS4x4P (For Bar)	LW-2 Tightening Torque 2 N·m	LCP025097

- 1) If shank dia. is $\phi 2.5$ mm or less, use 6 clamp screws (HS3x4P), distributed as follows:
 For Adjustment Pin 2pcs
 For Coolant Leak Prevention 2pcs
 For Bar 2pcs

- 2) If shank dia. is $\phi 3$ mm, use 9 clamp screws (HS3x4P), distributed as follows:
 For Adjustment Pin 2pcs
 For Coolant Leak Prevention 4pcs
 For Bar 3pcs



How to Install Bar Into Sleeve

How to Use Adjustment Pin and Prevent Coolant Leakage (Fig.1)

- Put the adjustment pin into the hole according to the overhang length and push it into the sleeve using the wrench "LW-1.5."
- Tighten the clamp screw for the adjustment pin "HS3x4P" using the wrench "LW-1.5" from both sides of the sleeve.
- Put the additional clamp screws "HS3x4P" into the un-used adjustment pin holes to prevent coolant leakage using the wrench "LW-1.5" and fix them from both sides of the sleeve.

How to Secure the Bar (Fig.2)

- With the chip pocket upward, set the bar into the sleeve. Secure the slant face of the bar end against the adjustment pin. Make sure that the bar does not rotate. (Fig.3)
- Tighten the clamp screw with wrench "LW-2" and secure the bar. (Use "LW-1.5" if shank dia. is 3 mm or less.)

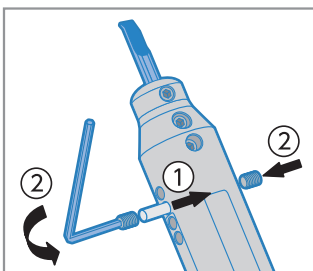


Fig. 1 How to Use Adjustment Pin

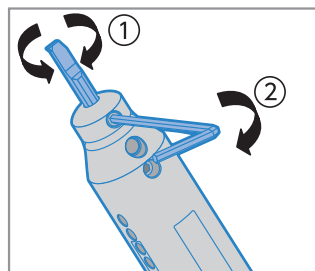


Fig. 2 How to Secure the Bar

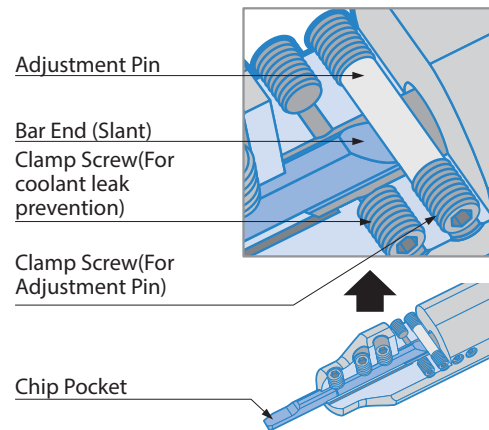
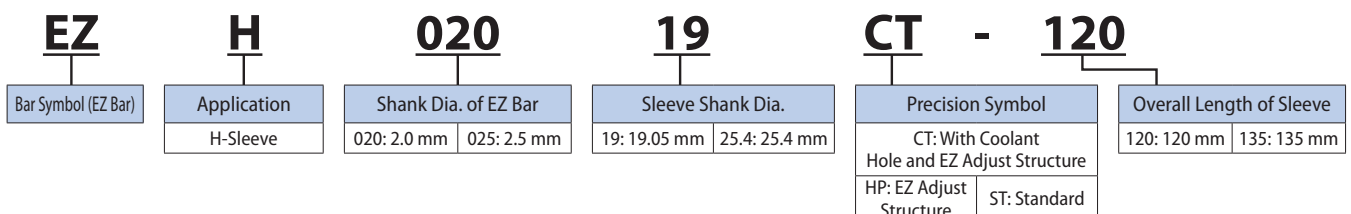
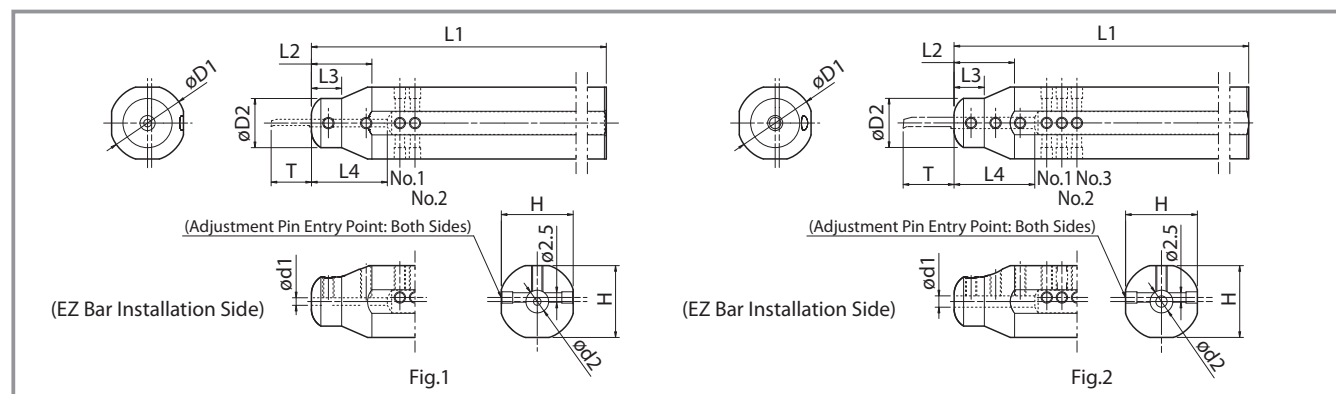


Fig. 3 Clamped Bar

Sleeve Identification System



Applicable Sleeve



Sleeve Dimensions

Description	Stock	Dimensions (mm)									Overhang Length of Bar ² T (mm)				Drawing	Applicable EZ Bar
		ød1	øD1	øD2	ød2	H	L1	L2	L3	*1L4	No.1	No.2	No.3	No.4		
EZH 01716HP-100	●	1.7	16	13	6	15	100	16	8	16	7.5	3.5	—	—	Fig.1	EZBR...017...
01719HP-120	●		19.05			18	120									
01720HP-120	●		20			19	120									
01722HP-135	●		22			21	135									
01725.0HP-135	●		25			24	135									
01725.4HP-120	●		25.4			24.4	120									
EZH 02016HP-100	●	2	16	13	6	15	100	16	8	20	8.5	4.5	—	—	Fig.1	EZBR...020...
02019HP-120	●		19.05			18	120									
02020HP-120	●		20			19	120									
02022HP-135	●		22			21	135									
02025.0HP-135	●		25			24	135									
02025.4HP-120	●		25.4			24.4	120									
EZH 02516HP-100	●	2.5	16	13	6	15	100	16	8	20	11	7	—	—	Fig.1	EZBR...025... EZTR...025...
02519HP-120	●		19.05			18	120									
02520HP-120	●		20			19	120									
02522HP-135	●		22			21	135									
02525.0HP-135	●		25			24	135									
02525.4HP-120	●		25.4			24.4	120									
EZH 03016HP-100	●	3	16	13	6	15	100	16	8	21	13.5	9.5	5.5	—	Fig.2	EZBR...030... EZVBR...030... EZGR...030... EZTR...030...
03019HP-120	●		19.05			18	120									
03020HP-120	●		20			19	120									
03022HP-135	●		22			21	135									
03025.0HP-135	●		25			24	135									
03025.4HP-120	●		25.4			24.4	120									
EZH 03516HP-100	●	3.5	16	13	6	15	100	16	8	22	15.5	11.5	7.5	—	Fig.2	EZBR...035... EZTR...035...
03519HP-120	●		19.05			18	120									
03520HP-120	●		20			19	120									
03522HP-135	●		22			21	135									
03525.0HP-135	●		25			24	135									
03525.4HP-120	●		25.4			24.4	120									
EZH 04016HP-100	●	4	16	13	6	15	100	16	8	24	20.5	16.5	12.5	8.5	Fig.4	EZBR...040... EZVBR...040... EZGR...040... EZFR...040... EZTR...040...
04019HP-120	●		19.05			18	120									
04020HP-120	●		20			19	120									
04022HP-135	●		22			21	135									
04025.0HP-135	●		25			24	135									
04025.4HP-120	●		25.4			24.4	120									

*1: L4 shows ød1 length.

*2: Dimension T shows overhang length of the EZB Bar when attached to sleeve (with the exception of extended reach bars).

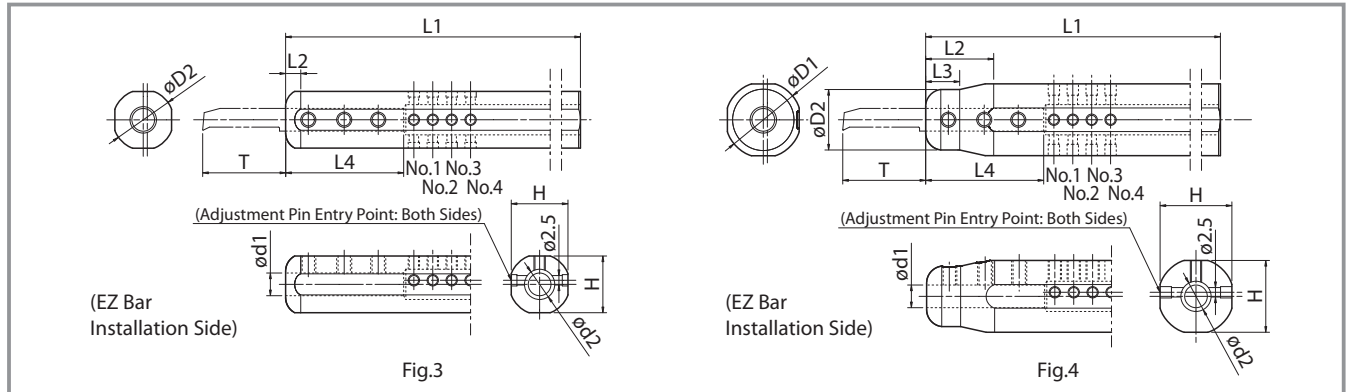
Choose sleeves (ød1) that match øD dimension of bar.

●: Std. Item

Parts (For EZH-HP Sleeves)

Description	Clamp Screw	Wrench	Spare Parts Clamp Screw	Wrench	Adjustment Pin
	EZH 017...HP-... 020...HP-... 025...HP-... 030...HP-...	HS3×4P (For Both Adjustment Pin and Bar)	LW-1.5 Tightening Torque 1N·m	—	—
EZH 035...HP-... 040...HP-... 045...HP-... 050...HP-... 060...HP-... 070...HP-...	HS3×4P (Only for Adjustment Pin)	LW-1.5 Tightening Torque 1N·m	HS4×4P (For Bar)	LW-2 Tightening Torque 2N·m	LCP025140

Applicable Sleeve



Sleeve Dimensions

Description	Stock	Dimensions (mm)								Bar Overhang Length ² T (mm)				Drawing	Applicable EZ Bar	
		ød1	øD1	øD2	ød2	H	L1	L2	L3	*L4	No.1	No.2	No.3			No.4
EZH 04516HP-100	●	4.5	16	16	6	15	100	4	—	25.3	23	18.5	14	9.5	Fig.3	s/c045X...-050EZ s/c045X...-050EZP
EZH 04519HP-120	●		19.05			18	120									
EZH 04520HP-120	●		20			19	120									
EZH 04522HP-135	●		22			21	135									
EZH 04525.0HP-135	●		25			24	135									
EZH 04525.4HP-120	●		25.4			24.4	120									
EZH 05016HP-100	●	5	16	16	6	15	100	4	—	29	25.5	20.5	15.5	10.5	Fig.3	EZBR...050... EZVBR...050... EZGR...050... EZFG...050... EZTR...050... s/c050X...-060EZP
EZH 05019HP-120	●		19.05			18	120									
EZH 05020HP-120	●		20			19	120									
EZH 05022HP-135	●		22			21	135									
EZH 05025.0HP-135	●		25			24	135									
EZH 05025.4HP-120	●		25.4			24.4	120									
EZH 06016HP-100	●	6	16	16	8	15	100	4	—	31	30.5	25.5	20.5	15.5	Fig.3	EZBR...060... EZVBR...060... EZGR...060... EZTR...060... s/c060X...-070EZ s/c060X...-070EZP
EZH 06019HP-120	●		19.05			18	120									
EZH 06020HP-120	●		20			19	120									
EZH 06022HP-135	●		22			21	135									
EZH 06025.0HP-135	●		25			24	135									
EZH 06025.4HP-120	●		25.4			24.4	120									
EZH 07016HP-100	●	7	16	16	8	15	100	4	—	33	35.5	30.5	25.5	20.5	Fig.3	EZBR...070... EZGR...070... EZFG...070... EZTR...070... s/c070X...-080EZP
EZH 07019HP-120	●		19.05			18	120									
EZH 07020HP-120	●		20			19	120									
EZH 07022HP-135	●		22			21	135									
EZH 07025.0HP-135	●		25			24	135									
EZH 07025.4HP-120	●		25.4			24.4	120									
EZH 08019HP-120	●	8	19.05	16	8.4	18	120	18	9	37	40.5	35.5	30.5	25.5	Fig.4	s/c080X...-100EZP
EZH 08020HP-120	●		20			19	120									
EZH 08022HP-135	●		22			21	135									
EZH 08025.0HP-135	●		25			24	135									
EZH 08025.4HP-120	●		25.4			24.4	120									

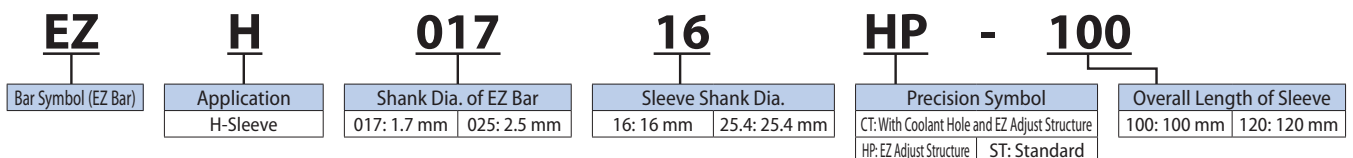
*1: L4 shows ød1 length.

*2: Dimension T shows overhang length of the EZB Bar when attached to sleeve (with the exception of extended reach bars). Dimension in () shows overhang length of the boring bar when installed into the sleeve.

Choose sleeves (ød1) that match øD dimension of bar.

●: Std. Item

Sleeve Identification System



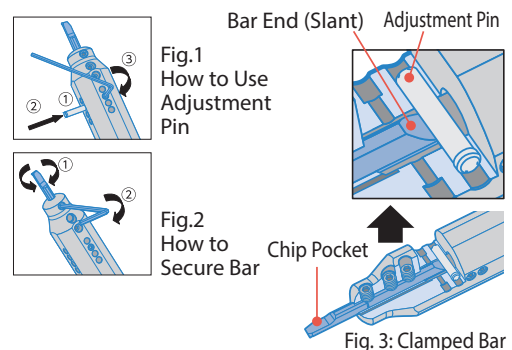
How to Install Bar Into Sleeve

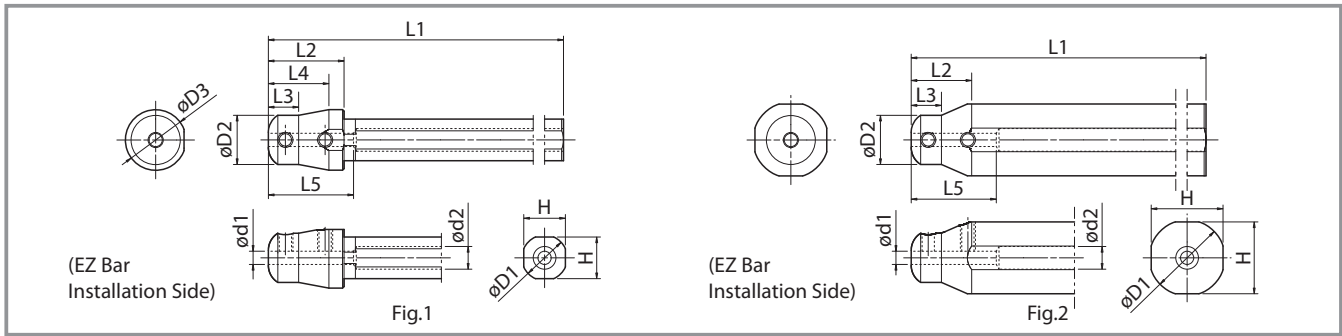
How to Use Adjustment Pin (Fig.1)

- Put the adjustment pin into the hole.
- Push it into the sleeve, using the wrench "LW-1.5".
- Tighten the clamp screw "HS3x4p" with wrench "LW-1.5" to fix the adjustment screw.

How to Secure Bar (Fig.2)

- With the chip pocket upward, set the bar in sleeve. Press the slant of the end of the bar against the adjustment pin. Make sure that the bar does not rotate (Fig.3)
- Tighten the clamp screw with wrench "LW-2" and secure the bar. (Use "LW-1.5" if shank dia. is 3 mm or less.)





Sleeve Dimensions

Description	Stock	Dimensions (mm)											Drawing	Applicable EZ Bar
		ød1	øD1	øD2	øD3	ød2	H	L1	L2	L3	L4	L5		
EZH 01712ST-80	●	1.7	12	13	16	6	11	80	20	8	16	16	Fig.1	EZBR...017...
01716ST-100	●		16				15	100						
01719ST-120	●		19.05				18	120						
01720ST-120	●		20				19	120						
01722ST-135	●		22				21	135						
01725.0ST-135	●		25				24	135						
01725.4ST-120	●		25.4				24.4	120						
EZH 02012ST-80	●	2	12	13	16	6	11	80	20	8	16	20	Fig.1	EZBR...020...
02016ST-100	●		16				15	100						
02019ST-120	●		19.05				18	120						
02020ST-120	●		20				19	120						
02022ST-135	●		22				21	135						
02025.0ST-135	●		25				24	135						
02025.4ST-120	●		25.4				24.4	120						
EZH 02512ST-80	●	2.5	12	13	16	6	11	80	20	8	16	20	Fig.1	EZBR...025... EZTR...025...
02516ST-100	●		16				15	100						
02519ST-120	●		19.05				18	120						
02520ST-120	●		20				19	120						
02522ST-135	●		22				21	135						
02525.0ST-135	●		25				24	135						
02525.4ST-120	●		25.4				24.4	120						
EZH 03012ST-80	●	3	12	13	16	6	11	80	20	8	16	21	Fig.1	EZBR...030... EZVBR...030... EZGR...030... EZTR...030...
03016ST-100	●		16				15	100						
03019ST-120	●		19.05				18	120						
03020ST-120	●		20				19	120						
03022ST-135	●		22				21	135						
03025.0ST-135	●		25				24	135						
03025.4ST-120	●		25.4				24.4	120						
EZH 03512ST-80	●	3.5	12	13	16	6	11	80	20	8	16	22	Fig.1	EZBR...035... EZTR...035...
03516ST-100	●		16				15	100						
03519ST-120	●		19.05				18	120						
03520ST-120	●		20				19	120						
03522ST-135	●		22				21	135						
03525.0ST-135	●		25				24	135						
03525.4ST-120	●		25.4				24.4	120						
EZH 04012ST-80	●	4	12	13	16	6	11	80	20	8	16	24	Fig.1	EZBR...040... EZVBR...040... EZGR...040... EZFR...040... EZTR...040...
04016ST-100	●		16				15	100						
04019ST-120	●		19.05				18	120						
04020ST-120	●		20				19	120						
04022ST-135	●		22				21	135						
04025.0ST-135	●		25				24	135						
04025.4ST-120	●		25.4				24.4	120						

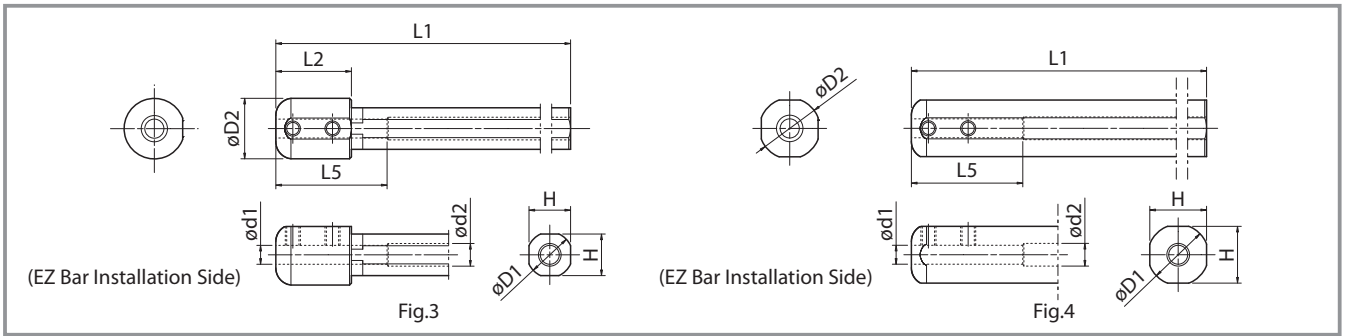
L5 shows ød1 length.

Choose sleeves (ød1) that match with øD dimension of bar.

Adjustment Pin cannot be installed into EZH-ST sleeves. To adjust overhang of EZB bars, please use EZH-CT/HP sleeves.

● : Std. Item

Applicable Sleeve



Sleeve Dimensions

Description	Stock	Dimensions (mm)											Drawing	Applicable EZ Bar		
		ød1	øD1	øD2	øD3	ød2	H	L1	L2	L3	L4	*L5				
EZH 05012ST-80	●	5	12	16	—	6	11	80	20	18	9	—	29	Fig.3	EZBR...050... EZVBR...050... EZGR...050... EZFRG...050... EZTR...050... s/c050X...-060EZP	
05016ST-100	●		16				15	100	—					—		Fig.4
05019ST-120	●		19.05				18	120	Fig.2							
05020ST-120	●		20				19	120								
05022ST-135	●		22				21	135								
05025.0ST-135	●		25				24	135								
05025.4ST-120	●		25.4				24.4	120								
EZH 06012ST-80	●	6	12	16	—	8	11	80	20	18	9	—	31	Fig.3	EZBR...060... EZVBR...060... EZGR...060... EZTR...060... s/c060X...-070EZ s/c060X...-070EZP	
06016ST-100	●		16				15	100	—					—		Fig.4
06019ST-120	●		19.05				18	120	Fig.2							
06020ST-120	●		20				19	120								
06022ST-135	●		22				21	135								
06025.0ST-135	●		25				24	135								
06025.4ST-120	●		25.4				24.4	120								
EZH 07012ST-80	●	7	12	16	—	8	11	80	20	18	9	—	33	Fig.3	EZBR...070... EZGR...070... EZFRG...070... EZTR...070... s/c070X...-080EZP	
07016ST-100	●		16				15	100	—					—		Fig.4
07019ST-120	●		19.05				18	120	Fig.2							
07020ST-120	●		20				19	120								
07022ST-135	●		22				21	135								
07025.0ST-135	●		25				24	135								
07025.4ST-120	●		25.4				24.4	120								
EZH 08016ST-100	●	8	16	16	—	8.4	15	100	—	18	9	—	37	Fig.4	s/c080X...-100EZP	
08019ST-120	●		19.05				18	120	Fig.2							
08020ST-120	●		20				19	120								
08022ST-135	●		22				21	135								
08025.0ST-135	●		25				24	135								
08025.4ST-120	●		25.4				24.4	120								

L5 shows ød1 length.

Choose sleeves (ød1) that match with øD dimension of bar.

Adjustment Pin cannot be installed to EZH-ST sleeves. To adjust overhang of EZB bar, please use EZH-CT/HP sleeves.

● : Std. Item

Parts for EZH-ST Sleeves

Description	Spare Parts		Applicable EZ Bar							
	Clamp Screw	Wrench	EZB-HP	EZB-ST	EZB-NB	EZG EZFG	EZT	EZ Bar PLUS		
EZH 017...ST-... 020...ST-... 025...ST-... 030...ST-...	HS3×4P	LW-1.5 Tightening Torque 1N·m	—	EZBR...017ST...	EZBR020017...NB	—	—	—		
EZBR...020HP...			EZBR...020ST...	EZBR025020...NB						
EZBR...025HP...			EZBR...025ST...	EZBR030025...NB	EZTR...025...					
EZBR...030HP...			EZBR...030ST...	EZBR...030...NB	EZGR...030...				EZTR...030...	
EZH 035...ST-... 040...ST-... 050...ST-... 060...ST-... 070...ST-... 080...ST-...	HS4×4P	LW-2 Tightening Torque 2N·m	EZBR...035HP...	EZBR...035ST...	EZBR...035...NB	—	—	—		
EZBR...040HP...			EZBR...040ST...	EZBR...040...NB	EZGR...040...				EZTR...040...	
EZBR...050HP...			EZBR...050ST...	EZBR...050...NB	EZGR...050...				EZTR...050...	s/c050X...-060EZP
EZBR...060HP...			EZBR...060ST...	EZBR...060...NB	EZGR...060...				EZTR...060...	s/c060X...-070EZ s/c060X...-070EZP
—			EZBR...070ST...	EZBR...070...NB	EZGR...070...				EZTR...070...	s/c070X...-080EZP
—			—	—	—				—	s/c080X...-100EZP

Applicable Sleeves for Machine Manufacturers

Sleeve Description				Applicable EZ Bar				Applicable Machine Manufacturer
EZH-CT EZ Adjust Structure and with Coolant Hole	EZH-HP Adjustable	EZH-ST	Sleeve Shank Dia. øD (mm)	EZB	EZVB - EZG - EZFG - EZT	EZ Bar PLUS	Shank Dia. øD (mm)	
—	—	EZH 01712ST-80	12	EZBR ...017...	—	—	1.7	(General Machines)
		02012ST-80		EZBR ...020...	—		2	
		02512ST-80		EZBR ...025... EZ ...025...	—		2.5	
		03012ST-80		EZBR ...030... EZ ...030...	—		3	
		03512ST-80		EZBR ...035... EZ ...035...	—		3.5	
		04012ST-80		EZBR ...040... EZ ...040...	—		4	
		05012ST-80		EZBR ...050... EZ ...050...	—		5	
		06012ST-80		EZBR ...060... EZ ...060...	—		6	
		07012ST-80		EZBR ...070... EZ ...070...	—		7	
		—		—	07012ST-80		EZBR ...070... EZ ...070...	
—	EZH 01716HP-100	EZH 01716ST-100	16	EZBR ...017...	—	—	1.7	(General Machines)
	02016HP-100	02016ST-100		EZBR ...020...	—		2	
	02516HP-100	02516ST-100		EZBR ...025... EZ ...025...	—		2.5	
	03016HP-100	03016ST-100		EZBR ...030... EZ ...030...	—		3	
	03516HP-100	03516ST-100		EZBR ...035... EZ ...035...	—		3.5	
	04016HP-100	04016ST-100		EZBR ...040... EZ ...040...	—		4	
	04516HP-100	—		—	—		4.5	
	05016HP-100	05016ST-100		EZBR ...050... EZ ...050...	S/C045X- ...-050EZP		5	
	06016HP-100	06016ST-100		EZBR ...060... EZ ...060...	S/C050X- ...-060EZP		6	
	07016HP-100	07016ST-100		EZBR ...070... EZ ...070...	S/C060X- ...-070EZP		7	
—	—	08016ST-100	—	—	S/C070X- ...-080EZP	8	—	
—	—	08016ST-100	—	—	S/C080X- ...-100EZP	8	—	
EZH 01719CT-120	EZH 01719HP-120	EZH 01719ST-120	19.05	EZBR ...017...	—	—	1.7	CITIZEN MACHINERY CO., LTD.
02019CT-120	02019HP-120	02019ST-120		EZBR ...020...	—		2	
02519CT-120	02519HP-120	02519ST-120		EZBR ...025... EZ ...025...	—		2.5	
03019CT-120	03019HP-120	03019ST-120		EZBR ...030... EZ ...030...	—		3	
03519CT-120	03519HP-120	03519ST-120		EZBR ...035... EZ ...035...	—		3.5	
04019CT-120	04019HP-120	04019ST-120		EZBR ...040... EZ ...040...	—		4	
—	04519HP-120	—		—	—		4.5	
05019CT-120	05019HP-120	05019ST-120		EZBR ...050... EZ ...050...	S/C045X- ...-050EZP		5	
06019CT-120	06019HP-120	06019ST-120		EZBR ...060... EZ ...060...	S/C050X- ...-060EZP		6	
07019CT-120	07019HP-120	07019ST-120		EZBR ...070... EZ ...070...	S/C060X- ...-070EZP		7	
—	08019HP-120	08019ST-120	—	—	S/C070X- ...-080EZP	8	—	
—	—	08019ST-120	—	—	S/C080X- ...-100EZP	8	—	
EZH 01720CT-120	EZH 01720HP-120	EZH 01720ST-120	20	EZBR ...017...	—	—	1.7	EGURO.LTD TSUGAMI CORPORATION CITIZEN MACHINERY CO., LTD. (General Machines)
02020CT-120	02020HP-120	02020ST-120		EZBR ...020...	—		2	
02520CT-120	02520HP-120	02520ST-120		EZBR ...025... EZ ...025...	—		2.5	
03020CT-120	03020HP-120	03020ST-120		EZBR ...030... EZ ...030...	—		3	
03520CT-120	03520HP-120	03520ST-120		EZBR ...035... EZ ...035...	—		3.5	
04020CT-120	04020HP-120	04020ST-120		EZBR ...040... EZ ...040...	—		4	
—	04520HP-120	—		—	—		4.5	
05020CT-120	05020HP-120	05020ST-120		EZBR ...050... EZ ...050...	S/C045X- ...-050EZP		5	
06020CT-120	06020HP-120	06020ST-120		EZBR ...060... EZ ...060...	S/C050X- ...-060EZP		6	
07020CT-120	07020HP-120	07020ST-120		EZBR ...070... EZ ...070...	S/C060X- ...-070EZP		7	
—	08020HP-120	08020ST-120	—	—	S/C070X- ...-080EZP	8	—	
—	—	08020ST-120	—	—	S/C080X- ...-100EZP	8	—	
EZH 01722CT-135	EZH 01722HP-135	EZH 01722ST-135	22	EZBR ...017...	—	—	1.7	STAR MICRONICS CO., LTD. Nomura DS Co., Ltd. TSUGAMI CORPORATION
02022CT-135	02022HP-135	02022ST-135		EZBR ...020...	—		2	
02522CT-135	02522HP-135	02522ST-135		EZBR ...025... EZ ...025...	—		2.5	
03022CT-135	03022HP-135	03022ST-135		EZBR ...030... EZ ...030...	—		3	
03522CT-135	03522HP-135	03522ST-135		EZBR ...035... EZ ...035...	—		3.5	
04022CT-135	04022HP-135	04022ST-135		EZBR ...040... EZ ...040...	—		4	
—	04522HP-135	—		—	—		4.5	
05022CT-135	05022HP-135	05022ST-135		EZBR ...050... EZ ...050...	S/C045X- ...-050EZP		5	
06022CT-135	06022HP-135	06022ST-135		EZBR ...060... EZ ...060...	S/C050X- ...-060EZP		6	
07022CT-135	07022HP-135	07022ST-135		EZBR ...070... EZ ...070...	S/C060X- ...-070EZP		7	
—	08022HP-135	08022ST-135	—	—	S/C070X- ...-080EZP	8	—	
—	—	08022ST-135	—	—	S/C080X- ...-100EZP	8	—	
EZH 01725.OCT-135	EZH 01725.OHP-135	EZH 01725.OST-135	25	EZBR ...017...	—	—	1.7	EGURO.LTD TSUGAMI CORPORATION CITIZEN MACHINERY CO., LTD. (General Machines)
02025.OCT-135	02025.OHP-135	02025.OST-135		EZBR ...020...	—		2	
02525.OCT-135	02525.OHP-135	02525.OST-135		EZBR ...025... EZ ...025...	—		2.5	
03025.OCT-135	03025.OHP-135	03025.OST-135		EZBR ...030... EZ ...030...	—		3	
03525.OCT-135	03525.OHP-135	03525.OST-135		EZBR ...035... EZ ...035...	—		3.5	
04025.OCT-135	04025.OHP-135	04025.OST-135		EZBR ...040... EZ ...040...	—		4	
—	04525.OHP-135	—		—	—		4.5	
05025.OCT-135	05025.OHP-135	05025.OST-135		EZBR ...050... EZ ...050...	S/C045X- ...-050EZP		5	
06025.OCT-135	06025.OHP-135	06025.OST-135		EZBR ...060... EZ ...060...	S/C050X- ...-060EZP		6	
07025.OCT-135	07025.OHP-135	07025.OST-135		EZBR ...070... EZ ...070...	S/C060X- ...-070EZP		7	
—	08025.OHP-135	08025.OST-135	—	—	S/C070X- ...-080EZP	8	—	
—	—	08025.OST-135	—	—	S/C080X- ...-100EZP	8	—	
EZH 01725.4CT-120	EZH 01725.4HP-120	EZH 01725.4ST-120	25.4	EZBR ...017...	—	—	1.7	CITIZEN MACHINERY CO., LTD.
02025.4CT-120	02025.4HP-120	02025.4ST-120		EZBR ...020...	—		2	
02525.4CT-120	02525.4HP-120	02525.4ST-120		EZBR ...025... EZ ...025...	—		2.5	
03025.4CT-120	03025.4HP-120	03025.4ST-120		EZBR ...030... EZ ...030...	—		3	
03525.4CT-120	03525.4HP-120	03525.4ST-120		EZBR ...035... EZ ...035...	—		3.5	
04025.4CT-120	04025.4HP-120	04025.4ST-120		EZBR ...040... EZ ...040...	—		4	
—	04525.4HP-120	—		—	—		4.5	
05025.4CT-120	05025.4HP-120	05025.4ST-120		EZBR ...050... EZ ...050...	S/c045X- ...-050EZP		5	
06025.4CT-120	06025.4HP-120	06025.4ST-120		EZBR ...060... EZ ...060...	S/c050X- ...-060EZP		6	
07025.4CT-120	07025.4HP-120	07025.4ST-120		EZBR ...070... EZ ...070...	S/c060X- ...-070EZP		7	
—	08025.4HP-120	08025.4ST-120	—	—	S/c070X- ...-080EZP	8	—	
—	—	08025.4ST-120	—	—	S/c080X- ...-100EZP	8	—	

Choose sleeves (øD1) that match with øD dimension of bar.
Adjustment Pin cannot be installed in EZH-ST sleeves. To adjust overhang of EZB bar, please use EZH-CT/HP sleeves.