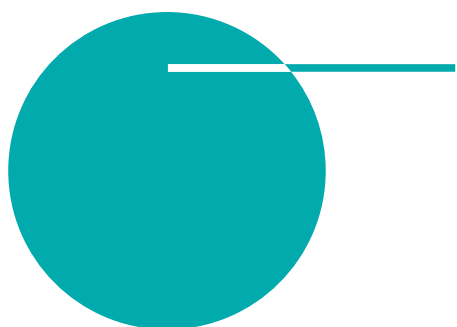


Tooling for machining centers

MC TOOLING SYSTEM

ALPS TOOL BT TOOLING SYSTEM



● BT50, BT40, BT30
25T, S20T, 15T



FUJISEIKO LIMITED

ALPS TOOL

Milling Chuck



Milling Chuck (TR type)

P2-3

Collet



Straight Collet

P4

Collet Holder



Collet Holder (EXH type)

P5-7

Collet Holder



Collet Holder (ECH type)

P8

SS.Collet Holder



SS.Collet Holder

P9

AR Collet



AR Collet (Standard type)

P10-11

AR Coolant Collet



AR Coolant Collet (OH type)

P12

AR Coolant Collet



AR Coolant Collet (C type)

P13

AR Tap Collet



AR Tap Collet (GB type)

P14

AR Tap Collet



AR Tap Collet (GH type)

P15

Milling Arbor



Arbor for Face Milling Cutter (A/B/C)

P16-17

Side Cut Arbor



Arbor for Side Milling Cutter (SCA type)

P18

Side Lock Holder



Side Lock Holder (A type/S type)

P19

Morse Taper Holder



Morse Taper Holder (A type)

P20

MT.Drill Socket



MT.Drill Socket

P20

Jacobs Taper Holder



Jacobs Taper Holder

P21

Collet Holder



Small Collet Holder for MC and DC (15T type)

P22

Collet Holder



Small Collet Holder for MC and DC (S20T type)

P22

Collet Holder



Small Collet Holder for MC and DC (25T type)

P23

Pull Bolt



Pull Studs

P24

Thermo Grip Chuck



Thermo Grip Chuck

Another Catalog

High quality chuck with good balance of high speed, high accuracy, high rigidity and high gripping force

● Milling Chuck (TR type)

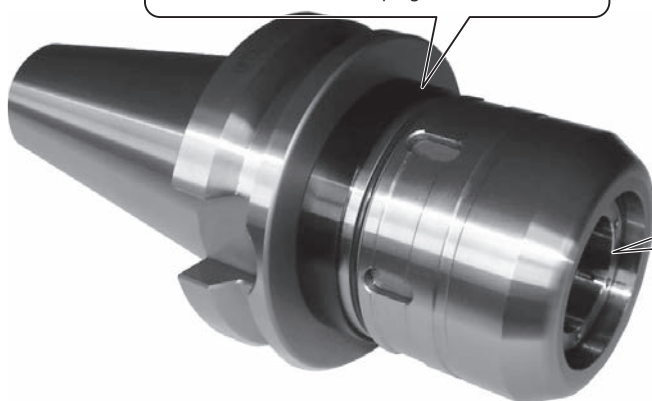
Heavy Cutting

Coolant Thru

7MPa Available

Clamp mark

- Tightening completion sign is easy to understand and ensures secure clamping.



A patent mechanism which is no uneasiness at high speed, not to mention high rigidity and high accuracy(PAT).

It is possible to use the Inner and Outer Coolant by the special slots of a chucking hole.

Coolant Thru

To change of a coolant system, an option is unnecessary.



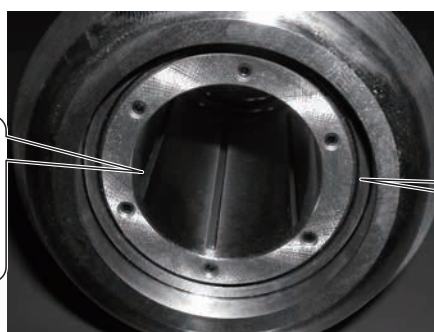
Internal coolant



Side through coolant

Special slits realize high rigidity and high grasp power.

- Sufficient tightening force with thick case.
- The main body deforms elastically to achieve stable runout accuracy.



High rigidity structure

- The thick structure of the body achieves high rigidity.

It can be used for processing which needs high accuracy.

- Excellent accuracy is achieved even with milling chucks.
TIR 15μm (4 × D)

Can also be used for heavy duty cutting.

- Suitable for machining heavy cutting materials and high machining conditions.

Suitable for high-speed rotation.



High quality chuck with good balance for high speed, high accuracy, high rigidity and high gripping force

● Milling Chuck (TR type)

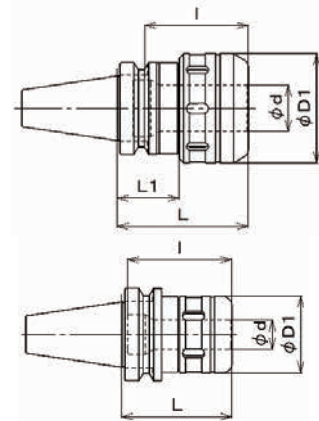
Heavy Cutting

Coolant Thru

7MPa Available



Form explanation
BT50 - TRX 16 - 105
 Shank type Holder type Diameter Dimension



CODE	Chucking Size	L	L1	D1	I	Collet Code	Spanner	Adjust bolt with coolant
BT50 - TRX16 -105	16	105	-	45	68	-	FK-7	-
-135		135						
-TRX20 -105	20	105		52	70	ASS20-d	FK-8	ACH20-07
-135		135						
- TRX25 -105	25	105		63	94	ASS25-d	FK-9	ACH25-07
-135		135						
-150		165						
- TRX32 -105	32	105		75	110	ASS32-d	FK-10	ACH32-07
-135		135						
-165		165						
- TRX42 -105	42	105		92		ASS32-d	FK-9	
-135		135						
-165		165						
BT40 - TRX16 - 75	16	75		45	68	-	FK-7	-
-105		105						
- TRX20 - 75	20	75		52	70	ASS20-d	FK-8	ACH20-07
-105		105						
-135		135						
- TRX25 - 85	25	85		63	90	ASS25-d	FK-9	ACH25-d
-105		105						
-135		135						
- TRX32 - 90	32	90	42	75	80	ASS32-d	FK-10	ACH32-d
-105		105	57					
-135		135	87		109			
BT30 - TRX16 - 70	16	70	-	45	68	-	FK-7	-
- TRX20 - 75 ※	20	75	23	52	70	ASS20-d	FK-8	ACH20-07
- 80		80	28		75			
- TRX25 - 85 ※	25	85	25	63	74	ASS25-d	FK-9	ACH25-07
- 90		90	30		79			

NOTES:

- Collet holder are used with straight collets in unit form.
When ordering, please specify straight collets.
- Please order collet and nut wrench separately.
- When using with straight collet, clamping power will decrease.
- Please order Adjust bolt separately.
- Type of Coolant bolt and wrench.
TRX16 ~ 25 → M2.0 × 3/LRE0.9, TRX32 ~ 42 → M2.5 × 3/LRE1.3
- In the table ※ some machines can not be used because of interference.
Please check the dimensions of L1 · D1 in the item of tool restriction of machine instruction manual.

● Straight Collet

An adjustment bolt is inside.
Can be used combining with Milling Chuck TRX.



Form explanation

ASS20 - 10

Grasp diameter
Collet diameter

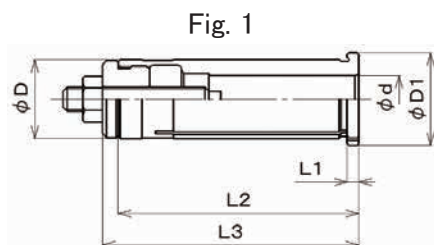


Fig. 1

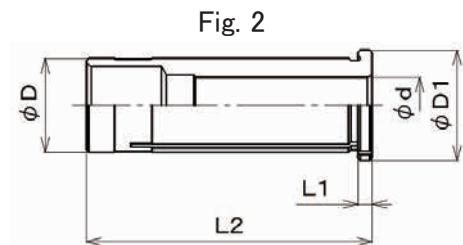


Fig. 2

CODE	Fig.	Metric	D	L3	L2	L1	D1
ASS20 - d	1 (Adjustment bolt)	6, 8, 10, 12, 16	20	65	61	3	23.5
ASS25 - d		6, 8, 10, 12, 16, 20	25	67	63		28.5
ASS32 - d		6, 8, 10, 12, 16, 20, 25	32	75	70		37.0
ASS42 - d		6, 8, 10, 12, 16, 20, 25, 32	42	83	78		47.0
AS 16 - d	2	6, 8, 10, 12	16	-	48	3	20.0
AS 20 - d		6, 8, 10, 12, 16	20		61		23.5
AS 25 - d		6, 8, 10, 12, 16, 20	25		63		28.5
AS 32 - d		6, 8, 10, 12, 16, 20, 25	32		70		37.0
AS 42 - d		6, 8, 10, 12, 16, 20, 25, 32	42		78		47.0

NOTES : 1) When you install a ASS □□ -d1 collet to milling chuck TRX, internal coolant can not be used.

Collet holder with slim shape, high precision, high accuracy balance and excellent versatility

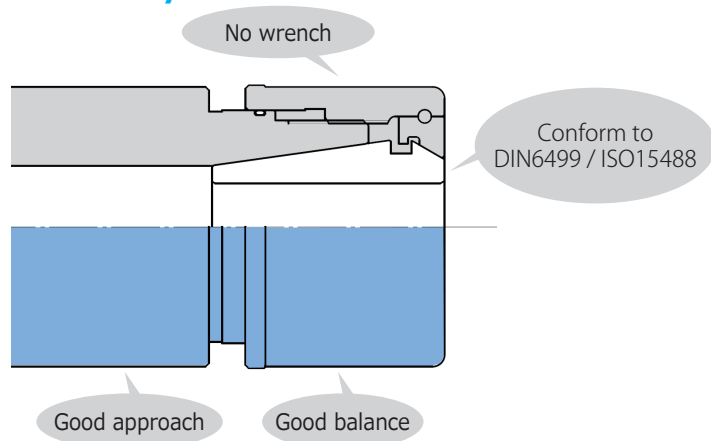
● Collet Holder (EXH type)

16° Collet

Coolant Thru

7MPa Available

Slim, High accuracy balance, Excellent versatility.



Support various coolant system.



Internal coolant



Side through coolant

Simply replacing the collet, easy to support Internal coolant and side through coolant.

By simply replacing the collet, it supports various functions such as coolant through, tapping, etc.



Immediate replacement collet support for various in.



AR Collet
Standard type



AR Coolant Thru Collet
OH type (Internal Coolant)



AR Coolant Thru Collet
C type (Side through Coolant)

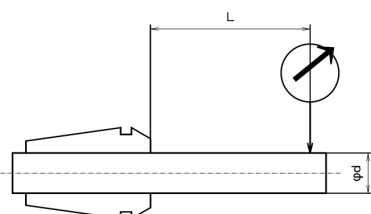


AR Tap Collet
GB type



AR Coolant Thru Tap Collet
GH type (Internal Coolant)

Run-out at 4 × D



Nominal diameter	L	Rounout		
D	AR11 ~ AR32	Class AAA	Class AA	Class A
1 ~ 1.5	4 × D	3 μ	5 μ	8 μ
2 ~ 5.5				
6 ~ 10				
11 ~ 20				

AR Collet conforms to DIN6499 / ISO15488 There is an item a standard type. a coolant type. and a coolant tap type.

Compatible with irregularly shaped tools.



← NA-F

Supprt in exchange for a large diameter cutter nut also.

The nut(NA-F) can be replaced, for large diameter tools EXH holder, the tool can be Used in safe umbrella.

Collet holder with slim shape, high precision, high accuracy balance and excellent versatility

Collet Holder (EXH type)

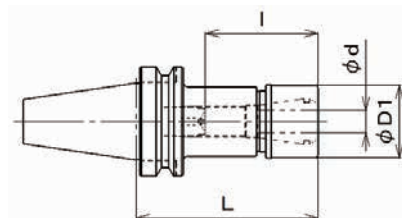
16° Collet

Coolant Thru

7MPa Available



Form explanation
BT50 - EXH 10 - 120
 Shank type Holder type Diameter Dimension



CODE	Grip Diameter	L	I (Adjustment)	D1 Nut diameter	Collet CODE	Wrench	Adjust bolt	
			Max. ~ Min.				without coolant hole	with coolant hole
BT50 - ECH 7 - 90	0.5 ~ 7	90	20 ~ 45	23	AR11-d	XSP23	ECH 7-05	ECH 70H-05
-120		120						
-165		165						
- EXH10 - 90	0.5 ~ 10	90	30 ~ 50	30	AR16-d	XSP30	ECH10-05	ECH100H-05
-120		120						
-165		165	30 ~ 55					
- ECH13 - 90	0.5 ~ 13	90	35 ~ 55	35	AR20-d	XSP35	ECH13-05	ECH130H-05
-120		120						
-165		165	35 ~ 65					
- EXH16 - 90	0.5 ~ 16	90	40 ~ 55	42	AR25-d	XSP42	ECH16-05	ECH160H-05
-120		120						
-165		165	40 ~ 65					
- EXH20 - 90	2 ~ 20	90	45 ~ 60	50	AR32-d	XSP50	ECH20-05	ECH200H-05
-120		120						
-165		165	45 ~ 65					
BT40 - EXH 7 - 75	0.5 ~ 7	75	20 ~ 45	23	AR11-d	XSP23	ECH 7-05	ECH 70H-05
-105		105						
-135		135						
- EXH10 - 75	0.5 ~ 10	75	30 ~ 50	30	AR16-d	XSP30	ECH10-05	ECH100H-05
-105		105						
-135		135	30 ~ 55					
- EXH13 - 75	0.5 ~ 13	75	35 ~ 55	35	AR20-d	XSP35	ECH13-05	ECH130H-05
-105		105						
-135		135	35 ~ 65					
- EXH16 - 75	0.5 ~ 16	75	40 ~ 55	42	AR25-d	XSP42	ECH16-05	ECH160H-05
-105		105						
-135		135	40 ~ 65					
- EXH20 - 75	2 ~ 20	75	45 ~ 60	50	AR32-d	XSP50	ECH20-05	ECH200H-05
-105		105						
-135		135	45 ~ 65					

NOTES:

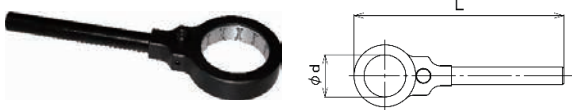
- 1) Collet holder are used with AR collets.
When ordering please specify AR collets.
- 2) Please order collet and nut wrench separately.
- 3) Please order Adjust bolt separately.

CODE	Grip Diameter	L	I (Adjustment) Max. ~ Min.	D1 Nut diameter	Collet CODE	Wrench	Adjust bolt	
							without coolant hole	with coolant hole
BT30 - EXH 7 - 60	0.5 ~ 7	60	20 ~ 45	23	AR11-d	XSP23	ECH 7-05	ECH 70H-05
-105		105						
- EXH10 - 60	0.5 ~ 10	60	30 ~ 50	30	AR16-d	XSP30	ECH10-05	ECH100H-05
-120		120						
- EXH13 - 60	0.5 ~ 13	60	30 ~ 55	35	AR20-d	XSP35	ECH13-05	ECH130H-05
-120		105						
- EXH16 - 60	0.5 ~ 16	60	40 ~ 55	42	AR25-d	XSP42	ECH16-05	ECH160H-05
-105		105						

NOTES: 1) Collet holder are used with AR collets.
When ordering please specify AR collets.
2) Please order collet and nut wrench separately.
3) Please order Adjust bolt separately.

Wrench • Nut

XSP type

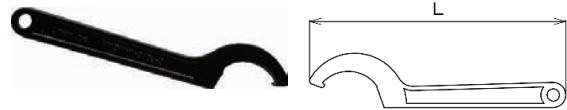


Form explanation

XSP 23
Wrench type Diameter

CODE	Bore	L	Fit
XSP23	23	120	EXH 7
XSP30	30	140	EXH10
XSP35	35	154	EXH13
XSP42	42	173	EXH16
XSP50	50	180	EXH20

FK type



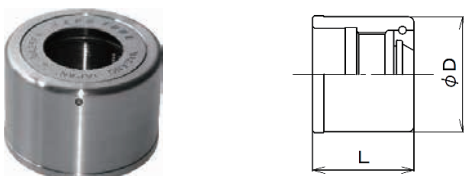
Used for nuts of NA □□ F

Form explanation

FK - 3
Wrench type Number

CODE	L	Fit
FK- 3	136	NA11F
FK- 4	136	NA16F
FK- 5	160	NA20F
FK- 6	173	NA25F
FK- 7	196	NA32F
FK- 8	208	TRX20
FK- 9	232	TRX25
FK-10	247	TRX32
FK0085	271	TRX42

Nut type FX



Form explanation

NA 11 FX
Nut Size Type

CODE	Bore	L	Fit
NA11FX	23	20.5	EXH 7
NA16FX	30	26.5	EXH10
NA20FX	35	28.5	EXH13
NA25FX	42	30	EXH16
NA32FX	50	31	EXH20

Nut type F



Form explanation

NA 11 F
Nut Size Type

CODE	Bore	L	Fit
NA11F	23	11	EXH 7
NA16F	30	15	EXH10
NA20F	35	17	EXH13
NA25F	42	18	EXH16
NA32F	50	19	EXH20

A wide variety of variations support processing

Collet Holder (ECH type)

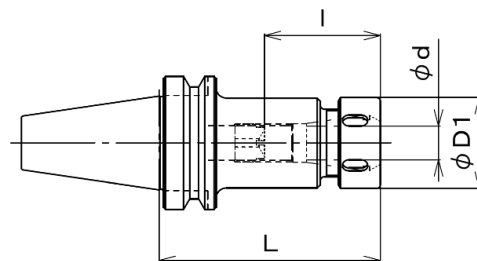
16° Collet

Coolant Thru

20MPa Available



Form explanation
BT50 - ECH 10 - 120
 Shank type Holder type Diameter Dimension



When using at high speeds, please replace with a high speed nut (NA-R/SR).

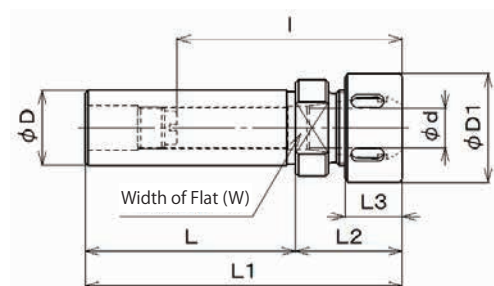
CODE	Grip Diameter d	L	Max. ~ Min.	Nut diameter D1	Collet CODE	Wrench	Adjust bolt	
			Adjustment				without colant hole	with coolant hole
BT50 - ECH 7 - 90	0.5 ~ 7	90	45 ~ 20	23	AR11-d	FK-3	ECH 7-05	ECH 70H-05
-135		135						
- ECH10 - 90	0.5 ~ 10	90	50 ~ 30	32	AR16-d	FK-4	ECH10-05	ECH100H-05
-120		120						
-150		150						
- ECH13 - 90	0.5 ~ 13	90	55 ~ 35	36	AR20-d	FK-5	ECH13-05	ECH130H-05
-120		120						
- ECH16 - 90	0.5 ~ 16	90	55 ~ 40	43	AR25-d	FK-6	ECH16-05	ECH160H-05
-120		120						
-150		150						
- ECH20 - 90	2 ~ 20	90	60 ~ 45	51	AR32-d	FK-8	ECH20-05	ECH200H-05
-120		120						
- ECH26 - 90	3 ~ 26	90	80 ~ 55	63	AR40-d	FK-9	ECH26-05	ECH260H-05
BT40 - ECH 7 - 75	0.5 ~ 7	75	45 ~ 20	23	AR11-d	FK-3	ECH 7-05	ECH 70H-05
-105		105						
- ECH10 - 75	0.5 ~ 10	75	50 ~ 30	32	AR16-d	FK-4	ECH10-05	ECH100H-05
-105		105						
-135		135						
- ECH13 - 75	0.5 ~ 13	75	55 ~ 35	36	AR20-d	FK-5	ECH13-05	ECH130H-05
-105		105						
- ECH16 - 75	0.5 ~ 16	75	55 ~ 40	43	AR25-d	FK-6	ECH16-05	ECH160H-05
-105		105						
-135		135						
- ECH20 - 75	2 ~ 20	75	60 ~ 45	51	AR32-d	FK-8	ECH20-05	ECH200H-05
-105		105						
- ECH26 - 75	3 ~ 26	75	75 ~ 50	63	AR40-d	FK-9	ECH26-05	ECH260H-05
BT30 - ECH 7 - 60	0.5 ~ 7	60	45 ~ 20	23	AR11-d	FK-3	ECH 7-05	ECH 70H-05
-105		105						
- ECH10 - 60	0.5 ~ 10	60	50 ~ 30	32	AR16-d	FK-4	ECH10-05	ECH100H-05
-120		120						
- ECH13 - 60	0.5 ~ 13	60	55 ~ 35	36	AR20-d	FK-5	ECH13-05	ECH130H-05
-120		120						
- ECH16 - 60	0.5 ~ 16	60	55 ~ 40	43	AR25-d	FK-6	ECH16-5	ECH160H-05
-105		105						
- ECH20 - 75	2.5 ~ 20	6	60 ~ 45	51	AR32-d	FK-8	ECH20-05	ECH200H-05
-105		105						

NOTES: 1) Collet holder are used with AR collets.
 When ordering please specify AR collets.
 2) Please order collet and nut wrench separately.
 3) Please order Adjust bolt separately.

● SS.Collet Holder



Form explanation
SS25 - ECH 10 - 70
 Shank type Holder type Diameter Dimension



CODE	d	D	L	L1	L2	I	Nut diameter		W	Collet	Wrench
							D1	L3			
SS 8 – ECH 5S – 35	0.3 ~ 5	8	35	49	14	36	14.5	10.8	6	AR 8 – d	SP-13
SS12 – ECH 5S – 80		12	80	96	16				10		
SS16 – ECH 7 – 40	0.5 ~ 7	16	40	56	16	40	23	11.5	14	AR11– d	FK-3
– 70			70	94	24	55			19		
SS20 – ECH 7 – 45		20	45	61	16	45			17		
SS25 – ECH10 – 70	0.5 ~ 10	25	70	105	35	70	32	17	27	AR16 – d	FK-4
–150			150	185	35	53				AR20 – d	FK-5
– ECH13 – 70	0.5 ~ 13		70	106	36	75	36	19	36	AR25 – d	FK-4
– ECH16 – 70	0.5 ~ 16			110	40	80	43	20	36	AR16 – d	FK-5
SS32 – ECH10 – 80	0.5 ~ 10	32	80	119	39	70	32	17	32	AR20 – d	FK-6
– ECH13 – 80	0.5 ~ 13			116	36	75	36	19		36	
– ECH16 – 80	0.5 ~ 16			120	40	80	43	20	36	AR32 – d	FK-8
– ECH20 – 80	2.5 ~ 20			40	110	128	48	100	51	23	46
SS40 – ECH20 – 110											

NOTES: 1) Collet holder are used with straight collets in unit form.
 When ordering please specify straight collets.
 2) Please order collet and nut wrench separately.



A wide variety of variations support processing

AR Collet

DIN6499

ISO15488

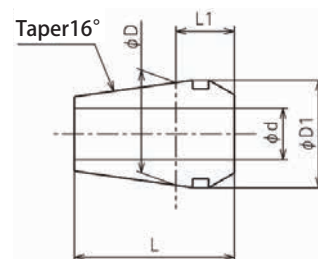
16° Collet



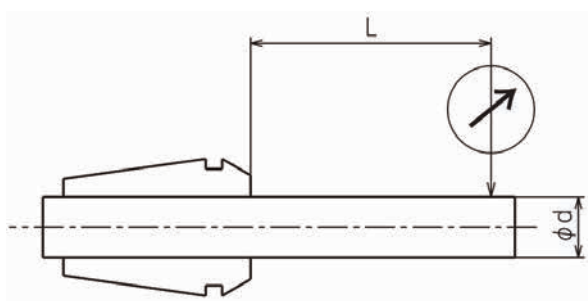
AR Collet is applicable to processing for Drill, and End mill and Reamer.

AR Collet is 16-degree taper collet excellent in flexibility.

AR Collet can be choosed 8 micrometers and 5 micrometers and 3 micrometers T.I.R. accuracy.



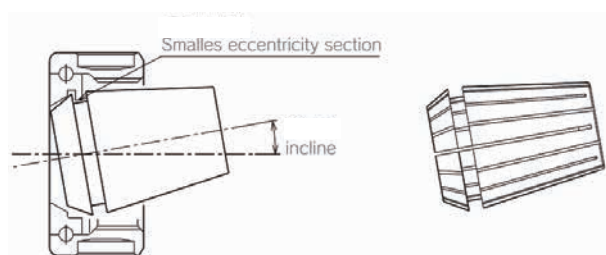
CONCENTRICITY OF TEST BAR RUNOUT (TIR)



Size	d	L	Accuracy by grade (μ m)		
			A	AA	AAA
AR 8	0.5 - 5	4 x d	8	5	-
AR11	1 - 7	4 x d	8	5	3
AR16	1 - 10	4 x d	8	5	3
AR20	1 - 13 (14)	4 x d	8	5	3
AR25	1 - 16	4 x d	8	5	3
AR32	2.5 - 20	4 x d	8	5	3
AR40	4 - 26	4 x d	8	5	-
AR50	6 - 10	25	8	5	-
	12 - 26	40			
	28 - 34	60			

○ Collets of diameter over φ 26 are of defferent accuracy stadard from above.

REMOVAL AND MOUNTING OF COLLET



It is easy to pull the collet out because Pull Ring is integrated with Thrust Ring in Nut.

○ Collet can be removed from Nut by inclining collet when Groove of Collet is hooked on the smallest eccentricity section of Thrust Ring of Nut.

Note : 1) After Collet is seated into Nut, please mount Nut into Collet Holder.

2) Please put cutting tool shank into Collet with full depth.

RECOMMENDED TORQUE OF NUT CLAMPING

Dimension	Size	Torque	Holder size
AR 8	φ 0.5 - < φ 3.5	7	ECH 5
	φ 3.5 - φ 5.0	10	
AR11	φ 1.0 - < φ 3.5	15	ECH 7
	φ 3.5 - φ 7.0	20	
AR16	φ 1.0 - < φ 3.5	30	ECH10
	φ 3.5 - φ 10.0	40	
AR20	φ 1.0 - < φ 3.5	40	ECH13
	φ 3.5 - φ 14.0	60	
AR25	φ 1.0 - < φ 3.5	40	ECH16
	φ 3.5 - φ 16.0	60	
AR32	φ 3.0 - φ 20.0	70	ECH20
AR40	φ 4.0 - φ 26.0	80	ECH26
AR50	φ 6.0 - φ 34.0	140	ECH34

AR Collet Holder Recommended torque of nut clamping.

□ Caution Excessive torque will damage a holder, nut, or collet.

A wide variety of variations support processing

DIN6499

ISO15488

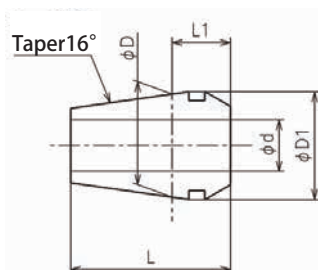
16° Collet

AR Collet Standard type



Form explanation

AR 16 - 10 AA
Name Size I.D. Grade



AR Collet is usable for applications for Drill, and End mill and Reamer. AR Collet is 16-degree taper collet.

AR Collets are classified as 8 micrometers, 5 micrometers and 3 micrometers T.I.R.

AR 8	
L1=4.6, φ D=8, φ D1=8.5, L=13.5	
CODE	O.D. range
AR8-0.5	0.5 - 0.3
AR8-1	1.0 - 0.5
AR8-1.5	1.5 - 1.0
AR8-2	2.0 - 1.5
AR8-2.5	2.5 - 2.0
AR8-3	3.0 - 2.5
AR8-3.5	3.5 - 3.0
AR8-4	4.0 - 3.5
AR8-4.5	4.5 - 4.0
AR8-5	5.0 - 4.5

AR16	
L1=10, φ D=16, φ D1=17, L=27	
CODE	O.D. range
AR16-1	1.0 - 0.5
AR16-1.5	1.5 - 1.0
AR16-2	2.0 - 1.5
AR16-2.5	2.5 - 2.0
AR16-3	3.0 - 2.5
AR16-3.175	3.175
AR16-3.5	3.5 - 3.0
AR16-4	4.0 - 3.5
AR16-4.5	4.5 - 4.0
AR16-5	5.0 - 4.5
AR16-6	6.0 - 5.0
AR16-7	7.0 - 6.0
AR16-8	8.0 - 7.0
AR16-9	9.0 - 8.0
AR16-10	10.0 - 9.0

AR25	
L1=11.5, φ D=25, φ D1=26, L=35	
CODE	O.D. range
AR25-1	1.0 - 0.5
AR25-1.5	1.5 - 1.0
AR25-2	2.0 - 1.5
AR25-2.5	2.5 - 2.0
AR25-3	3.0 - 2.5
AR25-3.5	3.5 - 3.0
AR25-4	4.0 - 3.5
AR25-4.5	4.5 - 4.0
AR25-5	5.0 - 4.5
AR25-6	6.0 - 5.0
AR25-7	7.0 - 6.0
AR25-8	8.0 - 7.0
AR25-9	9.0 - 8.0
AR25-10	10.0 - 9.0
AR25-11	11.0 - 10.0
AR25-12	12.0 - 11.0
AR25-13	13.0 - 12.0
AR25-14	14.0 - 13.0
AR25-15	15.0 - 14.0
AR25-16	16.0 - 15.0

AR40	
L1=14.5, φ D=40, φ D1=41, L=46	
CODE	O.D. range
AR40-4	4.0 - 3.5
AR40-4.5	4.5 - 4.0
AR40-5	5.0 - 4.5
AR40-6	6.0 - 5.0
AR40-7	7.0 - 6.0
AR40-8	8.0 - 7.0
AR40-9	9.0 - 8.0
AR40-10	10.0 - 9.0
AR40-11	11.0 - 10.0
AR40-12	12.0 - 11.0
AR40-13	13.0 - 12.0
AR40-14	14.0 - 13.0
AR40-15	15.0 - 14.0
AR40-16	16.0 - 15.0
AR40-17	17.0 - 16.0
AR40-18	18.0 - 17.0
AR40-19	19.0 - 18.0
AR40-20	20.0 - 19.0
AR40-21	21.0 - 20.0
AR40-22	22.0 - 21.0
AR40-23	23.0 - 22.0
AR40-24	24.0 - 23.0
AR40-25	25.0 - 24.0
AR40-26	26.0 - 25.0

AR11	
L1=6.5, φ D=11, φ D1=11.5, L=18	
CODE	O.D. range
AR11-1	1.0 - 0.5
AR11-1.5	1.5 - 1.0
AR11-2	2.0 - 1.5
AR11-2.5	2.5 - 2.0
AR11-3	3.0 - 2.5
AR11-3.175	3.175
AR11-3.5	3.5 - 3.0
AR11-4	4.0 - 3.5
AR11-4.5	4.5 - 4.0
AR11-5	5.0 - 4.5
AR11-5.5	5.5 - 5.0
AR11-6	6.0 - 5.5
AR11-6.5	6.5 - 6.0
AR11-7	7.0 - 6.5

AR20	
L1=11, φ D=20, φ D1=21, L=31	
CODE	O.D. range
AR20-1	1.0 - 0.5
AR20-1.5	1.5 - 1.0
AR20-2	2.0 - 1.5
AR20-2.5	2.5 - 2.0
AR20-3	3.0 - 2.5
AR20-3.175	3.175
AR20-3.5	3.5 - 3.0
AR20-4	4.0 - 3.5
AR20-4.5	4.5 - 4.0
AR20-5	5.0 - 4.5
AR20-6	6.0 - 5.0
AR20-7	7.0 - 6.0
AR20-8	8.0 - 7.0
AR20-9	9.0 - 8.0
AR20-10	10.0 - 9.0
AR20-11	11.0 - 10.0
AR20-12	12.0 - 11.0
AR20-13	13.0 - 12.0
AR20-14 *	14.0 - 13.0

AR32	
L1=12.5, φ D=32, φ D1=33, L=40	
CODE	O.D. range
AR32-2.5	2.5 - 2.0
AR32-3	3.0 - 2.5
AR32-3.5	3.5 - 3.0
AR32-4	4.0 - 3.5
AR32-4.5	4.5 - 4.0
AR32-5	5.0 - 4.5
AR32-6	6.0 - 5.0
AR32-7	7.0 - 6.0
AR32-8	8.0 - 7.0
AR32-9	9.0 - 8.0
AR32-10	10.0 - 9.0
AR32-11	11.0 - 10.0
AR32-12	12.0 - 11.0
AR32-13	13.0 - 12.0
AR32-14	14.0 - 13.0
AR32-15	15.0 - 14.0
AR32-16	16.0 - 15.0
AR32-17	17.0 - 16.0
AR32-18	18.0 - 17.0
AR32-19	19.0 - 18.0
AR32-20	20.0 - 19.0

NOTES:

(1)Odd size tool shank can be properly held with Collet with enough grasp range from nominal size.

Example : In case of holding 6.7 mm dia. Drill, use nominal size 7 Collet.

(2)When ordering Collet, specify class of TIR accuracy at end of Code number. Class "AAA" is order made.

*You can't insert deep inside with AR20-14 because I.D. of collet holders is smaller than 14mm.

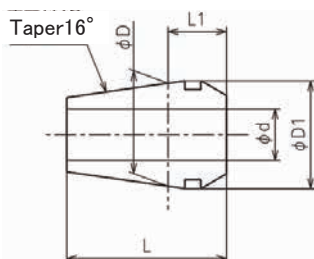
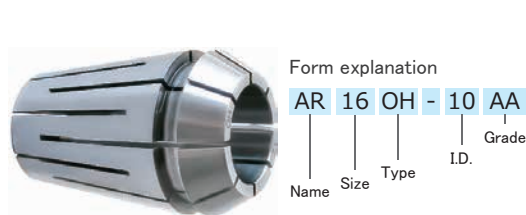
Compatible with center-through high-pressure coolant

16° Collet

Coolant Thru

20MPa Available

AR Coolant Collet OH type



AR Coolant Collet (PAT.) is a liquid sealing collet applying special slitting. and a new type of collet which can seal coolant oil completely at even high pressure of 20MPa.

AR11 OH	
L1=6.5, $\phi D=11$, $\phi D_1=11.5$, L=18	
CODE	O.D. range
AR11OH-2	2.0 - 1.9
AR11OH-2.5	2.5 - 2.4
AR11OH-3	3.0 - 2.9
AR11OH-3.5	3.5 - 3.4
AR11OH-4	4.0 - 3.9
AR11OH-4.5	4.5 - 4.4
AR11OH-5	5.0 - 4.9
AR11OH-5.5	5.5 - 5.4
AR11OH-6	6.0 - 5.9
AR11OH-6.5	6.5 - 6.4
AR11OH-7	7.0 - 6.9

AR16 OH	
L1=10, $\phi D=16$, $\phi D_1=17$, L=27	
CODE	O.D. range
AR16OH-2	2.0 - 1.9
AR16OH-2.5	2.5 - 2.4
AR16OH-3	3.0 - 2.9
AR16OH-3.5	3.5 - 3.4
AR16OH-4	4.0 - 3.9
AR16OH-4.5	4.5 - 4.4
AR16OH-5	5.0 - 4.9
AR16OH-5.5	5.5 - 5.4
AR16OH-6	6.0 - 5.5
AR16OH-6.5	6.5 - 6.0
AR16OH-7	7.0 - 6.5
AR16OH-7.5	7.5 - 7.0
AR16OH-8	8.0 - 7.5
AR16OH-8.5	8.5 - 8.0
AR16OH-9	9.0 - 8.5
AR16OH-9.5	9.5 - 9.0
AR16OH-10	10.0 - 9.5

AR20 OH	
L1=11, $\phi D=20$, $\phi D_1=21$, L=31	
CODE	O.D. range
AR20OH-3	3.0 - 2.9
AR20OH-3.5	3.5 - 3.4
AR20OH-4	4.0 - 3.9
AR20OH-4.5	4.5 - 4.4
AR20OH-5	5.0 - 4.9
AR20OH-5.5	5.5 - 5.4
AR20OH-6	6.0 - 5.5
AR20OH-6.5	6.5 - 6.0
AR20OH-7	7.0 - 6.5
AR20OH-7.5	7.5 - 7.0
AR20OH-8	8.0 - 7.5
AR20OH-8.5	8.5 - 8.0
AR20OH-9	9.0 - 8.5
AR20OH-9.5	9.5 - 9.0
AR20OH-10	10.0 - 9.5
AR20OH-10.5	10.5 - 10.0
AR20OH-11	11.0 - 10.5
AR20OH-11.5	11.5 - 11.0
AR20OH-12	12.0 - 11.5
AR20OH-12.5	12.5 - 12.0
AR20OH-13	13.0 - 12.5

AR25 OH	
L1=11.5, $\phi D=25$, $\phi D_1=26$, L=35	
CODE	O.D. range
AR25OH-3	3.0 - 2.9
AR25OH-3.5	3.5 - 3.4
AR25OH-4	4.0 - 3.9
AR25OH-4.5	4.5 - 4.4
AR25OH-5	5.0 - 4.9
AR25OH-5.5	5.5 - 5.4
AR25OH-6	6.0 - 5.5
AR25OH-6.5	6.5 - 6.0
AR25OH-7	7.0 - 6.5
AR25OH-7.5	7.5 - 7.0
AR25OH-8	8.0 - 7.5
AR25OH-8.5	8.5 - 8.0
AR25OH-9	9.0 - 8.5
AR25OH-9.5	9.5 - 9.0
AR25OH-10	10.0 - 9.5
AR25OH-10.5	10.5 - 10.0
AR25OH-11	11.0 - 10.5
AR25OH-11.5	11.5 - 11.0
AR25OH-12	12.0 - 11.5
AR25OH-12.5	12.5 - 12.0
AR25OH-13	13.0 - 12.5
AR25OH-13.5	13.5 - 13.0
AR25OH-14	14.0 - 13.5
AR25OH-14.5	14.5 - 14.0
AR25OH-15	15.0 - 14.5
AR25OH-15.5	15.5 - 15.0
AR25OH-16	16.0 - 15.5

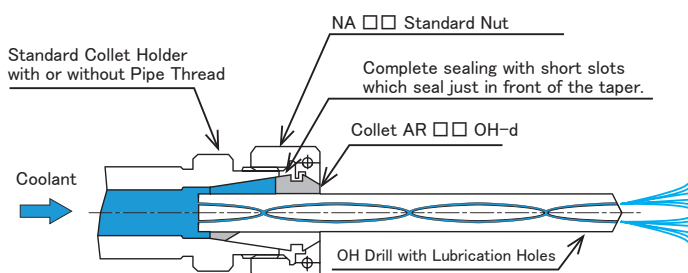
AR32 OH	
L1=12.5, $\phi D=32$, $\phi D_1=33$, L=40	
CODE	O.D. range
AR32OH-3	3.0 - 2.9
AR32OH-3.5	3.5 - 3.4
AR32OH-4	4.0 - 3.9
AR32OH-4.5	4.5 - 4.4
AR32OH-5	5.0 - 4.9
AR32OH-5.5	5.5 - 5.4
AR32OH-6	6.0 - 5.9
AR32OH-6.5	6.5 - 6.4
AR32OH-7	7.0 - 6.9
AR32OH-7.5	7.5 - 7.4
AR32OH-8	8.0 - 7.5
AR32OH-8.5	8.5 - 8.0
AR32OH-9	9.0 - 8.5
AR32OH-9.5	9.5 - 9.0
AR32OH-10	10.0 - 9.5
AR32OH-10.5	10.5 - 10.0
AR32OH-11	11.0 - 10.5
AR32OH-11.5	11.5 - 11.0
AR32OH-12	12.0 - 11.5
AR32OH-12.5	12.5 - 12.0
AR32OH-13	13.0 - 12.5
AR32OH-13.5	13.5 - 13.0
AR32OH-14	14.0 - 13.5
AR32OH-14.5	14.5 - 14.0
AR32OH-15	15.0 - 14.5
AR32OH-15.5	15.5 - 15.0
AR32OH-16	16.0 - 15.5
AR32OH-16.5	16.5 - 16.0
AR32OH-17	17.0 - 16.5
AR32OH-17.5	17.5 - 17.0
AR32OH-18	18.0 - 17.5
AR32OH-18.5	18.5 - 18.0
AR32OH-19	19.0 - 18.5
AR32OH-19.5	19.5 - 19.0
AR32OH-20	20.0 - 19.5

AR40 OH	
L1=14.5, $\phi D=40$, $\phi D_1=41$, L=46	
CODE	O.D. range
AR40OH-10	10.0 - 9.5
AR40OH-10.5	10.5 - 10.0
AR40OH-11	11.0 - 10.5
AR40OH-11.5	11.5 - 11.0
AR40OH-12	12.0 - 11.5
AR40OH-12.5	12.5 - 12.0
AR40OH-13	13.0 - 12.5
AR40OH-13.5	13.5 - 13.0
AR40OH-14	14.0 - 13.5
AR40OH-14.5	14.5 - 14.0
AR40OH-15	15.0 - 14.5
AR40OH-15.5	15.5 - 15.0
AR40OH-16	16.0 - 15.5
AR40OH-16.5	16.5 - 16.0
AR40OH-17	17.0 - 16.5
AR40OH-17.5	17.5 - 17.0
AR40OH-18	18.0 - 17.5
AR40OH-18.5	18.5 - 18.0
AR40OH-19	19.0 - 18.5
AR40OH-19.5	19.5 - 19.0
AR40OH-20	20.0 - 19.5
AR40OH-20.5	20.5 - 20.0
AR40OH-21	21.0 - 20.5
AR40OH-21.5	21.5 - 21.0
AR40OH-22	22.0 - 21.5
AR40OH-22.5	22.5 - 22.0
AR40OH-23	23.0 - 22.5
AR40OH-23.5	23.5 - 23.0
AR40OH-24	24.0 - 23.5
AR40OH-24.5	24.5 - 24.0
AR40OH-25	25.0 - 24.5
AR40OH-25.5	25.5 - 25.0
AR40OH-26	26.0 - 25.5

NOTES:

- (1) Sizes not mentioned above are order made.
- (2) When in use, insert a drill to the end from the front part of the collet.
- (3) Do not use smaller sized cutting tools than inner diameter of collet or coolant will leak out of a collet.
- (4) AR/OH collet does not work if using flat-face shank cutting tool.

Structure of AR /OH type coolant collet



Side-through high-pressure coolant compatible

16° Collet

Coolant Thru

20MPa Available

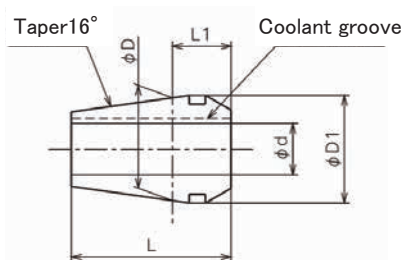
AR Coolant Collet C type

Made to order



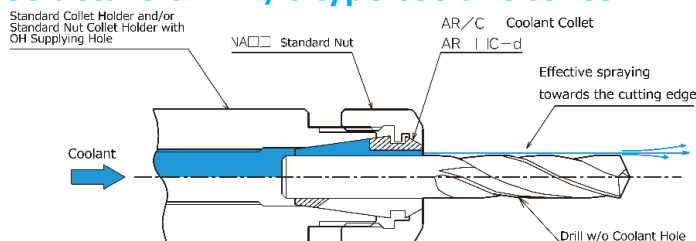
Form explanation

AR 16 C - 10 AA
Name Size Type I.D. Grade



AR/C coolant collet (PAT) is a liquid sealing chuck applying special slitting. AR/C was added to the coolant groove to the inner diameter of the collet. This coolant groove has been made possible refueling effective to the tip of the tool.

Structure of AR /C type coolant collet



CODE	φ d		φ D	L	Supported Holders
	Range	Shrink range			
AR11C-d	3 — 7	0.1	11	18	EXH 7/ECH 7
AR16C-d	3 — 5.9		16	27	EXH10/ECH10
AR20C-d	5 — 5.9	0.1	20	31	EXH13/ECH13
	6 — 13				
AR25C-d	6 — 16	0.5	25	35	EXH16/ECH16
AR32C-d	8 — 20		32	40	EXH20/ECH20

Features of AR/C type coolant collet

- ◆ Correspond for high-pressure coolant sealing can be done by high-pressure of 20MPa except for the coolant groove.
- ◆ Coolant is sprayed toward the cutting edge, making it easy to reduce chip clogging.
- ◆ Effective for deep drilling of small diameter hole.
- ◆ For water-soluble or oil coolant available.
- ◆ AR / C is also valid for semi-dry (mist) processing.

NOTES:

- (1) AR / C is compatible with water-soluble coolant.
AR / C will also manufacture products corresponding to the oil based coolant.
- (2) When ordering, specify the type of oil and accuracy class.
Order Example : AR16 C -6 . . . Water-soluble coolant for φ 6, grade A
AR16CY-6AA . . . Oil-based coolant, for φ 6, grade AA
- (3) Drill should be inserted deeper the depth of the collet.
- (4) When gripping a collet of a size other than the diameter, coolant may seep out or a small amount of coolant may leak.
- (5) The sealing of the collet does not work when a straight shank with flat edge is used.
- (6) The inside diameter shape varies depending on φ d.

16° Collet

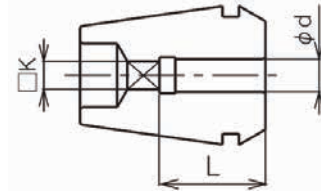
Tap

● AR Tap Collet GB type



Form explanation

AR 16 GB - M4
Name Size Type Tap size



TAP COLLET with Square Hole for Synchronized Tapping.

Size			CODE				
Metric thread	Unified screw thread	Pipe thread	AR16GB	AR20GB	AR25GB	AR32GB	AR40GB
M4	No.8U		AR16GB-M4	AR20GB-M4	AR25GB-M4	AR32GB-M4	
M5	No.10/12U		-M5	-M5	-M5	-M5	
M6	1/4U		-M6	-M6	-M6	-M6	
	5/16U		-5/16U	-5/16U	-5/16U	-5/16U	
M8			-M8	-M8	-M8	-M8	
M10			-M10	-M10	-M10	-M10	AR40GB-M10
M11			-7/16U	-7/16U	-7/16U	-7/16U	-7/16U
		P1/8	-P1/8	-P1/8	-P1/8	-P1/8	-P1/8
M12				-M12	-M12	-M12	-M12
	1/2U			-1/2U	-1/2U	-1/2U	-1/2U
M14	9/16U				-M14	-M14	-M14
		P1/4			-P1/4	-P1/4	-P1/4
	5/8U				-5/8U	-5/8U	-5/8U
M16					-M16	-M16	-M16
		P3/8			-P3/8	-P3/8	-P3/8
M18	3/4U					-M18	-M18
M20						-M20	-M20
M22	7/8U						-M22
		P1/2					-P1/2
M24							-M24
M27	1U						-M27

NOTES: 1) The above chart based on JIS Standard.
Please ask for Tap Shank of ASNI,DIN,or ISO Standard is required.

2) Each suitable collet is required for each tap size.

For Synchro-tap processing · Coolant collet

16° Collet

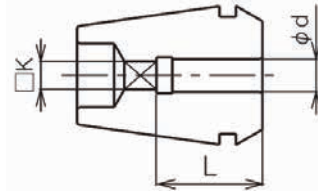
Coolant Tap

20MPa Available

● AR Coolant Tap Collet GH type



Form explanation
AR **16** **GH** **-** **M6**
 Name Size Type Tap size



AR/GH tap collet chuck is for tap with a oil hole
 Higher sealing ability than AR/GB tap collet
 chuck makes tool life longer. Can be used for
 deep-hole tapping.

Size			CODE				
Metric thread	Unified screw thread	Pipe thread	AR16GH	AR20GH	AR25GH	AR32GH	AR40GH
M6	1/4U		AR16GH-M6	AR20GH-M6	AR25GH-M6	AR32GH-M6	
	5/16U		-5/16U	-5/16U	-5/16U	-5/16U	
M8			-M8	-M8	-M8	-M8	
M10			-M10	-M10	-M10	-M10	AR40GH-M10
M11			-7/16U	-7/16U	-7/16U	-7/16U	-7/16U
		P1/8	-P1/8	-P1/8	-P1/8	-P1/8	-P1/8
M12				-M12	-M12	-M12	-M12
	1/2U			-1/2U	-1/2U	-1/2U	-1/2U
M14	9/16U				-M14	-M14	-M14
		P1/4			-P1/4	-P1/4	-P1/4
	5/8U				-5/8U	-5/8U	-5/8U
M16					-M16	-M16	-M16
		P3/8			-P3/8	-P3/8	-P3/8
M18	3/4U					-M18	-M18
M20						-M20	-M20
M22	7/8U						-M22
		P1/2					-P1/2
M24							-M24
M27	1U						-M27

NOTES: 1) The above chart based on JIS Standard.
 Please ask for Tap Shank of ASNI,DIN,or ISO Standard is required.
 2) Each suitable collet is required for each tap size.

JIS B 4133 Face milling compatible

Arbors for Face Milling Cutters Type A



Face Milling Cutter Arbor corresponding to JIS B4133.

Form explanation

BT50 FMA 25.4 - 150

Shank type Holder type Diameter Dimension

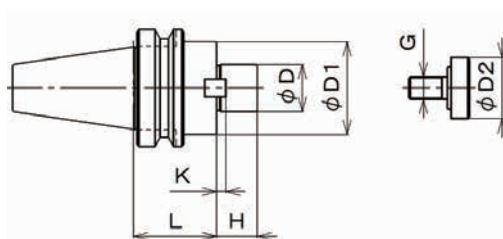


Fig. 1

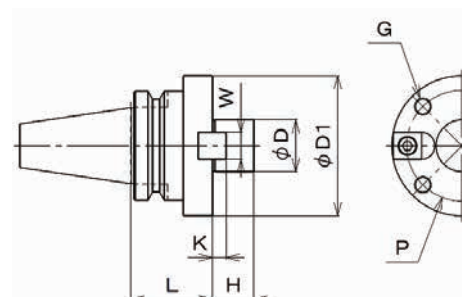


Fig. 2

Inch

CODE	Fig.	D	L	D1	H	W	K	G	D2	P	Cuuter DIA (JIS B4113)
BT50 – FMA25.4 – 45	1	25.4	45	50	22	9.5	5	M12	33	–	76 , (3″)
– 90			90								
–150			150								
– FMA31.75 – 45		31.75	45	60	30	12.7	7	M16	40		102 , (4″)
– 75			75								
–105			105								
– FMA38.1 – 45		38.1	45	80	34	15.9	9	M20	50		127 , (5″)
– 75			75								
– FMA50.8 – 45		50.8	45	100	36	19.05	10	M24	65		152 , 178 , (6″) , (7″)
– 75			75								
– FMA47.625 – 75	2	47.625	75	128.57	38	25.4	12.5	M16	–	101.6	203 , (8″)
BT40 – FMA25.4 – 45	1	25.4	45	50	22	9.5	5	M12	33	–	76 , (3″)
– 90			90								
– FMA31.75 – 45		31.75	45	60	30	12.7	7	M16	44		102 , (4″)
– 75			75								
– FMA38.1 – 60		38.1	60	80	34	15.9	9	M20	50		127 , (5″)
BT30 – FMA25.4 – 45		25.4	45	50	22	9.5	5	M12	33		76 , (3″)
– 60			60								

NOTES: 1) Cutters are supposed to be JIS B4113 type face milling cutters.

2) Driving key and clamp bolts are standard accessories.

Compatible with SANDVIK T-MAX face mills and shoulder face mills

Arbors for Face Milling Cutters Type B

Face Milling Cutter Arbor corresponding to T-MAX Face mill and Shoulder mill for SANDVIK.

Fig. 1

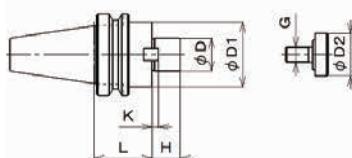
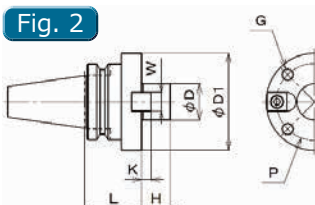


Fig. 2



Form explanation

BT50 FMB 25.4 - 150
 Shank type Holder type Diameter Dimension

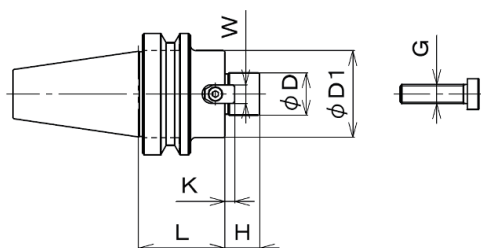
Inch

CODE	Fig.	D	L	D1	H	W	K	G	D2	P	Cutter DIA (Sandvik Coromant)
BT50 - FMB25.4 - 45	1	25.4	45	80	26	9.5	5	M12	33	-	80
- 90			90								
- 105			105								
- FMB38.1 - 45			45								
- 75	2	38.1	75	85	26	15.9	9	M20	50	66.7 × M12	100 , 125
- 105			105								
- FMB38.1F - 75			75								
- 105			105								
BT40 - FMB25.1 - 45	1	25.4	45	62	26	9.5	5	M12	33	-	80
- 60			60								
- 90			90								
- FMB38.1 - 60			60								
- 75	2	38.1	75	85	26	15.9	9	M20	50	-	100 , 125
- 105			105								
- FMB38.1F - 75			75								
- 105			105								

Compatible with SANDVIK T-MAX face mills and shoulder face mills

Arbors for Face Milling Cutters Type C

Face Milling Cutter Arbor corresponding to T-MAX Face mill and Shoulder mill for SANDVIK.



Form explanation

BT50 FMC 25.4 - 150
 Shank type Holder type Diameter Dimension

Inch

CODE	D	L	D1	H	W	K	G	Cutter DIA (JIS B4113)
BT50 - FMC25.4 - 45	25.4	45	70	20	9.5	6	M12	80
- 90		90						
- 150		150						
- FMC38.1 - 45	38.1	45	85	22	15.9	7	M16	100
- 75		70						
- 105		105						
BT40 - FMC25.4 - 60	25.4	60	62	20	9.5	6	M12	80
- 90		90						
- 105		105						
- FMC38.1 - 45	38.1	60	85	22	15.9	7	M16	100

NOTES: 1) Cutters are supposed to be the COROMANT T-MAX shoulder face mill of SANDVIK.

2) Driving key and clamp bolts are standard accessories.

A wide variety of variations support processing

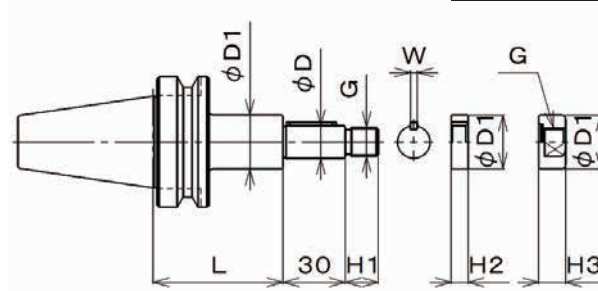
Arbors for Side Milling Cutters



Form explanation

BT50 SCA 12.7 - 105
 Shank type Holder type Diameter Dimension

H2
3, 5, 7
8, 10, 12



Inch

CODE	D	L	D1	G	H1	W	H3	Cutter DIA	
								JIS B4206	JIS B4219
BT50 - SCA12.7 - 75	12.7	75	20	M12 × 1.25	15	-	12	-	50
-105		105							
- SCA15.875 - 90	15.875	90	26	M14 × 1.5	16	3.18	13	50	60
-120		120							
- SCA22.225 - 90	22.225	90	34	M20 × 1.5	21	6.35	18	(60), 63, (75)	75
-135		135							
- SCA25.4 - 90	25.4	90	40	M24 × 2	25	7.92	26	100, 125, (150)	150, 175, 200
-135		135							
- SCA31.75 - 90	31.75	90	46	M30 × 2	30	9.52	31	160, (175), 200	-
-135		135							
- SCA38.1 - 90	38.1	90	55	M36 × 2	36	-	12	-	50
-135		135							
BT40 - SCA12.7 - 75	12.7	75	20	M12 × 1.25	15	-	12	-	50
-105		105							
- SCA15.875 - 75	15.875	75	26	M14 × 1.5	16	3.18	13	50	60
-105		105							
- SCA22.225 - 75	22.225	75	34	M20 × 1.5	21	6.35	21	80, (100)	100, 125
-120		120							
- SCA25.4 - 75	25.4	75	40	M24 × 2	25	7.92	26	100, 125, (150)	150, 175, 200
-120		120							
- SCA31.75 - 90	31.75	90	46	M30 × 2	30	9.52	31	160, (175), 200	-
BT30 - SCA12.7 - 40	12.7	40	20	M12 × 1.25	15	-	12	-	50
- SCA15.875 - 40	15.875	40	26	M14 × 1.5	16	3.18	13	50	60
- SCA22.225 - 40	22.225	40	34	M20 × 1.5	21	-	18	(60), 63, (75)	75

NOTES: 1) Cutters are supposed to be JIS B4206 side milling cutters.
 JIS B4107 side milling cutters with cemented carbide tips.
 JIS B4219 metal slitting saws, JIS B4109 metal slitting saws with cemented tips.

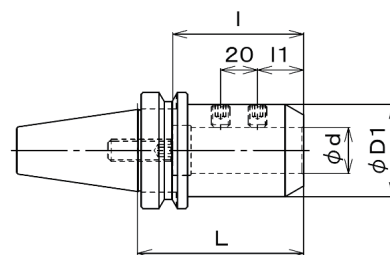
2) Normal accessories are nuts and collars
 (H3 :3,5,7,8,10,12mm)

Support processing with reliable performance

Side Lock Holder A Type



Form explanation
BT50 SLA 20 - 105
 Shank type Holder type Diameter Dimension



General-purpose type

CODE	d	L	D1	I		I1
				Min.	Max.	
BT50 - SLA20 - 105	20	105	50	55	70	25
- SLA25 - 105	25		60	65	80	30
- SLA32 - 105	32					
- SLA42 - 105	42		70	90	110	
BT40 - SLA20 - 90	20	90	50	55	70	25
- SLA25 - 90	25		60	65	80	30
- SLA32 - 90	32					
BT30 - SLA20 - 75	20	75	44	55	70	25
- SLA25 - 75	25					

For End-Mill with flat face.

Side Lock Holder S Type

Side lock holders for the exclusive use ISO-3338 type end mills, which have the flat face on a shank.

Made to order

Form explanation
BT50 SLS 10 - 75
 Shank type Holder type Diameter Dimension

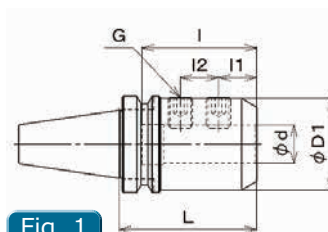


Fig. 1

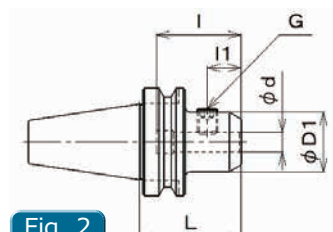


Fig. 2

Dedicated to end mills

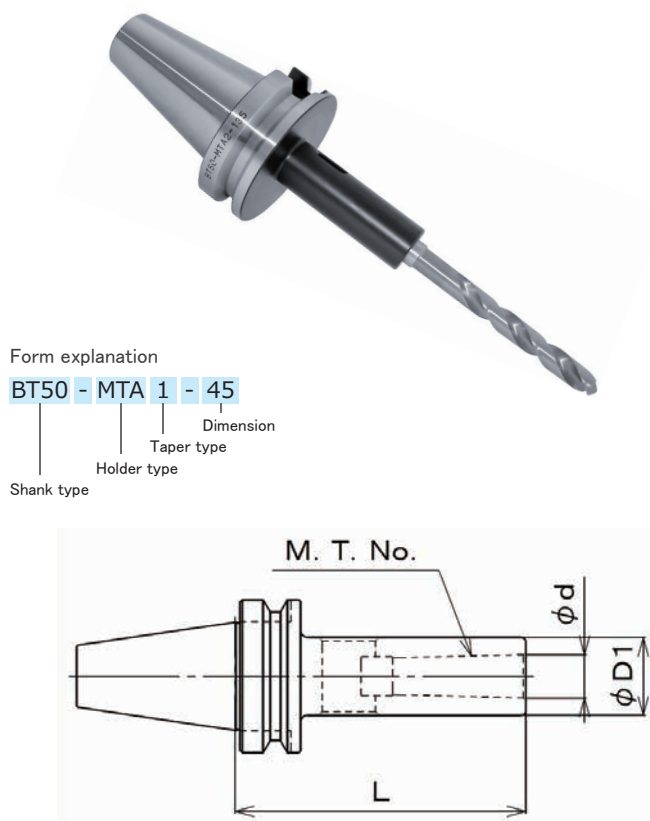
CODE	Fig.	d	L	D1	I	I1	I2	G
BT50 – SLS 6 – 75	1	6	75	25	35	15	15	1–M6
– SLS 8 – 75		8		28	40			1–M8
– SLS10 – 75		10		30	45	16	16	1–M10
– SLS12 – 75		12		35	50	20	20	1–M12
– SLS16 – 75		16		42	60	23	23	1–M14
– SLS20 –105		20		50	75	25	25	1–M16
– SLS25 –105	2	25	60	30				30
– SLS32 –105		32	70		81			
– SLS40 –120		40	120	80	110	30	30	1–M16
– SLS42 –120		42						
BT40 – SLS 6 – 60	1	6	60	25	35	15	–	1–M6
– SLS 8 – 60		8		28	40			1–M8
– SLS10 – 60		10		30	45	16		1–M10
– SLS12 – 60		12		35	50	20		1–M12
– SLS16 – 60		16		42	60	23		1–M14
– SLS20 – 90		2		20	90	50		75
– SLS25 – 90	25		60	25				
– SLS32 – 90	1	32	62	81		25		1–M16

NOTES: 1) Side Lock Holder can't use through coolant.

For Morse taper drills

Morse Taper Holder A Type

Morse Taper Holder is used together with Morse Taper Drill.

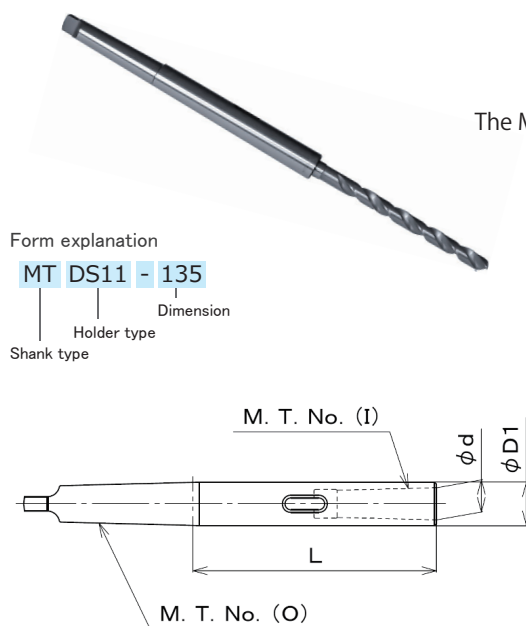


CODE	M.T.NO.	L	d	D1
BT50 - MTA1 - 45	1	45	12.065	25
-120		120		
-180		180		
- MTA2 - 45	2	45	17.78	32
-135		135		
-180		180		
- MTA3 - 45	3	45	23.825	40
-150		150		
-180		180		
- MAT4 - 75	4	75	31.267	50
-180		180		
- MAT5 -105	5	105	44.339	65
-210		210		
BT40 - MAT1 - 45	1	45	12.065	25
-120		120		
- MTA2 - 60	2	60	17.78	32
-120		120		
- MTA3 - 75	3	75	23.825	40
-135		135		
- MTA4 - 95	4	95	31.267	50
-165		165		
BT30 - MTA1 - 50	1	50	12.065	25
- MTA2 - 65	2	60	17.78	30

For converting morse taper size

MT. Drill Sockets

Made to order



The Morse taper drill can be used when the taper size is different from the Holder's.

CODE	M.T.NO.		d	L	D1
	(O)	(I)			
MT – DS11 – 135	1	1	12.065	135	20
– DS21 – 135	2		2		17.78
– DS22 – 135					
– DS32 – 135	3	3	23.825	150	32
– DS33 – 150					4
– DS43 – 150					
– DS44 – 150	5	5	44.399		180
– DS54 – 150					
– DS55 – 180					

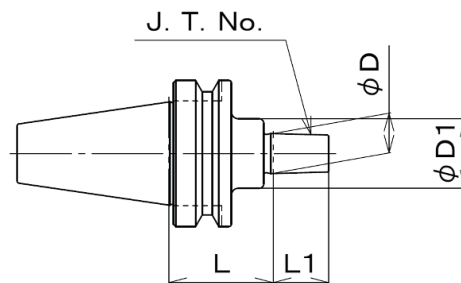
Easy drill chucking

Jacobs Taper Holder

Jacobs Taper Holder is used together with Drill Chuck. And it grasps a straight drill.



Form explanation
BT50 JTA 25 - 105
 Shank type Holder type Diameter Dimension



CODE	J.T.No	L	D	D1	L1	Drill Chuck CODE
BT50 – JTA 2 – 45	2	45	14.119	30	20	100 – J2
–105		105				
– JTA 6 – 45	6	45	17.17		24	130 – J6
–105		105				160 – J6
BT40 – JTA 2 – 45	2	45	14.119		20	100 – J2
–105		105				
– JTA 6 – 45	6	45	17.17		24	130 – J6
–105		105				160 – J6
BT30 – JTA 2 – 30	2	30	14.119		20	100 – J2
– JTA 6 – 30	6		17.17		24	130 – J6
						160 – J6

NOTES: 1) Drill chuck are not supplied.

Drill Chuck



It is a drill chuck made by ALBRECHT.
 Drill Chuck is used attaching to Jacobs Taper Holder.
 Please choose drill chuck code from a list and order for it.

CODE	J.T.No.	Grasp range	Outer diameter dimension
100 - J2	2JT	0 ~ 100	43
130 - J6	6JT	0 ~ 130	50
160 - J6		0 ~ 160	56

Collet holder for small MC and DC

15T-Collet Holder

16° Collet

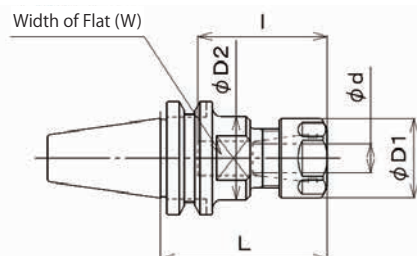
Form explanation

15T - ECH 10 S - 120

Shank type Holder type Nut type Dimension



It is applicable to processing using Drill, Reamer, and End mill and Tap.
It is the collet holder used by small MC-DC.
Collet Holder can use 16-degree taper collet.



CODE	d	L	I Max.	D2	W	D1	Collet CODE	Nut Wrench	Adjust bolt without coolant
15T - ECH 7S - 40	0.5 ~ 7	40	31	20	17	19	AR11	AP-17A	ECH 7-05
- 48		48							
- 55		55							
- 75		75							
- 90		90		16	14				
- ECH10S - 55	0.5 ~ 10	55	45	25	22	28	AR16	SP-25	ECH10-05

Collet holder for small MC and DC

S20T-Collet Holder

16° Collet

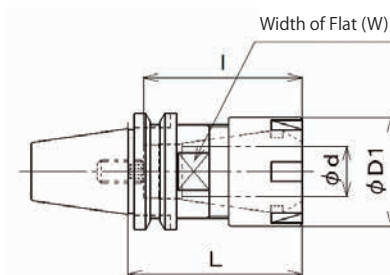
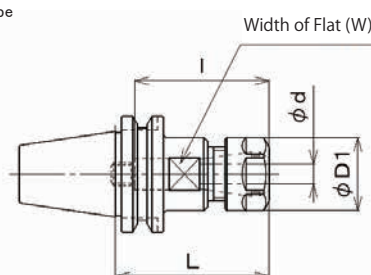
Form explanation

S20T - ECH 7 S - 40

Shank type Holder type Nut type Dimension



It is applicable to processing using Drill, Reamer, and End mill and Tap.
It is the collet holder used by small MC-DC.
Collet Holder can use 16-degree taper collet.



When using at high speeds, please replace with a high speed nut (NA-R/SR).

CODE	d	L	I Max.	W	D1	Collet CODE	Nut Wrench	Adjust bolt without coolant
S20T - ECH 7S - 40	0.5 ~ 7	40	35	17	19	AR11	SP-17A	ECH 7-05
- 50		50						
- ECH10S - 45	0.5 ~ 10	45	19	19	28	AR16	SP-25	ECH10-05
- 60		60						
- ECH13S - 45	0.5 ~ 13	45	22	22	34	AR20	SP-30	ECH13-05
- 60		60						
- ECH13M - 15		45	-	-	28	-	AE-20M	

NOTES: 1) Collet holders are combined with collets and Pull Studs in unit form.
2) Please order collet and nut wrench separately.
3) Please order Adjust bolt separately.

Collet holder for small MC and DC

25T-Collet Holder

16° Collet

It is applicable to processing using Drill, Reamer, and End mill and Tap.

It is the collet holder used by small MC-DC. Collet Holder can use 16-degree taper collet.

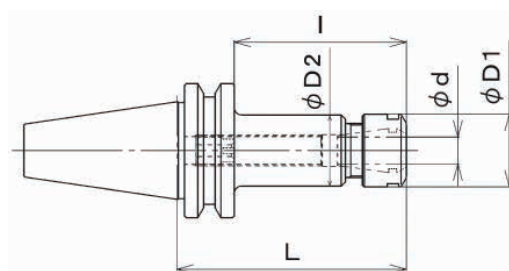


Form explanation

25T - ECH 7 SR - 60

Shank type Holder type Nut type Dimension

Diameter



When using at high speeds, please replace with a high speed nut (NA-R/SR).

CODE	d	L	I	D2	W	D1	Collet CODE	Nut Wrench	Adjust bolt without coolant
			Max.						
25T – ECH 5M – 45	0.5 ~ 5	45	–	12	–	12	AR 8	AE-8M	–
– ECH 7SR – 60	0.5 ~ 7	60	35	19		19	AR11	SP-17A	ECH 7-05
– 70		70							
– ECH10SR – 60	0.5 ~ 10	60	55	22		28	AR16	SP-25	ECH10-05
– 70		70							
– ECH13SR – 60	0.5 ~ 13	60		25		34	AR20	SP-30	ECH13-05
25T – ECT 7S – 60	0.5 ~ 7	60	–	23		19	AR11	SP-17A	–
– 70									

NOTES: 1) Collet holders are combined with collets and Pull Studs in unit form.

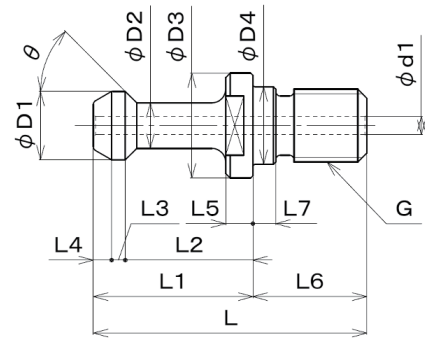
2) Please order collet and nut wrench separately.

3) ECT type is use for synchronization processing.

4) Please order Adjust bolt separately.

Pull Studs

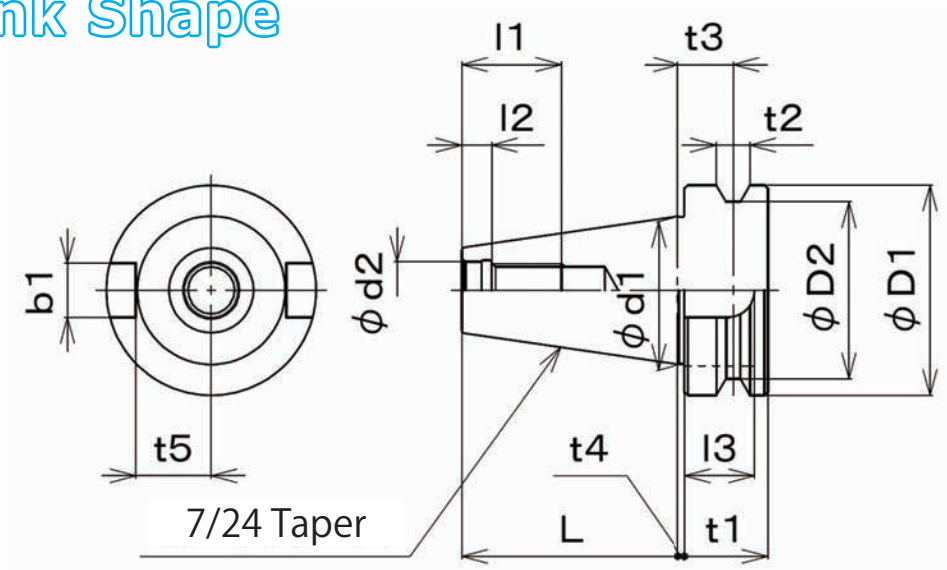
Holder is certainly drawn into Machine spindle. It is excellent in durability.



CODE	L	L6	L1	D3	L5	D4	L7	G	L2	D2	D1	d1	L3	L4	Q					
P50T – 1	85	40	45	38	10	25	8	M24	35	17	23	–	5	5	45°					
– 1 OH												6								
– 2												–								
– 2 OH												6			60°					
– 3												–								
– 3 OH												6								
P50T – JIS	74	34	7	25	21	28	–	75°												
– JIS OH							10													
P40T – 1	60	25	35	23	6	17	5	M16	28	10	15	–	3	4	45°					
– 1 OH												4								
– 2												–								
– 2 OH												4			60°					
– 3												–								
– 3 OH												4								
P40T – JIS	54	25	29	23	7	23	14	19	–	75°										
– JIS OH									7											
P30T – 1	43	20	23	16.5	5	12.5	4	M12	18	7	11	–	2.5	2.5	45°					
– 1 OH												2.5								
– 2												–								
– 2 OH												2.5								
P30T – JIS		19.6	23.4						18.4	8	12	–	3	2	75°					
– S												4								
S20R – 1	34.5	14	20.5	14	4	8.5	M8	16	7	9.5	–	2.1	2.4	90°						
– 2														45°						
– R																				
15R – 1	26	11	15	10	3	6.5	3	M6	11.7	5.2	7.4	–	1.4	1.9	75°					
– 2															90°					
– B															28	11	17	1.5	2	45°

NOTES: 1) We can make a variety of pull studs to suit your machine.
When ordering, please specify pull studs code or the machine model and type.

● Shank Shape



CODE	D1	D2	t1	t2	t3	t4	d1	d2	L	l1	l2	g	l3	b1	t5
15T	27	21	11	5	5.5	1.5	19.05	6.6	27	15	5	M6	9.5	8.1	9.8
S20T	30	24					22.225	8.5	25	M8	11.4				
25T	35	28	13	6	8.5	2	25.4		40		18	6.5	11	9.6	13
BT30	46	38	20	8	11.6		31.75	12.5	48.4	24	7	M12	17	16.1	16.3
BT40	63	53	25	10	16.6		44.45	17	65.4	30	9	M16	21		22.6
BT50	100	85	35	15	23.2	3	69.85	25	101.8	45	13	M24	31	25.7	35.4

 Pull Studs

CODE	SUB CODE 2	Body Marking	Specification
P50T - 1	P50T - I	P50T - 1	MAS 403 P50T 1 shape
- 1 OH	- I - S	- 1 ϕ 6	MAS 403 P50T 1 shape with hole
- 2	- II	- 2	MAS 403 P50T 2 shape
- 2 OH	- II - S	- 2 (ϕ 6)	MAS 403 P50T 2 shape with hole
- 3	- III	- 3	Manufacturer's standard (MAS 403 P50T angle 90 degrees)
- 3 OH	- III - S	- 3 ϕ 6	Manufacturer's standard (With holes as above)
- JIS	J50P	- JIS NH	JIS B 6339-3 Appendix JA(Reference) JJ shape
- JIS	- S	- JIS (ϕ 10)	JIS B 6339-3 Appendix JA(Reference) JJ shape with hole
P40T - 1	P40T - I	P40T - 1	MAS 403 P40T 1 shape
- 1 OH	- I - S	- 1 (ϕ 4)	MAS 403 P40T 1 shape with hole
- 2	- II	- 2	MAS 403 P40T 2 shape
- 2 OH	- II - S	- 2 ϕ 4	MAS 403 P40T 2 shape with hole
- 3	- III	- 3	Manufacturer's standard (MAS 403 P40T angle 90 degrees)
- 3 OH	- III - S	- 3 (ϕ 4)	Manufacturer's standard (With holes as above)
- JIS	J40P	- JIS NH	JIS B 6339-3 Appendix JA(Reference) JJ shape
- JIS OH	J40P - S	- JIS ϕ 7	JIS B 6339-3 Appendix JA(Reference) JJ shape with hole
P30T - 1	P30T - I	P30T - 1	MAS 403 P30T 1 shape
- 1 OH	- I - S	- 1 ϕ 2.5	MAS 403 P30T 1 shape with hole
- 2	- II	- 2	MAS 403 P30T 1 shape
- 2 OH	- II - S	- 2 ϕ 2.5	MAS 403 P30T 1 shape with hole
- JIS	J30P	- JIS	JIS B 6339-3 Appendix JA(Reference) JJ shape
- JIS OH	- S	- JIS (ϕ 4)	JIS B 6339-3 Appendix JA(Reference) JJ shape with hole
S20R - 1	S20R - I	S20R - 1	JIS 4003 S20R 1 shape
- 2	- II	- 2	JIS 4003 S20R 2 shape
- R	- R	- R	Manufacturer's standard (ROKU-ROKU SMART TECHNOLOGY CO.,LTD.)
15R - 1	15R - 1	15R - 1	JIS 4002 15R 1 shape
- 2	- 2	- 2	JIS 4002 15R 2 shape
- B	- B	- B	Manufacturer's standard (BROTHER INDUSTRIES, LTD.)



For more information about this catalog, please request a separate dedicated catalog.

C-max

ALPS TOOL

<https://atc.sub.jp/en/>

ALPS TOOL CO.,LTD.

HQ,Factory 1 10070 Sakaki, Sakaki-machi, Hanishina-gun, Nagano-ken, 389-0601 Japan TEL +81-268-82-2511 FAX +81-268-82-7368
Factory 2 10030 Sakaki, Sakaki-machi, Hanishina-gun, Nagano-ken, 389-0601 Japan TEL +81-268-82-4811 FAX +81-268-82-8741
Factory 3 102-8 Nakanojo, Sakaki-machi, Hanishina-gun, Nagano-ken, 389-0602 Japan TEL +81-268-82-7911 FAX +81-268-82-7919

ALPS TOOL(Dalian)CO.,LTD. No. 7 Yuexiang Street, Wanli Sub-district, Dalian Economic and Technical Development Zone, Dalian Liaoning China TEL +86-411-87935969 FAX +86-411-87935255

ALPS TOOL(THAILAND)CO.,LTD.

Ayutthaya Factory Hi-Tech Industrial Estate,144 Moo 1, Tambol Banlen, Amphur Bang Pa-In, Ayutthaya 13160 Thailand TEL +66-35-314-071 FAX +66-35-314-075
Suranaree Factory 567 Moo6 Tambol Nongraviang Amphur Muang Nakhon Ratchasima 30000 Thailand TEL +66-44-009-838 FAX +66-44-009-839

ALPS TOOL USA,INC.

5420 Newport Drive, Unit #51 Rolling Meadows, IL 60008 USA TEL +1-847-342-0300 FAX +1-847-342-6355

ALPS TOOL Europe GmbH

Vogelsangstr. 8, 73760 Ostfildern GERMANY TEL +49-711-34801-139 FAX +49-711-34801-140



FUJISEIKO LIMITED

<https://www.c-max.co.jp/en/>

J A P A N Head Office / Main Plant

26 Hirako, Yoshiwara-cho, Toyota, Aichi 473-8511, JAPAN TEL +81-(0)565-53-6611 FAX 0565-53-6601

Tokyo office

5-2-40 Onna, Atsugi, Kanagawa, 243-0032, JAPAN TEL 046-224-1441

AMERICA ACCUROMM U.S.A.INC.

101 Westhampton Drive, Lexington, Kentucky, U.S.A. TEL +1(859) 254-4334

P O L A N D ACCUROMM Central Europe Sp.zo.o.

Leg. ul. Europejska 4, 55-220 Jelcz-Laskowice, Poland TEL +48-71-381-8123

AUSTRALIA SANCELL PTY.LTD.

25-31 Colemans Road, Carrum Downs, Victoria, AUSTRALIA TEL +61-38796-5555

M E X I C O ACCUROMM MEXICO S.A. de C.V.

Carretera Panamericana Nte. Km 14 nave 8 y 9 C.P.20909, J. Gomez Portugal, Jesus Maria, Aguascalientes MEXICO

K O R E A HANBOO ENGINEERING CO.,LTD.

70, 3 Gongdan 1-ro, Northwest-gu, Cheonan-si, Chungcheongnam-do, Korea TEL +82-41-621-0543

C H I N A 大连富士工具有限公司

中国遼寧省大连市沙河口区香周路 200 号 TEL 1 390 4086583

長春韓富工具有限公司

No.3 Xianjiang Road, Yonghe Economic Zone, No.434 Putian Road, Hi-Tech Development Zone, Changchun City, Jilin Province, P.R.China

THAILAND FUJISEIKO(THAILAND)CO.,LTD

101 Moo 1 Hi-Tech Industrial Estate, Asian Highway K.M.59-60, Banlen, Bang PA In, AYUTTHAYA, THAILAND TEL +66-35-350-766

TT FUJI TOOL SUPPORT CO.,LTD

Amata Nakorn Industrial Estate, Phase4 700/541 Moo 6, Tambon Don Hua Lor, Amphur Muang, Chonburi, THAILAND TEL +66-(0)38-184-501-513

INDONESIA PT.FUJI PRESISI-TOOL INDONESIA

EJIP Industrial Park Plot 3B-2, Cikarang Selatan, Bekasi Jawa Barat INDONESIA TEL +62 21 8970-211

I N D I A HANBOO INDIA

A-36/2, SIPCOT Industrial Growth Centre, Oragadam, Siperumbudur Taluk, Kancheepuram, INDIA