

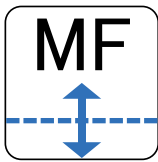


KATO Mfg.Co.,Ltd.

TAPPING ATTACHMENT

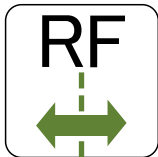
Specifications are subject to change without notice for improvement purposes. No.2506-1-E1

Icon Descriptions



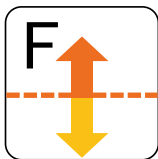
Micro float

Absorbs thrust force during machining with an expansion/contraction of approximately $\pm 0.5\text{mm}$.



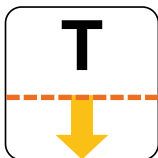
Radial float

Moves horizontally to compensate for misalignment with the pilot hole.



Axial float

Absorbs discrepancies between rotation and feed through expansion and contraction.



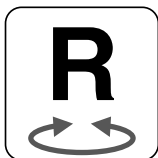
Extension

Absorbs discrepancies between rotation and feed with extension only, preventing shallow threads.



Tread depth control mechanism

Keeps thread depth consistent by using the dwell function.



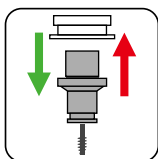
Self reversing mechanism

Since the tapper has a self-reverse mechanism, tapping can be performed even on machines with forward rotation only.



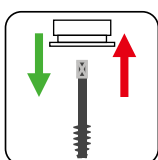
Torque limiter

During tapping, if the applied torque exceeds a certain value, the tap adapter idles (slips).



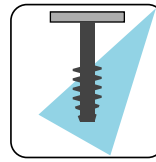
Adapter quick change

The tap adapter can be quickly replaced.



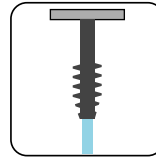
Tap quick change

The tap can be quickly replaced.



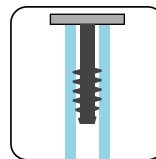
External coolant supply

Apply coolant externally to a standard (non-through-hole) tap during machining.



Center-through coolant supply (tap with oil holes)

Center-through machining is possible with a through-hole tap.



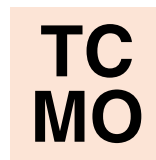
Adapter/Collet through coolant supply

The adapter has a coolant outlet on its end face, enabling center-through machining even with a standard (non-through-hole) tap.



TC adapter series

Adapter **with** torque limiter



TC-MO adapter series

Adapter **without** torque limiter

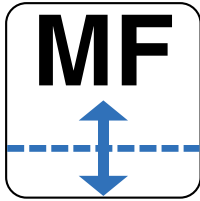


TCA adapter series

Adapter available in six different lengths



AR/ER collet



Micro float



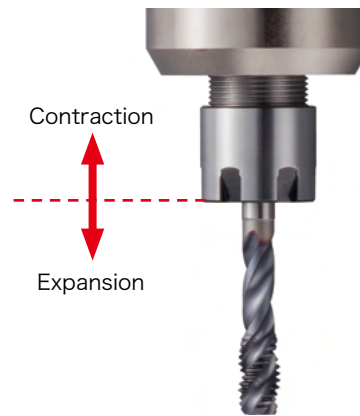
Micro float is

Microscopic expansion and contraction mechanism under 1 mm

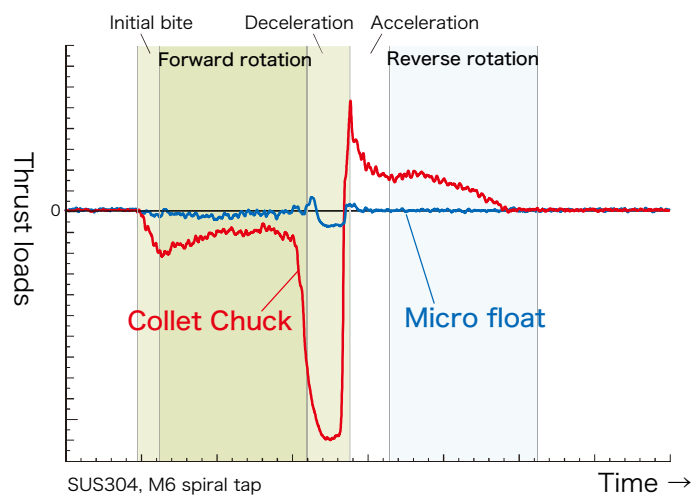
Reduces load on the tap during synchro tapping!

Even in synchro tapping, slight differences can occur between the movements of the machine and the tap due to various factors. These differences become especially apparent during tap engagement and when switching from forward to reverse rotation, causing thrust loads on the tap. Such loads may lead to thread expansion, galling, or tap breakage.

By incorporating a microscopic expansion and contraction mechanism (Micro float) in the holder, the load on the tap during machining can be reduced, which is expected to improve thread accuracy and extend tap life.



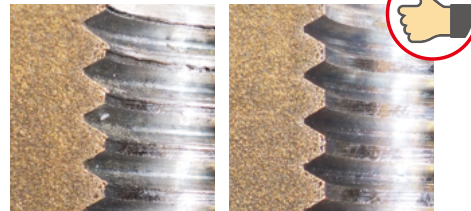
Stress-free tapping!



Smooth and accurate thread profiles



Pipe tap

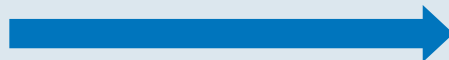


Inconel, U1/4-28UNJF, 3m/min

Extended tool life!



KATO's Micro float



Over 1000 holes

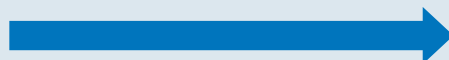
Collet Chuck



Tap breakage after 100 holes

SUS304, M1.7 rolling tap, 20m/min

KATO's Micro float



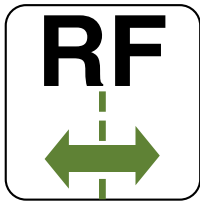
Over 2000 holes

Collet Chuck



Tap replaced due to wear after 1000 holes

ADC12, M6 Spiral tap, 30m/min

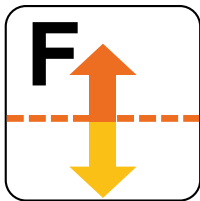
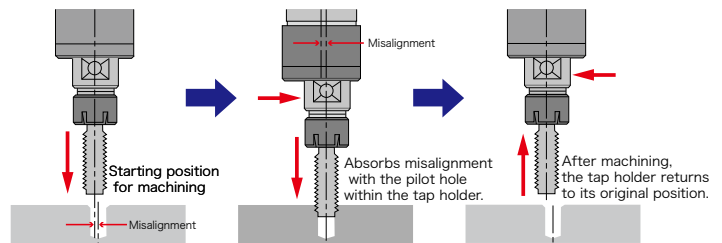


Radial float

YouTube
Radial float



A mechanism that corrects radial misalignment when processes such as casting hole punching or pilot hole machining are performed separately from tapping.

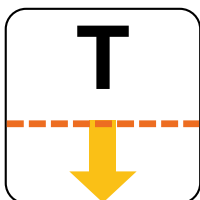
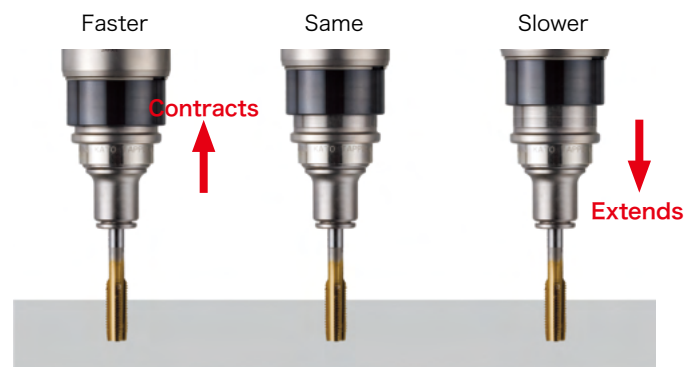


Axial float

The holder is equipped with floating in both extension and contraction directions, which compensates for feed errors between the tap and the machine. This mechanism is essential for NC machines without synchronous control.

It can also be used with machines that have synchronous control.

Feed speed of machine compared to tap speed:



Extension

Compensates for feed discrepancies between the tap and the machine using only the extension side of the floating mechanism. Since there is no contraction—only extension—the occurrence of shallow threads due to holder contraction is eliminated.

Not compatible with adapters equipped with a torque limiter.



Tread depth control mechanism

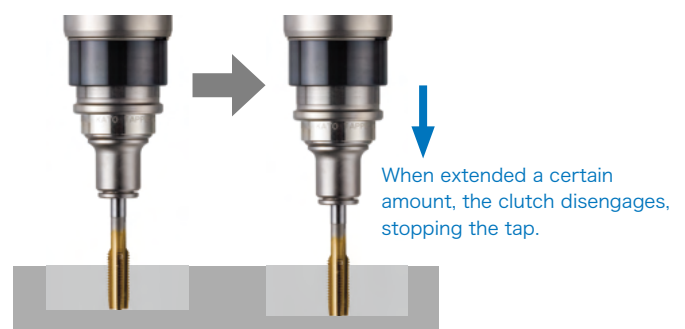
YouTube
Tread depth control

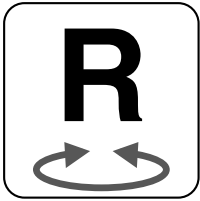


A mechanism that halts forward motion once the tap reaches a certain thread depth, while maintaining rotation during cutting feed with dwell. The holder is designed to idle (slip) after extending a set amount.

This is useful when precise thread depth control is required, such as in tapered pipe thread tapping or when there's limited bottom hole depth.

Stopping the machine feed while maintaining spindle rotation (dwell).





Self reversing mechanism

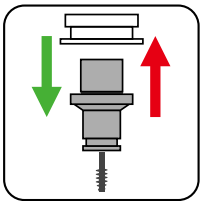
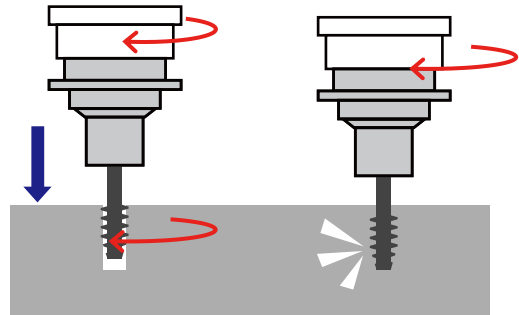
When the holder extends a certain amount, it engages the self-reverse mechanism. The spindle continues to rotate forward while only the holder reverses, enabling tapping on machines like benchtop drill presses that cannot reverse spindle rotation. Since only part of the holder (the tap holding section) reverses, the inertia is low, making it much more efficient than reversing the machine spindle itself.



Torque limiter

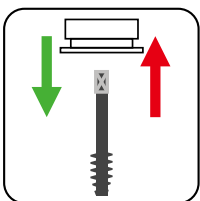
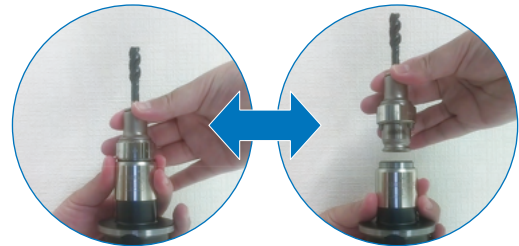
A device that slips when torque exceeds a certain value during tapping to prevent tap breakage (such as when the tap bottoms out in a blind hole or becomes worn).

Not compatible with no contraction mechanism or micro float.



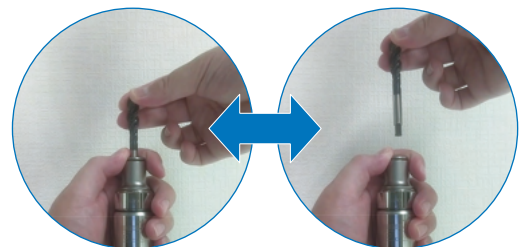
Adapter quick change

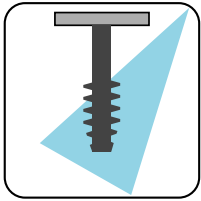
Tap adapters can be exchanged with one touch. This enables efficient adapter replacement without removing the tool holder from the machine spindle.



Tap quick change

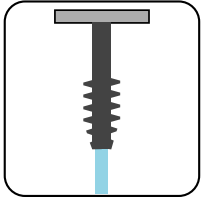
Taps can be exchanged with one touch. This enables efficient tap replacement without removing the tool holder from the machine spindle.





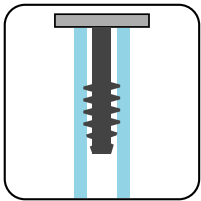
External coolant supply

Coolant is applied externally during machining.



Center-through coolant supply (tap with oil holes)

Center-through coolant supply is possible by using a dedicated adapter/collet and a tap with a hole.



Adapter/Collet through coolant supply

By equipping a dedicated adapter or collet, coolant can be discharged from the end face of the adapter or collet.

TC

TC adapter series

Adapter enabling quick change attachment and detachment with the holder.



折損
防止

With torque limiter

TC MO

TC-MO adapter series

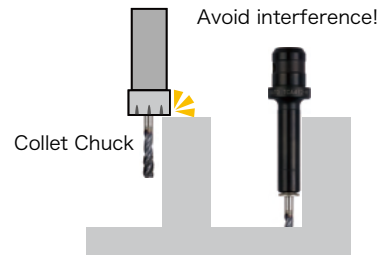
Adapter enabling quick change attachment and detachment with the holder. Without torque limiter.



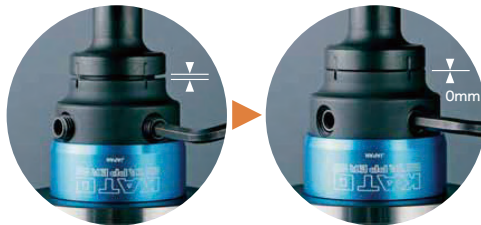
TCA

TCA adapter series

Available in six different lengths.



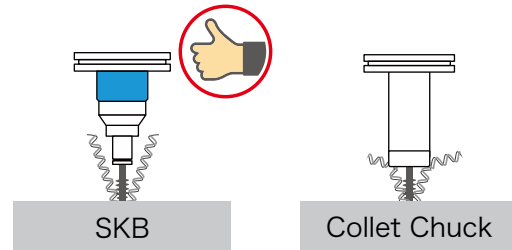
Draw-in clamping



Before installing

After installing

The tip is slender, making chip buildup less likely.

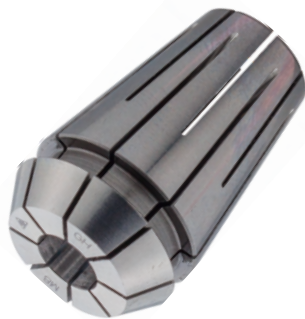


SKB

Collet Chuck

AR ER

AR/ER collet



Collet chuck tap installation

Synchro tapping

SSR-OHC

Shank

- BT
- DBT
- HSK
- C

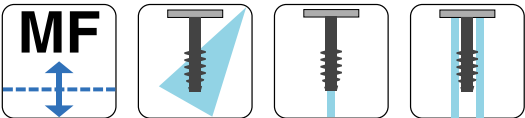
Capacity

M4~M24
U No.8~U 7/8
P 1/8~P 1/2

YouTube
SSR-OHC



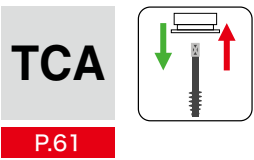
Features



- ➔ Exclusive for synchro tapping
- ➔ Up to TCA adapter length L



Compatible adapter

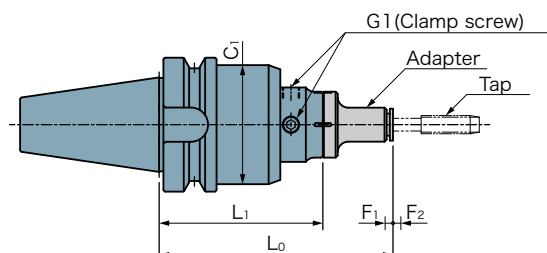


Adapter length selectable.

Select based on coolant supply method

Coolant supply method			
Tap oil hole	Not required	Required	Not required
Adapter (coolant pressure)	TCA	TCA-HP-SB (~ 2MPa) TCA-HP1-SB (~ 5MPa) TCA-ER + AR-GH (~ 7MPa)	TCA-HP-3H/ON-SB (~ 2MPa) TCA-HP1-3H/ON-SB (~ 5MPa) TCA-ER + AR-GHC (~ 7MPa)

BT shank



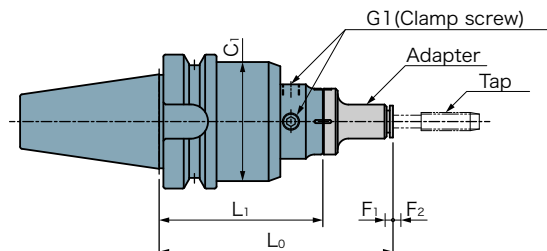
Unit: mm

Order code	Model	L0 [※]	L1	C1	F1 [※]	F2 [※]	G1	Capacity	Weight (kg)
SSR-0026	BT30-SSR412-OHC-112	145	112	56	0.5	0.5	M8 P1.0	M4 ~ M12	1.38
SSR-0028	BT40-SSR412-OHC-77	110	77	56	0.5	0.5	M8 P1.0	M4 ~ M12	1.29
SSR-0027	BT40-SSR412-OHC-117	150	117	56	0.5	0.5	M8 P1.0	M4 ~ M12	2.04
SSR-0036	BT40-SSR1022-OHC-100	155	100	66	0.5	0.5	M10 P1.0	M10 ~ M24	1.73
SSR-0030	BT50-SSR412-OHC-92	125	92	56	0.5	0.5	M8 P1.0	M4 ~ M12	3.99
SSR-0029	BT50-SSR412-OHC-117	150	117	56	0.5	0.5	M8 P1.0	M4 ~ M12	4.46
SSR-0038	BT50-SSR1022-OHC-100	155	100	66	0.5	0.5	M10 P1.0	M10 ~ M24	4.10
SSR-0037	BT50-SSR1022-OHC-140	195	140	66	0.5	0.5	M10 P1.0	M10 ~ M24	5.16

F1 – Contraction / F2 – Extension

The L0 dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L1 + H1).

DBT shank (two-face clamping BT shank)



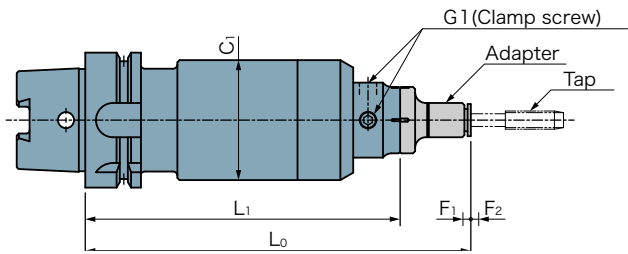
Unit: mm

Order code	Model	L0 [※]	L1	C1	F1 [※]	F2 [※]	G1	Capacity	Weight (kg)
SSR-0034	DBT30-SSR412-OHC-112	145	112	56	0.5	0.5	M8 P1.0	M4 ~ M12	1.38
SSR-0035	DBT40-SSR412-OHC-77	110	77	56	0.5	0.5	M8 P1.0	M4 ~ M12	1.30
SSR-0047	DBT40-SSR412-OHC-117	150	117	56	0.5	0.5	M8 P1.0	M4 ~ M12	2.05
SSR-0048	DBT40-SSR1022-OHC-100	155	100	66	0.5	0.5	M10 P1.0	M10 ~ M24	1.74
SSR-0049	DBT50-SSR412-OHC-92	125	92	56	0.5	0.5	M8 P1.0	M4 ~ M12	4.04
SSR-0044	DBT50-SSR412-OHC-117	150	117	56	0.5	0.5	M8 P1.0	M4 ~ M12	4.51
SSR-0050	DBT50-SSR1022-OHC-100	155	100	66	0.5	0.5	M10 P1.0	M10 ~ M24	4.15
SSR-0045	DBT50-SSR1022-OHC-140	195	140	66	0.5	0.5	M10 P1.0	M10 ~ M24	5.21

F1 – Contraction / F2 – Extension

The L0 dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L1 + H1).

HSK-A shank

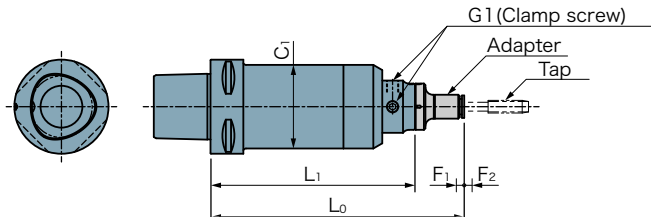


Unit: mm

Order code	Model	L0※	L1	C1	F1※	F2※	G1	Capacity	Weight (kg)
SSR-0032	HSK-A63-H-SSR412-OHC-107	140	107	56	0.5	0.5	M8 P1.0	M4 ~ M12	1.52
SSR-0040	HSK-A63-H-SSR1022-OHC-130	185	130	66	0.5	0.5	M10 P1.0	M10 ~ M24	2.01
SSR-0033	HSK-A100-H-SSR412-OHC-112	145	112	56	0.5	0.5	M8 P1.0	M4 ~ M12	3.01
SSR-0041	HSK-A100-H-SSR1022-OHC-135	190	135	66	0.5	0.5	M10 P1.0	M10 ~ M24	3.83

F1 – Contraction / F2 – Extension
The coolant tube is of the movable type.
The L0 dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L1 + H1).

C shank



Unit: mm

Order code	Model	L0※	L1	C1	F1※	F2※	G1	Capacity	Weight (kg)
SSR-0031	C6-SSR412-OHC-107	140	107	56	0.5	0.5	M8 P1.0	M4 ~ M12	1.73
SSR-0039	C6-SSR1022-OHC-130	185	130	66			M10 P1.0	M10 ~ M24	2.46

F1 – Contraction / F2 – Extension
The L0 dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L1 + H1).

Clamp screw



Order code	Model	Compatible holder
ACC-0157	CS8-8.5	SSR412-OHC
ACC-0159	CS10-10	SSR1022-OHC

Synchro tapping

ESS

Shank

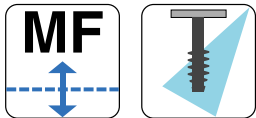


Capacity

M1~M3
U No.0~U No.6



Features



- Exclusive for synchro tapping
- Small tap
- Compatible with carbide taps



Compatible collet



Optional accessories

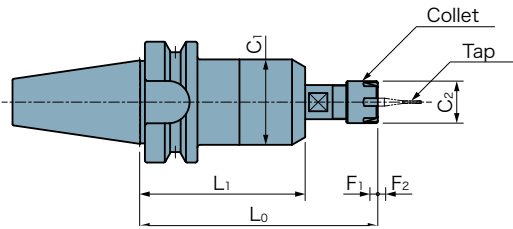


Collet



Spanner

BT shank

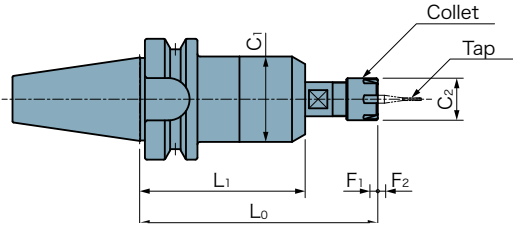


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Capacity	Spanner	Weight (kg)
ESS-0042	BT30-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3	E11M	0.55
ESS-0043	BT40-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3		1.18
ESS-0044	BT50-ESS103-135-ER11	135	108	32.5	16	0.5	0.5	M1 ~ M3		4.15

F1 – Contraction / F2 – Extension

DBT shank (two-face clamping BT shank)

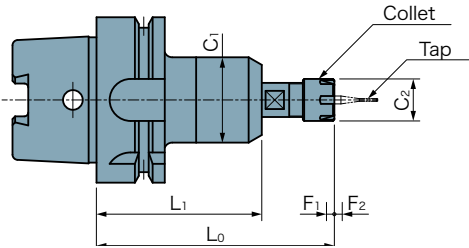


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Capacity	Spanner	Weight (kg)
ESS-0052	DBT30-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3	E11M	0.55
ESS-0053	DBT40-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3		1.29
ESS-0067	DBT50-ESS103-135-ER11	135	108	32.5	16	0.5	0.5	M1 ~ M3		4.20

F1 – Contraction / F2 – Extension

HSK-A shank

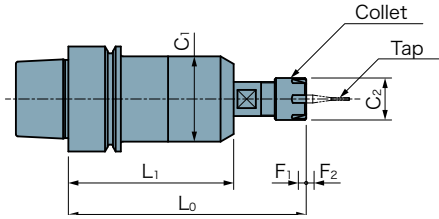


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Capacity	Spanner	Weight (kg)
ESS-0047	HSK-A40-H-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3	E11M	0.48
ESS-0048	HSK-A50-H-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3		0.62
ESS-0049	HSK-A63-H-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3		0.88

F1 – Contraction / F2 – Extension
The coolant tube is of the movable type.

HSK-E shank

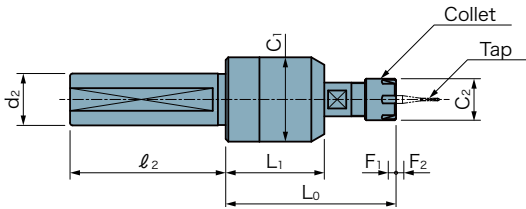


Unit: mm

Order code	Model	L_0	L_1	C_1	C_2	F_1^*	F_2^*	Capacity	Spanner	Weight (kg)
ESS-0050	HSK-E40-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3	E11M	0.49
ESS-0051	HSK-E50-ESS103-90-ER11	90	63	32.5	16	0.5	0.5	M1 ~ M3	E11M	0.65

F1 – Contraction / F2 – Extension
The coolant tube is of the movable type.

STT shank

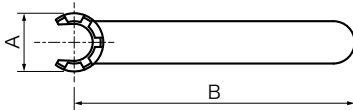


Unit: mm

Order code	Model	L_0	L_1	C_1	C_2	F_1^*	F_2^*	Shank		Capacity	Spanner	Weight (kg)
								ℓ_2	d_2			
ESS-0046	STT19.05-ESS103-ER11	65	38	32.5	16	0.4	0.4	60	19.05	M1 ~ M3	E11M	0.36
ESS-0045	STT20-ESS103-ER11	65	38	32.5	16	0.4	0.4	60	20	M1 ~ M3	E11M	0.36

F1 – Contraction / F2 – Extension

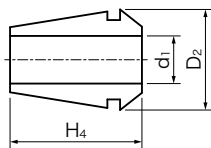
Spanner



Unit: mm

Order code	Model	A	B	Weight (kg)
ACC-0195	E11M_Spanner (RF306, 7-P, 1D, SC, ESS103)	16.8	90	0.04

ER Collet



Unit: mm

Order code	Model	d_1	H_4	D_2
ER-0017	ER11-UP-3 (ϕ 3~2.5)_M2	3	18	11.5
ER-0126	ER11-UP-4 (ϕ 4~3.5)_M3	4	18	11.5

Synchro tapping **ESS-OHC**

Shank

- BT
- DBT
- HSK
- C
- STT

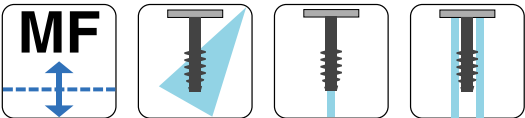
Capacity

M4~M22
U No.8~U 7/8
P1/8

YouTube
ESS-OHC



Features



- ➔ Exclusive for synchro tapping
- ➔ Compatible with carbide taps



Compatible collet

AR
ER
P.17

Optional accessories



Collet



Spanner

Select based on coolant supply method

Coolant supply method			
Tap oil hole	Not required	Required	Not required
Collet (coolant pressure)	AR-GB (M4) AR-GH (M5 ~)	AR-GH (~ 7MPa)	AR-GHC (~ 7MPa)



Micro Float



Radial Float



Axial Float



Extension



Depth Control



Self Reversing



Torque Limiter



Adapter Quick Change



Tap Quick Change



Center Through



Adapter/Collet Through



External Coolant



TC Adapter



TC-MO Adapter

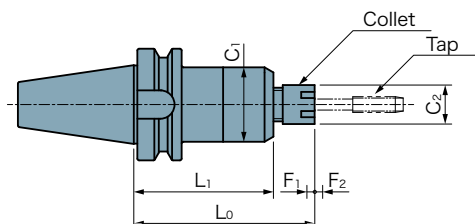


TCA Adapter



AR/ER Collet

BT shank

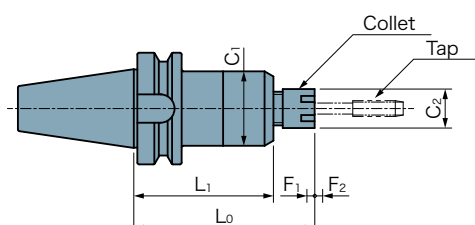


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Capacity	Spanner	Weight (kg)
ESS-0008	BT30-ESS412-OHC	87	63.8	42	22	0.5	0.5	M4 ~ M12	AE-16M	0.70
ESS-0009	BT40-ESS412-OHC	102	78.8	42	22	0.5	0.5	M4 ~ M12	AE-16M	1.45
ESS-0032	BT40-ESS1022-OHC	160	126.9	66	50	0.5	0.5	M10 ~ M22	FK-7	3.45
ESS-0011	BT50-ESS412-OHC	132	108.8	42	22	0.5	0.5	M4 ~ M12	AE-16M	4.24
ESS-0033	BT50-ESS1022-OHC	160	126.9	66	50	0.5	0.5	M10 ~ M22	FK-7	5.59

F1 – Contraction / F2 – Extension

DBT shank (two-face clamping BT shank)

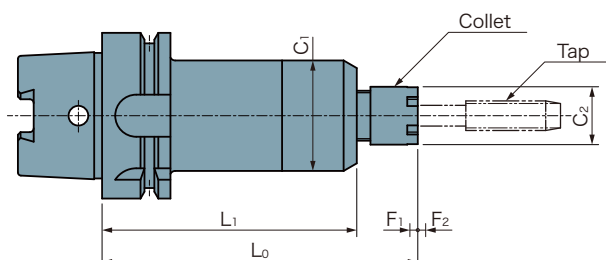


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Capacity	Spanner	Weight (kg)
ESS-0028	DBT30-ESS412-OHC	87	63.8	42	22	0.5	0.5	M4 ~ M12	AE-16M	0.70
ESS-0029	DBT40-ESS412-OHC	102	78.8	42	22	0.5	0.5	M4 ~ M12	AE-16M	1.46
ESS-0040	DBT40-ESS1022-OHC	160	126.9	66	50	0.5	0.5	M10 ~ M22	FK-7	3.46
ESS-0030	DBT50-ESS412-OHC	132	108.8	42	22	0.5	0.5	M4 ~ M12	AE-16M	4.29
ESS-0041	DBT50-ESS1022-OHC	160	126.9	66	50	0.5	0.5	M10 ~ M22	FK-7	5.64

F1 – Contraction / F2 – Extension

HSK-A shank



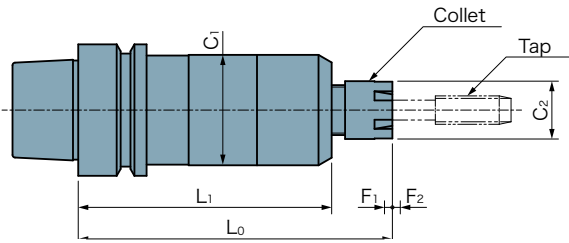
Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Capacity	Spanner	Weight (kg)
ESS-0021	HSK-A40-H-ESS412-OHC	120	96.4	42	22	0.5	0.5	M4 ~ M12	AE-16M	0.93
ESS-0022	HSK-A50-H-ESS412-OHC	120	96.4	42	22	0.5	0.5	M4 ~ M12	AE-16M	1.14
ESS-0023	HSK-A63-H-ESS412-OHC	120	96.8	42	22	0.5	0.5	M4 ~ M12	AE-16M	1.57
ESS-0038	HSK-A63-H-ESS1022-OHC	180	147	66	50	0.5	0.5	M10 ~ M22	FK-7	3.94
ESS-0025	HSK-A100-H-ESS412-OHC	125	101.4	42	22	0.5	0.5	M4 ~ M12	AE-16M	2.76
ESS-0039	HSK-A100-H-ESS1022-OHC	180	145.4	66	50	0.5	0.5	M10 ~ M22	FK-7	4.63

F1 – Contraction / F2 – Extension

The coolant tube is of the movable type.

HSK-E shank

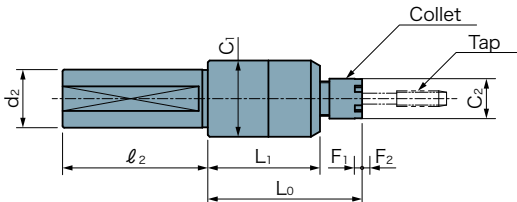


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Capacity	Spanner	Weight (kg)
ESS-0026	HSK-E40-ESS412-OHC	120	96.4	42	22	0.5	0.5	M4 ~ M12	AE-16M	0.94
ESS-0027	HSK-E50-ESS412-OHC	120	96.4	42	22	0.5	0.5	M4 ~ M12	AE-16M	1.16

F1 – Contraction / F2 – Extension
The coolant tube is of the movable type.

STT shank

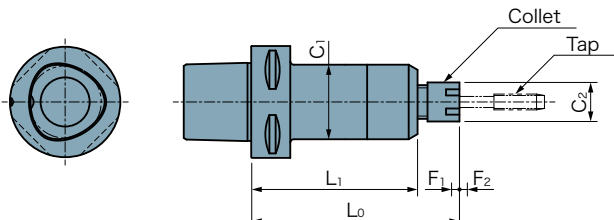


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Shank		Capacity	Spanner	Weight (kg)
								ℓ ₂	d ₂			
ESS-0013	STT32-ESS412-OHC	85	61.8	42	22	0.5	0.5	80	32	M4 ~ M12	AE-16M	1.22

F1 – Contraction / F2 – Extension

C shank



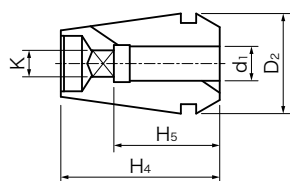
Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F ₁ ※	F ₂ ※	Capacity	Spanner	Weight (kg)
ESS-0016	C3-ESS412-OHC	117	93.7	42	22	0.5	0.5	M4 ~ M12	AE-16M	0.93
ESS-0017	C4-ESS412-OHC	117	93.7	42	22	0.5	0.5	M4 ~ M12	AE-16M	1.00
ESS-0018	C5-ESS412-OHC	117	93.7	42	22	0.5	0.5	M4 ~ M12	AE-16M	1.19
ESS-0019	C6-ESS412-OHC	117	93.7	42	22	0.5	0.5	M4 ~ M12	AE-16M	1.55
ESS-0036	C6-ESS1022-OHC	175	141.9	66	50	0.5	0.5	M10 ~ M22	FK-7	3.83
ESS-0020	C8-ESS412-OHC	120	96.8	42	22	0.5	0.5	M4 ~ M12	AE-16M	2.40
ESS-0037	C8-ESS1022-OHC	160	126.9	66	50	0.5	0.5	M10 ~ M22	FK-7	3.81

F1 – Contraction / F2 – Extension



AR-GB/GH Collet



Unit: mm

Order code	Model	d ₁	K	H ₄	D ₂	H ₅
AR-0033	AR16-GB_5x4 (M4, ISO-F_M5)	5	4	27	17	15

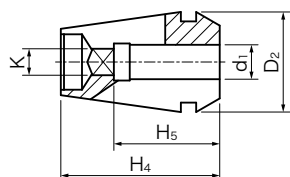
Unit: mm

Order code	Model	d ₁	K	H ₄	D ₂	H ₅
AR-0040	AR16-GH_5.5x4.5 (M5)	5.5	4.5	27	17	22
AR-0041	AR16-GH_6x4.5 (M6.U1/4)	6	4.5	27	17	22
AR-0043	AR16-GH_6.1x5 (U5/16)	6.1	5	27	17	22
AR-0044	AR16-GH_6.2x5 (M7.M8)	6.2	5	27	17	22
AR-0045	AR16-GH_7x5.5 (M9.M10.U3/8, DIN376_M10)	7	5.5	27	17	22
AR-0046	AR16-GH_8x6 (P1/8.U7/16.M11)	8	6	27	17	22
AR-0048	AR16-GH_8.5x6.5 (M12)	8.5	6.5	27	17	22

Unit: mm

Order code	Model	d ₁	K	H ₄	D ₂	H ₅
AR-0088	AR32-GH_7x5.5 (M9.M10.U3/8, DIN376_M10)	7	5.5	40	33	30
AR-0089	AR32-GH_8x6 (P1/8 Long tap.U7/16)	8	6	40	33	30
AR-0090	AR32-GH_8.5x6.5 (M12)	8.5	6.5	40	33	30
AR-0091	AR32-GH_9x7 (U1/2, DIN376_M12)	9	7	40	33	30
AR-0092	AR32-GH_10.5x8 (M14.U9/16)	10.5	8	40	33	30
AR-0094	AR32-GH_12x9 (U5/8, DIN376_M16)	12	9	40	33	35
AR-0095	AR32-GH_12.5x10 (M16, ISO-R_M16)	12.5	10	40	33	35
AR-0096	AR32-GH_14x11 (M18.U3/4, DIN376_M18)	14	11	40	33	35
AR-0098	AR32-GH_15x12 (M20)	15	12	40	33	35
AR-0100	AR32-GH_17x13 (M22.U7/8)	17	13	40	33	33

AR-GHC Collet



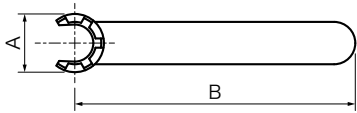
Unit: mm

Order code	Model	d ₁	K	H ₄	D ₂	H ₅
AR-0050	AR16-GHC_5.5x4.5 (M5)	5.5	4.5	27	17	22
AR-0051	AR16-GHC_6x4.5 (M6.U1/4)	6	4.5	27	17	22
AR-0053	AR16-GHC_6.1x5 (U5/16)	6.1	5	27	17	22
AR-0054	AR16-GHC_6.2x5 (M7.M8)	6.2	5	27	17	22
AR-0055	AR16-GHC_7x5.5 (M9.M10.U3/8, DIN376_M10)	7	5.5	27	17	22
AR-0056	AR16-GHC_8x6 (P1/8.U7/16.M11)	8	6	27	17	22
AR-0058	AR16-GHC_8.5x6.5 (M12)	8.5	6.5	27	17	22

Unit: mm

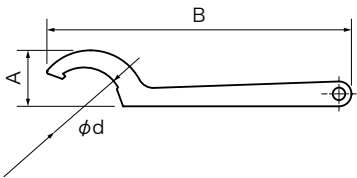
Order code	Model	d ₁	K	H ₄	D ₂	H ₅
AR-0103	AR32-GHC_7x5.5 (M9.M10.U3/8, DIN376_M10)	7	5.5	40	33	30
AR-0117	AR32-GHC_8x6 (P1/8 Long tap.U7/16)	8	6	40	33	30
AR-0104	AR32-GHC_8.5x6.5 (M12)	8.5	6.5	40	33	30
AR-0105	AR32-GHC_9x7 (U1/2, DIN376_M12)	9	7	40	33	30
AR-0106	AR32-GHC_10.5x8 (M14.U9/16)	10.5	8	40	33	30
AR-0107	AR32-GHC_12x9 (U5/8, DIN376_M16)	12	9	40	33	35
AR-0108	AR32-GHC_12.5x10 (M16, ISO-R_M16)	12.5	10	40	33	35
AR-0109	AR32-GHC_14x11 (M18.U3/4, DIN376_M18)	14	11	40	33	35
AR-0111	AR32-GHC_15x12 (M20)	15	12	40	33	35
AR-0113	AR32-GHC_17x13 (M22.U7/8)	17	13	40	33	33

Spanner



Unit: mm

Order code	Model	A	B	Weight (kg)
ACC-0250	AE-16M_Spanner (ESS412-OHC)	22.5	110	0.06



Unit: mm

Order code	Model	A	B	φ d	Weight (kg)
ACC-0255	FK-7_Hook spanner (ESS1022-OHC)	36	196	50	0.15



Synchro tapping

HA-M-OHC

Shank

- BT
- DBT
- HSK
- C

Capacity

M3~M56,
U No.5~U 2_1/4,
P1/8~P1_3/4

YouTube
HA-M-OHC



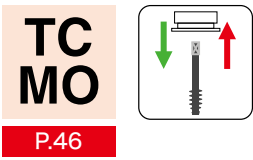
Features



- ➔ Exclusive for synchro tapping
- ➔ With slight compression function



Compatible adapter



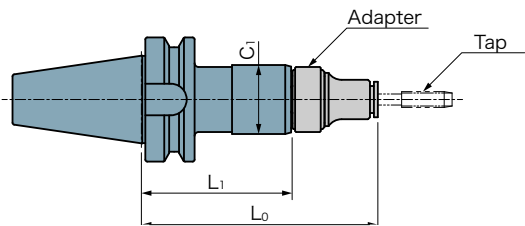
Adapter length selectable.



Select based on coolant supply method

Coolant supply method			
Tap oil hole	Not required	Required	Not required
Adapter (coolant pressure)	TC-MO	TC-MO-SB (~ 5MPa) TC-MO-L-HP1-SB (~ 5MPa)	TC-MO-HP1-3H/ON-SB (~ 5MPa) TC-MO-L-HP1-3H/ON-SB (~ 5MPa)

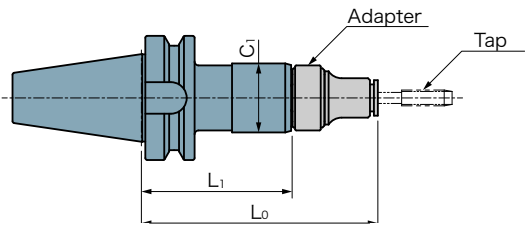
BT shank



Unit: mm

Order code	Model	L0	L1	C1	Capacity	Weight (kg)
HAM-0014	BT30-HA412-M-OHC	105	61.5	35	M3 ~ M16	0.53
HAM-0042	BT30-HA1022-M-OHC	150	85	50	M8 ~ M22	1.05
HAM-0015	BT40-HA412-M-OHC	120	76.5	35	M3 ~ M16	1.19
HAM-0043	BT40-HA1022-M-OHC	150	85	50	M8 ~ M27	1.46
HAM-0063	BT40-HA2035-M-OHC	210	125	72	M18 ~ M38	2.13
HAM-0016	BT50-HA412-M-OHC	135	91.5	35	M3 ~ M16	3.73
HAM-0044	BT50-HA1022-M-OHC	165	100	50	M8 ~ M27	4.10
HAM-0064	BT50-HA2035-M-OHC	210	125	72	M18 ~ M38	4.92
HAM-0074	BT50-HA3050-M-OHC	255	155	92	M27 ~ M56	6.90

DBT shank (two-face clamping BT shank)

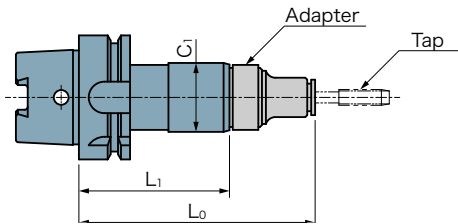


Unit: mm

Order code	Model	L0	L1	C1	Capacity	Weight (kg)
HAM-0039	DBT30-HA412-M-OHC	105	61.5	35	M3 ~ M16	0.53
HAM-0060	DBT30-HA1022-M-OHC	150	85	50	M8 ~ M22	1.05
HAM-0040	DBT40-HA412-M-OHC	120	76.5	35	M3 ~ M16	1.20
HAM-0061	DBT40-HA1022-M-OHC	150	85	50	M8 ~ M27	1.47
HAM-0072	DBT40-HA2035-M-OHC	210	125	72	M18 ~ M38	2.14
HAM-0041	DBT50-HA412-M-OHC	135	91.5	35	M3 ~ M16	3.78
HAM-0062	DBT50-HA1022-M-OHC	165	100	50	M8 ~ M27	4.15
HAM-0073	DBT50-HA2035-M-OHC	210	125	72	M18 ~ M38	4.97
HAM-0076	DBT50-HA3050-M-OHC	255	155	92	M27 ~ M56	6.95



HSK-A shank

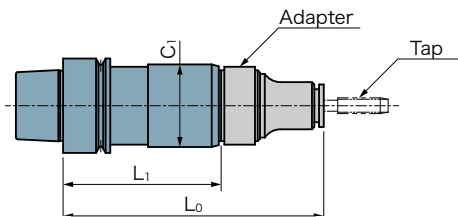


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	Capacity	Weight (kg)
HAM-0026	HSK-A40-H-HA412-M-OHC	110	66.5	35	M3 ~ M14	0.40
HAM-0027	HSK-A50-H-HA412-M-OHC	120	76.5	35	M3 ~ M16	0.62
HAM-0029	HSK-A63-H-HA412-M-OHC	120	76.5	35	M3 ~ M16	0.89
HAM-0052	HSK-A63-H-HA1022-M-OHC	165	100	50	M8 ~ M27	1.32
HAM-0068	HSK-A63-H-HA2035-M-OHC	210	125	72	M18 ~ M38	1.98
HAM-0031	HSK-A100-H-HA412-M-OHC	135	91.5	35	M3 ~ M16	2.80
HAM-0054	HSK-A100-H-HA1022-M-OHC	165	100	50	M8 ~ M27	3.14
HAM-0069	HSK-A100-H-HA2035-M-OHC	210	125	72	M18 ~ M38	4.33

The coolant tube is of the movable type.

HSK-E shank

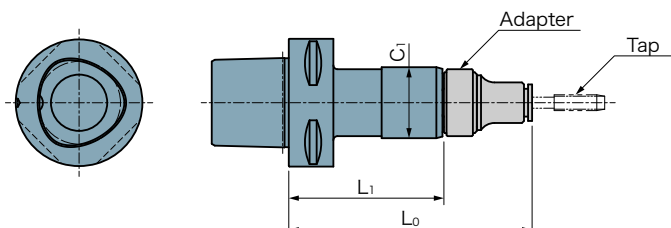


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	Capacity	Weight (kg)
HAM-0035	HSK-E40-HA412-M-OHC	110	66.5	35	M3 ~ M14	0.41
HAM-0036	HSK-E50-HA412-M-OHC	120	76.5	35	M3 ~ M16	0.65

The coolant tube is of the movable type.

C shank



Unit: mm

Order code	Model	L ₀	L ₁	C ₁	Capacity	Weight (kg)
HAM-0022	C4-HA412-M-OHC	110	66.5	35	M3 ~ M14	0.45
HAM-0023	C5-HA412-M-OHC	120	76.5	35	M3 ~ M16	0.69
HAM-0024	C6-HA412-M-OHC	120	76.5	35	M3 ~ M16	1.21
HAM-0050	C6-HA1022-M-OHC	165	100	50	M8 ~ M27	1.76
HAM-0025	C8-HA412-M-OHC	120	76.5	35	M3 ~ M16	1.90
HAM-0051	C8-HA1022-M-OHC	165	100	50	M18 ~ M27	2.38

Synchro tapping SKB

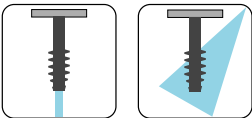
Shank

- BT
- DBT
- HSK
- C

Capacity

M2~M24
U No.2~U 7/8
P1/8~P1/2

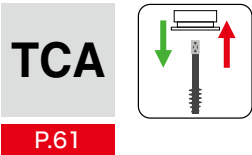
Features



- Exclusive for synchro tapping
- High cost performance



Compatible adapter



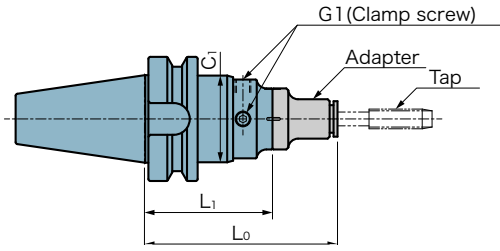
Adapter length selectable.



Select based on coolant supply method

Coolant supply method			
Tap oil hole	Not required	Required	Not required
Adapter (coolant pressure)	TCA	TCA-HP-SB (~ 2MPa) TCA-HP1-SB (~ 5MPa) TCA-ER + AR-GH (~ 7MPa)	TCA-HP-3H/ON-SB (~ 2MPa) TCA-HP1-3H/ON-SB (~ 5MPa) TCA-ER + AR-GHC (~ 7MPa)

BT shank

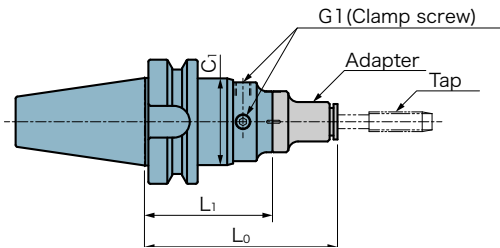


Unit: mm

Order code	Model	L ₀ ※	L ₁	C ₁	G ₁	Capacity	Weight (kg)
SKB-0001	BT30-SKB412	98	65	44	M8 P1.0	M2 ~ M12	0.73
SKB-0027	BT30-SKB1022	140	85	56	M10 P1.0	M10 ~ M24	0.89
SKB-0002	BT40-SKB412	98	65	44	M8 P1.0	M2 ~ M12	1.23
SKB-0028	BT40-SKB1022	130	75	56	M10 P1.0	M10 ~ M24	1.39
SKB-0003	BT50-SKB412	113	80	44	M8 P1.0	M2 ~ M12	3.88
SKB-0029	BT50-SKB1022	145	90	56	M10 P1.0	M10 ~ M24	4.09

The L₀ dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L₁ + H₁).

DBT shank (two-face clamping BT shank)

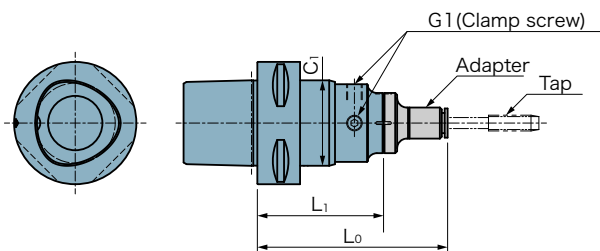


Unit: mm

Order code	Model	L ₀ ※	L ₁	C ₁	G ₁	Capacity	Weight (kg)
SKB-0024	DBT30-SKB412	98	65	44	M8 P1.0	M2 ~ M12	0.73
SKB-0040	DBT30-SKB1022	140	85	56	M10 P1.0	M10 ~ M24	0.89
SKB-0025	DBT40-SKB412	98	65	44	M8 P1.0	M2 ~ M12	1.24
SKB-0041	DBT40-SKB1022	130	75	56	M10 P1.0	M10 ~ M24	1.40
SKB-0026	DBT50-SKB412	113	80	44	M8 P1.0	M2 ~ M12	3.93
SKB-0042	DBT50-SKB1022	145	90	56	M10 P1.0	M10 ~ M24	4.14

The L₀ dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L₁ + H₁).

C shank

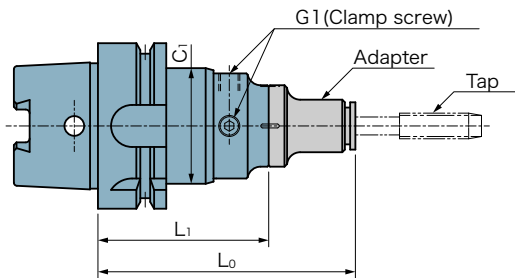


Unit: mm

Order code	Model	L ₀ ※	L ₁	C ₁	G ₁	Capacity	Weight (kg)
SKB-0010	C4-SKB412	98	65	44	M8 P1.0	M2 ~ M12	0.56
SKB-0011	C5-SKB412	98	65	44	M8 P1.0	M2 ~ M12	0.72
SKB-0012	C6-SKB412	98	65	44	M8 P1.0	M2 ~ M12	1.23
SKB-0033	C6-SKB1022	135	80	56	M10 P1.0	M10 ~ M24	1.52
SKB-0013	C8-SKB412	103	70	44	M8 P1.0	M2 ~ M12	1.97
SKB-0034	C8-SKB1022	135	80	56	M10 P1.0	M10 ~ M24	2.15

The L₀ dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L₁ + H₁).

HSK-A shank

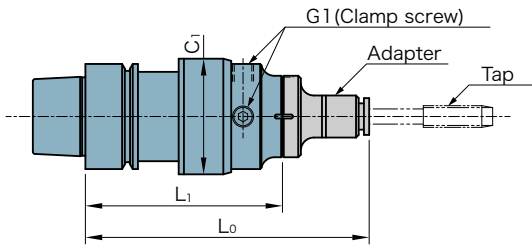


Unit: mm

Order code	Model	L0※	L1	C1	G1	Capacity	Weight (kg)
SKB-0015	HSK-A40-H-SKB412	108	75	44	M8 P1.0	M2 ~ M12	0.55
SKB-0016	HSK-A50-H-SKB412	113	80	44	M8 P1.0	M2 ~ M12	0.79
SKB-0017	HSK-A63-H-SKB412	98	65	44	M8 P1.0	M2 ~ M12	0.89
SKB-0036	HSK-A63-H-SKB1022	149	94	56	M10 P1.0	M10 ~ M24	1.54
SKB-0019	HSK-A100-H-SKB412	103	70	44	M8 P1.0	M2 ~ M12	2.31
SKB-0038	HSK-A100-H-SKB1022	135	80	56	M10 P1.0	M10 ~ M24	2.48

The coolant tube is of the movable type.
The L0 dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L1 + H1).

HSK-E shank



Unit: mm

Order code	Model	L0※	L1	C1	G1	Capacity	Weight (kg)
SKB-0022	HSK-E40-SKB412	108	75	44	M8 P1.0	M2 ~ M12	0.56
SKB-0023	HSK-E50-SKB412	113	80	44	M8 P1.0	M2 ~ M12	0.81

The coolant tube is of the movable type.
The L0 dimension applies when the TCA-S adapter is installed. For other cases, calculate using (L1 + H1).

Clamp screw



Order code	Model	Compatible holder
ACC-0160	CS8-10.5	SKB412
ACC-0158	CS10-12	SKB1022

Synchro tapping

RA-M

Shank

BT DBT

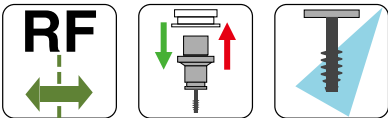
Capacity

M4~M12
U No.8~U 7/16
P1/8

YouTube
RA-M



Features

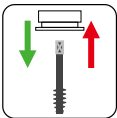


→ Exclusive for synchro tapping

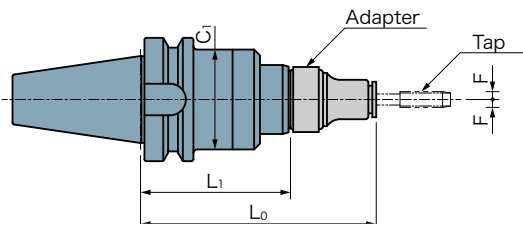


Compatible adapter

TC
MO
P.46



BT shank

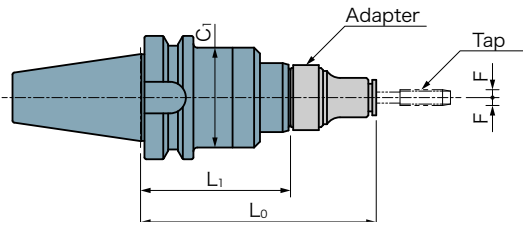


Unit: mm

Order code	Model	L0	L1	C1	F※	Capacity	Weight (kg)
RA-0002	BT30-RA412-M	132	88.5	51	1	M4 ~ M12	1.15
RA-0006	BT40-RA412-M	120	76.5	51	1	M4 ~ M12	1.52
RA-0007	BT50-RA412-M	135	91.5	51	1	M4 ~ M12	4.32

F – Radial movement

DBT shank (two-face clamping BT shank)



Unit: mm

Order code	Model	L0	L1	C1	F※	Capacity	Weight (kg)
RA-0021	DBT30-RA412-M	132	88.5	51	1	M4 ~ M12	1.15
RA-0022	DBT40-RA412-M	120	76.5	51	1	M4 ~ M12	1.53
RA-0023	DBT50-RA412-M	135	91.5	51	1	M4 ~ M12	4.37

F – Radial movement



Synchro tapping

RF

Shank

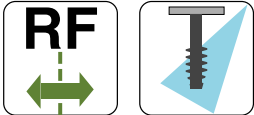


Capacity

M1~M14
 U No.0~U 9/16
 P1/8



Features



- Exclusive for synchro tapping
- Can also be used as a reamer holder.



Compatible collet

**AR
ER**

P.29

Optional accessories

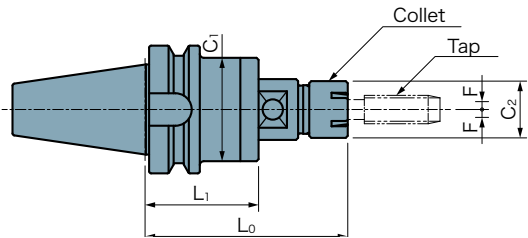


Collet



Spanner

BT shank

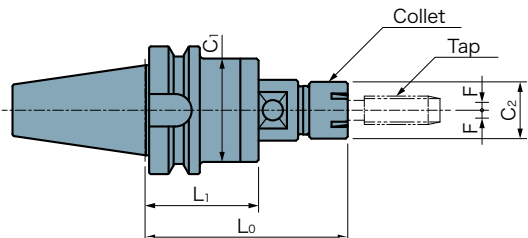


Unit: mm

Order code	Model	L0	L1	C1	C2	F*	Capacity	Spanner	Weight (kg)
RF-0001	BT30-RF103	75	53	35	12	0.3	M1 ~ M3	E8M	0.62
RF-0007	BT30-RF306	75	48	40	16	0.8	M3 ~ M6	E11M	0.60
RF-0021	BT30-RF414	112	70	51	28	1	M4 ~ M14	E20M	1.11
RF-0009	BT40-RF306	90	63	40	16	0.8	M3 ~ M6	E11M	1.29
RF-0025	BT40-RF414	100	58	51	28	1	M4 ~ M14	E20M	1.80
RF-0010	BT50-RF306	105	78	40	16	0.8	M3 ~ M6	E11M	3.65
RF-0028	BT50-RF414	115	73	51	28	1	M4 ~ M14	E20M	4.16

F – Radial movement

DBT shank (two-face clamping BT shank)

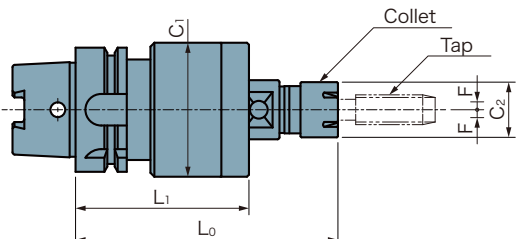


Unit: mm

Order code	Model	L0	L1	C1	C2	F*	Capacity	Spanner	Weight (kg)
RF-0005	DBT30-RF103	75	53	35	12	0.3	M1 ~ M3	E8M	0.62
RF-0018	DBT30-RF306	75	48	40	16	0.8	M3 ~ M6	E11M	0.60
RF-0045	DBT30-RF414	112	70	51	28	1	M4 ~ M14	E20M	1.11
RF-0019	DBT40-RF306	90	63	40	16	0.8	M3 ~ M6	E11M	1.30
RF-0046	DBT40-RF414	100	58	51	28	1	M4 ~ M14	E20M	1.81
RF-0020	DBT50-RF306	105	78	40	16	0.8	M3 ~ M6	E11M	3.70
RF-0047	DBT50-RF414	115	73	51	28	1	M4 ~ M14	E20M	4.21

F – Radial movement

HSK-A shank



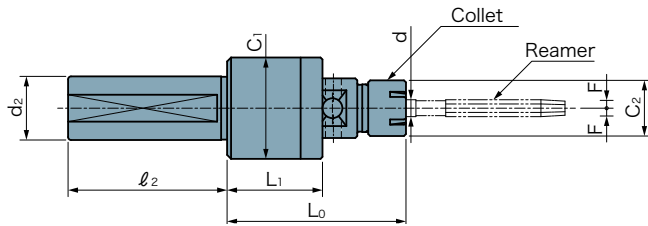
Unit: mm

Order code	Model	L0	L1	C1	C2	F*	Capacity	Spanner	Weight (kg)
RF-0043	HSK-A63-H-RF414	133	88	51	28	1	M 4 ~ M14	E20M	1.59

F – Radial movement
The coolant tube is of the movable type.



STT shank

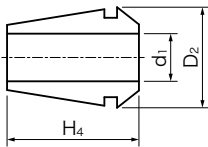


Unit: mm

Order code	Model	L ₀	L ₁	C ₁	C ₂	F [*]	Shank		Capacity	Spanner	Weight (kg)
							l ₂	d ₂			
RF-0013	STT20-RF306	67	40	40	16	0.8	60	20	M3 ~ M6	E11M	0.45
RF-0014	STT25-RF306	67	40	40	16	0.8	75	25	M3 ~ M6		0.59
RF-0034	STT25-RF414	90	48	51	28	1	75	25	M4 ~ M14	E20M	1.04
RF-0035	STT32-RF414	90	48	51	28	1	80	32	M4 ~ M14		1.26

F – Radial movement

ER collet



Unit: mm

Order code	Model	H ₄	D ₂
ER-0005	ER8-3 (φ 3~2.5)_M1 ~ M2.6	13.6	8.5
ER-0008	ER8-4 (φ 4~3.5)_M3	13.6	8.5

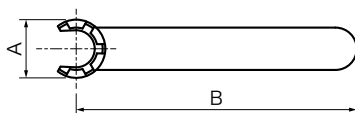
Unit: mm

Order code	Model	H ₄	D ₂
ER-0016	ER11-3 (φ 3~2.5)_M1 ~ M2.6	18	11.5
ER-0019	ER11-4 (φ 4~3.5)_M3	18	11.5
ER-0021	ER11-5 (φ 5~4.5)_M4	18	11.5
ER-0022	ER11-5.5 (φ 5.5~5)_M5	18	11.5
ER-0024	ER11-6 (φ 6~5.5)_M6	18	11.5

Unit: mm

Order code	Model	H ₄	D ₂
ER-0052	ER20-5 (φ 5~4)_M4	31.5	21
ER-0054	ER20-6 (φ 6~5)_M5.M6	31.5	21
ER-0056	ER20-7 (φ 7~6)_M8.M10	31.5	21
ER-0057	ER20-8 (φ 8~7)_P1/8	31.5	21
ER-0058	ER20-9 (φ 9~8)_M12	31.5	21
ER-0060	ER20-11 (φ 11~10)_M14, U9/16	31.5	21

Spanner



Unit: mm

Order code	Model	A	B	Weight (kg)
ACC-0191	E8M_Spanner (RF103)	12.4	70	0.02
ACC-0195	E11M_Spanner (RF306, 7-P, 1D, SC, ESS103)	16.8	90	0.04
ACC-0223	E20M_Spanner (RF414, RF414-OHC)	29	120	0.07

Tapper

SA-III

Shank

BT

DBT

HSK

ST

STT

MT

Capacity

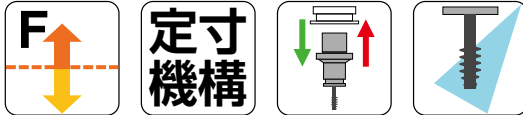
M2~M100

U No.2~U 4

P1/8~P3

 YouTube
SA-III


Features



- KATO TAPPER's Best-Selling Product
- NC machine tap holder compatible with various machines and workpieces
- Ideal for machining expensive workpieces such as prototypes, single units, and molds.
- Specifications such as spring force and stroke length can be modified depending on usage conditions.
- Right-hand thread is standard (left-hand thread also available upon request).



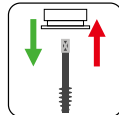
Compatible adapter

TC

P.38

**TC
MO**

P.46



For holders sized 206 and 50100, please use the TC-M adapter if you require one without torque limiter.

Adapter length selectable.



TC

TCA

ER

AR

BT shank

fig1

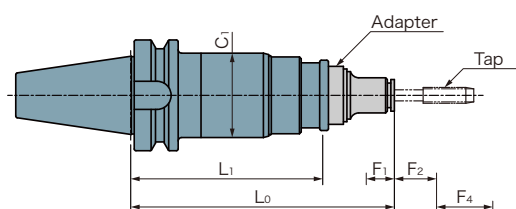
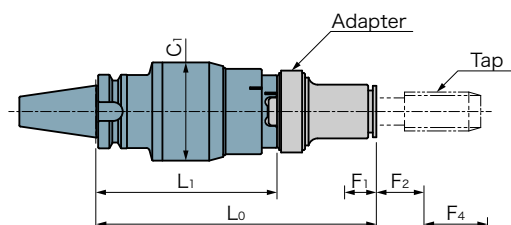


fig2



Unit: mm

Order code	fig	Model	L ₀	L ₁	C ₁	F ₁ *	F ₂ *	F ₄ *	Capacity	Weight (kg)
SA3-0001	1	BT30-SA206-III	120	88.0	33	5	(3)	(7.0)	M2 ~ M 8	0.64
SA3-0079		BT30-SA412-III	150	106.5	48	7	(5)	(8.5)	M3 ~ M16	1.14
SA3-0014		BT40-SA206-III	120	88.0	33	5	(3)	(7.0)	M2 ~ M 8	1.20
SA3-0090		BT40-SA412-III	150	106.5	48	7	(5)	(8.5)	M3 ~ M16	1.68
SA3-0236	2	BT40-SA1022-III	195	130.0	66	10	(6)	(11.0)	M8 ~ M27	2.62
SA3-0376		BT40-SA2035-III	240	155.0	84	10	(7)	(13.0)	M18 ~ M38	3.91
SA3-0025	1	BT50-SA206-III	150	118.0	33	5	(3)	(7.0)	M2 ~ M 8	3.98
SA3-0107		BT50-SA412-III	150	106.5	48	7	(5)	(8.5)	M3 ~ M16	4.17
SA3-0248		BT50-SA1022-III	195	130.0	66	10	(6)	(11.0)	M8 ~ M27	5.01
SA3-0382	2	BT50-SA2035-III	225	140.0	84	10	(7)	(13.0)	M18 ~ M38	5.83
SA3-0322		BT50-SA3050-III	285	185.0	104	15	(8)	(14.0)	M27 ~ M56	8.60
SA3-0353		BT50-SA50100-III	375	245.0	132	25	(20)	(6.0)	M50 ~ M100	15.90

F1 – Contraction / F2 – Extension / F4 – Reverse rotation extension
F2 and F4 values are for reference only.

DBT shank (two-face clamping BT shank)

fig1

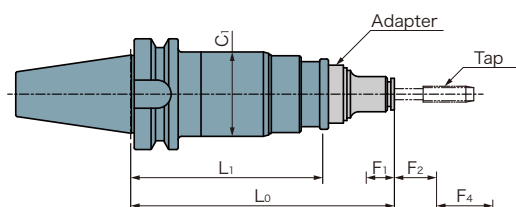
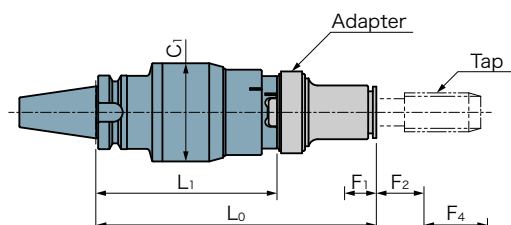


fig2



Unit: mm

Order code	fig	Model	L ₀	L ₁	C ₁	F ₁ *	F ₂ *	F ₄ *	Capacity	Weight (kg)
SA3-0075	1	DBT30-SA206-III	120	88.0	33	5	(3)	(7.0)	M2 ~ M 8	0.64
SA3-0211		DBT30-SA412-III	150	106.5	48	7	(5)	(8.5)	M3 ~ M16	1.14
SA3-0076		DBT40-SA206-III	120	88.0	33	5	(3)	(7.0)	M2 ~ M 8	1.21
SA3-0212		DBT40-SA412-III	150	106.5	48	7	(5)	(8.5)	M3 ~ M16	1.69
SA3-0315	2	DBT40-SA1022-III	195	130.0	66	10	(6)	(11.0)	M8 ~ M27	2.63
SA3-0413		DBT40-SA2035-III	240	155.0	84	10	(7)	(13.0)	M18 ~ M38	3.92
SA3-0077	1	DBT50-SA206-III	150	118.0	33	5	(3)	(7.0)	M2 ~ M 8	3.99
SA3-0213		DBT50-SA412-III	150	106.5	48	7	(5)	(8.5)	M3 ~ M16	4.22
SA3-0316		DBT50-SA1022-III	195	130.0	66	10	(6)	(11.0)	M8 ~ M27	5.06
SA3-0414	2	DBT50-SA2035-III	225	140.0	84	10	(7)	(13.0)	M18 ~ M38	5.88
SA3-0352		DBT50-SA3050-III	285	185.0	104	15	(8)	(14.0)	M27 ~ M56	8.65
SA3-0373		DBT50-SA50100-III	375	245.0	132	25	(20)	(6.0)	M50 ~ M100	15.95

F1 – Contraction / F2 – Extension / F4 – Reverse rotation extension
F2 and F4 values are for reference only.

HSK-A shank

fig1

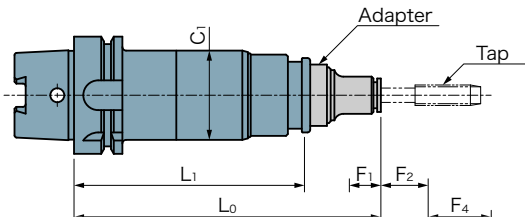
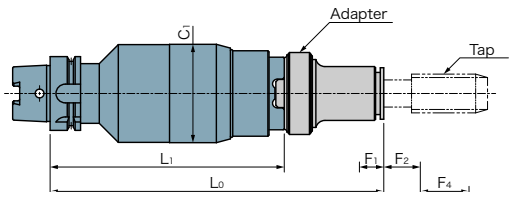


fig2



Unit: mm

Order code	fig	Model	L0	L1	C1	F1※	F2※	F4※	Capacity	Weight (kg)
SA3-0073	1	HSK-A63-H-SA206-III	150	118	33	5	(3)	(7.0)	M2 ~ M8	1.35
SA3-0204		HSK-A63-H-SA412-III	165	121.5	48	7	(5)	(8.5)	M3 ~ M16	1.65
SA3-0311		HSK-A63-H-SA1022-III	225	160	66	10	(6)	(11.0)	M8 ~ M27	2.75
SA3-0411	2	HSK-A63-H-SA2035-III	285	200	84	10	(7)	(13.0)	M18 ~ M38	4.12
SA3-0207	1	HSK-A100-H-SA412-III	165	121.5	48	7	(5)	(8.5)	M3 ~ M16	3.56
SA3-0313		HSK-A100-H-SA1022-III	225	160	66	10	(6)	(11.0)	M8 ~ M27	5.22
SA3-0412		HSK-A100-H-SA2035-III	265	180	84	10	(7)	(13.0)	M18 ~ M38	7.21

F1 - Contraction / F2 - Extension / F4 - Reverse rotation extension
F2 and F4 values are for reference only.
The coolant tube is of the movable type.

ST shank

fig1

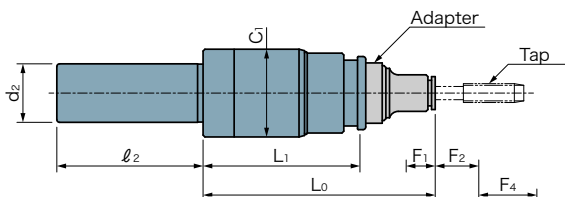
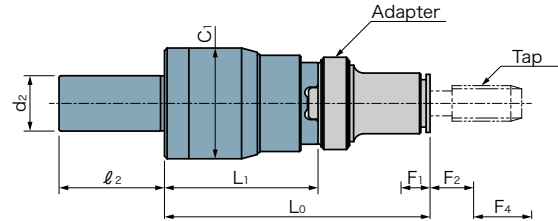


fig2



Unit: mm

Order code	fig	Model	L0	L1	C1	F1※	F2※	F4※	Shank		Capacity	Weight (kg)
									ℓ2	d2		
SA3-0049	1	ST20-SA206-III	103	71.0	33	5	(3)	(7.0)	60	20	M2 ~ M8	0.43
SA3-0056		ST25-SA206-III	103	71.0	33	5	(3)	(7.0)	75	25	M2 ~ M8	0.58
SA3-0167		ST25-SA412-III	127	83.5	48	7	(5)	(8.5)	75	25	M3 ~ M16	1.05
SA3-0174	2	ST32-SA412-III	127	83.5	48	7	(5)	(8.5)	80	32	M3 ~ M16	1.26
SA3-0284		ST32-SA1022-III	174	109.0	66	10	(6)	(11.0)	80	32	M8 ~ M27	2.33
SA3-0405		ST42-SA2035-III	201.5	116.5	84	10	(7)	(13.0)	80	42	M18 ~ M38	5.10

F1 - Contraction / F2 - Extension / F4 - Reverse rotation extension
F2 and F4 values are for reference only.

STT shank

fig1

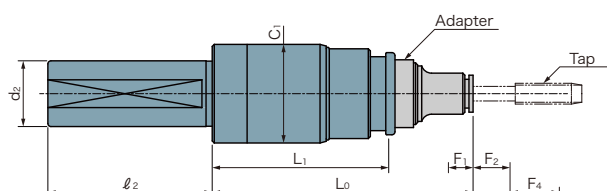
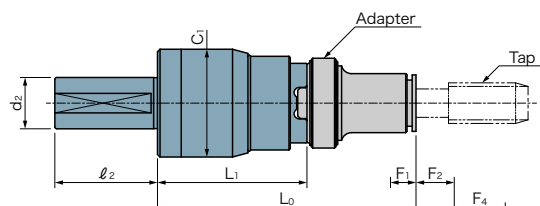


fig2



Unit: mm

Order code	fig	Model	L ₀	L ₁	C ₁	F ₁ ※	F ₂ ※	F ₄ ※	Shank ℓ ₂ d ₂	Capacity	Weight (kg)
SA3-0062	1	STT20-SA206-III	103	71.0	33	5	(3)	(7.0)	60 20	M2 ~ M8	0.58
SA3-0183		STT25-SA412-III	127	83.5	48	7	(5)	(8.5)	75 25	M3 ~ M16	1.05
SA3-0190		STT32-SA412-III	127	83.5	48	7	(5)	(8.5)	80 32	M3 ~ M16	1.26
SA3-0293		STT32-SA1022-III	174	109.0	66	10	(6)	(11.0)	80 32	M8 ~ M27	2.33
SA3-0297		STT40-SA1022-III	174	109.0	66	10	(6)	(11.0)	80 40	M8 ~ M27	2.61
SA3-0406	2	STT40-SA2035-III	201.5	116.5	84	10	(7)	(13.0)	80 40	M18 ~ M38	5.02

F1 – Contraction / F2 – Extension / F4 – Reverse rotation extension
F2 and F4 values are for reference only.

MT shank

fig1

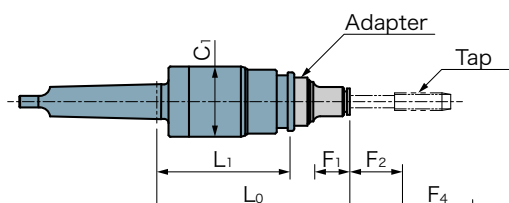
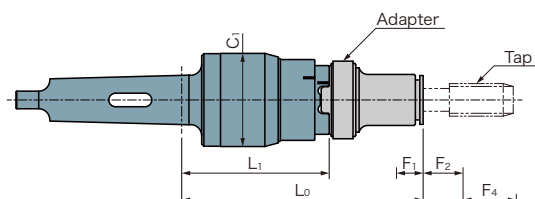


fig2



Unit: mm

Order code	fig	Model	L ₀	L ₁	C ₁	F ₁ ※	F ₂ ※	F ₄ ※	Capacity	Weight (kg)
SA3-0041	1	MT2-SA206-III	110.0	78.0	33	5	(3)	(7.0)	M2 ~ M8	0.41
SA3-0147		MT2-SA412-III	132.0	88.5	48	7	(5)	(8.5)	M3 ~ M12	0.85
SA3-0156		MT3-SA412-III	132.0	88.5	48	7	(5)	(8.5)	M3 ~ M16	0.99
SA3-0277		MT3-SA1022-III	181.0	116.0	66	10	(6)	(11.0)	M8 ~ M22	2.08
SA3-0280		MT4-SA1022-III	181.0	116.0	66	10	(6)	(11.0)	M8 ~ M27	2.37
SA3-0397	2	MT4-SA2035-III	218.0	133.0	84	10	(7)	(13.0)	M18 ~ M35	3.50
SA3-0399		MT5-SA2035-III_OKUMA	218.0	133.0	84	10	(7)	(13.0)	M18 ~ M38	4.27
SA3-0339		MT5-SA3050-III_OKUMA	278.0	178.0	104	15	(8)	(14.0)	M27 ~ M56	7.26
SA3-0364		MT5-SA50100-III_OKUMA	395.5	265.5	132	25	(20)	(6.0)	M50 ~ M75	15.70

F1 – Contraction / F2 – Extension / F4 – Reverse rotation extension
F2 and F4 values are for reference only.

Shank

MT

JT

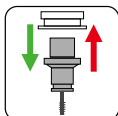
Capacity

M3~M75

U No.5~U 2 3/4

P1/8~P2 1/2

Features



- For drill presses capable of forward and reverse rotation.
- Prevents tap breakage when combined with TC adapters equipped with torque limiters.



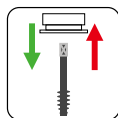
Compatible adapter

TC

P.38

TC
MO

P.46

折損
防止

For holders sized 50100, please use the TC-M adapter if you require one without torque limiter.

TC

TCA

ER

AR

Micro
FloatRadial
FloatAxial
Float

Extension

定寸
機構Self
Reversing折損
防止Adapter
Quick ChangeTap Quick
ChangeCenter
ThroughAdapter/Collet
ThroughExternal
CoolantTC
AdapterTC-MO
AdapterTCA
AdapterER/AR
Collet

JT/MT shank

fig1

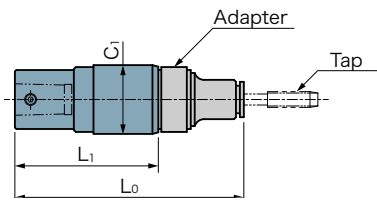


fig2

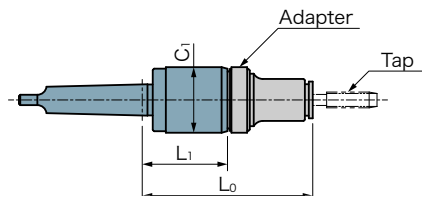


fig3

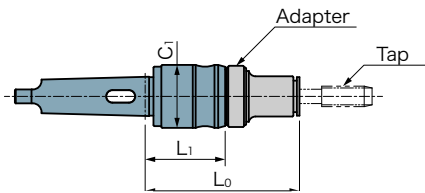
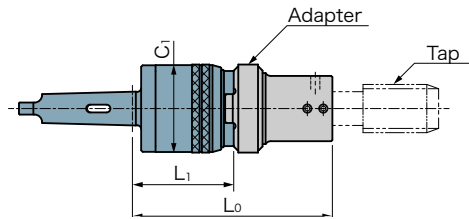


fig4



Unit: mm

Order code	fig	Model	L ₀	L ₁	C ₁	Capacity	Weight (kg)
HA-0008	1	JT6-HA412	116.5	73	35	M3 ~ M8	0.26
HA-0009		MT2-HA412	93	49.5	35	M3 ~ M12	0.29
HA-0010		MT3-HA412	93	49.5	35	M3 ~ M16	0.44
HA-0025	2	MT3-HA1022	130	65	50	M8 ~ M22	0.74
HA-0026		MT4-HA1022	131.5	66.5	50	M8 ~ M27	1.06
HA-0034		MT4-HA2035	176.5	91.5	72	M18 ~ M35	1.92
HA-0035		MT5-HA2035_OKUMA	176.5	91.5	72	M18 ~ M38	2.68
HA-0042	3	MT5-HA3050_OKUMA	214.5	114.5	92	M27 ~ M56	4.14
HA-0055	4	MT5-HA50100_OKUMA	263.5	133.5	116	M50 ~ M75	6.80

The standard cotter slot specification for MT5 and larger follows the Okuma Corporation's standard.
If you require cotter slot dimensions different from this specification, please contact us.

Tap size compatibility table for adapter

TC/TCA

○ This is a compatibility table of JIS standard taps for TC/TCA adapters.

Adapter model	Nominal tap size	Metric thread M	Unified thread U	Adapter model	Pipe thread (nominal tap size) P	Shank diameter d ₁	Square width K
TC206	M2	M2 M2.2·M2.3	No.2	TC412		3.0	2.5
	M2.5	M2.5·M2.6	U No.3·U No.4			3.0	2.5
	M3	M3·M3.5	U No.5·U No.6			4.0	3.2
	M4	M4·M4.5	U No.8			5.0	4.0
	M5	M5·M5.5	U No.10·U No.12			5.5	4.5
	M6	M6	U 1/4			6.0	4.5
	U5/16		U 5/16			6.1	5.0
	M8	M7·M8				6.2	5.0
	M10	M9·M10	U 3/8			7.0	5.5
	U7/16	M11	U 7/16		P 1/16·P 1/8	8.0	6.0
TC412	M12	M12		TCA412		8.5	6.5
	U1/2		U 1/2			9.0	7.0
		M13				9.5	7.0
	M14	M14·M15	U 9/16			10.5	8.0
	U5/8		U 5/8		P 1/4	11.0	9.0
	M16	M16				12.0	9.0
		M17				12.5	10.0
	M18	M18	U 3/4			13.0	10.0
	M20	M20			P 3/8	14.0	11.0
	M22	M22	U 7/8			15.0	12.0
TC1022	M24	M24·M25		TCA1022		17.0	13.0
	M27	M26·M27	U 1		P 1/2	18.0	14.0
	M28	M28			P 5/8	19.0	15.0
	U1 1/8		U 1 1/8			20.0	15.0
	M30	M30				21.0	17.0
	M32	M32	U 1 1/4			22.0	17.0
	M33	M33			P 3/4	23.0	17.0
	M35	M35	U 1 3/8		P 7/8	24.0	19.0
	M36	M36·M38				25.0	19.0
	M39	M39·M40	U 1 1/2		P1	26.0	21.0
TC2035	M42	M42	U 1 5/8	TC412	P1 1/8	28.0	21.0
	M45	M45	U 1 3/4			30.0	23.0
	M48	M48			P1 1/4	32.0	26.0
	M50	M50	U 2		P1 3/8	35.0	26.0
	M52	M52			P1 1/2	38.0	29.0
	M56	M55·M56	U 2 1/4		P1 5/8	40.0	32.0
			U 2 1/4		P1 3/4	42.0	32.0
	M60	M58·M60				44.0	35.0
	M64	M62·M64	U 2 1/2			45.0	35.0
	M65	M65			P2	46.0	35.0
TC3050	M68	M68		TCA412		48.0	38.0
	M72	M70·M72	U 2 3/4		P2 1/4	50.0	38.0
	M82	M75·M76·M78·M80·M82	U 3·U 3 1/4			52.0	41.0
	M90	M85·M90	U 3 1/2		P2 1/2	55.0	41.0
	M100	M95·M100	U 3 3/4·U 4			58.0	46.0
					P2 3/4	60.0	46.0
					P3	65.0	50.0
TC50100				TC1022			
TC50100				TC2035			

Tap size compatibility table for collet

ER/AR

○ This is a compatibility table of JIS standard taps for ER/AR collets.

When ordering nominal size M4 with the AR16-GH model,
it will be supplied as the AR16-GB type.

Adapter model		Nominal tap size	Metric thread M	Unified thread U	Pipe thread (nominal tap size) P	Shank diameter d ₁	Square width K
ER8	ER11	3.0-2.5	M1 ~ M2.6	U No.0 ~ U No.4		3.0	2.5
		4.0-3.5	M3·M3.5	U No.5·U No.6		4.0	3.2
		5.0-4.5	M4·M4.5	U No.8		5.0	4.0
		5.5-5.0	M5·M5.5	U No.10·U No.12		5.5	4.5
		6.0-5.5	M6	U 1/4		6.0	4.5
AR16-GH/GB※	ER20-GB	M4※	M4·M4.5	U No.8		5.0	4.0
		M5	M5·M5.5	U No.10·U No.12		5.5	4.5
		M6	M6	U 1/4		6.0	4.5
		U5/16		U 5/16		6.1	5.0
		M8	M7·M8			6.2	5.0
		M10	M9·M10	U 3/8		7.0	5.5
		U7/16.P1/8	M11	U 7/16	P1/16 · P1/8	8.0	6.0
		M12	M12			8.5	6.5
		U1/2		U 1/2		9.0	7.0
		M14	M14·M15	U 9/16		10.5	8.0
		P1/4			P1/4	11.0	9.0
		U5/8		U 5/8		12.0	9.0
		M16	M16			12.5	10.0
		M18.P3/8	M18	U 3/4	P3/8	14.0	11.0
		M20	M20			15.0	12.0
		M22	M22	U 7/8		17.0	13.0

Adapter **TC**

Capacity

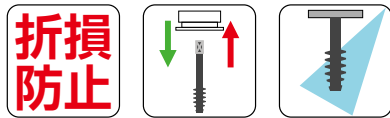
M2 ~ M100, U No.2 ~ U 4, P 1/8 ~ P 3

Pipe threads (Rc, Rp, G, PT, PF, PS) are collectively indicated as P.
P1/16 can be replaced with P1/8 if the shaft diameter and flat width are the same.

Whitworth (W) threads are compatible with Unified (U) threads.

Please contact us for standards other than JIS.

Features



- ➔ Prevents tap breakage with torque limiter-equipped adapters.
 - ➔ Torque values of the torque limiter are set according to tap size and workpiece material.
 - ➔ Four adapter lengths are available, eliminating the need for long taps.
- For carbide taps, please use AR or ER collets.



Torque specifications for torque limiter (breakage prevention) settings

Application	Torque setting	Setting value	Applicable material	Model Example	Image of engraving
For general use	Standard	Set to approximately twice the cutting torque of S45C.	SC SCM FC DFC and others	TC412-M12	
For light cutting materials	YELLOW	Approx. 20% below standard	ADC BC MC Nylon Resin and others	TC412-YELLOW-M12	
For hard-to-cut materials	RED	Approx. 30% above standard	SUS SK SKD SKS and others	TC412-RED-M12	
For rolling taps	ROLL	Approx. 60% above standard	SC SCM ADC and others	TC412-ROLL-M12	

YELLOW, RED, and ROLL are not listed. All dimensions correspond to the standard torque settings.
Please contact us for order codes. Some tap sizes may not support torque settings.

Workability comparison between TC adapters and collet chucks

One-touch tap installation

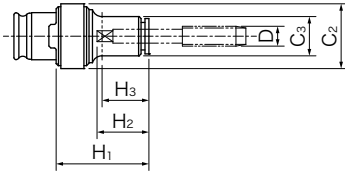
Driven by the square section of the tap, preventing slippage

Varies depending on the nut tightening force

Tool length remains constant even after tap replacement

Variation occurs

TC206 (M2 ~ M8, U No.2 ~ U 5/16)

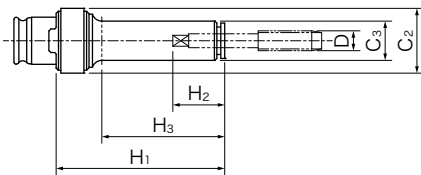


Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-0001	TC206-M2	32	20	21	15	20	0.07
TC-0002	TC206-M3, U No.5	32	20	21	15	21	0.07
TC-0004	TC206-M4, U No.8	32	20	21	15	22	0.07
TC-0006	TC206-M5, U No.10 (12)	32	20	21	15	22	0.07
TC-0008	TC206-M6, U 1/4	32	20	21	15	22	0.07
TC-0010	TC206-U 5/16	32	20	21	15	23	0.07
TC-0012	TC206-M8 (7)	32	20	21	15	23	0.07
TC-0014	TC206-M2.2, M2.3, U No.2	32	20	21	15	20	0.07
TC-0015	TC206-M2.5, M2.6, U No.4	32	20	21	15	20	0.07
TC-0016	TC206-M3.5, U No.6	32	20	21	15	21	0.07

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC206-L+30/60 (M2 ~ M8, U No.2 ~ U 5/16)



Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1003	TC206-L+30-M2	62	50	21	15	20	0.08
TC-1004	TC206-L+30-M3, U No.5	62	50	21	15	21	0.08
TC-1005	TC206-L+30-M4, U No.8	62	50	21	15	22	0.08
TC-1006	TC206-L+30-M5, U No.10 (12)	62	50	21	15	22	0.08
TC-1007	TC206-L+30-M6, U 1/4	62	50	21	15	22	0.08
TC-1008	TC206-L+30-U 5/16	62	50	21	15	23	0.08
TC-1009	TC206-L+30-M8 (7)	62	50	21	15	23	0.08
TC-1010	TC206-L+30-M2.2, M2.3, U No.2	62	50	21	15	20	0.08
TC-1011	TC206-L+30-M2.5, M2.6, U No.4	62	50	21	15	20	0.08

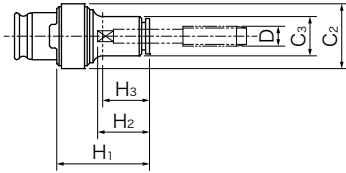
C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1083	TC206-L+60-M2	92	80	21	15	20	0.11
TC-1084	TC206-L+60-M3, U No.5	92	80	21	15	21	0.11
TC-1085	TC206-L+60-M4, U No.8	92	80	21	15	22	0.11
TC-1086	TC206-L+60-M5, U No.10 (12)	92	80	21	15	22	0.11
TC-1087	TC206-L+60-M6, U 1/4	92	80	21	15	22	0.11
TC-1088	TC206-L+60-U 5/16	92	80	21	15	23	0.11
TC-1089	TC206-L+60-M8 (7)	92	80	21	15	23	0.11
TC-1090	TC206-L+60-M2.2, M2.3, U No.2	92	80	21	15	20	0.11
TC-1091	TC206-L+60-M2.5, M2.6, U No.4	92	80	21	15	20	0.11

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC412 (M3 ~ M16, U No.5 ~ U 5/8, P1/8 ~ P3/8)

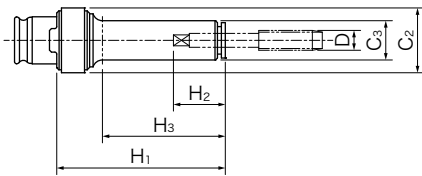


Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-0071	TC412-M3, U No.5	39.5	15	33	16	21	0.19
TC-0073	TC412-M4, U No.8	39.5	15	33	16	22	0.19
TC-0076	TC412-M5, U No.10 (12)	43.5	20.5	33	20	26	0.19
TC-0079	TC412-M6, U 1/4	43.5	20.5	33	20	26	0.19
TC-0082	TC412-U 5/16	43.5	20.5	33	20	27	0.19
TC-0085	TC412-M8 (7)	43.5	20.5	33	20	27	0.19
TC-0088	TC412-M10 (9), U 3/8	43.5	20.5	33	20	27	0.19
TC-0091	TC412-P1/8, U 7/16 (M11)	43.5	20.5	33	20	28	0.19
TC-0093	TC412-M12	43.5	20.5	33	20	28	0.19
TC-0096	TC412-U 1/2	43.5	20.5	33	20	29	0.19
TC-0098	TC412-M14, U 9/16	49.5	33	33	27	31	0.23
TC-0100	TC412-U 5/8	49.5	33	33	27	32	0.23
TC-0102	TC412-M16	49.5	33	33	27	33	0.23
TC-0111	TC412-P1/4	49.5	33	33	27	32	0.23
TC-0113	TC412-P3/8	49.5	33	33	27	34	0.23

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC412-L+60/100 (M3 ~ M16, U No.5 ~ U 5/8, P1/8 ~ P3/8)



Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1132	TC412-L+60-M3, U No.5	103.5	75	33	16	21	0.24
TC-1134	TC412-L+60-M4, U No.8	103.5	75	33	16	22	0.24
TC-1136	TC412-L+60-M5, U No.10 (12)	103.5	75	33	16	22	0.24
TC-1137	TC412-L+60-M6, U 1/4	103.5	75	33	16	22	0.24
TC-1138	TC412-L+60-U 5/16	103.5	75	33	16	23	0.24
TC-1139	TC412-L+60-M8 (7)	103.5	75	33	16	23	0.24
TC-1140	TC412-L+60-M10 (9), U 3/8	103.5	80	33	20	27	0.26
TC-1141	TC412-L+60-P1/8, U 7/16 (M11)	103.5	80	33	20	28	0.26
TC-1142	TC412-L+60-M12	103.5	80	33	20	28	0.26
TC-1143	TC412-L+60-U 1/2	103.5	80	33	20	29	0.26
TC-1144	TC412-L+60-M14, U 9/16	109.5	93	33	27	31	0.40
TC-1145	TC412-L+60-U 5/8	109.5	93	33	27	32	0.40
TC-1146	TC412-L+60-M16	109.5	93	33	27	33	0.40
TC-1149	TC412-L+60-P1/4	109.5	93	33	27	32	0.40
TC-1150	TC412-L+60-P3/8	109.5	93	33	27	34	0.40

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Micro
FloatRadial
FloatAxial
Float

Extension

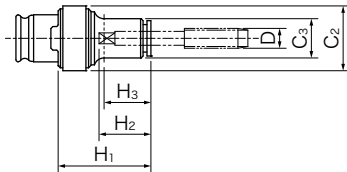
定寸
機構Self
Reversing折損
防止Adapter
Quick ChangeTap Quick
ChangeCenter
ThroughAdapter/Collet
ThroughExternal
CoolantTC
AdapterTC-MO
AdapterTCA
AdapterER/AR
Collet

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1450	TC412-L+100-M3, U No.5	143.5	115	33	16	21	0.26
TC-1451	TC412-L+100-M4, U No.8	143.5	115	33	16	22	0.26
TC-1453	TC412-L+100-M5, U No.10 (12)	143.5	115	33	16	22	0.26
TC-1455	TC412-L+100-M6, U 1/4	143.5	115	33	16	22	0.26
TC-1457	TC412-L+100-U 5/16	143.5	115	33	16	23	0.26
TC-1458	TC412-L+100-M8 (7)	143.5	115	33	16	23	0.26
TC-1460	TC412-L+100-M10 (9), U 3/8	143.5	120	33	20	27	0.31
TC-1461	TC412-L+100-P1/8, U 7/16 (M11)	143.5	120	33	20	28	0.31
TC-1463	TC412-L+100-M12	143.5	120	33	20	28	0.31
TC-1464	TC412-L+100-U 1/2	143.5	120	33	20	29	0.31
TC-1465	TC412-L+100-M14, U 9/16	149.5	133	33	27	31	0.53
TC-1466	TC412-L+100-U 5/8	149.5	133	33	27	32	0.53
TC-1467	TC412-L+100-M16	149.5	133	33	27	33	0.53
TC-1470	TC412-L+100-P1/4	149.5	133	33	27	32	0.53
TC-1471	TC412-L+100-P3/8	149.5	133	33	27	34	0.53

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC1022 (M7 ~ M27, U 3/8 ~ U 1, P1/8 ~ P3/4)

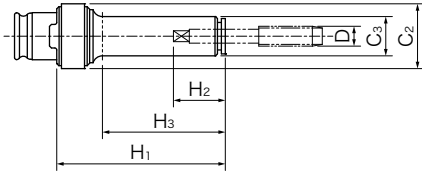


Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-0289	TC1022-M8 (7)	65	38	50	32	38	0.61
TC-0291	TC1022-M10 (9), U 3/8	65	38	50	32	38	0.61
TC-0294	TC1022-U 7/16 (M11)	65	38	50	32	39	0.61
TC-0296	TC1022-M12	65	38	50	32	39	0.61
TC-0299	TC1022-U 1/2	65	38	50	32	40	0.61
TC-0301	TC1022-M14, U 9/16	65	38	50	32	41	0.61
TC-0304	TC1022-U 5/8	65	38	50	32	42	0.63
TC-0306	TC1022-M16	65	38	50	32	43	0.63
TC-0309	TC1022-M18, U 3/4	65	38	50	32	44	0.63
TC-0312	TC1022-M20	65	38	50	32	45	0.63
TC-0316	TC1022-M22, U 7/8	65	38	50	32	46	0.63
TC-0320	TC1022-M24 (25)	68	42.5	50	36	48	0.65
TC-0323	TC1022-M27 (26), U 1	68	42.5	50	36	48	0.65
TC-0330	TC1022-P1/8	59	20.5	50	20	29	0.52
TC-0332	TC1022-P1/4	59	25.5	50	27	32	0.56
TC-0334	TC1022-P3/8	59	25.5	50	27	34	0.56
TC-0337	TC1022-P1/2	62	38.5	50	36	42	0.63
TC-0339	TC1022-P5/8	62	38.5	50	36	43	0.63
TC-0341	TC1022-P3/4	65	42	50	40	45	0.68

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC1022-L+60/100 (M7 ~ M27, U 3/8 ~ U 1, P1/8 ~ P3/4)



Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-1224	TC1022-L+60-M8 (7)	125	86.5	50	20	27	0.70
TC-1225	TC1022-L+60-M10 (9), U 3/8	125	86.5	50	20	27	0.70
TC-1226	TC1022-L+60-U 7/16 (M11)	125	86.5	50	20	28	0.70
TC-1227	TC1022-L+60-M12	125	86.5	50	20	28	0.70
TC-1229	TC1022-L+60-U 1/2	125	86.5	50	20	29	0.70
TC-1230	TC1022-L+60-M14, U 9/16	125	91.5	50	27	31	0.80
TC-1231	TC1022-L+60-U 5/8	125	91.5	50	27	32	0.80
TC-1232	TC1022-L+60-M16	125	91.5	50	27	33	0.80
TC-1233	TC1022-L+60-M18, U 3/4	125	98	50	32	44	0.85
TC-1234	TC1022-L+60-M20	125	98	50	32	45	0.85
TC-1235	TC1022-L+60-M22, U 7/8	125	98	50	32	46	0.85
TC-1236	TC1022-L+60-M24 (25)	128	104.5	50	36	48	0.90
TC-1237	TC1022-L+60-M27 (26), U 1	128	104.5	50	36	48	0.90
TC-1238	TC1022-L+60-P1/8	119	80.5	50	20	29	0.62
TC-1239	TC1022-L+60-P1/4	119	85.5	50	27	32	0.76
TC-1240	TC1022-L+60-P3/8	119	85.5	50	27	34	0.76
TC-1241	TC1022-L+60-P1/2	122	98.5	50	36	42	0.86
TC-1243	TC1022-L+60-P5/8	122	98.5	50	36	43	0.86
TC-1244	TC1022-L+60-P3/4	125	102	50	40	45	1.06

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

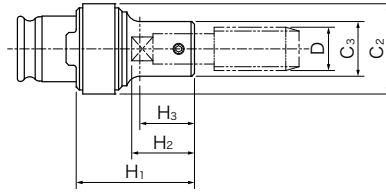
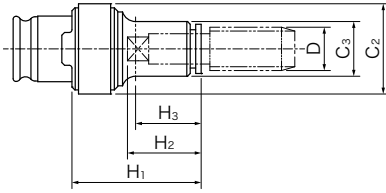
Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-1557	TC1022-L+100-M8 (7)	165	126.5	50	20	27	0.85
TC-1558	TC1022-L+100-M10 (9), U 3/8	165	126.5	50	20	27	0.85
TC-1560	TC1022-L+100-U 7/16 (M11)	165	126.5	50	20	28	0.85
TC-1561	TC1022-L+100-M12	165	126.5	50	20	28	0.85
TC-1562	TC1022-L+100-U 1/2	165	126.5	50	20	29	0.85
TC-1563	TC1022-L+100-M14, U 9/16	165	131.5	50	27	31	0.90
TC-1564	TC1022-L+100-U 5/8	165	131.5	50	27	32	0.90
TC-1565	TC1022-L+100-M16	165	131.5	50	27	33	0.90
TC-1568	TC1022-L+100-M18, U 3/4	165	138.5	50	32	44	1.00
TC-1569	TC1022-L+100-M20	165	138.5	50	32	45	1.00
TC-1570	TC1022-L+100-M22, U 7/8	165	138.5	50	32	46	1.00
TC-1571	TC1022-L+100-M24 (25)	168	144.5	50	36	48	1.05
TC-1572	TC1022-L+100-M27 (26), U 1	168	144.5	50	36	48	1.05
TC-1573	TC1022-L+100-P1/8	159	120.5	50	20	29	0.66
TC-1574	TC1022-L+100-P1/4	159	125.5	50	27	32	0.86
TC-1575	TC1022-L+100-P3/8	159	125.5	50	27	34	0.86
TC-1576	TC1022-L+100-P1/2	162	138.5	50	36	42	1.03
TC-1578	TC1022-L+100-P5/8	162	138.5	50	36	43	1.03
TC-1579	TC1022-L+100-P3/4	165	142	50	40	45	1.28

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.



TC2035 (M18 ~ M38, U 3/4 ~ U 1_3/8, P3/8 ~ P1)



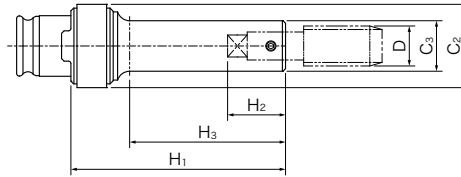
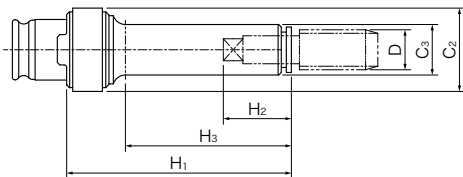
-SL denotes side lock type.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-0566	TC2035-M18, U 3/4	85	50	70	46	45	1.72
TC-0567	TC2035-M20	85	50	70	46	46	1.72
TC-0569	TC2035-M22, U 7/8	85	50	70	46	47	1.72
TC-0570	TC2035-M24 (25)	85	50	70	46	49	1.72
TC-0571	TC2035-M27 (26), U 1	85	50	70	46	49	1.72
TC-0572	TC2035-M28	85	50	70	46	56	1.72
TC-0573	TC2035-U 1_1/8	85	50	70	46	56	1.72
TC-0574	TC2035-M30	85	50	70	46	56	1.72
TC-0575	TC2035-M32, U 1_1/4	85	50	70	46	58	1.72
TC-0576	TC2035-M33	85	50	70	46	58	1.72
TC-0577	TC2035-M35, U 1_3/8	85	50	70	46	60	1.72
TC-0578	TC2035-M36 (38)	85	50	70	46	60	1.72
TC-0580	TC2035-P3/8-SL	71	36	70	46	34	1.66
TC-0581	TC2035-P1/2-SL	71	36	70	46	39	1.66
TC-0582	TC2035-P5/8-SL	71	36	70	46	40	1.66
TC-0583	TC2035-P3/4-SL	71	36	70	46	42	1.66
TC-0585	TC2035-P7/8-SL	71	36	70	46	44	1.66
TC-0586	TC2035-P1-SL	71	36	70	46	46	1.66

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC2035-L+60 (M18 ~ M38, U 3/4 ~ U 1_3/8, P3/8 ~ P1)



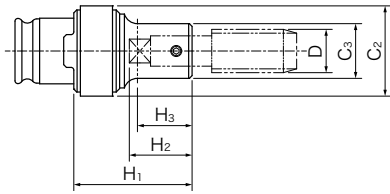
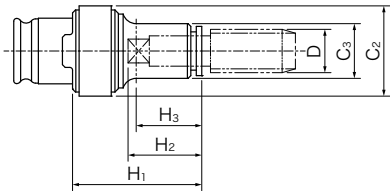
-SL denotes side lock type.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1325	TC2035-L+60-M18, U 3/4	145	97	70	32	45	1.45
TC-1326	TC2035-L+60-M20	145	97	70	32	46	1.45
TC-1327	TC2035-L+60-M22, U 7/8	145	97	70	32	47	1.45
TC-1328	TC2035-L+60-M24 (25)	145	101.5	70	36	49	1.65
TC-1329	TC2035-L+60-M27 (26), U 1	145	101.5	70	36	49	1.65
TC-1330	TC2035-L+60-M28	145	110	70	46	56	1.90
TC-1331	TC2035-L+60-U 1_1/8	145	110	70	46	56	1.90
TC-1332	TC2035-L+60-M30	145	110	70	46	56	1.90
TC-1333	TC2035-L+60-M32, U 1_1/4	145	110	70	46	58	1.90
TC-1334	TC2035-L+60-M33	145	110	70	46	58	1.90
TC-1335	TC2035-L+60-M35, U 1_3/8	145	110	70	46	60	1.90
TC-1336	TC2035-L+60-M36 (38)	145	110	70	46	60	1.90
TC-1337	TC2035-L+60-P3/8-SL	131	96	70	46	34	2.30
TC-1338	TC2035-L+60-P1/2-SL	131	96	70	46	39	2.30
TC-1339	TC2035-L+60-P5/8-SL	131	96	70	46	40	2.30
TC-1340	TC2035-L+60-P3/4-SL	131	96	70	46	42	2.30
TC-1341	TC2035-L+60-P7/8-SL	131	96	70	46	44	2.30
TC-1342	TC2035-L+60-P1-SL	131	96	70	46	46	2.30

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC3050 (M26 ~ M56, U 1 ~ U 2_1/4, P3/4 ~ P1_3/8)



-SL denotes side lock type.

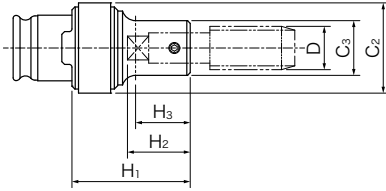
Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-0766	TC3050-M27 (26), U 1	85	47	87	64	49	3.42
TC-0767	TC3050-M28	85	47	87	64	56	3.42
TC-0768	TC3050-U 1_1/8	85	47	87	64	56	3.42
TC-0769	TC3050-M30	100	62	87	64	57	3.50
TC-0770	TC3050-M32, U 1_1/4	100	62	87	64	59	3.50
TC-0771	TC3050-M33	100	62	87	64	59	3.50
TC-0772	TC3050-M35, U 1_3/8	100	62	87	64	61	3.50
TC-0773	TC3050-M36 (38)	100	62	87	64	61	3.50
TC-0775	TC3050-M39 (40), U 1_1/2	100	62	87	64	63	3.50
TC-0776	TC3050-M42, U 1_5/8	100	62	87	64	67	3.50
TC-0778	TC3050-M45, U 1_3/4	100	62	87	64	67	3.50
TC-0779	TC3050-M48	100	62	87	64	69	3.50
TC-0781	TC3050-M50, U 2	100	62	87	64	72	3.50
TC-0782	TC3050-M52	100	62	87	64	72	3.50
TC-0783	TC3050-M56 (55), U 2_1/4	105	69.5	87	68	77	3.57
TC-0786	TC3050-P3/4-SL	85	47	87	64	42	3.59
TC-0787	TC3050-P7/8-SL	85	47	87	64	44	3.59
TC-0788	TC3050-P1-SL	85	47	87	64	46	3.59
TC-0789	TC3050-P1_1/8-SL	85	47	87	64	46	3.59
TC-0790	TC3050-P1_1/4-SL	85	47	87	64	52	3.59
TC-0791	TC3050-P1_3/8-SL	85	47	87	64	52	3.59
TC-0792	TC3050-P1_1/2-SL	85	47	87	64	54	3.59
TC-0793	TC3050-P1_3/4-SL	85	47	87	64	57	3.59

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.



TC50100 (M50 ~ M100, U 2 ~ U 4, P1_5/8 ~ P3)



-SL denotes side lock type.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-0945	TC50100-M50, U 2-SL	130	81	116	86	78	7.99
TC-0946	TC50100-M52-SL	130	81	116	86	78	7.99
TC-0947	TC50100-M56, M55, U 2_1/4 (φ 44)-SL	130	81	116	86	81	7.99
TC-0948	TC50100-U 2_1/4 (φ 45)-SL	130	81	116	86	81	7.99
TC-0949	TC50100-M60 (M58)-SL	130	81	116	86	81	7.99
TC-0950	TC50100-M64 (62), U 2_1/2-SL	130	81	116	86	85	7.99
TC-0951	TC50100-M65-SL	130	81	116	86	85	7.99
TC-0952	TC50100-M68-SL	130	81	116	86	87	7.99
TC-0953	TC50100-M72 (70), U 2_3/4-SL	130	81	116	86	87	7.99
TC-0954	TC50100-M82 (M75-M82), U 3-SL	130	81	116	86	93	7.99
TC-0955	TC50100-M90 (M85), U 3_1/2-SL	130	81	116	86	93	7.99
TC-0956	TC50100-M100 (M95), U 4 (U 3_3/4)-SL	130	84.5	116	90	93	7.64
TC-0957	TC50100-P1_5/8-SL	113	64	116	86	61	7.64
TC-0958	TC50100-P1_3/4-SL	113	64	116	86	61	7.64
TC-0959	TC50100-P2-SL	113	64	116	86	64	7.64
TC-0960	TC50100-P2_1/4-SL	113	64	116	86	68	7.64
TC-0961	TC50100-P2_1/2-SL	113	64	116	86	70	7.64
TC-0962	TC50100-P2_3/4-SL	113	64	116	86	76	7.64
TC-0963	TC50100-P3-SL	113	64	116	86	87	7.64

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Adapter **TC-MO**

Capacity

**M3 ~ M56, U No.5 ~ U 2_1/4,
P 1/8 ~ P 1_3/4**

Pipe threads (Rc, Rp, G, PT, PF, PS) are collectively indicated as P.
P1/16 can be replaced with P1/8 if the shaft diameter and flat width are the same.

Whitworth (W) threads are compatible with Unified (U) threads.
Please contact us for standards other than JIS.

Coolant pump pressure

~ 0.4MPa

Features



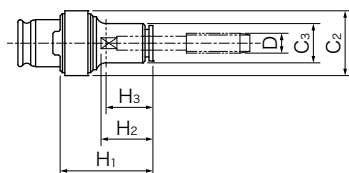
- TC adapter type without torque limiter.
 - Unaffected by workpiece material or tap type.
 - Recommended for mass production and CNC-controlled machines.
 - Four adapter lengths are available, eliminating the need for long taps.
- For carbide taps, please use AR or ER collets.

! NOTE

For center-through coolant supply, please use taps with oil holes.
Center-through coolant supply is not available for sizes M5 and below.
Please consult us if you wish to use it.



TC412-MO (M3 ~ M16, U No.5 ~ U 5/8, P1/8 ~ P3/8)

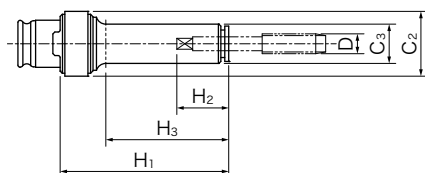


Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-0207	TC412-MO-M3, U No.5	39.5	15	33	16	21	0.19
TC-0209	TC412-MO-M4, U No.8	39.5	15	33	16	22	0.19
TC-0211	TC412-MO-M5, U No.10 (12)	43.5	20.5	33	20	26	0.19
TC-0213	TC412-MO-M6, U 1/4	43.5	20.5	33	20	26	0.19
TC-0215	TC412-MO-U 5/16	43.5	20.5	33	20	27	0.19
TC-0217	TC412-MO-M8 (7)	43.5	20.5	33	20	27	0.19
TC-0219	TC412-MO-M10 (9), U 3/8	43.5	20.5	33	20	27	0.19
TC-0221	TC412-MO-P1/8, U 7/16 (M11)	43.5	20.5	33	20	28	0.19
TC-0223	TC412-MO-M12	43.5	20.5	33	20	28	0.19
TC-0225	TC412-MO-U 1/2	43.5	20.5	33	20	29	0.19
TC-0227	TC412-MO-M14, U 9/16	49.5	33	33	27	31	0.23
TC-0229	TC412-MO-U 5/8	49.5	33	33	27	32	0.23
TC-0231	TC412-MO-M16	49.5	33	33	27	33	0.23
TC-0238	TC412-MO-P1/4	49.5	33	33	27	32	0.23
TC-0240	TC412-MO-P3/8	49.5	33	33	27	34	0.23

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC412-MO-L+60/100 (M3 ~ M16, U No.5 ~ U 5/8, P1/8 ~ P3/8)



Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-1205	TC412-MO-L+60-M3, U No.5	103.5	75	33	16	21	0.24
TC-1207	TC412-MO-L+60-M4, U No.8	103.5	75	33	16	22	0.24
TC-1209	TC412-MO-L+60-M5, U No.10 (12)	103.5	75	33	16	22	0.24
TC-1211	TC412-MO-L+60-M6, U 1/4	103.5	75	33	16	22	0.24
TC-1212	TC412-MO-L+60-U 5/16	103.5	75	33	16	23	0.24
TC-1213	TC412-MO-L+60-M8 (7)	103.5	75	33	16	23	0.24
TC-1214	TC412-MO-L+60-M10 (9), U 3/8	103.5	80	33	20	27	0.26
TC-1215	TC412-MO-L+60-P1/8, U 7/16 (M11)	103.5	80	33	20	28	0.26
TC-1216	TC412-MO-L+60-M12	103.5	80	33	20	28	0.26
TC-1217	TC412-MO-L+60-U 1/2	103.5	80	33	20	29	0.26
TC-1218	TC412-MO-L+60-M14, U 9/16	109.5	93	33	27	31	0.40
TC-1219	TC412-MO-L+60-U 5/8	109.5	93	33	27	32	0.40
TC-1220	TC412-MO-L+60-M16	109.5	93	33	27	33	0.40
TC-1222	TC412-MO-L+60-P1/4	109.5	93	33	27	32	0.40
TC-1223	TC412-MO-L+60-P3/8	109.5	93	33	27	34	0.40

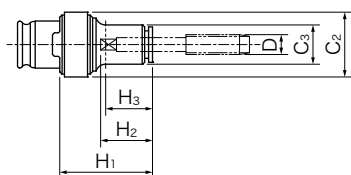
C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1534	TC412-MO-L+100-M3, U No.5	143.5	115	33	16	21	0.26
TC-1536	TC412-MO-L+100-M4, U No.8	143.5	115	33	16	22	0.26
TC-1538	TC412-MO-L+100-M5, U No.10 (12)	143.5	115	33	16	22	0.26
TC-1540	TC412-MO-L+100-M6, U 1/4	143.5	115	33	16	22	0.26
TC-1542	TC412-MO-L+100-U 5/16	143.5	115	33	16	23	0.26
TC-1543	TC412-MO-L+100-M8 (7)	143.5	115	33	16	23	0.26
TC-1545	TC412-MO-L+100-M10 (9), U 3/8	143.5	120	33	20	27	0.31
TC-1547	TC412-MO-L+100-P1/8, U 7/16 (M11)	143.5	120	33	20	28	0.31
TC-1548	TC412-MO-L+100-M12	143.5	120	33	20	28	0.31
TC-1550	TC412-MO-L+100-U 1/2	143.5	120	33	20	29	0.31
TC-1551	TC412-MO-L+100-M14, U 9/16	149.5	133	33	27	31	0.53
TC-1552	TC412-MO-L+100-U 5/8	149.5	133	33	27	32	0.53
TC-1553	TC412-MO-L+100-M16	149.5	133	33	27	33	0.53
TC-1555	TC412-MO-L+100-P1/4	149.5	133	33	27	32	0.53
TC-1556	TC412-MO-L+100-P3/8	149.5	133	33	27	34	0.53

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC1022-MO (M7 ~ M27, U 3/8 ~ U 1, P1/8 ~ P3/4)

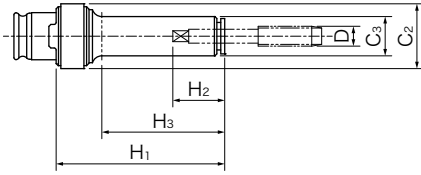


Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-0463	TC1022-MO-M8 (7)	65	38	50	32	38	0.61
TC-0465	TC1022-MO-M10 (9), U 3/8	65	38	50	32	38	0.61
TC-0467	TC1022-MO-U 7/16 (M11)	65	38	50	32	39	0.61
TC-0469	TC1022-MO-M12	65	38	50	32	39	0.61
TC-0471	TC1022-MO-U 1/2	65	38	50	32	40	0.61
TC-0473	TC1022-MO-M14, U 9/16	65	38	50	32	41	0.61
TC-0475	TC1022-MO-U 5/8	65	38	50	32	42	0.63
TC-0477	TC1022-MO-M16	65	38	50	32	43	0.63
TC-0481	TC1022-MO-M18, U 3/4	65	38	50	32	44	0.63
TC-0483	TC1022-MO-M20	65	38	50	32	45	0.63
TC-0485	TC1022-MO-M22, U 7/8	65	38	50	32	46	0.63
TC-0487	TC1022-MO-M24 (25)	68	42.5	50	36	48	0.65
TC-0489	TC1022-MO-M27 (26), U 1	68	42.5	50	36	48	0.65
TC-0496	TC1022-MO-P1/8	59	20.5	50	20	29	0.52
TC-0498	TC1022-MO-P1/4	59	25.5	50	27	32	0.56
TC-0500	TC1022-MO-P3/8	59	25.5	50	27	34	0.56
TC-0502	TC1022-MO-P1/2	62	38.5	50	36	42	0.63
TC-0505	TC1022-MO-P5/8	62	38.5	50	36	43	0.63
TC-0507	TC1022-MO-P3/4	65	42	50	40	45	0.68

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC1022-MO-L+60/100 (M7 ~ M27, U 3/8 ~ U 1, P1/8 ~ P3/4)



Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1297	TC1022-MO-L+60-M8 (7)	125	86.5	50	20	27	0.70
TC-1298	TC1022-MO-L+60-M10 (9), U 3/8	125	86.5	50	20	27	0.70
TC-1299	TC1022-MO-L+60-U 7/16 (M11)	125	86.5	50	20	28	0.70
TC-1300	TC1022-MO-L+60-M12	125	86.5	50	20	28	0.70
TC-1301	TC1022-MO-L+60-U 1/2	125	86.5	50	20	29	0.70
TC-1302	TC1022-MO-L+60-M14, U 9/16	125	91.5	50	27	31	0.80
TC-1303	TC1022-MO-L+60-U 5/8	125	91.5	50	27	32	0.80
TC-1304	TC1022-MO-L+60-M16	125	91.5	50	27	33	0.80
TC-1305	TC1022-MO-L+60-M18, U 3/4	125	98	50	32	44	0.85
TC-1306	TC1022-MO-L+60-M20	125	98	50	32	45	0.85
TC-1307	TC1022-MO-L+60-M22, U 7/8	125	98	50	32	46	0.85
TC-1308	TC1022-MO-L+60-M24 (25)	128	104.5	50	36	48	0.90
TC-1309	TC1022-MO-L+60-M27 (26), U 1	128	104.5	50	36	48	0.90
TC-1311	TC1022-MO-L+60-P1/8	119	80.5	50	20	29	0.62
TC-1312	TC1022-MO-L+60-P1/4	119	85.5	50	27	32	0.76
TC-1314	TC1022-MO-L+60-P3/8	119	85.5	50	27	34	0.76
TC-1315	TC1022-MO-L+60-P1/2	122	98.5	50	36	42	0.86
TC-1316	TC1022-MO-L+60-P5/8	122	98.5	50	36	43	0.86
TC-1317	TC1022-MO-L+60-P3/4	125	102	50	40	45	1.06

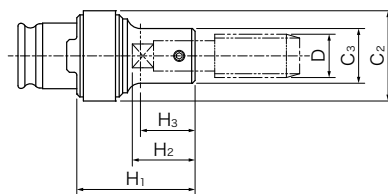
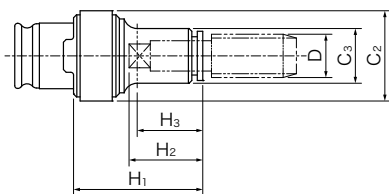
C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1640	TC1022-MO-L+100-M8 (7)	165	126.5	50	20	27	0.85
TC-1642	TC1022-MO-L+100-M10 (9), U 3/8	165	126.5	50	20	27	0.85
TC-1643	TC1022-MO-L+100-U 7/16 (M11)	165	126.5	50	20	28	0.85
TC-1644	TC1022-MO-L+100-M12	165	126.5	50	20	28	0.85
TC-1645	TC1022-MO-L+100-U 1/2	165	126.5	50	20	29	0.85
TC-1646	TC1022-MO-L+100-M14, U 9/16	165	131.5	50	27	31	0.90
TC-1647	TC1022-MO-L+100-U 5/8	165	131.5	50	27	32	0.90
TC-1648	TC1022-MO-L+100-M16	165	131.5	50	27	33	0.90
TC-1649	TC1022-MO-L+100-M18, U 3/4	165	138.5	50	32	44	1.00
TC-1650	TC1022-MO-L+100-M20	165	138.5	50	32	45	1.00
TC-1651	TC1022-MO-L+100-M22, U 7/8	165	138.5	50	32	46	1.00
TC-1652	TC1022-MO-L+100-M24 (25)	168	144.5	50	36	48	1.05
TC-1653	TC1022-MO-L+100-M27 (26), U 1 (26)U 1	168	144.5	50	36	48	1.05
TC-1657	TC1022-MO-L+100-P1/8	159	120.5	50	20	29	0.66
TC-1658	TC1022-MO-L+100-P1/4	159	125.5	50	27	32	0.86
TC-1659	TC1022-MO-L+100-P3/8	159	125.5	50	27	34	0.86
TC-1660	TC1022-MO-L+100-P1/2	162	138.5	50	36	42	1.03
TC-1661	TC1022-MO-L+100-P5/8	162	138.5	50	36	43	1.03
TC-1662	TC1022-MO-L+100-P3/4	165	142	50	40	45	1.28

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC2035-MO (M18 ~ M38, U 3/4 ~ U 1_3/8, P3/8 ~ P1)



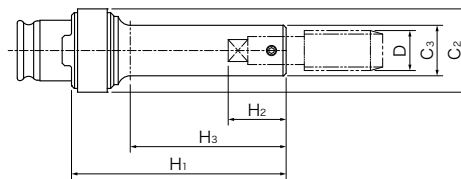
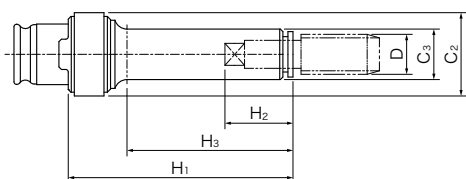
-SL denotes side lock type.

Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-0688	TC2035-MO-M18, U 3/4	85	50	70	46	45	1.72
TC-0690	TC2035-MO-M20	85	50	70	46	46	1.72
TC-0692	TC2035-MO-M22, U 7/8	85	50	70	46	47	1.72
TC-0694	TC2035-MO-M24 (25)	85	50	70	46	49	1.72
TC-0696	TC2035-MO-M27 (26), U 1	85	50	70	46	49	1.72
TC-0698	TC2035-MO-M28	85	50	70	46	56	1.72
TC-0700	TC2035-MO-U 1_1/8	85	50	70	46	56	1.72
TC-0702	TC2035-MO-M30	85	50	70	46	56	1.72
TC-0704	TC2035-MO-M32, U 1_1/4	85	50	70	46	58	1.72
TC-0706	TC2035-MO-M33	85	50	70	46	58	1.72
TC-0708	TC2035-MO-M35, U 1_3/8	85	50	70	46	60	1.72
TC-0710	TC2035-MO-M36 (38)	85	50	70	46	60	1.72
TC-0712	TC2035-MO-P3/8-SL	71	36	70	46	34	1.66
TC-0714	TC2035-MO-P1/2-SL	71	36	70	46	39	1.66
TC-0716	TC2035-MO-P5/8-SL	71	36	70	46	40	1.66
TC-0718	TC2035-MO-P3/4-SL	71	36	70	46	42	1.66
TC-0720	TC2035-MO-P7/8-SL	71	36	70	46	44	1.66
TC-0722	TC2035-MO-P1-SL	71	36	70	46	46	1.66

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC2035-MO-L+60 (M18 ~ M38, U 3/4 ~ U 1_3/8, P3/8 ~ P1)



-SL denotes side lock type.

Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-1400	TC2035-MO-L+60-M18, U 3/4	145	97	70	32	45	1.45
TC-1402	TC2035-MO-L+60-M20	145	97	70	32	46	1.45
TC-1404	TC2035-MO-L+60-M22, U 7/8	145	97	70	32	47	1.45
TC-1406	TC2035-MO-L+60-M24 (25)	145	101.5	70	36	49	1.65
TC-1408	TC2035-MO-L+60-M27 (26), U 1	145	101.5	70	36	49	1.65
TC-1410	TC2035-MO-L+60-M28	145	110	70	46	56	1.90
TC-1412	TC2035-MO-L+60-U 1_1/8	145	110	70	46	56	1.90
TC-1414	TC2035-MO-L+60-M30	145	110	70	46	56	1.90
TC-1416	TC2035-MO-L+60-M32, U 1_1/4	145	110	70	46	58	1.90
TC-1418	TC2035-MO-L+60-M33	145	110	70	46	58	1.90
TC-1420	TC2035-MO-L+60-M35, U 1_3/8	145	110	70	46	60	1.90
TC-1423	TC2035-MO-L+60-M36 (38)	145	110	70	46	60	1.90
TC-1425	TC2035-MO-L+60-P3/8-SL	131	96	70	46	34	2.30
TC-1427	TC2035-MO-L+60-P1/2-SL	131	96	70	46	39	2.30
TC-1429	TC2035-MO-L+60-P5/8	131	96	70	46	40	2.30
TC-1430	TC2035-MO-L+60-P3/4-SL	131	96	70	46	42	2.30
TC-1432	TC2035-MO-L+60-P7/8	131	96	70	46	44	2.30
TC-1433	TC2035-MO-L+60-P1-SL	131	96	70	46	46	2.30

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.



Micro Float



Radial Float



Axial Float



Extension



Self Reversing



Torque Limiter



Adapter Quick Change



Tap Quick Change



Center Through



Adapter/Collet Through



External Coolant



TC Adapter



TC-MO Adapter

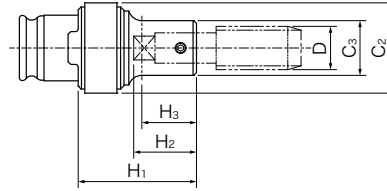
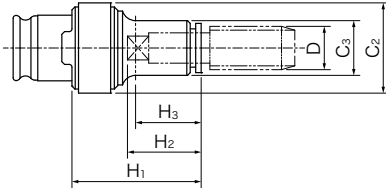


TCA Adapter



AR/ER Collet

TC3050-MO (M26 ~ M56, U 1 ~ U 2_1/4, P3/4 ~ P1_3/8)



-SL denotes side lock type.

Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-0868	TC3050-MO-M27 (26), U 1	85	47	87	64	49	3.42
TC-0870	TC3050-MO-M28	85	47	87	64	56	3.42
TC-0872	TC3050-MO-U 1_1/8	85	47	87	64	56	3.42
TC-0874	TC3050-MO-M30	100	62	87	64	57	3.50
TC-0876	TC3050-MO-M32, U 1_1/4	100	62	87	64	59	3.50
TC-0878	TC3050-MO-M33	100	62	87	64	59	3.50
TC-0880	TC3050-MO-M35, U 1_3/8	100	62	87	64	61	3.50
TC-0882	TC3050-MO-M36 (38)	100	62	87	64	61	3.50
TC-0884	TC3050-MO-M39 (40), U 1_1/2	100	62	87	64	63	3.50
TC-0886	TC3050-MO-M42, U 1_5/8	100	62	87	64	67	3.50
TC-0888	TC3050-MO-M45, U 1_3/4	100	62	87	64	67	3.50
TC-0890	TC3050-MO-M48	100	62	87	64	69	3.50
TC-0892	TC3050-MO-M50, U 2	100	62	87	64	72	3.50
TC-0894	TC3050-MO-M52	100	62	87	64	72	3.50
TC-0896	TC3050-MO-M56 (55), U 2_1/4	105	69.5	87	68	77	3.57
TC-0900	TC3050-MO-P3/4-SL	85	47	87	64	42	3.59
TC-0902	TC3050-MO-P7/8-SL	85	47	87	64	44	3.59
TC-0904	TC3050-MO-P1-SL	85	47	87	64	46	3.59
TC-0906	TC3050-MO-P1_1/8-SL	85	47	87	64	46	3.59
TC-0909	TC3050-MO-P1_1/4-SL	85	47	87	64	52	3.59
TC-3489	TC3050-MO-P1_3/8-SL	85	47	87	64	52	3.59
TC-0911	TC3050-MO-P1_1/2-SL	85	47	87	64	54	3.59
TC-0913	TC3050-MO-P1_3/4-SL	85	47	87	64	57	3.59

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Adapter **TC-MO-SB**

Capacity

M3 ~ M56, U No.5 ~ U 2_1/4,

P 1/8 ~ P 1

Pipe threads (Rc, Rp, G, PT, PF, PS) are collectively indicated as P.
P1/16 can be replaced with P1/8 if the shaft diameter and flat width are the same.

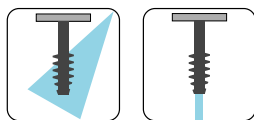
Whitworth (W) threads are compatible with Unified (U) threads.

Please contact us for standards other than JIS.

Coolant pump pressure

~ 5MPa

Features



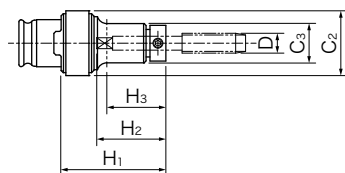
→ Three adapter lengths are available, eliminating the need for long taps.
For carbide taps, please use AR or ER collets.

! NOTE

For center-through coolant supply, please use taps with oil holes.
Center-through coolant supply is not available for sizes M5 and below.
Please consult us if you wish to use it.



TC412-MO-SB (M3 ~ M16, U No.5 ~ U 5/8, P1/8 ~ P3/8)

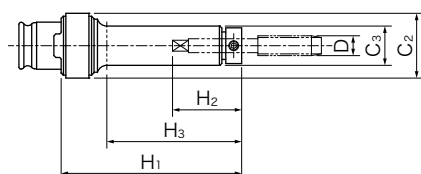


Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-0214	TC412-MO-M6, U 1/4-SB	49.5	26.5	33	20	32	0.19
TC-0216	TC412-MO-U 5/16-SB	49.5	26.5	33	20	33	0.19
TC-0218	TC412-MO-M8 (7)-SB	49.5	26.5	33	20	33	0.19
TC-0220	TC412-MO-M10 (9), U 3/8-SB	49.5	26.5	33	20	33	0.19
TC-0222	TC412-MO-P1/8, U 7/16 (M11)-SB	49.5	26.5	33	20	34	0.19
TC-0224	TC412-MO-M12-SB	49.5	26.5	33	20	34	0.19
TC-0226	TC412-MO-U 1/2-SB	49.5	26.5	33	20	35	0.19
TC-0228	TC412-MO-M14, U 9/16-SB	55.5	39	33	27	37	0.23
TC-0230	TC412-MO-U 5/8-SB	55.5	39	33	27	38	0.23
TC-0232	TC412-MO-M16-SB	55.5	39	33	27	39	0.23
TC-0239	TC412-MO-P1/4-SB	55.5	39	33	27	38	0.23
TC-0241	TC412-MO-P3/8-SB	55.5	39	33	27	40	0.23

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC412-MO-L+60/100-HP1-SB (M3 ~ M16, U No.5 ~ U 5/8, P1/8 ~ P3/8)



Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-1871	TC412-MO-L+60-HP1-M6, U 1/4-SB	108.5	80	33	16	27	0.24
TC-1872	TC412-MO-L+60-HP1-U 5/16-SB	108.5	80	33	16	28	0.24
TC-1873	TC412-MO-L+60-HP1-M8 (7)-SB	108.5	80	33	16	28	0.24
TC-1874	TC412-MO-L+60-HP1-M10 (9), U 3/8-SB	109.5	86	33	20	33	0.26
TC-1875	TC412-MO-L+60-HP1-P1/8, U 7/16 (M11)-SB	109.5	86	33	20	34	0.26
TC-1876	TC412-MO-L+60-HP1-M12-SB	109.5	86	33	20	34	0.26
TC-1877	TC412-MO-L+60-HP1-U 1/2-SB	109.5	86	33	20	35	0.26
TC-1878	TC412-MO-L+60-HP1-M14, U 9/16-SB	115.5	99	33	27	37	0.40
TC-1879	TC412-MO-L+60-HP1-U 5/8-SB	115.5	99	33	27	38	0.40
TC-1880	TC412-MO-L+60-HP1-M16-SB	115.5	99	33	27	39	0.40
TC-1881	TC412-MO-L+60-HP1-P1/4-SB	115.5	99	33	27	38	0.40
TC-1882	TC412-MO-L+60-HP1-P3/8-SB	115.5	99	33	27	40	0.40

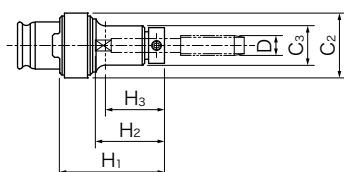
C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1933	TC412-MO-L+100-HP1-M6, U 1/4-SB	148.5	120	33	16	27	0.26
TC-1934	TC412-MO-L+100-HP1-U 5/16-SB	148.5	120	33	16	28	0.26
TC-1935	TC412-MO-L+100-HP1-M8 (7)-SB	148.5	120	33	16	28	0.26
TC-1936	TC412-MO-L+100-HP1-M10 (9), U 3/8-SB	149.5	126	33	20	33	0.31
TC-1937	TC412-MO-L+100-HP1-P1/8, U 7/16 (M11)-SB	149.5	126	33	20	34	0.31
TC-1938	TC412-MO-L+100-HP1-M12-SB	149.5	126	33	20	34	0.31
TC-1939	TC412-MO-L+100-HP1-U 1/2-SB	149.5	126	33	20	35	0.31
TC-1940	TC412-MO-L+100-HP1-M14, U 9/16-SB	155.5	139	33	27	37	0.53
TC-1941	TC412-MO-L+100-HP1-U 5/8-SB	155.5	139	33	27	38	0.53
TC-1942	TC412-MO-L+100-HP1-M16-SB	155.5	139	33	27	39	0.53
TC-1943	TC412-MO-L+100-HP1-P1/4-SB	155.5	139	33	27	38	0.53
TC-1944	TC412-MO-L+100-HP1-P3/8-SB	155.5	139	33	27	40	0.53

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC1022-MO-SB (M7 ~ M27, U 3/8 ~ U 1, P1/8 ~ P3/4)



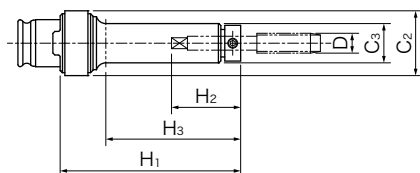
Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-0464	TC1022-MO-M8 (7)-SB	69	42	50	32	42	0.61
TC-0466	TC1022-MO-M10 (9), U 3/8-SB	69	42	50	32	42	0.61
TC-0468	TC1022-MO-U 7/16 (M11)-SB	69	42	50	32	43	0.61
TC-0470	TC1022-MO-M12-SB	69	42	50	32	43	0.61
TC-0472	TC1022-MO-U 1/2-SB	69	42	50	32	45	0.61
TC-0474	TC1022-MO-M14, U 9/16-SB	69	42	50	32	45	0.61
TC-0476	TC1022-MO-U 5/8-SB	69	42	50	32	47	0.63
TC-0478	TC1022-MO-M16-SB	70	43	50	32	48	0.63
TC-0482	TC1022-MO-M18, U 3/4-SB	70	43	50	32	49	0.63
TC-0484	TC1022-MO-M20-SB	70	43	50	32	50	0.63
TC-0486	TC1022-MO-M22, U 7/8-SB	70	43	50	32	51	0.63
TC-0488	TC1022-MO-M24 (25)-SB	73	47.5	50	36	53	0.65
TC-0490	TC1022-MO-M27 (26), U 1-SB	73	47.5	50	36	53	0.65
TC-0497	TC1022-MO-P1/8-SB	65	26.5	50	20	35	0.52
TC-0499	TC1022-MO-P1/4-SB	65	31.5	50	27	38	0.56
TC-0501	TC1022-MO-P3/8-SB	65	31.5	50	27	40	0.56
TC-0503	TC1022-MO-P1/2-SB	67	43.5	50	36	47	0.63
TC-0506	TC1022-MO-P5/8-SB	67	43.5	50	36	48	0.63
TC-0508	TC1022-MO-P3/4-SB	70	47	50	40	50	0.68

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.



TC1022-MO-L+60/100-HP1-SB (M7 ~ M27, U 3/8 ~ U 1, P1/8 ~ P3/4)



Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1898	TC1022-MO-L+60-HP1-M8 (7)-SB	131	92.5	50	20	33	0.70
TC-1899	TC1022-MO-L+60-HP1-M10 (9), U 3/8-SB	131	92.5	50	20	33	0.70
TC-3487	TC1022-MO-L+60-U 7/16 (M11)-SB	131	92.5	50	20	34	0.70
TC-1900	TC1022-MO-L+60-HP1-M12-SB	131	92.5	50	20	34	0.70
TC-1901	TC1022-MO-L+60-HP1-U 1/2-SB	131	92.5	50	20	35	0.70
TC-1902	TC1022-MO-L+60-HP1-M14, U 9/16-SB	131	97.5	50	27	37	0.80
TC-1903	TC1022-MO-L+60-HP1-U 5/8-SB	131	97.5	50	27	38	0.80
TC-1904	TC1022-MO-L+60-HP1-M16-SB	131	97.5	50	27	39	0.80
TC-1905	TC1022-MO-L+60-HP1-M18, U 3/4-SB	130	103	50	32	49	0.85
TC-1906	TC1022-MO-L+60-HP1-M20-SB	130	103	50	32	50	0.85
TC-1907	TC1022-MO-L+60-HP1-M22, U 7/8-SB	130	103	50	32	51	0.85
TC-1908	TC1022-MO-L+60-HP1-M24 (25)-SB	133	109.5	50	36	53	0.90
TC-1909	TC1022-MO-L+60-HP1-M27 (26), U 1-SB	133	109.5	50	36	53	0.90
TC-1910	TC1022-MO-L+60-HP1-P1/8-SB	125	86.5	50	20	35	0.62
TC-1911	TC1022-MO-L+60-HP1-P1/4-SB	125	91.5	50	27	38	0.76
TC-1912	TC1022-MO-L+60-HP1-P3/8-SB	125	91.5	50	27	40	0.76
TC-1913	TC1022-MO-L+60-HP1-P1/2-SB	127	103.5	50	36	47	0.86
TC-1914	TC1022-MO-L+60-HP1-P5/8-SB	127	103.5	50	36	48	0.86
TC-1915	TC1022-MO-L+60-HP1-P3/4-SB	130	107	50	40	50	1.06

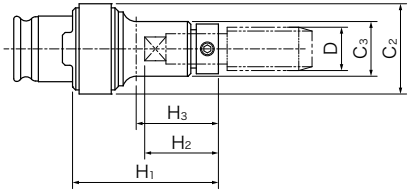
C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-1960	TC1022-MO-L+100-HP1-M8 (7)-SB	171	132.5	50	20	33	0.85
TC-1961	TC1022-MO-L+100-HP1-M10 (9), U 3/8-SB	171	132.5	50	20	33	0.85
TC-3488	TC1022-MO-L+100-U 7/16 (M11)-SB	171	132.5	50	20	34	0.85
TC-1962	TC1022-MO-L+100-HP1-M12-SB	171	132.5	50	20	34	0.85
TC-1963	TC1022-MO-L+100-HP1-U 1/2-SB	171	132.5	50	20	35	0.85
TC-1964	TC1022-MO-L+100-HP1-M14, U 9/16-SB	171	137.5	50	27	37	0.90
TC-1965	TC1022-MO-L+100-HP1-U 5/8-SB	171	137.5	50	27	38	0.90
TC-1966	TC1022-MO-L+100-HP1-M16-SB	171	137.5	50	27	39	0.90
TC-1967	TC1022-MO-L+100-HP1-M18, U 3/4-SB	170	143.5	50	32	49	1.00
TC-1968	TC1022-MO-L+100-HP1-M20-SB	170	143.5	50	32	50	1.00
TC-1969	TC1022-MO-L+100-HP1-M22, U 7/8-SB	170	143.5	50	32	51	1.00
TC-1970	TC1022-MO-L+100-HP1-M24 (25)-SB	173	149.5	50	36	53	1.05
TC-1971	TC1022-MO-L+100-HP1-M27 (26), U 1-SB	173	149.5	50	36	53	1.05
TC-1972	TC1022-MO-L+100-HP1-P1/8-SB	165	126.5	50	20	35	0.66
TC-1973	TC1022-MO-L+100-HP1-P1/4-SB	165	131.5	50	27	38	0.86
TC-1974	TC1022-MO-L+100-HP1-P3/8-SB	165	131.5	50	27	40	0.86
TC-1975	TC1022-MO-L+100-HP1-P1/2-SB	167	143.5	50	36	47	1.03
TC-1976	TC1022-MO-L+100-HP1-P5/8-SB	167	143.5	50	36	48	1.03
TC-1977	TC1022-MO-L+100-HP1-P3/4-SB	170	147	50	40	50	1.28

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC2035-MO-SB (M18 ~ M38, U 3/4 ~ U 1_3/8, P3/8 ~ P1)

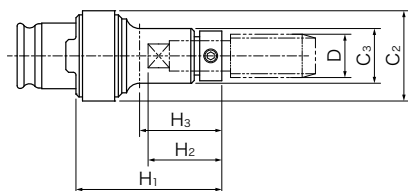


Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TC-0689	TC2035-MO-M18, U 3/4-SB	92	57	70	46	52	1.72
TC-0691	TC2035-MO-M20-SB	92	57	70	46	53	1.72
TC-0693	TC2035-MO-M22, U 7/8-SB	92	57	70	46	54	1.72
TC-0695	TC2035-MO-M24 (25)-SB	92	57	70	46	56	1.72
TC-0697	TC2035-MO-M27 (26), U 1-SB	92	57	70	46	56	1.72
TC-0699	TC2035-MO-M28-SB	92	57	70	46	63	1.72
TC-0701	TC2035-MO-U 1_1/8-SB	92	57	70	46	63	1.72
TC-0703	TC2035-MO-M30-SB	92	57	70	46	63	1.72
TC-0705	TC2035-MO-M32, U 1_1/4-SB	92	57	70	46	65	1.72
TC-0707	TC2035-MO-M33-SB	92	57	70	46	65	1.72
TC-0709	TC2035-MO-M35, U 1_3/8-SB	92	57	70	46	67	1.72
TC-0711	TC2035-MO-M36 (38)-SB	92	57	70	46	67	1.72
TC-0713	TC2035-MO-P3/8-SB	91	36	70	46	51	1.66
TC-0715	TC2035-MO-P1/2-SB	91	36	70	46	59	1.66
TC-0719	TC2035-MO-P3/4-SB	91	36	70	46	62	1.66
TC-0723	TC2035-MO-P1-SB	91	36	70	46	66	1.66

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC3050-MO-SB (M26 ~ M56, U 1 ~ U 2_1/4, P3/4 ~ P1)



Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TC-0869	TC3050-MO-M27 (26), U 1-SB	92	54	87	64	56	3.42
TC-0871	TC3050-MO-M28-SB	92	54	87	64	63	3.42
TC-0873	TC3050-MO-U 1_1/8-SB	92	54	87	64	63	3.42
TC-0875	TC3050-MO-M30-SB	107	69	87	64	64	3.50
TC-0877	TC3050-MO-M32, U 1_1/4-SB	107	69	87	64	66	3.50
TC-0879	TC3050-MO-M33-SB	107	69	87	64	66	3.50
TC-0881	TC3050-MO-M35, U 1_3/8-SB	107	69	87	64	68	3.50
TC-0883	TC3050-MO-M36 (38)-SB	107	69	87	64	68	3.50
TC-0885	TC3050-MO-M39 (40), U 1_1/2-SB	107	69	87	64	70	3.50
TC-0887	TC3050-MO-M42, U 1_5/8-SB	107	69	87	64	74	3.50
TC-0889	TC3050-MO-M45, U 1_3/4-SB	107	69	87	64	74	3.50
TC-0891	TC3050-MO-M48-SB	107	69	87	64	76	3.50
TC-0893	TC3050-MO-M50, U 2-SB	107	69	87	64	79	3.50
TC-0895	TC3050-MO-M52-SB	107	69	87	64	79	3.50
TC-0897	TC3050-MO-M56 (55), U 2_1/4-SB	105	69.5	87	68	77	3.57
TC-0901	TC3050-MO-P3/4-SB	85	47	87	64	42	3.59
TC-0905	TC3050-MO-P1-SB	85	47	87	64	46	3.59

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Adapter **TC-N**

Capacity

**M3 ~ M56, U No.5 ~ U 2_1/4,
P 1/8 ~ P 1_3/4**

Pipe threads (Rc, Rp, G, PT, PF, PS) are collectively indicated as P.
P1/16 can be replaced with P1/8 if the shaft diameter
and flat width are the same.
Whitworth (W) threads are compatible with Unified (U) threads.
Please contact us for standards other than JIS.



Coolant pump pressure

Not supported

Features



- Short type without torque limiter
 - Protrusion length can be shortened
 - Side lock type
- For carbide taps, please use AR or ER collets.



Micro
Float



Radial
Float



Axial
Float



Extension



Depth
Control



Self
Reversing



Torque
Limiter



Adapter
Quick Change



Tap Quick
Change



Center
Through



Adapter/Collet
Through



External
Coolant



TC
Adapter



TC-MO
Adapter

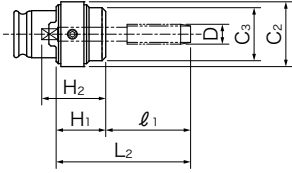


TCA
Adapter



AR/ER
Collet

TC412-N (M3 ~ M16, U No.5 ~ U 9/16, P1/8 ~ P3/8)



Unit: mm

Order code	Model	H ₁	C ₂	C ₃	H ₂	Weight (kg)
TC-0246	TC412-N-M3, U No.5	23.5	33	27	25	0.15
TC-0247	TC412-N-M4, U No.8	23.5	33	27	26	0.15
TC-0248	TC412-N-M5, U No.10 (12)	23.5	33	27	26	0.15
TC-0249	TC412-N-M6, U 1/4	23.5	33	27	26	0.15
TC-0252	TC412-N-U 5/16	23.5	33	27	27	0.15
TC-0254	TC412-N-M8 (7)	23.5	33	27	27	0.15
TC-0256	TC412-N-M10 (9), U 3/8	23.5	33	27	27	0.15
TC-0258	TC412-N-P1/8, U 7/16 (M11)	23.5	33	27	25	0.15
TC-0260	TC412-N-M12	23.5	33	27	28	0.15
TC-0261	TC412-N-U 1/2	23.5	33	27	29	0.15
TC-0262	TC412-N-M14, U 9/16	23.5	33	27	30	0.16
TC-0263	TC412-N-U 5/8	23.5	33	27	31	0.16
TC-0265	TC412-N-M16	23.5	33	27	32	0.16
TC-0268	TC412-N-P1/4	23.5	33	27	28	0.16
TC-0269	TC412-N-P3/8	23.5	33	27	30	0.16

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC1022-N (M7 ~ M27, U 3/8 ~ U 1, P1/8 ~ P3/4)

Unit: mm

Order code	Model	H ₁	C ₂	C ₃	H ₂	Weight (kg)
TC-0512	TC1022-N-M8 (7)	25	50	32	38	0.40
TC-0514	TC1022-N-M10 (9), U 3/8	25	50	32	38	0.40
TC-0516	TC1022-N-U 7/16 (M11)	25	50	32	39	0.40
TC-0518	TC1022-N-M12	25	50	32	39	0.40
TC-0520	TC1022-N-U 1/2	25	50	32	40	0.40
TC-0522	TC1022-N-M14, U 9/16	25	50	32	41	0.40
TC-0524	TC1022-N-U 5/8	25	50	32	42	0.40
TC-0526	TC1022-N-M16	25	50	32	43	0.40
TC-0527	TC1022-N-M18, U 3/4	25	50	32	44	0.40
TC-0529	TC1022-N-M20	25	50	32	45	0.40
TC-0530	TC1022-N-M22, U 7/8	25	50	32	46	0.40
TC-0531	TC1022-N-M24 (25)	25	50	32	53	0.42
TC-0532	TC1022-N-M27 (26), U 1	25	50	32	53	0.42
TC-0534	TC1022-N-P1/8	25	50	32	29	0.41
TC-0535	TC1022-N-P1/4	25	50	32	32	0.41
TC-0536	TC1022-N-P3/8	25	50	32	34	0.41
TC-0537	TC1022-N-P1/2	25	50	32	39	0.41
TC-0538	TC1022-N-P5/8	25	50	32	40	0.41
TC-0539	TC1022-N-P3/4	25	50	32	42	0.36

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC2035-N (M18 ~ M38, U 3/4 ~ U 1_3/8, P3/8 ~ P1)

Unit: mm

Order code	Model	H ₁	C ₂	C ₃	H ₂	Weight (kg)
TC-0724	TC2035-N-M18, U 3/4	35	70	46	44	1.10
TC-0725	TC2035-N-M20	35	70	46	45	1.10
TC-0726	TC2035-N-M22, U 7/8	35	70	46	46	1.10
TC-0727	TC2035-N-M24 (25)	35	70	46	58	1.16
TC-0728	TC2035-N-M27 (26), U 1	35	70	46	58	1.16
TC-0729	TC2035-N-M28	35	70	46	60	1.16
TC-0730	TC2035-N-U 1_1/8 (U 1_1/16)	35	70	46	60	1.16
TC-0731	TC2035-N-M30	35	70	46	60	1.16
TC-0732	TC2035-N-M32, U 1_1/4	35	70	46	62	1.16
TC-0733	TC2035-N-M33	35	70	46	62	1.16
TC-0734	TC2035-N-M35, U 1_3/8	35	70	46	64	1.16
TC-0735	TC2035-N-M36 (38)	35	70	46	64	1.16
TC-0737	TC2035-N-P3/8	28	70	46	31	1.20
TC-0738	TC2035-N-P1/2	28	70	46	36	1.20
TC-0739	TC2035-N-P5/8	28	70	46	37	1.20
TC-0740	TC2035-N-P3/4	28	70	46	39	1.20
TC-0741	TC2035-N-P7/8	28	70	46	41	1.20
TC-0742	TC2035-N-P1	28	70	46	43	1.20

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TC3050-N (M26 ~ M56, U 1 ~ U 2_1/4, P3/4 ~ P1_3/4)

Unit: mm

Order code	Model	H ₁	C ₂	C ₃	H ₂	Weight (kg)
TC-0917	TC3050-N-M27 (26), U 1	39	87	64	58	2.35
TC-0918	TC3050-N-M28	39	87	64	60	2.35
TC-0919	TC3050-N-U 1_1/8	39	87	64	60	2.35
TC-0920	TC3050-N-M30	39	87	64	60	2.31
TC-0921	TC3050-N-M32, U 1_1/4	39	87	64	62	2.31
TC-0922	TC3050-N-M33	39	87	64	62	2.31
TC-0923	TC3050-N-M35, U 1_3/8	39	87	64	64	2.31
TC-0924	TC3050-N-M36 (38)	39	87	64	64	2.31
TC-0925	TC3050-N-M39 (40), U 1_1/2	39	87	64	66	2.31
TC-0926	TC3050-N-M42, U 1_5/8	39	87	64	70	2.31
TC-0927	TC3050-N-M45, U 1_3/4	39	87	64	70	2.31
TC-0928	TC3050-N-M48	39	87	64	72	2.31
TC-0929	TC3050-N-M50, U 2	39	87	64	75	2.31
TC-0930	TC3050-N-M52	39	87	64	75	2.31
TC-0931	TC3050-N-M56 (55), U 2_1/4	39	87	64	85	2.33
TC-0932	TC3050-N-P3/4	32	87	64	42	1.80
TC-0933	TC3050-N-P7/8	32	87	64	44	1.80
TC-0934	TC3050-N-P1	32	87	64	46	1.80
TC-0935	TC3050-N-P1_1/8	32	87	64	46	1.80
TC-0936	TC3050-N-P1_1/4	32	87	64	52	1.80
TC-0937	TC3050-N-P1_1/2	32	87	64	54	1.80
TC-0938	TC3050-N-P1_3/4	32	87	64	57	1.80

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Adapter **TCA**

Capacity

**M2 ~ M25, U No.5 ~ U 7/8,
P 1/8 ~ P 1/2**

Pipe threads (Rc, Rp, G, PT, PF, PS) are collectively indicated as P.

P1/16 can be replaced with P1/8 if the shaft diameter and flat width are the same.

Whitworth (W) threads are compatible with Unified (U) threads.

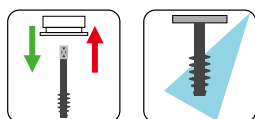
Please contact us for standards other than JIS.



Coolant pump pressure

Not supported

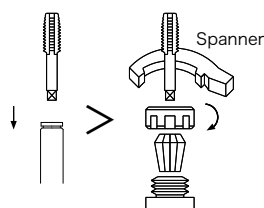
Features



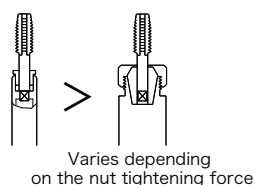
→ Six adapter lengths are available, eliminating the need for long taps.
For carbide taps, please use AR or ER collets.

Workability comparison between TCA adapters and collet chucks.

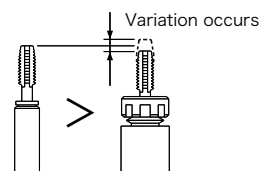
One-touch tap installation



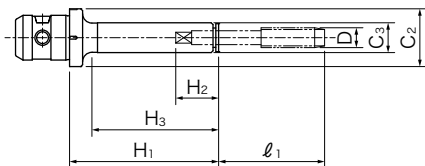
Driven by the square section of the tap, preventing slippage



Tool length remains constant even after tap replacement



TCA412-S/M/L (M2 ~ M12, U No.2 ~ U 1/2, P1/8)



Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0507	TCA412-S-M2	33	20	31	16	20	0.14
TCA-0508	TCA412-S-M3, U No.5	33	20	31	16	21	0.14
TCA-0510	TCA412-S-M4, U No.8	33	20	31	16	22	0.14
TCA-0512	TCA412-S-M5, U No.10 (12)	33	20	31	16	22	0.14
TCA-0514	TCA412-S-M6, U 1/4	33	20	31	16	22	0.14
TCA-0515	TCA412-S-U 5/16	33	20	31	16	23	0.14
TCA-0516	TCA412-S-M8 (7)	33	20	31	16	23	0.14
TCA-0517	TCA412-S-M10 (9), U 3/8	33	20	31	20	27	0.14
TCA-0518	TCA412-S-P1/8, U 7/16, M11	33	20	31	20	28	0.14
TCA-0519	TCA412-S-M12	33	20	31	20	28	0.14
TCA-0520	TCA412-S-U 1/2	33	20	31	20	29	0.14

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0551	TCA412-M-M2	80	67	31	16	20	0.20
TCA-0552	TCA412-M-M3, U No.5	80	67	31	16	21	0.20
TCA-0554	TCA412-M-M4, U No.8	80	67	31	16	22	0.20
TCA-0556	TCA412-M-M5, U No.10 (12)	80	67	31	16	22	0.20
TCA-0558	TCA412-M-M6, U 1/4	80	67	31	16	22	0.20
TCA-0559	TCA412-M-U 5/16	80	67	31	16	23	0.20
TCA-0560	TCA412-M-M8 (7)	80	67	31	16	23	0.20
TCA-0561	TCA412-M-M10 (9), U 3/8	80	67	31	20	27	0.20
TCA-0562	TCA412-M-P1/8, U 7/16, M11	80	67	31	20	28	0.20
TCA-0563	TCA412-M-M12	80	67	31	20	28	0.20
TCA-0564	TCA412-M-U 1/2	80	67	31	20	29	0.20

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0254	TCA412-L-M2	110	97	31	16	20	0.24
TCA-0255	TCA412-L-M3, U No.5	110	97	31	16	21	0.24
TCA-0257	TCA412-L-M4, U No.8	110	97	31	16	22	0.24
TCA-0259	TCA412-L-M5, U No.10 (12)	110	97	31	16	22	0.24
TCA-0261	TCA412-L-M6, U 1/4	110	97	31	16	22	0.24
TCA-0262	TCA412-L-U 5/16	110	97	31	16	23	0.24
TCA-0263	TCA412-L-M8 (7)	110	97	31	16	23	0.24
TCA-0264	TCA412-L-M10 (9), U 3/8	110	97	31	20	27	0.24
TCA-0265	TCA412-L-M11, U 7/16	110	97	31	20	28	0.24
TCA-0266	TCA412-L-M12	110	97	31	20	28	0.24
TCA-0267	TCA412-L-U 1/2	110	97	31	20	29	0.24
TCA-0268	TCA412-L-P1/8	110	97	31	20	28	0.24

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.



Micro Float



Radial Float



Axial Float



Extension



Dimensional Structure



Self Reversing



Torque Limiter



Adapter Quick Change



Tap Quick Change



Center Through



Adapter/Collet Through



External Coolant



TC Adapter



TC-MO Adapter

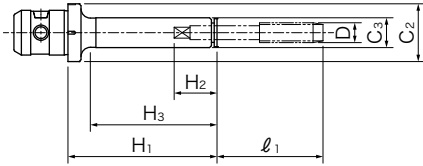


TCA Adapter



ER/AR Collet

TCA412-L + 30/60/90 (M4 ~ M12, U No.8 ~ U 1/2, P1/8)



Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0287	TCA412-L+30-M4, U No.8	140	127	31	16	22	0.27
TCA-0289	TCA412-L+30-M5, U No.10 (12)	140	127	31	16	22	0.27
TCA-0291	TCA412-L+30-M6, U 1/4	140	127	31	16	22	0.27
TCA-0292	TCA412-L+30-U 5/16	140	127	31	16	23	0.27
TCA-0293	TCA412-L+30-M8 (7)	140	127	31	16	23	0.27
TCA-0294	TCA412-L+30-M10 (9), U 3/8	140	127	31	20	27	0.27
TCA-0295	TCA412-L+30-M11, U 7/16	140	127	31	20	28	0.27
TCA-0296	TCA412-L+30-M12	140	127	31	20	28	0.27
TCA-0297	TCA412-L+30-U 1/2	140	127	31	20	29	0.27
TCA-0298	TCA412-L+30-P1/8	140	127	31	20	28	0.27

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0359	TCA412-L+60-M4, U No.8	170	157	31	16	22	0.30
TCA-0361	TCA412-L+60-M5, U No.10 (12)	170	157	31	16	22	0.30
TCA-0363	TCA412-L+60-M6, U 1/4	170	157	31	16	22	0.30
TCA-0364	TCA412-L+60-U 5/16	170	157	31	16	23	0.30
TCA-0365	TCA412-L+60-M8 (7)	170	157	31	16	23	0.30
TCA-0366	TCA412-L+60-M10 (9), U 3/8	170	157	31	20	27	0.30
TCA-0367	TCA412-L+60-M11, U 7/16	170	157	31	20	28	0.30
TCA-0368	TCA412-L+60-M12	170	157	31	20	28	0.30
TCA-0369	TCA412-L+60-U 1/2	170	157	31	20	29	0.30
TCA-0370	TCA412-L+60-P1/8	170	157	31	20	28	0.30

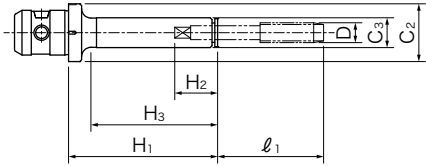
C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0433	TCA412-L+90-M4, U No.8	200	187	31	16	22	0.34
TCA-0435	TCA412-L+90-M5, U No.10 (12)	200	187	31	16	22	0.34
TCA-0437	TCA412-L+90-M6, U 1/4	200	187	31	16	22	0.34
TCA-0438	TCA412-L+90-U 5/16	200	187	31	16	23	0.34
TCA-0439	TCA412-L+90-M8 (7)	200	187	31	16	23	0.34
TCA-0440	TCA412-L+90-M10 (9), U 3/8	200	187	31	20	27	0.34
TCA-0441	TCA412-L+90-M11, U 7/16	200	187	31	20	28	0.34
TCA-0442	TCA412-L+90-M12	200	187	31	20	28	0.34
TCA-0443	TCA412-L+90-U 1/2	200	187	31	20	29	0.34
TCA-0444	TCA412-L+90-P1/8	200	187	31	20	28	0.34

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TCA1022-S/M/L (M9 ~ M25, U 3/8 ~ U 7/8, P1/8 ~ P1/2)



Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TCA-0525	TCA1022-S-M10 (9), U 3/8	55	40	47	20	27	0.55
TCA-0526	TCA1022-S-U 7/16, M11	55	40	47	20	28	0.55
TCA-0527	TCA1022-S-M12	55	40	47	20	28	0.55
TCA-0528	TCA1022-S-U 1/2	55	40	47	20	29	0.55
TCA-0529	TCA1022-S-M14, U 9/16	55	40	47	27	31	0.55
TCA-0530	TCA1022-S-U 5/8	55	40	47	27	32	0.55
TCA-0531	TCA1022-S-M16	55	40	47	27	33	0.55
TCA-0532	TCA1022-S-M18, U 3/4	55	40	47	32	44	0.55
TCA-0533	TCA1022-S-M20	55	40	47	32	45	0.55
TCA-0534	TCA1022-S-M22, U 7/8	55	40	47	32	46	0.55
TCA-0535	TCA1022-S-M24 (25)	55	40	47	36	48	0.55
TCA-0538	TCA1022-S-P1/8	55	40	47	20	28	0.55
TCA-0539	TCA1022-S-P1/4	55	40	47	27	32	0.55
TCA-0540	TCA1022-S-P3/8	55	40	47	27	34	0.55
TCA-0541	TCA1022-S-P1/2	55	40	47	36	42	0.55

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H1	H3	C2	C3	H2	Weight (kg)
TCA-0567	TCA1022-M-M10 (9), U 3/8	100	85	47	20	27	0.73
TCA-0568	TCA1022-M-U 7/16, M11	100	85	47	20	28	0.73
TCA-0569	TCA1022-M-M12	100	85	47	20	28	0.73
TCA-0570	TCA1022-M-U 1/2	100	85	47	20	29	0.73
TCA-0571	TCA1022-M-M14, U 9/16	100	85	47	27	31	0.73
TCA-0572	TCA1022-M-U 5/8	100	85	47	27	32	0.73
TCA-0573	TCA1022-M-M16	100	85	47	27	33	0.73
TCA-0574	TCA1022-M-M18, U 3/4	100	85	47	32	44	0.73
TCA-0575	TCA1022-M-M20	100	85	47	32	45	0.73
TCA-0576	TCA1022-M-M22, U 7/8	100	85	47	32	46	0.73
TCA-0577	TCA1022-M-M24 (25)	100	85	47	36	48	0.73
TCA-0580	TCA1022-M-P1/8	100	85	47	20	28	0.73
TCA-0581	TCA1022-M-P1/4	100	85	47	27	32	0.73
TCA-0582	TCA1022-M-P3/8	100	85	47	27	34	0.73
TCA-0583	TCA1022-M-P1/2	100	85	47	36	42	0.73

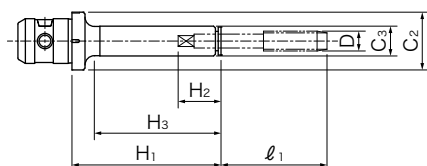
C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0270	TCA1022-L-M10 (9), U 3/8	130	115	47	20	27	0.75
TCA-0271	TCA1022-L-U 7/16, M11	130	115	47	20	28	0.75
TCA-0272	TCA1022-L-M12	130	115	47	20	28	0.75
TCA-0273	TCA1022-L-U 1/2	130	115	47	20	29	0.75
TCA-0274	TCA1022-L-M14, U 9/16	130	115	47	27	31	0.75
TCA-0275	TCA1022-L-U 5/8	130	115	47	27	32	0.75
TCA-0276	TCA1022-L-M16	130	115	47	27	33	0.75
TCA-0277	TCA1022-L-M18, U 3/4	130	115	47	32	44	0.75
TCA-0278	TCA1022-L-M20	130	115	47	32	45	0.75
TCA-0279	TCA1022-L-M22, U 7/8	130	115	47	32	46	0.75
TCA-0280	TCA1022-L-M24 (25)	130	115	47	36	48	0.75
TCA-0282	TCA1022-L-P1/8	130	115	47	20	28	0.75
TCA-0283	TCA1022-L-P1/4	130	115	47	27	32	0.75
TCA-0285	TCA1022-L-P3/8	130	115	47	27	34	0.75
TCA-0286	TCA1022-L-P1/2	130	115	47	36	42	0.75

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

TCA1022-L + 30/60/90 (M9 ~ M25, U 3/8 ~ U 7/8, P1/8 ~ P1/2)



Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0316	TCA1022-L+30-M10 (9), U 3/8	160	145	47	20	27	0.84
TCA-0833	TCA1022-L+30-U 7/16, M11	160	145	47	20	28	0.84
TCA-0317	TCA1022-L+30-M12	160	145	47	20	28	0.84
TCA-0834	TCA1022-L+30-U 1/2	160	145	47	20	29	0.84
TCA-0318	TCA1022-L+30-M14, U 9/16	160	145	47	27	31	0.84
TCA-0319	TCA1022-L+30-U 5/8	160	145	47	27	32	0.84
TCA-0320	TCA1022-L+30-M16	160	145	47	27	33	0.84
TCA-0321	TCA1022-L+30-M18, U 3/4	160	145	47	32	44	0.84
TCA-0322	TCA1022-L+30-M20	160	145	47	32	45	0.84
TCA-0323	TCA1022-L+30-M22, U 7/8	160	145	47	32	46	0.84
TCA-0324	TCA1022-L+30-M24 (25)	160	145	47	36	48	0.84
TCA-0325	TCA1022-L+30-P1/8	160	145	47	20	28	0.84
TCA-0326	TCA1022-L+30-P1/4	160	145	47	27	32	0.84
TCA-0327	TCA1022-L+30-P3/8	160	145	47	27	34	0.84
TCA-0328	TCA1022-L+30-P1/2	160	145	47	36	42	0.84

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0387	TCA1022-L+60-M10 (9), U 3/8	190	175	47	20	27	1.10
TCA-0835	TCA1022-L+60-U 7/16, M11	190	175	47	20	28	1.10
TCA-0388	TCA1022-L+60-M12	190	175	47	20	28	1.10
TCA-0389	TCA1022-L+60-U 1/2	190	175	47	20	29	1.10
TCA-0390	TCA1022-L+60-M14, U 9/16	190	175	47	27	31	1.10
TCA-0391	TCA1022-L+60-U 5/8	190	175	47	27	32	1.10
TCA-0392	TCA1022-L+60-M16	190	175	47	27	33	1.10
TCA-0393	TCA1022-L+60-M18, U 3/4	190	175	47	32	44	1.10
TCA-0394	TCA1022-L+60-M20	190	175	47	32	45	1.10
TCA-0395	TCA1022-L+60-M22, U 7/8	190	175	47	32	46	1.10
TCA-0396	TCA1022-L+60-M24 (25)	190	175	47	36	48	1.10
TCA-0397	TCA1022-L+60-P1/8	190	175	47	20	28	1.10
TCA-0398	TCA1022-L+60-P1/4	190	175	47	27	32	1.10
TCA-0400	TCA1022-L+60-P3/8	190	175	47	27	34	1.10
TCA-0401	TCA1022-L+60-P1/2	190	175	47	36	42	1.10

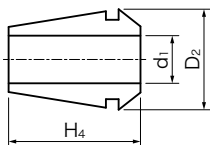
C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

Unit: mm

Order code	Model	H ₁	H ₃	C ₂	C ₃	H ₂	Weight (kg)
TCA-0464	TCA1022-L+90-M10 (9), U 3/8	220	205	47	20	27	1.25
TCA-0843	TCA1022-L+90-U 7/16, M11	220	205	47	20	28	1.25
TCA-0465	TCA1022-L+90-M12	220	205	47	20	28	1.25
TCA-0466	TCA1022-L+90-U 1/2	220	205	47	20	29	1.25
TCA-0467	TCA1022-L+90-M14, U 9/16	220	205	47	27	31	1.25
TCA-0468	TCA1022-L+90-U 5/8	220	205	47	27	32	1.25
TCA-0469	TCA1022-L+90-M16	220	205	47	27	33	1.25
TCA-0470	TCA1022-L+90-M18, U 3/4	220	205	47	32	44	1.25
TCA-0471	TCA1022-L+90-M20	220	205	47	32	45	1.25
TCA-0472	TCA1022-L+90-M22, U 7/8	220	205	47	32	46	1.25
TCA-0473	TCA1022-L+90-M24 (25)	220	205	47	36	48	1.25
TCA-0474	TCA1022-L+90-P1/8	220	205	47	20	28	1.25
TCA-0475	TCA1022-L+90-P1/4	220	205	47	27	32	1.25
TCA-0476	TCA1022-L+90-P3/8	220	205	47	27	34	1.25
TCA-0477	TCA1022-L+90-P1/2	220	205	47	36	42	1.25

C3 Dimensions are based on JIS standards. Please contact us for DIN standards.

ER collet



Compatible model : ESS

Unit: mm

Order code	Model	d_1	H_4	D_2
ER-0017	ER11-UP-3 (ϕ 3~2.5)_M2	3~2.5	18	11.5
ER-0126	ER11-UP-4 (ϕ 4~3.5)_M3	4~3.5	18	11.5

Compatible model : RF103

Unit: mm

Order code	Model	d_1	H_4	D_2
ER-0005	ER8-3 (ϕ 3~2.5)_M1 ~ M2.6	3~2.5	13.6	8.5
ER-0008	ER8-4 (ϕ 4~3.5)_M3	4~3.5	13.6	8.5

Compatible model : RF306

Unit: mm

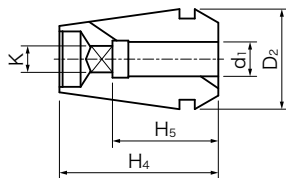
Order code	Model	d_1	H_4	D_2
ER-0016	ER11-3 (ϕ 3~2.5)_M1 ~ M2.6	3~2.5	18	11.5
ER-0019	ER11-4 (ϕ 4~3.5)_M3	4~3.5	18	11.5
ER-0021	ER11-5 (ϕ 5~4.5)_M4	5~4.5	18	11.5
ER-0022	ER11-5.5 (ϕ 5.5~5)_M5	5.5~5	18	11.5
ER-0024	ER11-6 (ϕ 6~5.5)_M6	6~5.5	18	11.5

Compatible model : RF414

Unit: mm

Order code	Model	d_1	H_4	D_2
ER-0052	ER20-5 (ϕ 5~4)_M4	5~4	31.5	21
ER-0054	ER20-6 (ϕ 6~5)_M5.M6	6~5	31.5	21
ER-0056	ER20-7 (ϕ 7~6)_M8.M10	7~6	31.5	21
ER-0057	ER20-8 (ϕ 8~7)_P1/8	8~7	31.5	21
ER-0058	ER20-9 (ϕ 9~8)_M12	9~8	31.5	21
ER-0060	ER20-11 (ϕ 11~10)_M14, U9/16	11~10	31.5	21

ER-GB collet



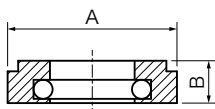
Compatible model : RF414-OHC

Unit: mm

Order code	Model	d ₁	K	H ₄	D ₂	H ₅
ER-0064	ER20-GB_5x4 (M4, ISO-F_M5)	5	4	31.5	21	18
ER-0065	ER20-GB_5.5x4.5 (M5)	5.5	4.5	31.5	21	18
ER-0066	ER20-GB_6x4.5 (M6.U 1/4)	6	4.5	31.5	21	18
ER-0067	ER20-GB_6.2x5 (M7.M8)	6.2	5	31.5	21	18
ER-0068	ER20-GB_7x5.5 (M9.M10.U 3/8, DIN376_M10)	7	5.5	31.5	21	18
ER-0070	ER20-GB_8.5x6.5 (M12)	8.5	6.5	31.5	21	22
ER-0071	ER20-GB_9x7 (U 1/2, DIN376_M12)	9	7	31.5	21	22
ER-0072	ER20-GB_10.5x8 (M14.U 9/16)	10.5	8	31.5	21	25

For tap size P1/8, please use the AR20-GH collet.

Sealing disk

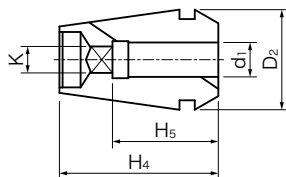


Compatible model : RF414-OHC

Unit: mm

Order code	Model	A	B
ACC-0210	DS/ER20-5 (φ 5~4.5) Sealing disk	16	4
ACC-0211	DS/ER20-5.5 (φ 5.5~5) Sealing disk	16	4
ACC-0212	DS/ER20-6 (φ 6~5.5) Sealing disk	16	4
ACC-0213	DS/ER20-6.5 (φ 6.5~6) Sealing disk	16	4
ACC-0214	DS/ER20-7 (φ 7~6.5) Sealing disk	16	4
ACC-0215	DS/ER20-8 (φ 8~7.5) Sealing disk	16	4
ACC-0216	DS/ER20-8.5 (φ 8.5~8) Sealing disk	16	4
ACC-0218	DS/ER20-10.5 (φ 10.5~10) Sealing disk	16	4

AR-GB collet



Compatible model : ESS412-OHC

Unit: mm

Order code	Model	d ₁	K	H ₄	D ₂	H ₅
AR-0033	AR16-GB_5x4 (M4, ISO-F_M5)	5	4	27	17	15

マイクロフー
(微小伸縮)ラジアルフー
(偏心伸縮)アシナルフー
(伸縮機構)テンション
(伸縮機構の伸びのみ)定寸機構
(ねじ深さ制限機構)

自動逆転機構

安全装置
(トルクリミッター)アダプタロック
チェンジ

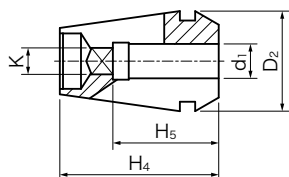
タップワイプチェンジ

センタースルー
(穴付きタップ)アダプタ /
コレットスルー

外部給油

TC
アダプタTC-MO
アダプタTCA
アダプタER/ER
コレット

AR-GH collet



Compatible model : ESS412-OHC, TCA-ER

Unit: mm

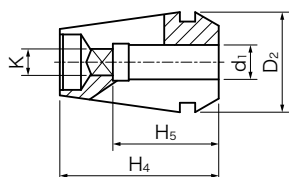
Order code	Model	d1	K	H4	D2	H5
AR-0040	AR16-GH_5.5x4.5 (M5)	5.5	4.5	27	17	22
AR-0041	AR16-GH_6x4.5 (M6.U 1/4)	6	4.5	27	17	22
AR-0043	AR16-GH_6.1x5 (U 5/16)	6.1	5	27	17	22
AR-0044	AR16-GH_6.2x5 (M7.M8)	6.2	5	27	17	22
AR-0045	AR16-GH_7x5.5 (M9.M10.U 3/8, DIN376_M10)	7	5.5	27	17	22
AR-0046	AR16-GH_8x6 (P1/8.U 7/16.M11)	8	6	27	17	22
AR-0048	AR16-GH_8.5x6.5 (M12)	8.5	6.5	27	17	22

Compatible model : ESS1022-OHC

Unit: mm

Order code	Model	d1	K	H4	D2	H5
AR-0088	AR32-GH_7x5.5 (M9.M10.U 3/8, DIN376_M10)	7	5.5	40	33	30
AR-0089	AR32-GH_8x6 (P1/8 Long tap.U7/16)	8	6	40	33	30
AR-0090	AR32-GH_8.5x6.5 (M12)	8.5	6.5	40	33	30
AR-0091	AR32-GH_9x7 (U 1/2, DIN376_M12)	9	7	40	33	30
AR-0092	AR32-GH_10.5x8 (M14.U 9/16)	10.5	8	40	33	30
AR-0094	AR32-GH_12x9 (U 5/8, DIN376_M16)	12	9	40	33	35
AR-0095	AR32-GH_12.5x10 (M16, ISO-R_M16)	12.5	10	40	33	35
AR-0096	AR32-GH_14x11 (M18.U 3/4, DIN376_M18)	14	11	40	33	35
AR-0098	AR32-GH_15x12 (M20)	15	12	40	33	35
AR-0100	AR32-GH_17x13 (M22.U 7/8)	17	13	40	33	33

AR-GHC collet



Compatible model : ESS412-OHC, TCA-ER

Unit: mm

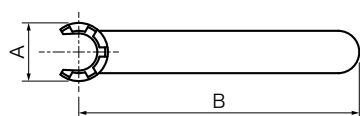
Order code	Model	d1	K	H4	D2	H5
AR-0050	AR16-GHC_5.5x4.5 (M5)	5.5	4.5	27	17	22
AR-0051	AR16-GHC_6x4.5 (M6.U 1/4)	6	4.5	27	17	22
AR-0053	AR16-GHC_6.1x5 (U 5/16)	6.1	5	27	17	22
AR-0054	AR16-GHC_6.2x5 (M7.M8)	6.2	5	27	17	22
AR-0055	AR16-GHC_7x5.5 (M9.M10.U 3/8, DIN376_M10)	7	5.5	27	17	22
AR-0056	AR16-GHC_8x6 (P1/8.U 7/16.M11)	8	6	27	17	22
AR-0058	AR16-GHC_8.5x6.5 (M12)	8.5	6.5	27	17	22

Compatible model : ESS1022-OHC

Unit: mm

Order code	Model	d ₁	K	H ₄	D ₂	H ₅
AR-0103	AR32-GHC_7x5.5 (M9.M10.U 3/8, DIN376_M10)	7	5.5	40	33	30
AR-0117	AR32-GHC_8x6 (P1/8 Long tap.U7/16)	8	6	40	33	30
AR-0104	AR32-GHC_8.5x6.5 (M12)	8.5	6.5	40	33	30
AR-0105	AR32-GHC_9x7 (U 1/2, DIN376_M12)	9	7	40	33	30
AR-0106	AR32-GHC_10.5x8 (M14.U 9/16)	10.5	8	40	33	30
AR-0107	AR32-GHC_12x9 (U 5/8, DIN376_M16)	12	9	40	33	35
AR-0108	AR32-GHC_12.5x10 (M16, ISO-R_M16)	12.5	10	40	33	35
AR-0109	AR32-GHC_14x11 (M18.U 3/4, DIN376_M18)	14	11	40	33	35
AR-0111	AR32-GHC_15x12 (M20)	15	12	40	33	35
AR-0113	AR32-GHC_17x13 (M22.U 7/8)	17	13	40	33	33

Spanner

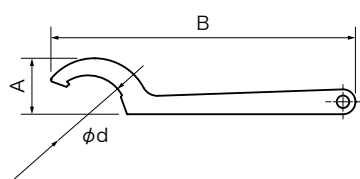


Unit: mm

Order code	Model	A	B	Weight (kg)
ACC-0250	AE-16M_Spanner (ESS412-OHC)	22.5	110	0.06

Unit: mm

Order code	Model	A	B	Weight (kg)
ACC-0191	E8M_Spanner (RF103)	12.4	70	0.02
ACC-0195	E11M_Spanner (RF306, 7-P, 1D, SC, ESS103)	16.8	90	0.04
ACC-0223	E20M_Spanner (RF414, RF414-OHC)	29	120	0.07



Unit: mm

Order code	Model	A	B	φ d	Weight (kg)
ACC-0255	FK-7_Hook spanner (ESS1022-OHC)	36	196	50	0.15

マイクロフロート
(微小伸縮)ラジアルフロート
(偏心機構)アキシアルフロート
(伸縮機構)テンション
(伸縮機構の伸びのみ)定寸機構
(ねじ戻し制限機構)

自動逆転機構

折損防止
(トルクリミッター)アダプタクイック
チェンジ

タップクイックチェンジ

センタースルー
(穴付きタップ)アダプタ /
コレットスルー

外部給油

TC
アダプタTC-MO
アダプタTCA
アダプタER/AR
コレット

Clamp screw



Order code	Model	Compatible holder
ACC-0160	CS8-10.5	SKB412
ACC-0158	CS10-12	SKB1022, ECG1022, ECP1022, CAS1022, CAS102-OHC
ACC-0157	CS8-8.5	ECG412, ECP412, SSR412-OHC, CAS412-OHC
ACC-0159	CS10-10	SSR1022-OHC

Dust seal (compatible with two-face clamping BT shank)



Order code	Model
ACC-0169	BT30 Dust seal (2pcs)
ACC-0170	BT40 Dust seal (2pcs)
ACC-0171	BT50 Dust seal (2pcs)

For BBT-type spindles, a dust seal can be attached to the BT shank flange surface to prevent chips.

Shank

BT

STT

Capacity

M2~M22

U No.2~U 7/8

P1/8~P1/2



Features

- Automates the tedious brush application process of tapping cutting oil.
- Compatible with vertical and horizontal machining centers
- Remaining liquid level can be checked visually.
- Maximum discharge volume: 0.5 ml



Optional accessories



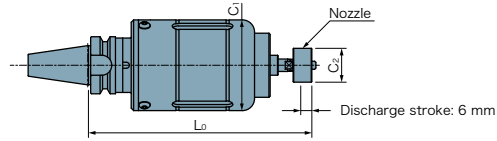
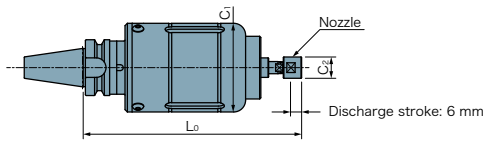
LD long nozzle

Micro
FloatRadial
FloatAxial
Float

Extension

Depth
ControlSelf
ReversingTorque
LimiterAdapter
Quick ChangeTap Quick
ChangeCenter
ThroughAdapter/Collet
ThroughExternal
CoolantTC
AdapterTC-MO
AdapterTCA
AdapterER/AR
Collet

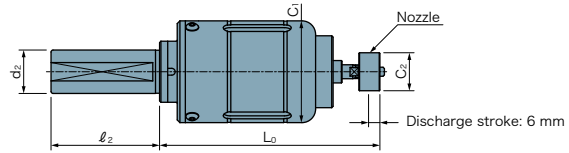
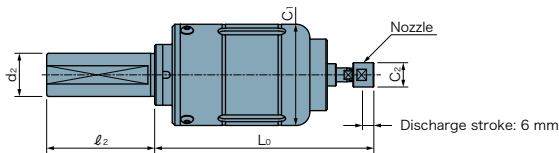
BT shank



Unit: mm

Order code	Model	Tap size	Nozzle	L ₀	C ₁	C ₂	Weight (kg)
LD-0001	BT30-LD180	M2 ~ M12	Standard	181.4	75	18	1.80
LD-0001	BT30-LD180	M12 ~ M22	Large tap	186.4	75	26	1.80
LD-0003	BT40-LD180	M2 ~ M12	Standard	195.3	75	18	2.80
LD-0003	BT40-LD180	M12 ~ M22	Large tap	200.3	75	26	2.80
LD-0005	BT50-LD180	M2 ~ M12	Standard	181.4	75	18	5.90
LD-0005	BT50-LD180	M12 ~ M22	Large tap	186.4	75	26	5.90

STT shank



Unit: mm

Order code	Model	Tap size	Nozzle	L ₀	C ₁	C ₂	ℓ ₂	d ₂	Weight (kg)
LD-0008	STT32-LD180	M2 ~ M12	Standard	162	75	18	80	32	2.16
LD-0008	STT32-LD180	M12 ~ M22	Large tap	167	75	26	80	32	2.16

Seri-cut Liquid Light

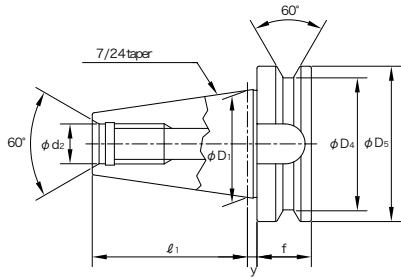
- Oil for Liquid Dispenser
- Brush application also possible
- Viscosity: 160 cSt

Order code	Model	Capacity
SRC-0009	Seri-cut Liquid Light S-C2000-LD	2000ml



BT shank (bottle grip taper shank) ISO 7338-2, JIS B6339

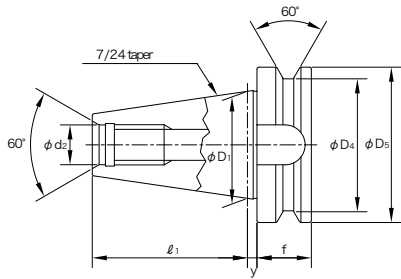
Unit: mm



Shank size designation	ℓ_1	f	y	ϕD_5	ϕD_4	ϕD_1	ϕd_2	Threaded portion
BT30	48.4	20	2	46	38	31.75	12.5	M12×1.75
BT40	65.4	25	2	63	53	44.45	17.0	M16×2.0
BT50	101.8	35	3	100	85	69.85	25.0	M24×3.0

DBT shank (two-face clamping bottle grip taper shank)

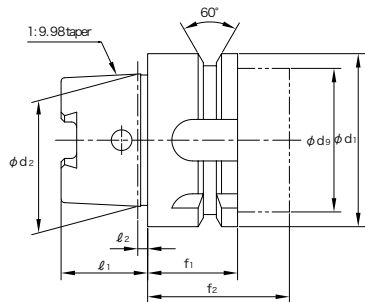
Unit: mm



Shank size designation	ℓ_1	f	y	ϕD_5	ϕD_4	ϕD_1	ϕd_2	Threaded portion
DBT30	48.4	21.0	1.0	46	38	31.75	12.5	M12×1.75
DBT40	65.4	26.0	1.0	63	53	44.45	17.0	M16×2.0
DBT50	101.8	36.5	1.5	100	85	69.85	25.0	M24×3.0

HSK-A shank ISO 12164-1, JIS B6064-1

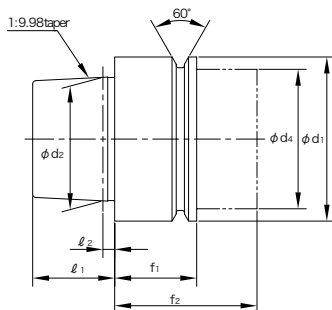
Unit: mm



Shank size designation	ℓ_1	ℓ_2	f ₁	f ₂	ϕd_1	ϕd_2	ϕd_9
A40	20	4.0	20	35	40	30.007	34
A50	25	5.0	26	42	50	38.009	42
A63	32	6.3	26	42	63	48.010	53
A80	40	8.0	26	42	80	60.012	68
A100	50	10.0	29	45	100	75.013	88

HSK-E shank DIN69893-5

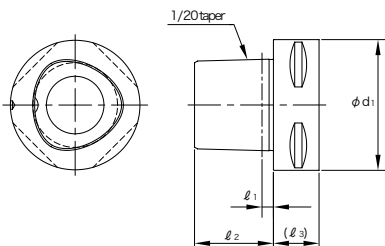
Unit: mm



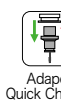
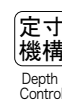
Shank size designation	ℓ_1	ℓ_2	f ₁	f ₂	ϕd_1	ϕd_2	ϕd_4
E40	20	4.0	20	35	40	30.007	34
E50	25	5.0	26	42	50	38.009	42

C shank (polygon shank)ISO 26623-1, JIS B 6066-1

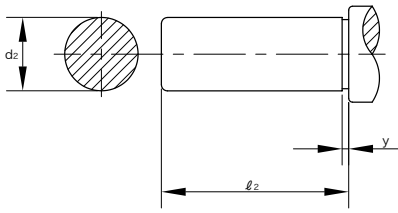
Unit: mm



Shank size designation	ℓ_2	ℓ_1	ℓ_3	ϕd_1
C3	19	2.5	15	32
C4	24	2.5	20	40
C5	30	3	20	50
C6	38	3	22	63
C8	48	3	30	80



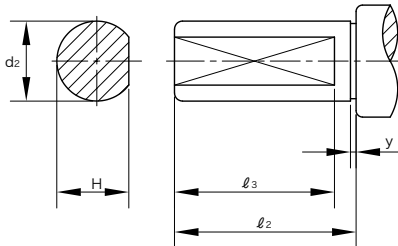
ST shank (straight shank) Manufacturer's standard (for milling chucks)



Unit: mm

Shank size designation	l_2	y	d_2
ST25	75	3	25
ST32	80	3	32
ST40	80	3	40
ST42	80	3	42
ST45	90	3	45

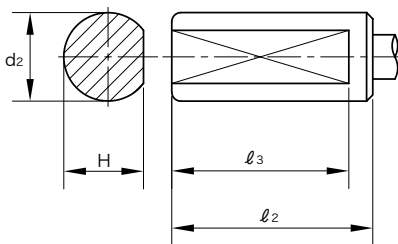
STT shank (straight shank with flat) Manufacturer's Standard (for CNC lathes)



Unit: mm

Shank size designation	l_2	l_3	y	d_2	H
STT19.05	60	55	3	19.05	18.05
STT20	60	55	3	20	19.0
STT25	75	70	3	25	24.0
STT32	80	75	3	32	30.5
STT40	80	75	3	40	38.5
STT42	80	75	3	42	40.5
STT50	90	85	3	50	48.5

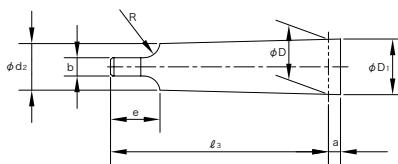
STT shank (straight shank with flat) Manufacturer's Standard (exclusive for SA-V)



Unit: mm

Shank size designation	l_2	l_3	d_2	H
STT32	65	60	32	30.5
STT40	75	70	40	38.5
STT50	85	75	50	48.5

MT shank (morse taper shank) JIS B4003

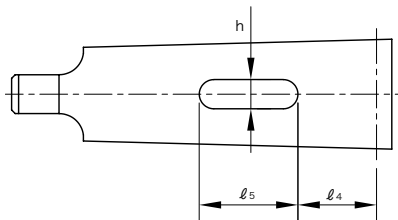


Unit: mm

Shank size designation	l_3	a	ϕD_1	ϕD	ϕd_2	R	e	b
MT2	75.0	5.0	18.0	17.780	14.0	6	16.0	6.3
MT3	94.0	5.0	24.1	23.825	19.1	7	20.0	7.9
MT4	117.5	6.5	31.6	31.267	25.2	8	24.0	11.9
MT5	149.5	6.5	44.7	44.399	36.5	10	29.0	15.9

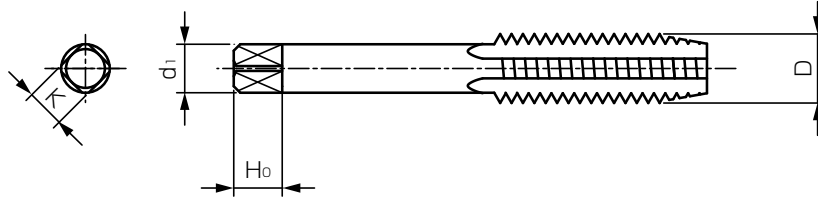
Cotter slot dimensions for Morse taper shank

Unit: mm



Shank size designation	Machine manufacturer	l_4	l_5	h
MT5	Okuma Corporation	27.0	38.8	12.2
	Oya Manufacturing Co., Ltd.	15.0	20.0	12.0
	Ohtori Kiko Co., Ltd.	25.0	15.0	12.0
	Okada Mechanica Co., Ltd. (Tominaga Ironworks)	16.0	22.0	12.5
	Ogawa Iron Works Co., Ltd.	25.0	30.0	12.0
	Toshiba Machine Co., Ltd.	50.0	35.0	13.0
	Nomura Manufacturing Co., Ltd.	27.0	35.0	12.2

Tap standards and shapes (1)



JIS Standard Tap Shank Diameter and Square Dimensions Table

JIS B4430 : 1998 • JIS B4432 : 1999 •
JIS B4445 : 1998 • JIS B4446 : 1998

■ NOTE

- In the table, the symbol "U" is used as a general designation for UNC and UNF thread types.
- In the table, the symbol "P" is used as a general designation for PT (Rc), PS (Rp), PF (G), and NPTF thread types.
- The red text in the table represents fine threads.
- The blue text in the table represents the manufacturer's standard.

Metric thread D	Unified thread D	Pipe thread D	Shank diameter d ₁	Square width K	Square length H ₀
M1 ·M1.1	U No.0				
M1.2·M1.4	U No.1				
M1.6·M1.7	U No.2		3.0	2.5	5.0
M1.8·M2	U No.3				
M2.2·M2.3	U No.4				
M2.5·M2.6					
M3·M3.5	U No.5-U No.6		4.0	3.2	6.0
M4·M4.5	U No.8		5.0	4.0	7.0
M5·M5.5	U No.10-U No.12		5.5	4.5	7.0
M6	U 1/4		6.0	4.5	7.0
	U5/16		6.1	5.0	8.0
M7·M8			6.2	5.0	8.0
M9·M10	U 3/8		7.0	5.5	8.0
M11	U 7/16	P 1/16-P 1/8	8.0	6.0	9.0
M12			8.5	6.5	9.0
	U 1/2		9.0	7.0	10.0
M13			9.5	7.0	10.0
M14 ·M15	U 9/16		10.5	8.0	11.0
		P 1/4	11.0	9.0	12.0
	U 5/8		12.0	9.0	12.0
M16			12.5	10.0	13.0
M17			13.0	10.0	13.0
M18	U 3/4	P 3/8	14.0	11.0	14.0
M20			15.0	12.0	15.0
M22	U 7/8		17.0	13.0	16.0
		P 1/2	18.0	14.0	17.0
M24·M25		P 5/8	19.0	15.0	18.0
M26·M27	U1		20.0	15.0	18.0
M28			21.0	17.0	20.0
	U1 1/8		22.0	17.0	20.0
M30		P 3/4	23.0	17.0	20.0
M32	U1 1/4	P 7/8	24.0	19.0	22.0
M33			25.0	19.0	22.0
M35	U1 3/8	P1	26.0	21.0	24.0
M36·M38		P1 1/8	28.0	21.0	24.0
M39·M40	U1 1/2		30.0	23.0	26.0
M42	U1 5/8	P1 1/4	32.0	26.0	30.0
M45	U1 3/4	P1 3/8	35.0	26.0	30.0
M48		P1 1/2	38.0	29.0	32.0
M50	U2	P1 5/8	40.0	32.0	35.0
M52		P1 3/4	42.0	32.0	35.0
M55·M56	U2 1/4		44.0	35.0	38.0
			45.0	35.0	38.0
M58·M60		P2	46.0	35.0	38.0
M62·M64	U2 1/2		48.0	38.0	42.0
M65		P2 1/4	50.0	38.0	42.0
M68			52.0	41.0	44.0
M70·M72	U2 3/4	P2 1/2	55.0	41.0	44.0
M75·M76					
M78·M80	U3·U3 1/4		58.0	46.0	50.0
M82					
M85·M90	U3 1/2	P2 3/4	60.0	46.0	50.0
M95·M100	U3 3/4·U4	P3	65.0	50.0	52.0

ISO Standard Tap Shank Diameter and Square Dimensions Table

ISO 529-1993·ISO 2283-2000·ISO 2284-2017

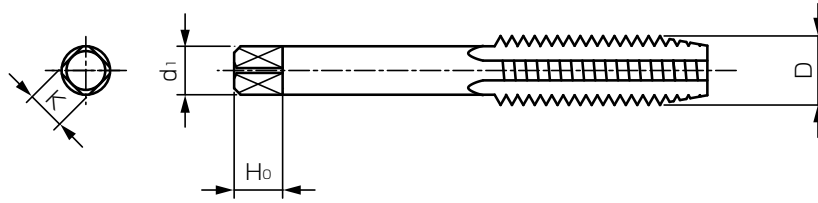
■ NOTE

In ISO standards, even for the same thread size, there are two types of shank diameters: full diameter shank and relieved shank.

- In the table, the symbol "U" is used as a general designation for UNC and UNF thread types.
- The red text in the table represents fine threads.
- ISO-F : Full-diameter shank , ISO-F : Shank with a recess

Metric thread D	Metric thread D	Unified thread D	Unified thread D	Metric thread D	Unified thread D	Pipe thread D			Shank diameter d ₁	Square width K	Square length H ₀
ISO-F	ISO-R	ISO-F	ISO-R			G	Rp	Rc			
	M3		UNo.5	M3	No.5				2.24	1.80	4.00
M1 ·M1.1											
M1.2·M1.4	M3.5	UNo.0	UNo.6	M3.5	No.6				2.50	2.00	4.00
M1.6·M1.8		UNo.1									
M2											
M2.2·M2.5		UNo.2-UNo.3							2.80	2.24	5.00
M3	M4	UNo.4-UNo.5	UNo.8	M4	No.8				3.15	2.50	5.00
M3.5	M4.5	UNo.6	UNo.10	M4.5	No.10				3.55	2.80	5.00
M4	M5·M5.5		UNo.12	M5·M5.5	No.12				4.00	3.15	6.00
M4.5	M6	UNo.8	U 1/4	M6	U 1/4				4.50	3.55	6.00
M5		UNo.10							5.00	4.00	7.00
M5.5	M7	UNo.12		M7		G 1/16	Rp 1/16	Rc 1/16	5.60	4.50	7.00
M6	M8	U 1/4	U 5/16	M8	U 5/16				6.30	5.00	8.00
M7	M9		U 3/8	M9	U 3/8				7.10	5.60	8.00
M8	M10·M11	U 5/16	U 7/16	M10·M11	U 7/16	G 1/8	Rp 1/8	Rc 1/8	8.00	6.30	9.00
M9	M12		U 1/2	M12	U 1/2				9.00	7.10	10.00
M10		U 3/8				G 1/4	Rp 1/4	Rc 1/4	10.00	8.00	11.00
	M14·M15		U 9/16	M14·M15	U 9/16				11.20	9.00	12.00
	M16·M17		U 5/8	M16·M17	U 5/8	G 3/8	Rp 3/8	Rc 3/8	12.50	10.00	13.00
	M18·M20		U 3/4	M18·M20	U 3/4				14.00	11.20	14.00
	M22		U 7/8	M22	U 7/8	G 1/2	Rp 1/2	Rc 1/2	16.00	12.50	16.00
	M24·M25		U1	M24	U1	(G 5/8)	(Rp 5/8)		18.00	14.00	18.00
	M27·M28·M30		U1 1/8			G 3/4	Rp 3/4	Rc 3/4	20.00	16.00	20.00
	M32·M33		U1 1/4			(G 7/8)	(Rp 7/8)		22.40	18.00	22.00
	M35·M36		U1 3/8			G1	Rp1	Rc1	25.00	20.00	24.00
	M39·M40		U1 1/2						28.00	22.40	26.00
	M42										
	M45·M48		U1 3/4			G1 1/4	Rp1 1/4	Rc1 1/4	31.50	25.00	28.00
	M50										
	M52·M55					G1 1/2·	Rp1 1/2·	Rc1 1/2	35.50	28.00	31.00
	M56		U2			(G1 3/4)	(Rp1 3/4)				
	M60·M64		U2 1/4·U2 1/2			G2·	Rp2·	Rc2	40.00	31.50	34.00
						(G2 1/4)	(Rp2 1/4)				
	M68·M70		U2 3/4			G2 1/2	Rp2 1/2	Rc2 1/2	45.00	35.50	38.00
	M72·M75										
			U3·U3 1/4·								
			U3 1/2			G3	Rp3	Rc3	50.00	40.00	42.00
	M76·M80										
	M85·M90										
			U3 3/4·U4						56.00	45.00	46.00
						G3 1/2	Rp3 1/2	Rc3 1/2	63.00	50.00	51.00
						G4	Rp4	Rc4	71.00	56.00	56.00

Tap standards and shapes (2)



DIN Standard Tap Shank Diameter and Square Dimensions Table

DIN 371 • DIN 376

DIN 2189 • DIN 5156 • DIN 5157

■ NOTE

In DIN standards, even for the same thread size, there are two types of shank diameters: full diameter shank and relieved shank.

Metric thread D		Pipe thread D					Shank diameter d_1	Square width K	Square length H_0
DIN371	DIN376	DIN 2189	DIN 5156	DIN 5157					
	M1.6 • M 1.8						1.2		
	M 2						1.4		
	M 2.2 • M 2.3						1.6		
	M 2.5 • M 2.6						1.8		
	M 3						2.2		
M 1 • M 1.1 • M 1.2 • M 1.4 • M 1.6 • M 1.7 • M 1.8	M 3.5						2.5	2.1	5.0
M 2 • M 2.2 • M 2.3 • M 2.5 • M 2.6	M 4						2.8	2.1	5.0
M 3	M 4.5 • M 5						3.5	2.7	6.0
M 3.5							4.0	3.0	6.0
M 4	M 6						4.5	3.4	6.0
	M 7						5.5	4.3	7.0
M 4.5 • M 5 • M 6	M 8	G 1/16	G 1/16	Rp 1/16	G 1/16	Rp 1/16	6.0	4.9	8.0
M 7	M 9 • M 10	G 1/8	G 1/8	Rp 1/8	G 1/8	Rp 1/8	7.0	5.5	8.0
M 8	M 11						8.0	6.2	9.0
M 9	M 12						9.0	7.0	10.0
M 10							10.0	8.0	11.0
	M 14	G 1/4	G 1/4	Rp 1/4	G 1/4	Rp 1/4	11.0	9.0	12.0
	M 16	G 3/8	G 3/8	Rp 3/8	G 3/8	Rp 3/8	12.0	9.0	12.0
	M 18						14.0	11.0	14.0
	M 20	G 1/2	G 1/2	Rp 1/2	G 1/2	Rp 1/2	16.0	12.0	15.0
	M 22 • M 24	G 5/8	G 5/8		G 5/8		18.0	14.5	17.0
	M 27	G 3/4	G 3/4	Rp 3/4	G 3/4	Rp 3/4	20.0	16.0	19.0
	M 30	G 7/8	G 7/8		G 7/8		22.0	18.0	21.0
	M 33	G 1	G 1	Rp 1	G 1	Rp 1	25.0	20.0	23.0
	M 36		G 1 1/8		G 1 1/8		28.0	22.0	25.0
	M 39 • M 42		G 1 1/4	Rp 1 1/4	G 1 1/4	Rp 1 1/4	32.0	24.0	27.0
	M 45 • M 48		G 1 1/2	Rp 1 1/2	G 1 1/2	Rp 1 1/2	36.0	29.0	32.0
	M 52 • M 56		G 1 3/4		G 1 3/4		40.0	32.0	35.0
	M 60		G 2	Rp 2	G 2	Rp 2	45.0	35.0	38.0
	M 64 • M 68				G 2 1/4 • G 2 1/2 • G 2 3/4 • G 3	Rp 2 1/2 • Rp 3	50.0	39.0	42.0
					G 3 1/2 • G 4	Rp 4	56.0	44.0	47.0

OSG Synchro Tap Standard

■ NOTE

When using OSG Synchro Taps, please refer to the table below before placing your order.

Metric thread D	Shank diameter d_1	Square width K	Square length H_0	Corresponding JIS Standard Sizes
M3	4	3.2	6	M3
M4	6	4.5	7	M6
M5	6	4.5	7	M6
M6	6	4.5	7	M6
M8	8	6.0	9	M11
M10	8	6.0	9	M11
M12	10	8.0	11	
M14	12	9.0	12	U5/8
M16	16	12.0	15	
M18	16	12.0	15	
M20	16	12.0	15	
M24	20	15.0	18	M27
M27	20	15.0	18	M27
M30	25	19.0	22	M33



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