

Tension / Compression tap chucks for tapping cycles that are not synchronized

For tapping applications on CNC machines where the revolutions per minute and feed rate are not synchronized to the tap pitch, tap holders with tension / compression float are recommended. These tap chucks rely on the machine spindle for reversal, but by providing axial float, the tap is able to follow the correct pitch, producing gage perfect threads.

Tapmatic offers a complete program of tension / compression tap chucks with a wide range of sizes, and three different tap holding options. Rubberflex multi range collets, ER collets, or Quick Change.



SM Rubberflex Collets

Tension / compression floating tap holders for gage perfect threads with releasable hard start for consistent tapping depth control.

For tap sizes M1.4-M30.

Only two collets needed to cover the capacity of each holder.



SM ER Collets

All the same features as the rubberflex version but for use with ER square drive collets.

For tap sizes M1.4-M18.

ER GB square drive collets include an internal square drive for securely gripping the tap shank.



TA Quick Change

In addition to tension/compression and releasable hard start, the TA series includes front release. A safety feature that releases the quick change tap adapter when the extension float is exceeded.

For tap sizes M1-M49.

Quick Change for fast tap change without wrenches

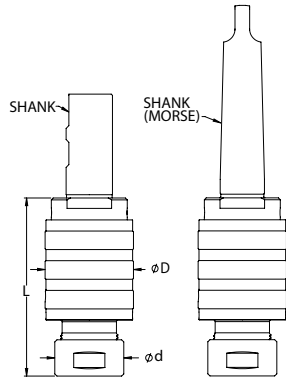


TIC Quick Change

All the same features as the TA series but with the addition of high pressure internal coolant up to 50 bar.

For tap sizes M3-M36.

Tension/Compression tap chucks with modular straight shank and RF collet



Dimensions

Model	D	d	L	Weight kg
SM2	27	19	53	0.2
SM4	38	27	71	0.4
SM6	48	37	96	0.8
SM8	63.5	57	128	2.5

Tapping chuck with increased tension and compression to accommodate tapping cycles that are not synchronized.

Features and Advantages

- increased tension and compression
- releasable hard start for consistent depth control
- right hand and left hand tapping
- multi-range collets (RF), adjustable back jaw for driving tap square

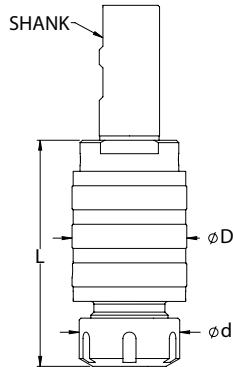
How to Order

Please select the tap chuck (A) and CAT, SK or BT shank (C), to fit your application. Please order rubber flex collets separately.

Model	Capacity (steel)	Collets Rubber Flex Order Code (Shank Ø)	Shank	Order code	Tension T	Compression H
SM2	M1.4–M7 #0 - 1/4"	21600 (2.5-4.5) 21700 (4.5-6.5)	16mm	023216	4.5	6
			5/8"	023262		
			No. 2 Morse	023202		
SM4	M3–M12 #6 - 1/2"	22100 (3.5-6.5) 22200 (6.5-10.0)	20mm	023420	7	7
			3/4"	023475		
			No. 2 Morse	023402		
SM6	M5–M18 #10 - 3/4"	24100 (4.5-10.0) 24500 (10.0-15.0)	25mm	023625	11	11
			1"	023610		
			No. 3 Morse	023603		
SM8	M10–M30 1/2" - 1 1/8"	26100 (10.0-16.0) 26200 (16.0-23.0)	32mm	023832	17	17
			1 1/2"	023815		
			No. 3 Morse	023803		
			No. 4 Morse	023804		

Note: Additional shanks available. When using roll form taps, the tool capacity must be reduced 25%.

Tension/Compression tap chucks with modular straight shank and ER collet



Dimensions

Model	D	d	L	Weight kg
SM2	27	28	65	0.2
SM4	38	34	74	0.4
SM6	48	42	94	0.8

Tapping chuck with increased tension and compression to accommodate tapping cycles that are not synchronized.

Features and Advantages

- increased tension and compression
- releasable hard start for consistent depth control
- right hand and left hand tapping
- ER steel collet chuck

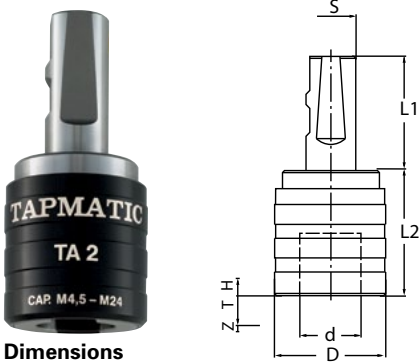
How to Order

Please select the tap chuck (A) and CAT, SK or BT shank (C), to fit your application. Please order ER steel collets separately.

Model	Capacity (steel)	Collets	Shank	Order code	Tension T	Compression H
SM2	M1.4–M7 #0 - 1/4"	ER16	16mm	023216ER	4.5	5
			5/8"	023262ER		
SM4	M3–M12 #6 - 1/2"	ER20	20mm	023420ER	7	7
			3/4"	023475ER		
SM6	M5–M18 #10 - 3/4"	ER25	25mm	023625ER	11	11
			1"	023610ER		



Tension/Compression tap chucks with modular straight shank and quick change



Dimensions

Model	D	d	L1	L2
TA0-016	29	13	48	38.0
TA0-020			50	
TA1-016	39	19	49	39.0
TA1-020			51	
TA1-025			57	
TA2-025	56	31	57	63.0
TA2-032				
TA3-032	81	48	61	124.0
TA4-040	99	60	71	135.5

TA tapping chuck with tension/compression. With its quick change spindle the taps can be changed in seconds.

Features and Advantages

- tension and compression
- releaseable hard start for consistent depth control
- front release protects against damage if over extended
- right hand and left hand tapping
- short projection

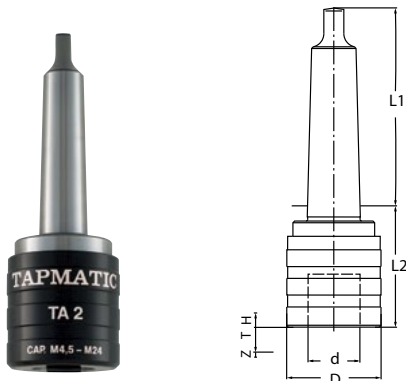
How to Order

Please order the tap chuck (A) and CAT, SK or BT shank (C) to fit your application. Please order tap adapters separately

(A) Model	Capacity (steel)	Adapter	Shank	Order code	Tension T	Compression H	Front release Z
TA0	M1-M10 #0 - 1/4"	Nr. 0	16 mm	490016	7.5	5	1.7
			20 mm	490020			
TA1	M3-M14 #8 - 9/16"	Nr. 1	16 mm	491016	8	5	2.1
			20 mm	491020			
			25 mm	491025			
TA2	M4.5-M24 5/16" - 7/8"	Nr. 2	25 mm	492025	15	8.5	2.8
			32 mm	492032			
TA3	M14-M36, 13/16" - 1 3/8"	Nr. 3	32 mm	493032	23.5	15	4.1
TA4	M22-M48, 7/8" - 1 7/8"	Nr. 4	40 mm	494040	25	16.5	5.7

Note: When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %.

Tension/Compression tap chucks with morse taper and quick change



Dimensions

Model	D	d	L1	L2
TA0-MT1	29	13	62.0	43.5
TA0-MT2	29	13	75.0	45.0
TA1-MT2	39	19	75.0	47.0
TA2-MT3	56	31	94.0	71.0
TA3-MT4	81	48	117.5	105.0
TA4-MT5	99	60	149.5	116.5

How to Order

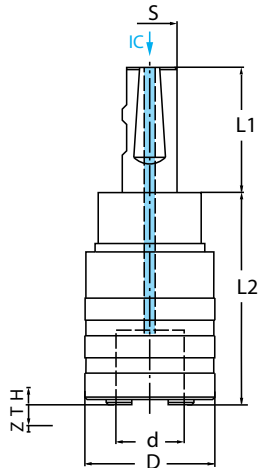
Please select the tap chuck (A) to fit your application. Please order quick change tap adapters separately.

(A) Model	Capacity (steel)	Tap adapters	Morse taper MT	Order code	Tension T	Compression H	Front release Z
TA0	M1-M10 #0-1/4"	Nr. 0	1	490MT1	7.5	5	1.7
			2	490MT2			
TA1	M3-M14 #8-9/16"	Nr. 1	2	491MT2	8	5	2.1
			3	491MT3			
TA2	M4.5-M24 5/16"-7/8"	Nr. 2	3	492MT3	15	8.5	2.8
			4	492MT4			
			5	492MT5			
TA3	M14-M36 13/16"-1 3/8"	Nr. 3	4	493MT4	23.5	15	4.1
			5	493MT5			
TA4	M22-M48 7/8"-1 7/8"	Nr. 4	5	494MT5	25	16.5	5.7
			6	494MT6			

Note: When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %. All dimensions are shown in mm. 25.4mm = 1"



Tension/Compression tap chucks with modular straight shank, quick change and internal coolant



Tapping chuck with internal coolant system, tension, compression and quick-change spindle, where the tap can be changed in seconds.

Features and Advantages

- tension and compression
- releaseable hard start for consistent depth control
- front release protects against damage if over extended
- right hand and left hand tapping
- internal coolant system (max. 50 bar)
- short projection

How to Order

Please order the tap chuck (A) and CAT, SK or BT shank (C) to fit your application. Please order tap adapters separately.

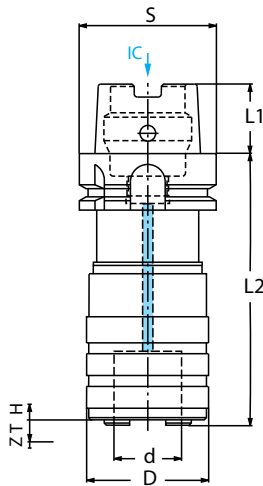
Dimensions

Model	D mm	d mm	L1 mm	L2 mm
TIC1-025	43	19	57	62
TIC2-025	59	31	57	98
TIC3-032	80	48	61	147

(A) Model	Capacity (steel)	Adapter	Shank	Order code	Tension T	Compression H	Front release Z
TIC1	M3-M14, #8 - 9/16"	Nr. 1	25	49C1025	7.5	5	2.5
TIC2	M4.5-M24, 5/16" - 7/8"	Nr. 2	25	49C2025	10	7	3
TIC3	M14-M36, 13/16" - 1 3/8"	Nr. 3	32	49C3032	20	15	5

Note: When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %.

Tension/Compression tap chucks with HSK shank, quick change and internal coolant



Dimensions

Model	D	d	L1	L2
TIC1-HSK50A	43	19	25	91
TIC1-HSK63A			32	93
TIC1-HSK80A			40	97
TIC1-HSK100A			50	98
TIC2-HSK50A	59	31	25	140
TIC2-HSK63A			32	130
TIC2-HSK80A			40	133
TIC2-HSK100A			50	135

How to Order

Please select the tap chuck (A) to fit your application. Please order quick change tap adapters separately.

(A) Model	Capacity (steel)	Adapter	Shank S HSK-A	Order code	Tension T	Compression H	Front release Z
TIC1	M3-M14 #8 - 9/16"	Nr. 1	50	49C1H50	7.5	5	2.5
			63	49C1H63			
			80	49C1H80			
			100	49C1H100			
TIC2	M4.5-M24 5/16" - 7/8"	Nr. 2	50	49C2H50	10	7	3
			63	49C2H63			
			80	49C2H80			
			100	49C2H100			

Note: When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %. All dimensions are shown in mm. 25.4mm = 1"

