8TC Dimension

Unit : mm

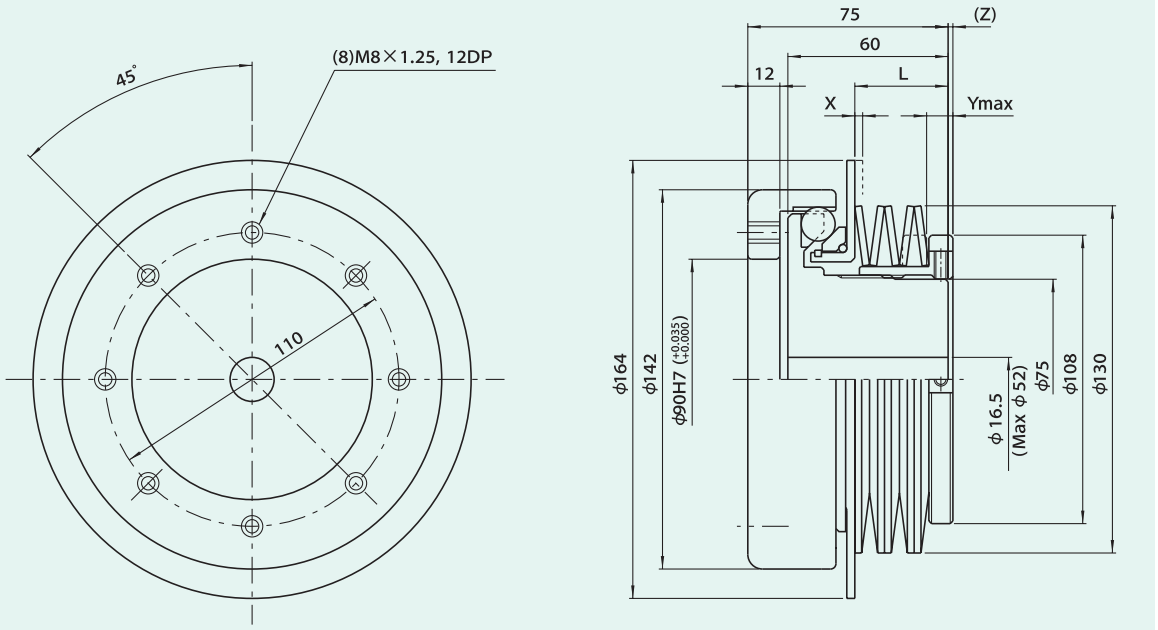
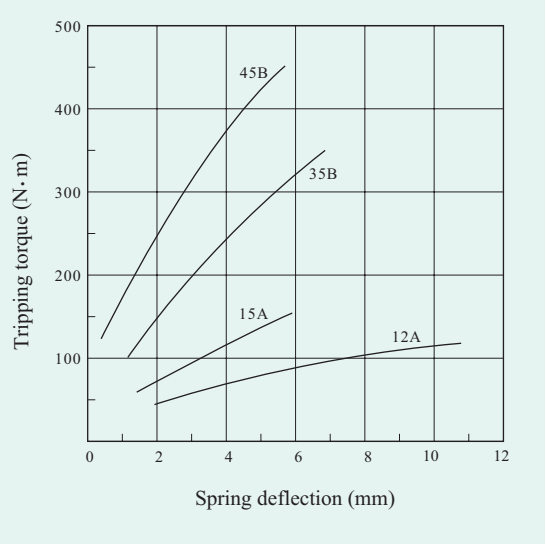


Figure 8TC-1

Torque diagram

Figure 8TC-2



NOTE
1. Use only recommended shaft fastening devices to match the torque requirement, compression ring type fasteners are a good alternative to keyways types.
2. Measure hole depth before selecting the bolt length.
3. Lock the adjusting nut after setting the torque.
4. Torque is set to minimum unless preset is specified.

Dimensions

Table 8TC-1

Model	Range of tripping torque (N·m)	L (mm)	X (mm)	Ymax (mm)	(Z) (mm)
8TC-12A	40 ~ 120	35.0	1.7	10.8	2.5
-15A	60 ~ 150	36.0	2.7	5.9	1.6
-35B	100 ~ 350	35.0	1.7	6.9	1.8
-45B	120 ~ 450	36.0	2.7	5.7	0.9

Specifications

Table 8TC-2

Item	Unit	Value
Pitch of thread	mm	2
Max. allowable angle error	deg	1.2
Max. allowable space error	mm	±2
Max. allowable parallel offset	mm	0.1
Max. revolution per minute	r.p.m	500
Moment of inertia	kg·m²	1.4 X 10^{-2}
Mass	kg	5.3

X : Denotes amount of movement when an overload occurs. Optional monitoring sensors can input to the controller to stop the machine.

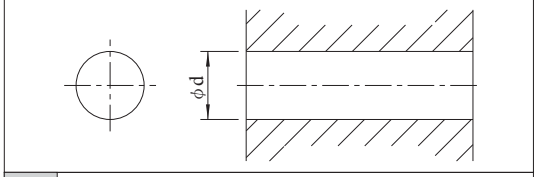
(Z) : Denotes when the spring height is torque free and should be a reference when calculating tripping torques.

Ymax : Denotes the amount of turns the torque adjustment nut must be turned to obtain maximum tripping torque. Tightening beyond this amount can prevent the torque limiter from tripping.

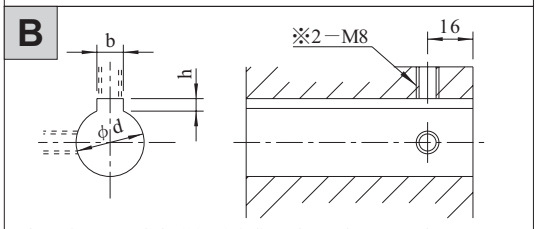
Shaft hole dimensions

Figure 8TC-3

A

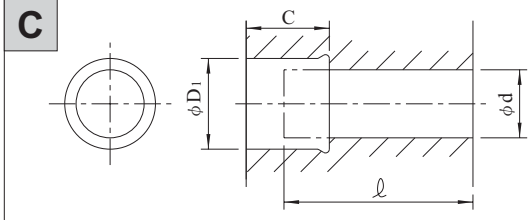


B



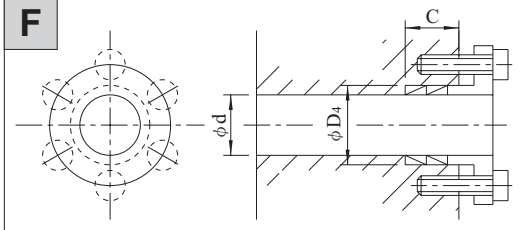
When using two set bolts ((2)M8), indicate the number M82 to the ordering code on the right.

C



When using two sets of fastening elements with a pressure flange, indicate the number of A0 to the ordering code on the right.

F



Ships with fastening element and pressure flange.

Shaft hole dimension ordering codes

Unit : mm

Table 8TC-3

	No.	ϕ d	Code No.
A	1	30H 7	08TC -30H 7
	2	32H 7	-32H 7
	3	35H 7	-35H 7
	4	38H 7	-38H 7
	5	40H 7	-40H 7
	6	45H 7	-45H 7
	7	50H 7	-50H 7

	No.	ϕ d	b ×h	Code No.
B	1	30H 7	8Js9×3.3	08TC -30K 8 J
	2	〃	10Js9×3.3	-30K 10J
	3	32H 7	〃	-32K 10J
	4	35H 7	〃	-35K 10J
	5	38H 7	〃	-38K 10J
	6	40H 7	12Js9×3.3	-40K 12J
	7	45H 7	14Js9×3.8	-45K 14J
	8	50H 7	〃	-50K 14J

	No.	ϕ d	ϕ D1	C	ℓ	Code No.
C	1	30H 7	35H 7	27	49	08TC -S 303527
	2	32H 7	36H 7	〃	〃	-S 323627
	3	35H 7	40H 8	30	〃	-S 354030
	4	38H 7	44H 8	〃	〃	-S 384430
	5	40H 7	45H 8	〃	〃	-S 404530
	6	45H 7	52H 8	38	46	-S 455238

	No.	ϕ d	ϕ D4	C	Code No.
F	1	30H 7	35H 7	17	08TC -G 303517B 0
	2	32H 7	36H 7	〃	-G 323617B 0
	3	35H 7	4 0H 8	19	-G 354019B 0
	4	38H 7	44H 8	〃	-G 384419B 0
	5	40H 7	45H 8	〃	-G 404519B 0
	6	45H 7	52H 8	24	-G 455224B 1

(Note) The codes shown here are for standard hole drilling specifications. The countersink depth depends on the length of the shaft ℓ and the depth of the Ringfeder.

Option

Figure 8TC-4

Shaft mounting flange

Code No.

08TC-C d O

Note) pressured flange and 2 sets of fastening elements are attached.

Table 8TC-4

ϕd (mm)	C±0.2 (mm)	Reference transmitted torque (N・m)	※Reference torque for fastening bolt (N・m)
ϕ 30 $^{+0.021}_{+0.0}$	17	343	14
ϕ 35 $^{+0.025}_{+0.0}$	19	382	14
ϕ 40 $^{+0.025}_{+0.0}$	19	578	14
ϕ 45 $^{+0.025}_{+0.0}$	25	833	34

※Please refer to DIN912-10.9 for torque fastening bolt.