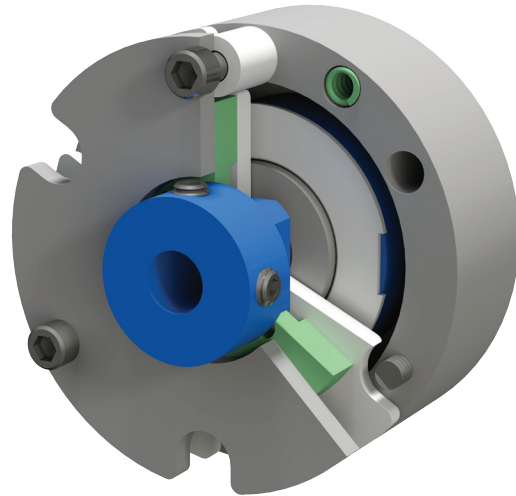


TSEB Series

Thin Spring-Engaged Power-Off Brakes

Eleven standard frame sizes available:

- 1.3 to 7.3" diameter ; 0.7 to 2.7" length
- Bore sizes from 0.16 to 1.2"
- Static torque from 0.10 to 147 lb-ft
- Power ratings of 4W to 45W
- 24VDC coil voltage
- Modified designs and customized assemblies available



Performance/ Mechanical Specifications

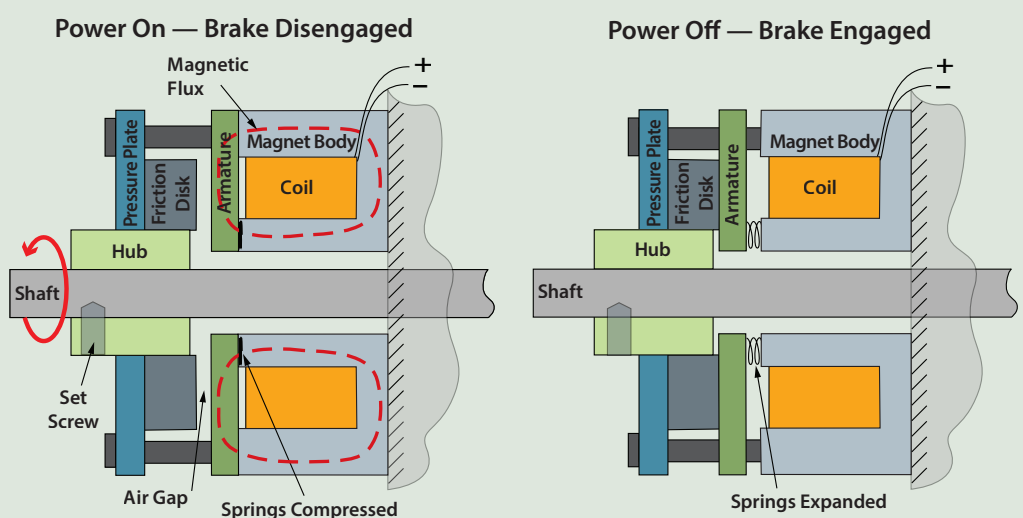
TSEB Series — Model Size

		138	158	189	303	335	382	460	492	571	650	736
Torque Rating (Static)	lb-ft	0.09	0.15	0.37	1.48	2.95	5.90	11.80	22.13	36.88	73.75	147.50
	Nm	0.1	0.2	0.5	2.0	4.0	8.0	16.0	30.0	50.0	100.0	200.0
Recommended Max Speed	RPM	6000	6000	5000	5000	4500	4000	3500	3500	3000	3000	2500
Coil Data- 24VDC	Amps	0.160	0.175	0.271	0.400	0.520	0.620	0.750	0.950	1.120	1.330	1.880
Friction Disc & Hub Inertia	lb-ft ²	0.002	0.003	0.004	0.031	0.055	0.099	0.287	1.094	2.204	4.664	8.304
	kg-cm ²	0.004	0.009	0.012	0.090	0.160	0.290	0.840	3.200	6.450	13.650	24.300
Approximate Weight	lb	0.2	0.4	0.6	1.3	1.8	2.4	4.0	6.2	8.4	11.0	26.9
	kg	0.09	0.17	0.26	0.6	0.8	1.1	1.8	2.8	3.8	5.0	12.2

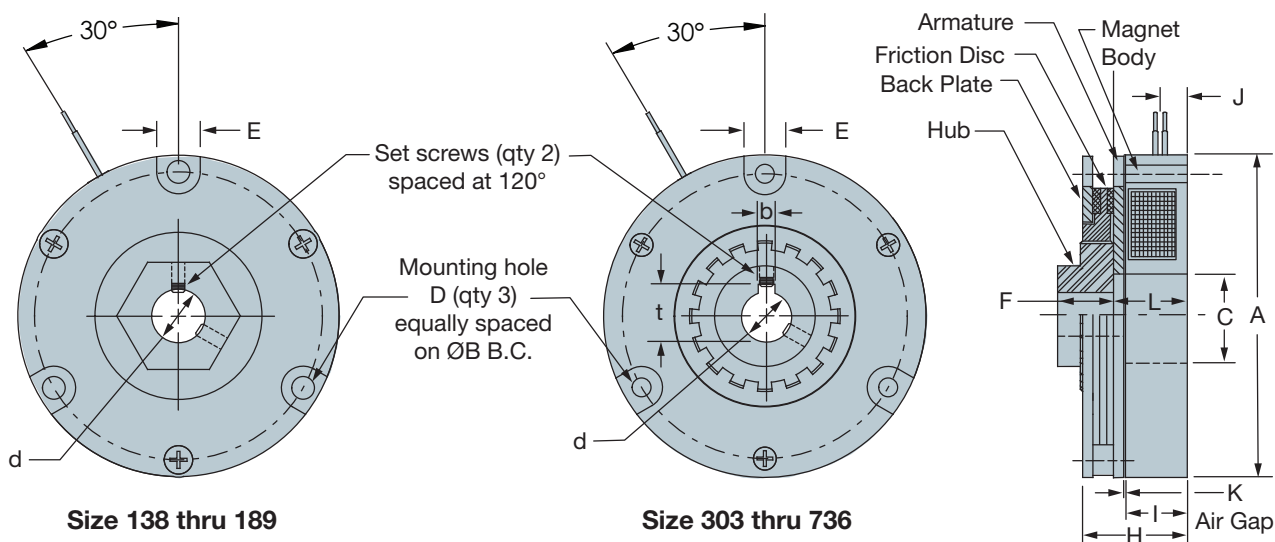
TSEB Operation:

The magnet body is attached to the rear of the motor or bulkhead, and the hub is attached to the shaft with two set screws. When the coil is energized, the electromagnetic field attracts the armature plate and compresses the springs. This allows the friction plate to rotate freely with the hub and shaft.

When power is turned off, the electromagnetic field dissipates, allowing the springs to push the armature plate into contact with the friction disk. This squeezes the friction disk between the pressure plate and the armature plate, thus transmitting torque, and stopping/holding the friction disc, hub, and shaft.



Thin Spring-Engaged Brakes



TSEB Series — Model Size (add "TSEB-" to model size below to complete model number)

Dimensions — Inches (mm)		138-24- M04	158-24- M06	189-24- M08	303-24- M12	335-24- M12	382-24- M14	460-24- M19	492-24- M19	571-24- M24	650-24- M28	736-24- M32		
Case	Overall Body Diameter	A	1.38 (35)	1.58 (40)	1.89 (48)	3.03 (77)	3.35 (85)	3.82 (97)	4.61 (117)	4.92 (125)	5.71 (145)	6.50 (165)	7.36 (187)	
	Overall Length (ref)	H	0.819 (20.8)	1.260 (32.0)	1.351 (34.3)	0.984 (25.0)	1.083 (27.5)	1.154 (29.3)	1.351 (34.3)	1.796 (45.6)	1.896 (48.2)	2.363 (60.0)	2.788 (70.8)	
	Thickness	I	0.484 (12.3)	0.827 (21.0)	0.917 (23.3)	0.591 (15.0)	0.630 (16.0)	0.662 (16.8)	0.768 (19.5)	1.024 (26.0)	1.063 (27.0)	1.260 (32.0)	1.457 (37.0)	
	Lead Wire Location	J	0.177 (4.5)	0.236 (6.0)	0.236 (6.0)	0.256 (6.5)	0.276 (7.0)	0.295 (7.5)	0.315 (8.0)	0.433 (11.0)	0.394 (10.0)	0.669 (17.0)	0.854 (21.7)	
	Mounting Hole Ø	D	0.118 (3)	0.118 (3)	0.118 (3)	0.177 (4.5)	0.217 (5.5)	0.217 (5.5)	0.217 (5.5)	0.260 (6.6)	0.256 (6.5)	0.354 (9)	0.354 (9)	
	Mounting Holes Bolt Circle	B	1.181 (30)	1.378 (35)	1.693 (43)	2.678 (68)	2.914 (74)	3.347 (85)	4.253 (108)	4.410 (112)	5.119 (130)	5.906 (150)	6.694 (170)	
	Clearance Slot	E	0.236 (6)	0.236 (6)	0.236 (6)	0.394 (10)	0.433 (11)	0.433 (11)	0.433 (11)	0.551 (14)	0.551 (14)	0.709 (18)	0.709 (18)	
	Pilot Ø	C	0.276 (7)	0.354 (9)	0.591 (15)	0.788 (20)	0.788 (20)	0.984 (20)	1.575 (40)	1.929 (49)	1.929 (49)	2.441 (62)	2.441 (62)	
	Length	F	0.335 (8.5)	0.433 (11)	0.433 (11)	0.315 (8)	0.473 (12)	0.630 (16)	0.788 (20)	0.984 (25)	0.984 (25)	1.181 (30)	1.575 (40)	
	Set Depth	L	0.484 (12.3)	0.827 (21.0)	0.917 (23.3)	0.768 (19.5)	0.807 (20.5)	0.847 (21.5)	0.984 (25.0)	1.299 (33.0)	1.378 (35.0)	1.713 (43.5)	2.067 (52.5)	
Hub	Bore Ø	d	0.158 (4.00)	0.236 (6.00)	0.315 (8.00)	0.473 (12.00)	0.473 (12.00)	0.551 (14.00)	0.748 (19.00)	0.748 (19.00)	0.945 (24.00)	1.103 (28.00)	1.260 (32.00)	
	Keyway	Width	b	—	—	—	0.158 (4)	0.158 (4)	0.197 (5)	0.197 (5)	0.197 (5)	0.276 (7)	0.276 (7)	0.394 (10)
		Height	t	—	—	—	0.543 (13.8)	0.543 (13.8)	0.642 (16.3)	0.839 (21.3)	0.839 (21.3)	1.063 (27.0)	1.221 (31.0)	1.398 (35.5)
	Set Screws Thread Size		M3	M3	M3	—	—	M4	M5	—	—	—	—	
Air Gap (nominal ref)	K	0.005 (0.13)	0.005 (0.13)	0.005 (0.13)	0.006 (0.15)	0.006 (0.15)	0.006 (0.15)	0.006 (0.15)	0.008 (0.20)	0.008 (0.20)	0.008 (0.20)	0.008 (0.20)		