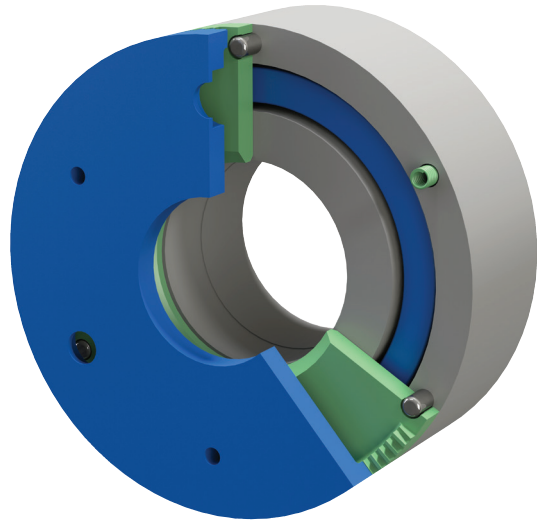


# SETB Series

## Spring Engaged Tooth Brakes

Eight standard frame sizes available:

- 2.8 to 9.6" diameter ; 1.4 to 6.5" length
- Bore sizes from 1.2 to 5.1"
- Static torque from 20 to 2600 lb-ft
- 1800 to 5500 RPM max speed
- Operates both dry and in oil
- Modified designs and customized assemblies available



### Performance/Mechanical Specifications

SETB Series — Model Size

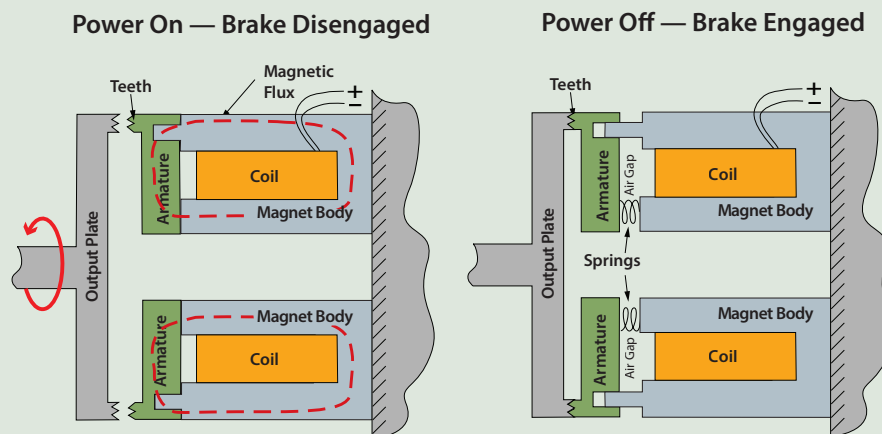
		320	375	450	525	630	760	895	1065
Torque Rating (Static)*	lb-ft	20	40	80	160	320	650	1300	2600
	Nm	27.1	54.2	108.5	216.9	433.9	881.3	1762.6	3525.1
Recommended Max Speed	RPM	5500	4500	4000	3500	3000	2500	2000	1800
Coil Data – 24VDC									
	110VDC								
Armature/Adapter Inertia	Amps	1.0	1.3	1.6	2.0	2.4	3.2	3.5	5.0
		0.3	0.4	0.5	0.6	0.7	0.9	1.0	1.5
Approximate Weight	lb-ft <sup>2</sup>	0.01	0.02	0.03	0.07	0.16	0.40	0.70	1.80
	kg-cm <sup>2</sup>	4.21	8.42	12.63	29.47	67.36	168.40	294.70	757.80
Approximate Weight	lb	2.0	3.3	5.5	10.0	18.0	30.0	36.0	75.0
	kg	0.91	1.50	2.49	4.54	8.16	13.61	16.33	34.02

\*Refer to Design Considerations – General Notes & Data for dynamic rating.

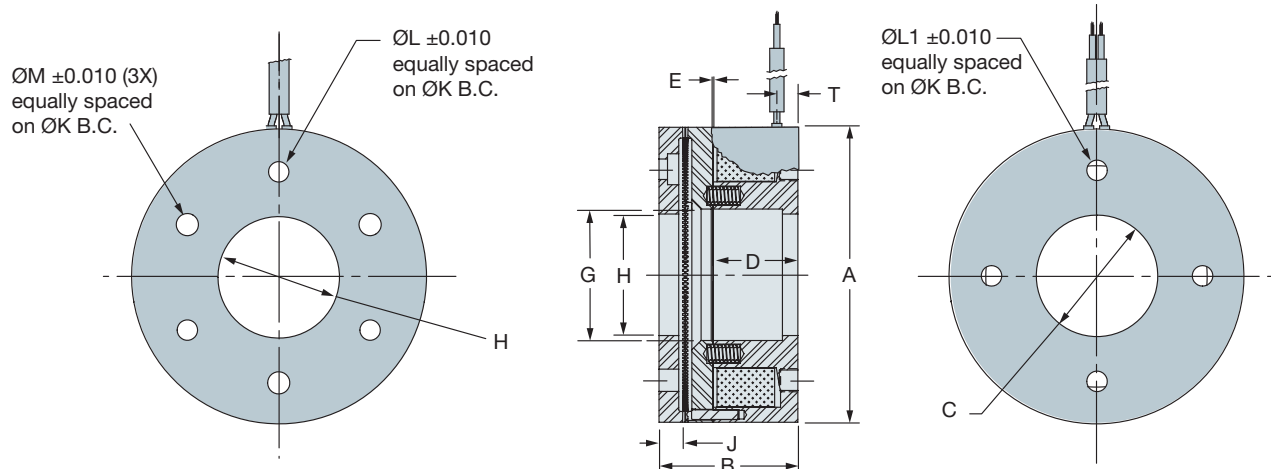
### SETB Operation:

When current is applied to the coil in the magnet body, a magnetic field is created which attracts the armature toward the magnet body, disengaging the teeth, and allowing the load attached to the output plate to rotate freely.

When the current is removed, springs push the armature teeth into engagement with the output plate teeth and the load is held.



# Tooth Clutches & Brakes



SETB Series — Model Size

Dimensions — Inches (mm)		320	375	450	525	630	760	895	1065
Magnet Body Diameter	A	2.87 (72.90)	3.44 (87.38)	4.11 (104.39)	4.78 (121.41)	5.75 (146.05)	6.97 (177.04)	8.19 (208.03)	9.66 (245.36)
Overall Length (ref)	B	1.41 (35.81)	1.62 (41.15)	1.92 (48.77)	2.25 (57.15)	2.70 (68.58)	3.84 (97.54)	4.94 (125.48)	6.05 (153.67)
Pilot Diameter Max	C	1.25 (31.75)	1.51 (38.35)	1.86 (47.24)	2.12 (53.85)	2.73 (69.34)	3.40 (86.36)	4.30 (109.22)	5.00 (127.00)
Bore Length	D	0.83 (21.08)	0.98 (24.89)	1.16 (29.46)	1.37 (34.82)	1.63 (41.40)	1.88 (47.75)	2.38 (60.45)	2.75 (69.85)
Disengaged Clearance	E	0.010 (0.254)	0.012 (0.305)	0.012 (0.305)	0.012 (0.305)	0.012 (0.305)	0.016 (0.406)	0.018 (0.457)	0.020 (0.508)
Armature Bore Diameter	G	1.26 (32.00)	1.52 (38.61)	1.87 (47.50)	2.13 (54.10)	2.74 (69.60)	3.41 (86.61)	4.31 (109.47)	5.18 (131.57)
Bore (min.)	H	1.000 (25.400)	1.125 (28.575)	1.250 (31.750)	1.375 (34.925)	1.625 (41.275)	2.000 (50.800)	2.500 (63.500)	3.000 (76.200)
Bore (max.)	H	1.690 (42.926)	2.000 (50.800)	2.340 (59.436)	2.760 (70.104)	3.320 (84.328)	4.120 (104.648)	5.000 (127.000)	5.875 (149.225)
Thickness	J	0.24 (6.10)	0.31 (7.87)	0.36 (9.14)	0.42 (10.67)	0.52 (13.21)	0.61 (15.49)	0.75 (19.05)	1.00 (25.40)
Mounting Adapter Bolt Circle	K	2.12 (53.85)	2.46 (62.48)	2.87 (72.90)	3.42 (86.87)	4.00 (101.60)	4.90 (124.46)	6.00 (152.40)	7.00 (177.80)
Holes-Screw (Qty)	L	#10 (3)	#10 (3)	1/4 (3)	5/16 (3)	5/16 (3)	3/8 (3)	7/16 (3)	1/2 (6)
Magnet Body Mounting Holes	L1	1/4-28 (4)	1/4-28 (4)	5/16-24 (4)	3/8-24 (4)	3/8-24 (4)	7/16-20 (4)	1/2-20 (4)	1/2-20 (6)
Holes - Dowel (3X)	M	0.110 (2.744)	0.235 (5.969)	0.297 (7.544)	0.360 (9.144)	0.360 (9.144)	0.422 (10.719)	0.485 (12.319)	0.485 (12.319)
Lead Wire Location	T	0.22 (5.59)	0.25 (6.35)	0.28 (7.11)	0.34 (8.64)	0.39 (9.91)	0.41 (10.41)	0.51 (12.95)	0.57 (14.48)