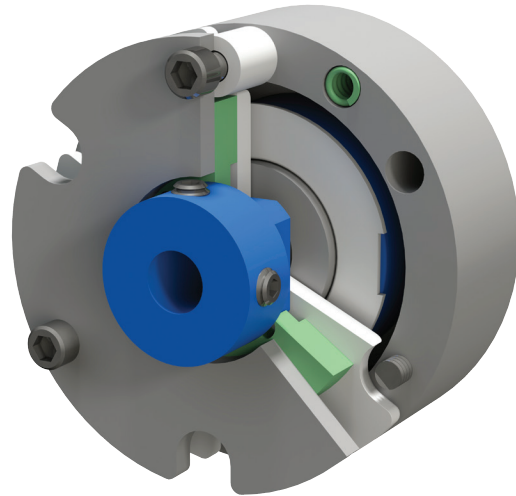


SEB Series

Spring-Engaged Power-Off Brakes

Twenty standard frame sizes available:

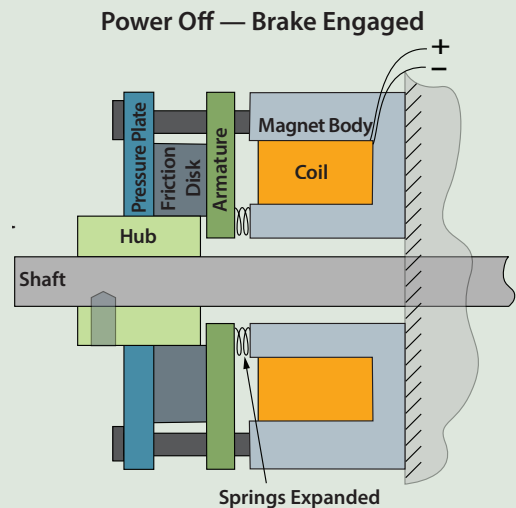
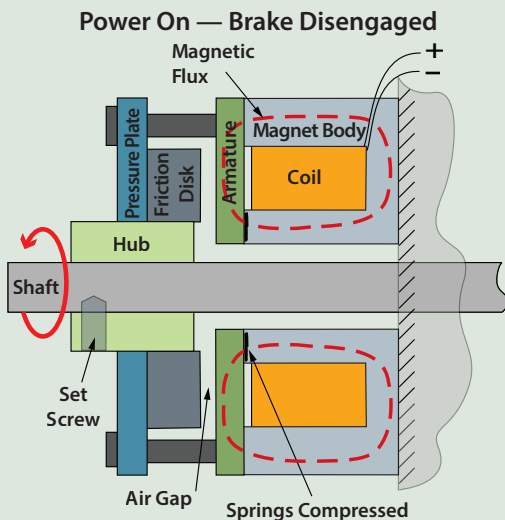
- 1.1 to 6.3" diameter ; 1.1 to 3.6" length
- Bore sizes from 0.18 to 5.5"
- Static torque from 0.08 to 4330 lb-ft
- Starting torque from 0.04 to 2150 lb-ft
- 24/90/110VDC coil voltage
- Operates both dry and in oil
- Modified designs and customized assemblies available



SEB 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.

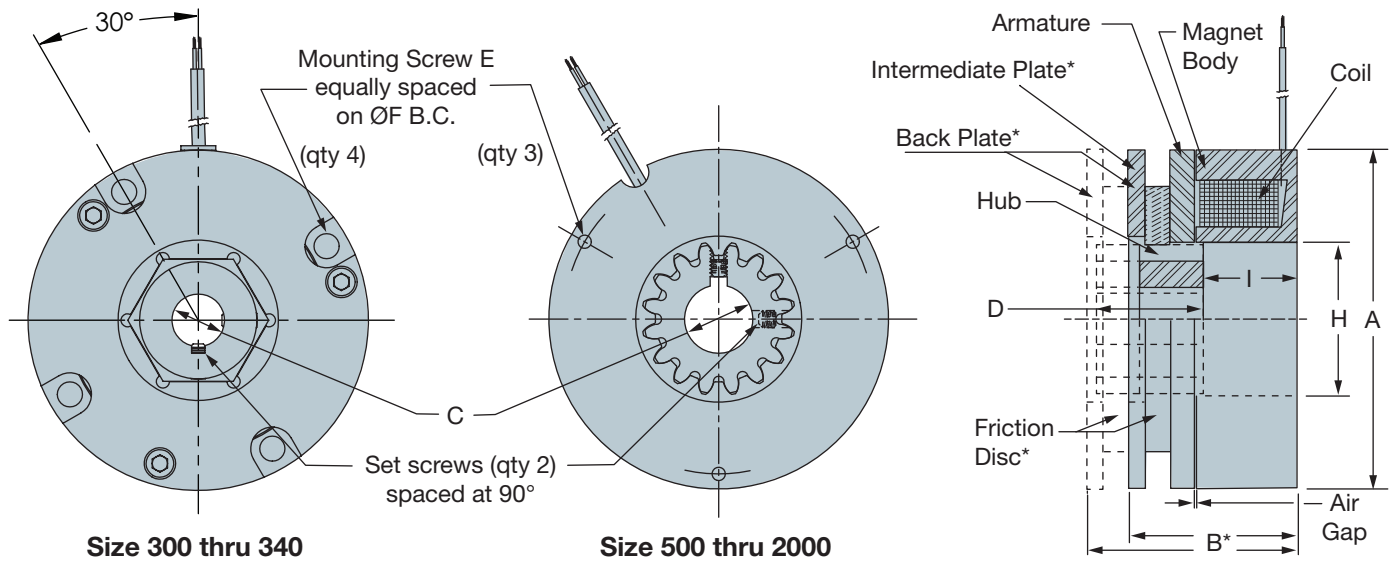


Spring-Engaged Brakes

Performance/Mechanical Specifications

| | | | SEB Series — Model Size | | | | | | | |
|------------------------------------|--------------------|---------|-------------------------|---------|---------|-------|-------|-------|--------|-------|
| | | | 300-1 | 300-2 | 340-1 | 340-2 | 500-1 | 500-2 | 670-1 | 670-2 |
| Torque Rating | Static | lb-ft | 3.0 | 5.5 | 8.0 | 14.5 | 21 | 38 | 65 | 120 |
| | | Nm | 4.1 | 7.5 | 10.9 | 19.7 | 28 | 52 | 88 | 163 |
| | Starting | lb-ft | 1.5 | 2.3 | 4.0 | 7.5 | 10.5 | 19.0 | 32.5 | 60 |
| | | Nm | 2.0 | 3.1 | 5.4 | 10.2 | 14.2 | 25.8 | 44.1 | 81 |
| Recommended Max Speed | RPM | 5000 | 5000 | 5000 | 5000 | 4000 | 4000 | 3600 | 3600 | |
| Coil Data – 24VDC 110VDC/90VDC* | Amps | | 0.73 | 0.73 | 0.74 | 0.74 | 1.88 | 1.88 | 3.13 | 3.13 |
| | | | 0.14 | 0.14 | 0.16 | 0.16 | 0.41 | 0.41 | 0.68 | 0.68 |
| Disc Inertia | lb-ft ² | 0.00037 | 0.00074 | 0.00037 | 0.00074 | 0.004 | 0.008 | 0.013 | 0.026 | |
| | kg-cm ² | 0.15577 | 0.31154 | 0.15577 | 0.31154 | 1.684 | 3.368 | 5.473 | 10.946 | |
| Hub Inertia | lb-ft ² | 0.00003 | 0.00006 | 0.00006 | 0.00006 | 0.002 | 0.004 | 0.003 | 0.005 | |
| | kg-cm ² | 0.01263 | 0.02526 | 0.02526 | 0.02526 | 0.842 | 1.684 | 1.263 | 2.105 | |
| Approximate Weight | lb | 3.5 | 3.8 | 3.6 | 4.1 | 12.2 | 13.9 | 28.5 | 31 | |
| | kg | 1.59 | 1.72 | 1.63 | 1.86 | 5.53 | 6.30 | 12.93 | 14.1 | |

| | | | SEB Series — Model Size | | | | | | | |
|------------------------------------|--------------------|--------|-------------------------|--------|--------|--------|---------|---------|---------|--------|
| | | | 900-1 | 900-2 | 1075-1 | 1075-2 | 1200-1 | 1200-2 | 2000-1 | 2000-2 |
| Torque Rating | Static | lb-ft | 250 | 450 | 400 | 800 | 830 | 2080 | 2150 | 4330 |
| | | Nm | 339 | 610 | 542 | 1085 | 1125 | 2820 | 2915 | 5871 |
| | Starting | lb-ft | 125 | 225 | 200 | 400 | 400 | 825 | 1025 | 2150 |
| | | Nm | 169 | 305 | 271 | 542 | 542 | 1119 | 1390 | 2915 |
| Recommended Max Speed | RPM | 2800 | 2800 | 2200 | 2200 | 1800 | 1800 | 1200 | 1200 | |
| Coil Data – 24VDC 110VDC/90VDC* | Amps | | 5.73 | 5.73 | 5.80 | 5.80 | 12.15 | 12.15 | 9.99 | 9.99 |
| | | | 1.25 | 1.25 | 1.27 | 1.27 | 2.65 | 2.65 | 2.18 | 2.18 |
| Disc Inertia | lb-ft ² | 0.076 | 0.151 | 0.330 | 6.600 | 1.19 | 2.38 | 5.54 | 11.08 | |
| | kg-cm ² | 31.996 | 63.571 | 138.93 | 2778.6 | 500.99 | 1001.98 | 2332.34 | 4664.68 | |
| Hub Inertia | lb-ft ² | 0.016 | 0.028 | 0.124 | 0.270 | 0.54 | 0.54 | 6.57 | 7.48 | |
| | kg-cm ² | 6.736 | 11.788 | 52.204 | 113.67 | 227.34 | 227.34 | 2765.97 | 3149.08 | |
| Approximate Weight | lb | 55 | 62 | 91 | 111 | 167 | 210 | 552 | 603 | |
| | kg | 24.9 | 28 | 41.3 | 50.3 | 75.7 | 95.3 | 250.4 | 273.5 | |



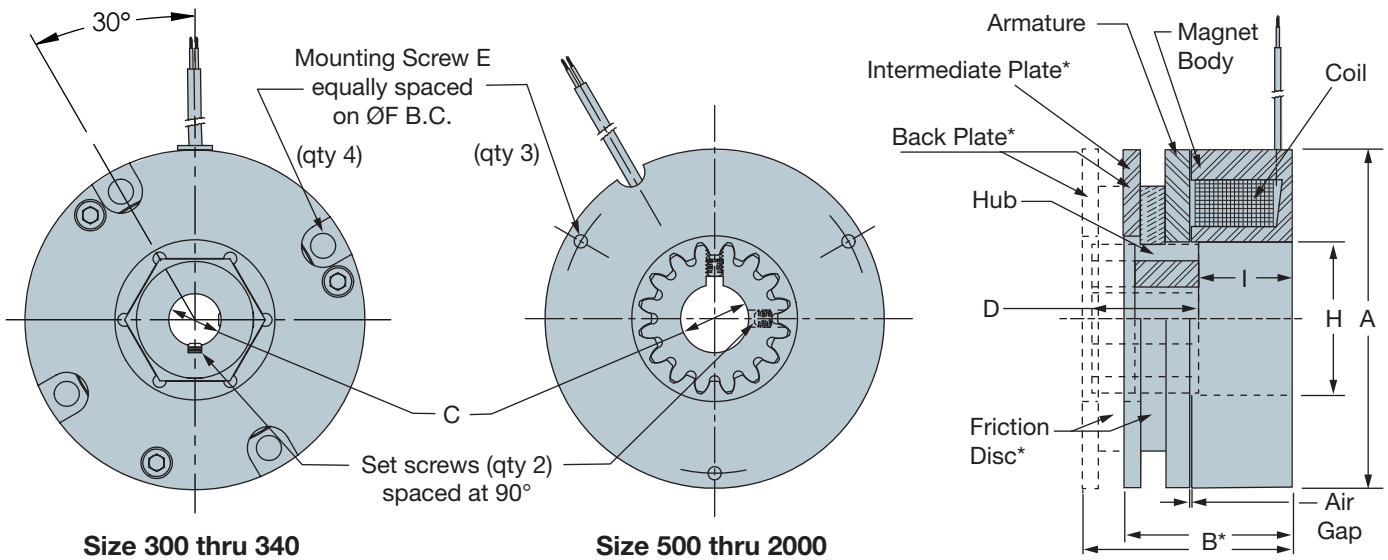
Configuration details may vary depending on model size. Contact factory for specific details.

* -1 models indicate single friction disc;
-2 indicates double disc configuration

**Dimensions —
Inches (mm)**

| | | SEB Series — Model Size * | | | | | | | |
|----------------------------|----------------|---------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| | | 300-1 | 300-2 | 340-1 | 340-2 | 500-1 | 500-2 | 670-1 | 670-2 |
| Magnet Body Diameter | A | 3.00 (76.2) | 3.00 (76.2) | 3.36 (85.3) | 3.36 (85.3) | 4.97 (126.2) | 4.97 (126.2) | 6.70 (170.2) | 6.70 (170.2) |
| Overall Length | B | 2.10 (53.3) | 2.54 (64.5) | 1.60 (40.6) | 2.03 (51.6) | 3.00 (76.2) | 3.60 (91.4) | 3.41 (86.6) | 4.02 (102.1) |
| Brake Body Length | B ₁ | 2.10 (53.3) | 2.54 (64.5) | 1.60 (40.6) | 2.03 (51.6) | 2.50 (63.5) | 3.10 (78.7) | 2.79 (70.9) | 3.40 (86.4) |
| Hub Bore (max) | C | 0.625 (15.88) | 0.625 (15.88) | 0.625 (15.88) | 0.625 (15.88) | 1.125 (28.58) | 1.125 (28.58) | 1.125 (28.58) | 1.125 (28.58) |
| Hub Bore Length | D | 0.44 (11.18) | 0.85 (21.6) | 0.85 (21.6) | 0.85 (21.6) | 1.20 (30.5) | 1.80 (45.7) | 1.76 (44.7) | 2.38 (60.5) |
| Mounting Screw | E | #8 | #8 | #10 | #10 | #10 | #10 | 5/16 | 5/16 |
| Mounting Bolt Circle | F | 2.725 (69.22) | 2.725 (69.22) | 2.913 (73.99) | 2.913 (73.99) | 4.530 (115.06) | 4.530 (115.06) | 6.000 (152.40) | 6.000 (152.40) |
| Mounting Screw Penetration | G | Thru | Thru | Thru | Thru | Thru | Thru | Thru | Thru |
| Thru Bore | H | 0.75 (19.1) | 0.75 (19.1) | 1.03 (26.2) | 1.03 (26.2) | 1.76 (44.7) | 1.76 (44.7) | 2.43 (61.7) | 2.43 (61.7) |
| Hub Position | I | 1.44 (36.6) | 1.44 (36.6) | 0.65 (16.5) | 1.08 (27.4) | 1.80 (45.7) | 1.80 (45.7) | 1.65 (41.9) | 1.65 (41.9) |

Spring-Engaged Brakes



Configuration details may vary depending on model size. Contact factory for specific details.

* -1 models indicate single friction disc;
-2 indicates double disc configuration

Dimensions — Inches (mm)

| | | SEB Series — Model Size * | | | | | | | |
|----------------------------|----------------|---------------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| | | 900-1 | 900-2 | 1075-1 | 1075-2 | 1200-1 | 1200-2 | 2000-1 | 2000-2 |
| Magnet Body Diameter | A | 9.00 (228.6) | 9.00 (228.6) | 10.75 (270.1) | 10.75 (270.1) | 12.00 (304.8) | 12.00 (304.8) | 20.00 (508.0) | 20.00 (508.0) |
| Overall Length | B | 4.58 (116.3) | 5.09 (129.3) | 4.50 (114.3) | 6.00 (152.4) | 5.74 (145.8) | 7.28 (184.9) | 7.38 (187.5) | 8.38 (212.9) |
| Brake Body Length | B ₁ | 4.58 (116.3) | 5.09 (129.3) | 4.50 (114.3) | 6.00 (152.4) | 5.74 (145.8) | 7.28 (184.9) | 5.96 (151.4) | 7.58 (192.5) |
| Hub Bore (max) | C | 2.000 (50.80) | 2.000 (50.80) | 2.500 (63.50) | 2.500 (63.50) | 3.000 (76.20) | 3.000 (76.20) | 5.500 (139.70) | 5.500 (139.70) |
| Hub Bore Length | D | 1.25 (31.8) | 2.25 (57.2) | 2.00 (50.8) | 3.50 (88.9) | 2.50 (63.5) | 2.50 (63.5) | 2.50 (63.5) | 3.50 (88.9) |
| Mounting Screw | E | 3/8 | 3/8 | 3/8-16 | 3/8-16 | 3/8-16 | 3/8-16 | 1/2-13 | 1/2-13 |
| Mounting Bolt Circle | F | 8.250 (209.55) | 8.250 (209.55) | 6.125 (155.58) | 6.125 (155.58) | 11.130 (282.70) | 11.130 (282.70) | 18.500 (469.90) | 18.500 (469.90) |
| Mounting Screw Penetration | G | Thru | Thru | 1.00 (25.4) | 1.00 (25.4) | 0.65 (2.28) | 0.65 (2.28) | 0.80 (20.3) | 0.80 (20.3) |
| Thru Bore | H | 3.50 (88.9) | 3.50 (88.9) | 5.25 (133.4) | 5.25 (133.4) | 3.12 (79.2) | 3.12 (79.2) | 6.00 (152.4) | 6.00 (152.4) |
| Hub Position | I | 2.50 (63.5) | 2.50 (63.5) | 2.55 (64.8) | 2.55 (64.8) | 4.78 (121.4) | 4.78 (121.4) | 4.88 (124.0) | 4.88 (124.0) |