

ERDD VAR 00 / VAR 02 120-6400

Electro-Magnetic Dual Disc Electro Release Brake

Characteristics

- Electrically operated 24 or 103,5 VDC, depending on size
- Dual disc
- Activated by spring pressure

Utilisation

- Braking a shaft
- Holding a load

Particularities

- For dry use
- No residual torque in disengaged position

Adjustments

- Airgap should be adjusted at installation
- Requires wear compensation for dynamic applications

Maintenance Manual

- SM 321 for sizes 120 to 600
- SM 300 for sizes 1000 to 6400

Mounting Precautions

- For horizontal use only
- Release shipping screws after mounting

Power Supply

- CBC 140-5

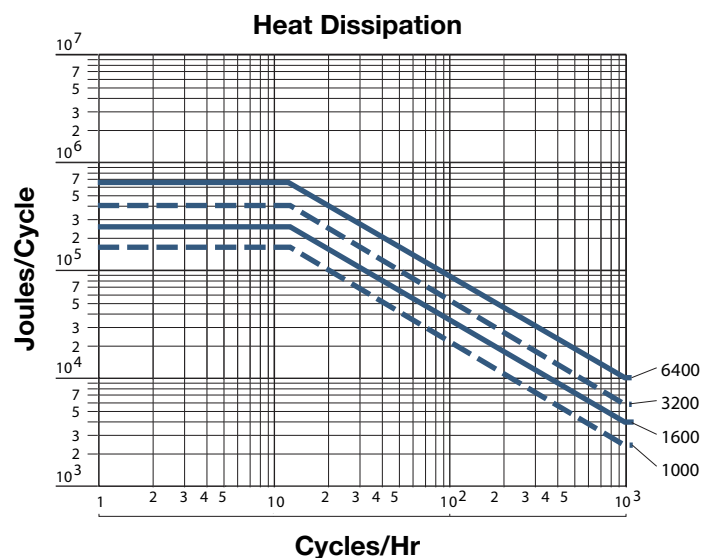
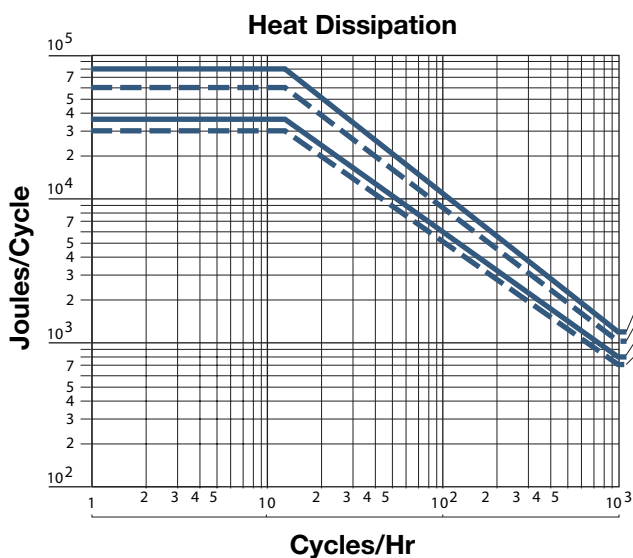
Response Times

Response times are average values for switching on the DC side. Pull-in = release time for 10 % torque left. Drop-out = time to obtain 90 % torque.

DC side operated, AC side operated $t \times 6$ (typ)

Switch time on the DC side

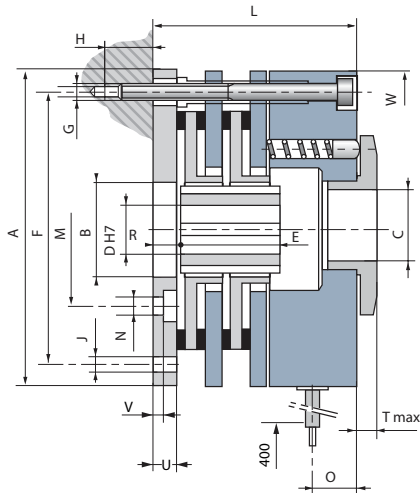
| Sizes | | 120 | 200 | 340 | 600 | 1000 | 1600 | 3200 | 6400 |
|----------|------|-----|-----|-----|-----|------|------|------|------|
| Pull-in | [ms] | 188 | 195 | 297 | 354 | 400 | 500 | 650 | 1200 |
| Drop-out | [ms] | 47 | 74 | 99 | 160 | 200 | 320 | 380 | 420 |



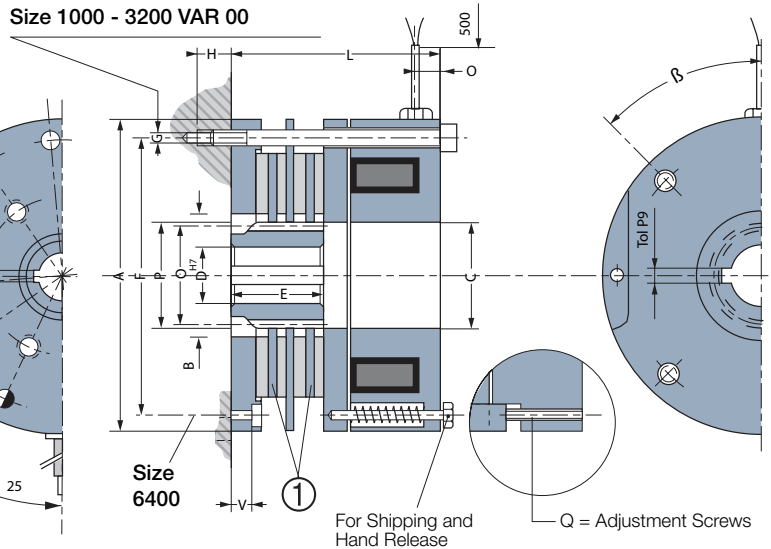
ERDD VAR 00 / VAR 02 120-6400

Electro-Magnetic Dual Disc Electro Release Brake

Size 120 - 600 VAR 02



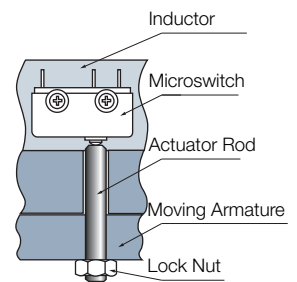
Size 1000 - 3200 VAR 00



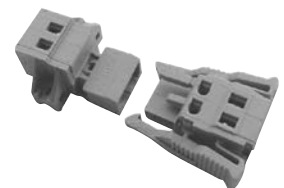
| Sizes | | 120 VAR 02 | 200 VAR 02 | 340 VAR 02 | 600 VAR 02 | 1000 VAR 00 | 1600 VAR 00 | 3200 VAR 00 | 6400 VAR 00 |
|---------------------------|------------------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|
| Nom. Torque | [Nm] | - | - | - | 600 | 1000 | 1600 | 3200 | 6400 |
| Max. Speed | [min.-] | - | - | - | 3600 | 3600 | 3000 | 2300 | 1800 |
| High Torque Version (HT) | [Nm] | 160 | 260 | 440 | 800 | 1600 | 2200 | 4500 | - |
| Max. Speed at High Torque | [min.-] | 2600 | 2300 | 1900 | 1600 | 650 | 500 | 400 | - |
| Voltage | [VDC] | 24 | 24 | 24 | 24 | 103,5 | 103,5 | 103,5 | 103,5 |
| Power | P20 [W] | 47 | 57 | 66 | 99 | 150 | 165 | 327 | 408 |
| | A | 160 | 185 | 212 | 250 | 265 | 320 | 395 | 500 |
| | B | 55 | 65 | 75 | 90 | 120 | 155 | 210 | 260 |
| | C | 48 | 52 | 60 | 73 | 98 | 124 | 168 | 210 |
| | D pre-bored | 14 | 15 | 20 | 25 | 30 | 35 | 50 | 60 |
| | D min | 25/30 | 25/30/35 | 35/40/45 | 35/40/45 | - | - | - | - |
| | D max | 32* | 40* | 50* | 54* | 65 | 80 | 110 | 125 |
| | E | 45 | 50 | 55 | 68 | 60 | 70 | 100 | 168 |
| | F | 145 | 170 | 196 | 230 | 240 | 294 | 360 | 455 |
| | G | 3xM8/120° | 3xM8/120° | 6xM8/60° | 6xM10/60° | 4xM12 | 4xM12 | 4xM16 | 8xM20 |
| | H min | 14 | 20 | 16 | 25 | 25 | 27 | 30 | - |
| | J | 8,3(3x120°) | 8,3(3x120°) | 8,3(6x60°) | 10,3(6x60°) | - | - | - | - |
| | L | 96 | 105 | 120 | 139 | 148 | 168 | 203 | 268 |
| | M | 74 | 84 | 100 | 120 | - | - | - | - |
| | N | 8,3(3x120°) | 8,3(3x120°) | 8,3(6x60°) | 10,3(6x60°) | - | - | - | - |
| | O | 19 | 22 | 27 | 34 | 20 | 27 | 27 | 36 |
| | Q | - | - | - | - | 4xM12 | 4xM16 | 4xM16 | 4xM20 |
| | R | 11 | 11 | 11 | 11 | - | - | - | - |
| | Tmax | 10,5 | 10,5 | 13 | 18 | - | - | - | - |
| | U | 11 | 11 | 11 | 11 | - | - | - | - |
| | V | 3 | 3 | 3 | 3 | - | - | - | 40 |
| | W | 162 | 188 | 215 | 252 | - | - | - | - |
| | β | - | - | - | - | 50° | 45° | 60° | 22°30' |
| | [α°] | 60° | 60° | 30° | 30° | - | - | - | - |
| Hub | Pressure Angle | - | - | - | - | 20° | 20° | 20° | 20° |
| | Number of Teeth [Z] | - | - | - | - | 37 | 39 | 53 | 63 |
| | Module [m] | - | - | - | - | 2,5 | 3 | 3 | 3 |
| | Diametrical Pitch [Dp] | - | - | - | - | 92,5 | 117 | 159 | 189 |
| | Outside Diameter [P] | - | - | - | - | 95 | 120 | 162 | 195 |
| | Dimension on K tooth | - | - | - | - | 5/34,38 | 5/41,34 | 6/50,786 | 7/60,06 |
| Inertia | ① STD | [kgm²] | - | - | - | 0,017 | 0,047 | 0,155 | 0,966 |
| | HT | [kgm²] | 0,017 | 0,0040 | 0,0093 | 0,0181 | 0,0281 | 0,0742 | 0,1379 |
| Weight | [kg] | 8 | 12 | 20 | 30 | 38 | 72 | 133 | 292 |
| Connection | | Cable | | | | | | | |

Microswitch Option

- Indicate moving armature position.
- Not available for VAR 00



The HT torque outlined is a static torque: for dynamic applications, please contact our technical department.



Connector Options

(Delivered without cable)
2 poles, capacity : 0,5/2,5mm²

Keyways according to
ISO/R 773 / BS 4235 / DIN 6885-1 / NF E 22-175, tolerance P9