

# 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

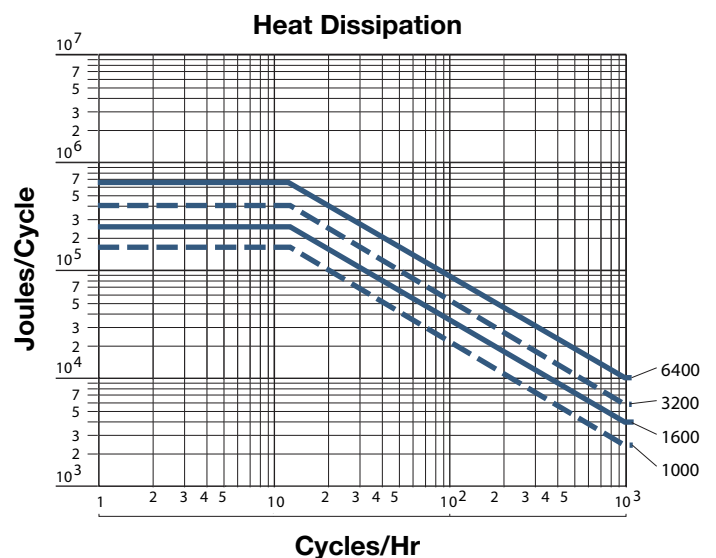
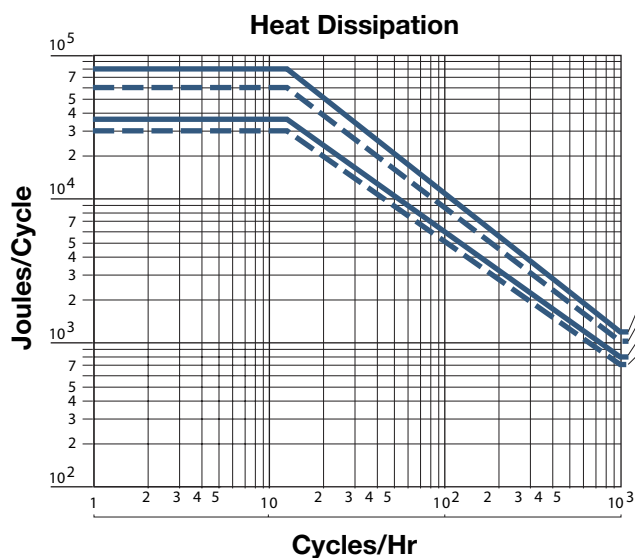
### Response Times

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

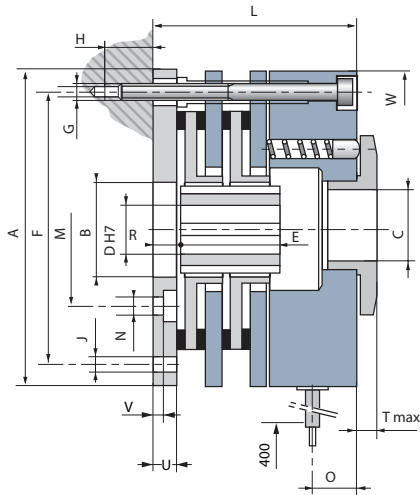
Sizes		120	200	340	600	1000	1600	3200	6400
Pull-in	[ms]	188	195	297	354	400	500	650	1200
Drop-out	[ms]	47	74	99	160	200	320	380	420



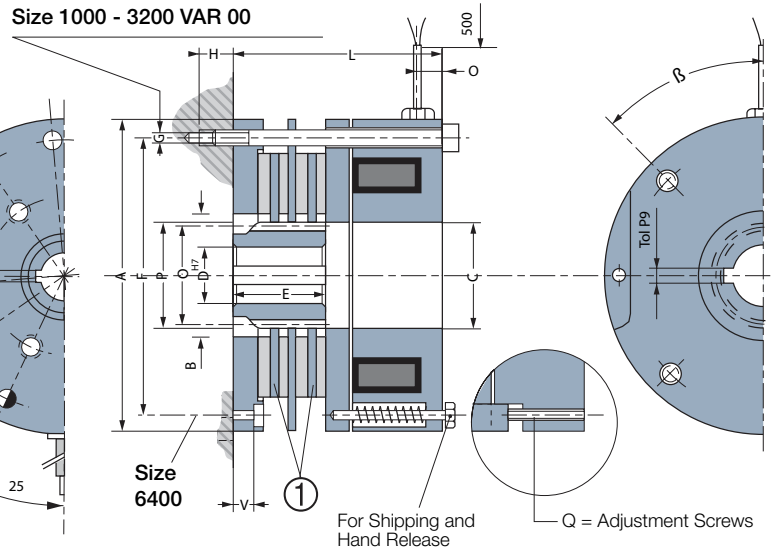
# ERDD VAR 00 / VAR 02 120-6400

## Electro-Magnetic Dual Disc Electro Release Brake

Size 120 - 600 VAR 02



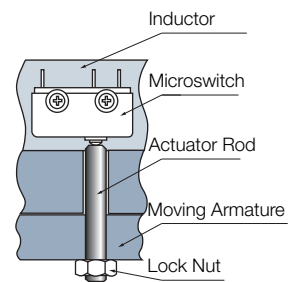
Size 1000 - 3200 VAR 00



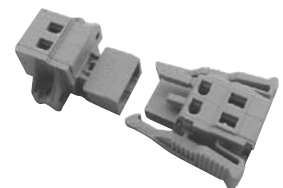
Sizes		120 VAR 02	200 VAR 02	340 VAR 02	600 VAR 02	1000 VAR 00	1600 VAR 00	3200 VAR 00	6400 VAR 00
Nom. Torque	[Nm]	-	-	-	600	1000	1600	3200	6400
Max. Speed	[min.-]	-	-	-	3600	3600	3000	2300	1800
High Torque Version (HT)	[Nm]	160	260	440	800	1600	2200	4500	-
Max. Speed at High Torque	[min.-]	2600	2300	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 : 0,5/2,5mm<sup>2</sup>

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

# ERDD VAR 03 1000-25600

## Electro-Magnetic Dual Disc Electro Release Brake

### Characteristics

- Electrically operated 103,5 VDC
- Dual disc
- Activated by spring pressure

### Utilisation

- Braking a shaft
- Holding a load

### Particularities

- For dry use
- No residual torque in disengaged position
- For Tacho mounting
- Torque adjustment with screw cap until size 6400
- Option: detection kit and dust cover

### Adjustments

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

### Maintenance Manual

- SM 300

### Mounting Precautions

- For horizontal use only
- Release shipping screws after mounting

### Power Supply

- CBC140-5 for sizes until 6400

### Response Times

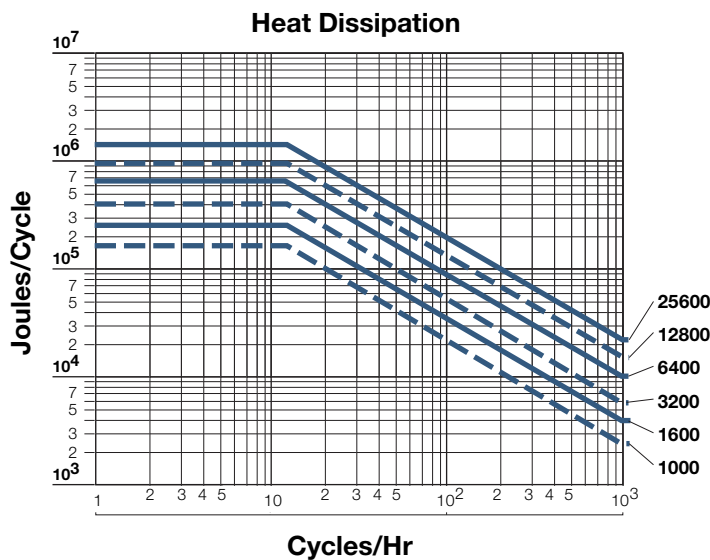
Response times are average values for switching on the DC side. Pull-in = release time for 10 % torque left.

Drop-out = time to obtain 90 % torque.

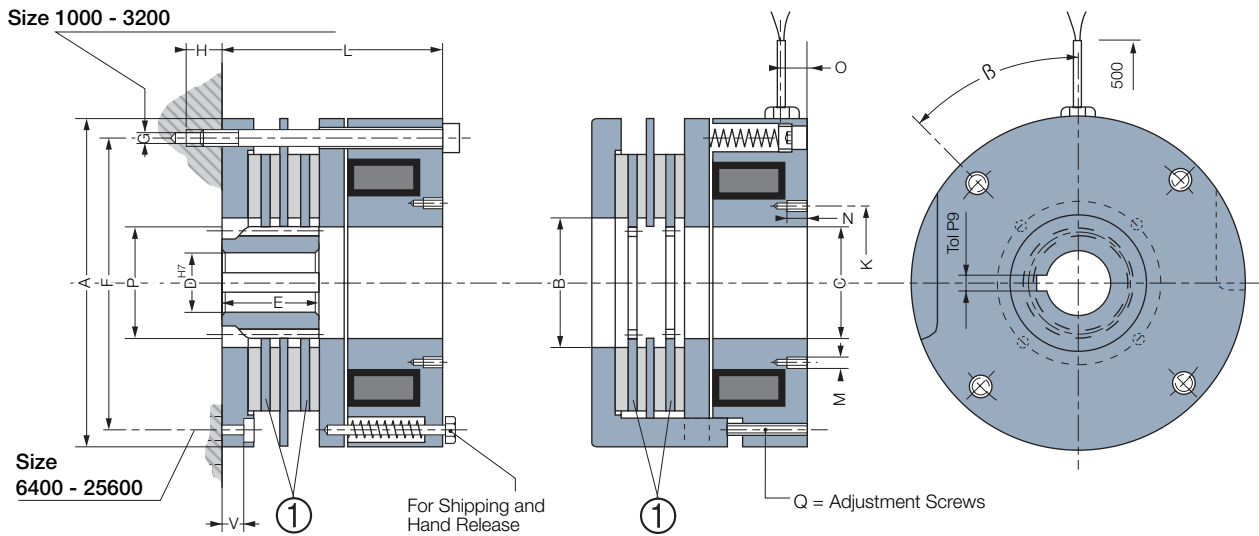
DC side operated, AC side operated  $t \times 6$  (typ)

Switch time  
on the DC side

Sizes		1000	1600	3200	6400	12800	25600
Pull-in	[ms]	400	550	650	1200	1800	2000
Drop-out	[ms]	200	320	380	420	950	1300



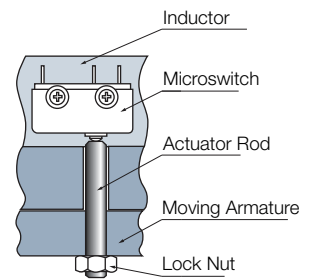
## Electro-Magnetic Dual Disc Electro Release Brake



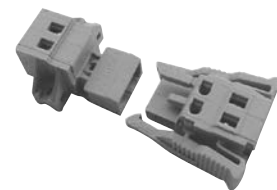
Sizes		1000	1600	3200	6400	12800*	25600*	
Nom. Torque	[Nm]	1000	1600	3200	6400	12800	25600	
Max. Speed	[min.-]	3600	3000	2300	1800	1300	1200	
High Torque Version (HT)	[Nm]	1600	2200	4500	-	-	-	
Max. Speed at High Torque	[min.-]	650	500	400	-	-	-	
Voltage	[VDC]	103,5	103,5	103,5	103,5	103,5	103,5	
Power	[W]	150	165	327	408	487	690	
	P20							
	A	265	320	395	500	645	730	
	B	120	155	210	260	385	405	
	C	98	124	168	210	300	360	
	D min	30	35	50	60	75	100	
	D max	65	80	110	125	140	170	
	E	60	70	100	125	140	170	
	F	240	294	360	455	595	675	
	G	4xM12	4xM12	4xM16	8xM20	8xM24	8xM27	
	H min	25	27	30	-	-	-	
	K	126	150	216	250	358	430	
	L	148	168	203	268	310	365	
	M	4xM6	4xM6	4xM6	4xM6	4xM6	4xM6	
	N	12	12	12	15	15	15	
	O	20	27	27	36	40	50	
	Q	4xM12	4xM16	4xM16	4xM20	4xM24	4xM27	
	V	-	-	-	40	46	51	
	W	12	12	12	12	12	12	
	$\beta$	50°	45°	60°	22°30'	22°30'	22°30'	
Hub	Pressure Angle	$\alpha^\circ$	20°	20°	20°	20°	20°	
	Number of Teeth	[Z]	37	39	53	63	58	72
	Module	[m]	2,5	3	3	3	4	4
	Diametrical Pitch	[Dp]	92,5	117	159	189	232	288
	Outside Diameter	[P]	95	120	162	195	240	296
	Dimension on K tooth		34,38	41,34	50,786	60,06	79,80	92,39
	K Tooth	[K]	5	5	6	7	7	8
Inertia	①	[kgm <sup>2</sup> ]	0,013	0,038	0,125	0,954	2,87	5,27
Weight		[kg]	38	72	133	292	488	775
Connection					Cable			

### Microswitch Option

- Indicate moving armature position



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



### Connector Options

(Delivered without cable)  
2 poles, capacity : 0,5/2,5mm<sup>2</sup>

Keyways according to  
ISO/R 773 / BS 4235 / DIN 6885-1 / NF E 22-175, tolerance P9  
\*Sizes 12800 and 25600, torque adjustment made by spring selection

# ERD-ERDD VAR 00 / VAR 03 120-25600

## Electro-Magnetic Dual Disc Electro Release Brake

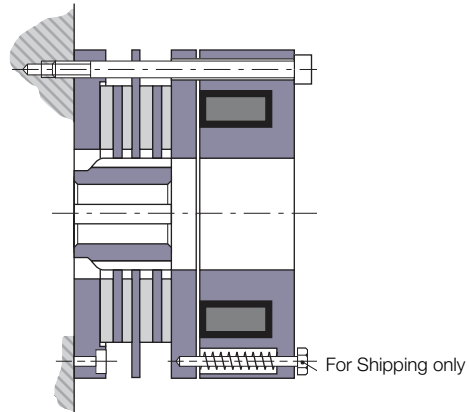
### Options

#### Hand Release

Shipping screws may be used to release brake manually

**WARNING: see service manual**

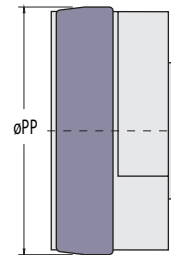
Other solutions on request



Sizes	ERD ERDD	500 1000	800 1600	1600 3200	3200 6400	6400 12800	12800 25600
Screws		2 x M10 x 80	4 x M12 x 90	3 x M16 x 110	8 x M20 x 120	8 x M20 x 140	8 x M20 x 180

#### Dustcover

Used to prevent entry of dust into the air gap or braking area. Also serves to limit the emission of dust from the same area.



Sizes	ERD ERDD	500 1000	800 1600	1600 3200	3200 6400	6400 12800	12800 25600
ø PP (mm)		249	300	370	464	598	734

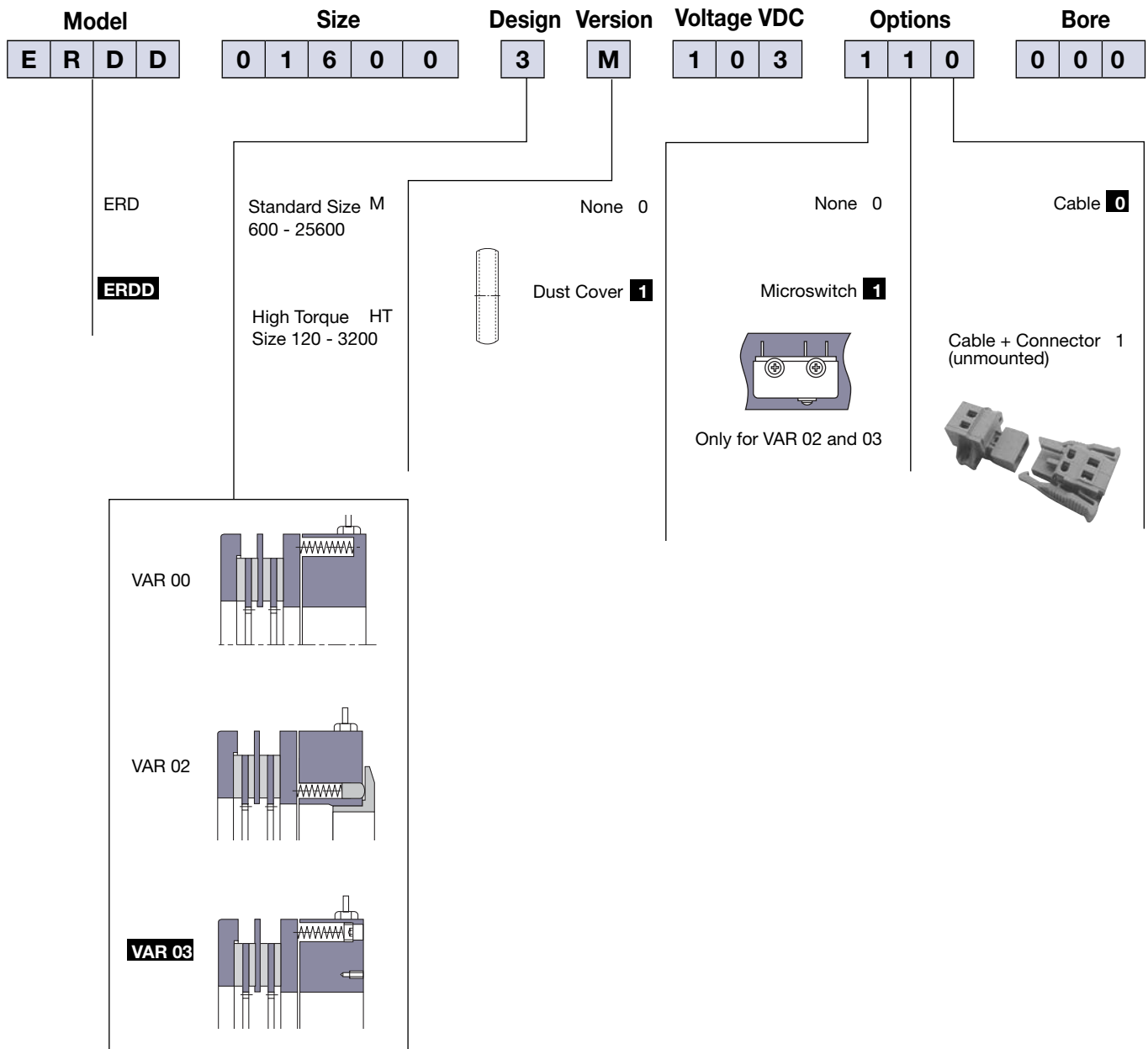
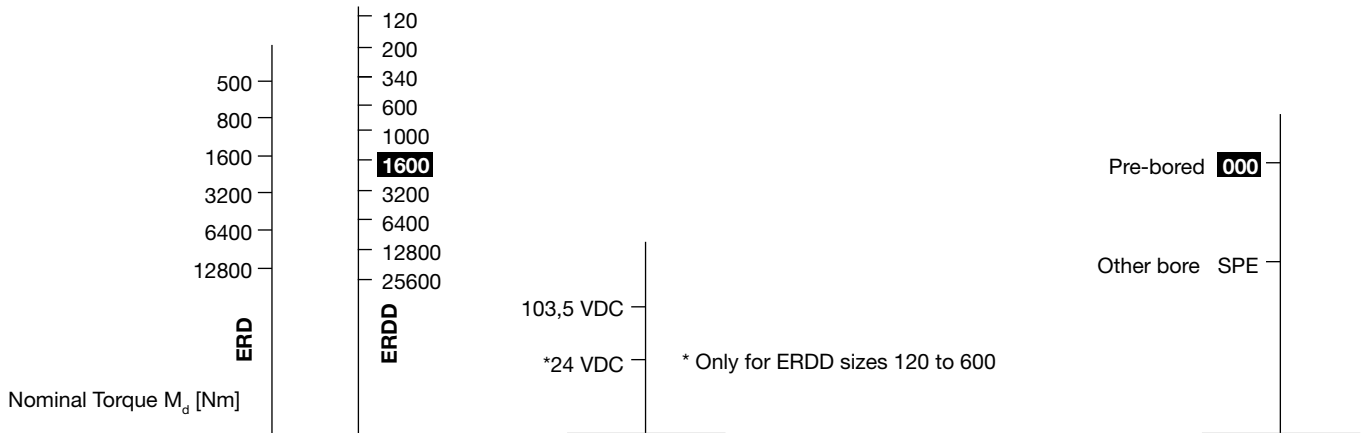
#### Silent Brakes

Available on request

# ERD-ERDD VAR 00 / VAR 03 120-25600

## Electro-Magnetic Single Disc Electro Release Brake

### How to Order



No VAR 00 for  
ERD 6400 / 12800  
ERDD 12800 / 25600

No VAR 02 for  
ERD 500 / 12800  
ERDD 1000 / 25600