

ERD VAR 03 500-12800

Electro-Magnetic Single Disc Electro Release Brake

Characteristics

- Electrically operated 103,5 VDC
- Single 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 3000
- 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

- Sizes 500 / 800 / 1600 :
- For horizontal or vertical use for standard versions
- Horizontal use for high torque versions (H)
For other sizes horizontal use only
- Release shipping screws after mounting

Power Supply

- CBC140-5 for sizes until 3200

Response Times

Response times are average values for switching on the DC side.

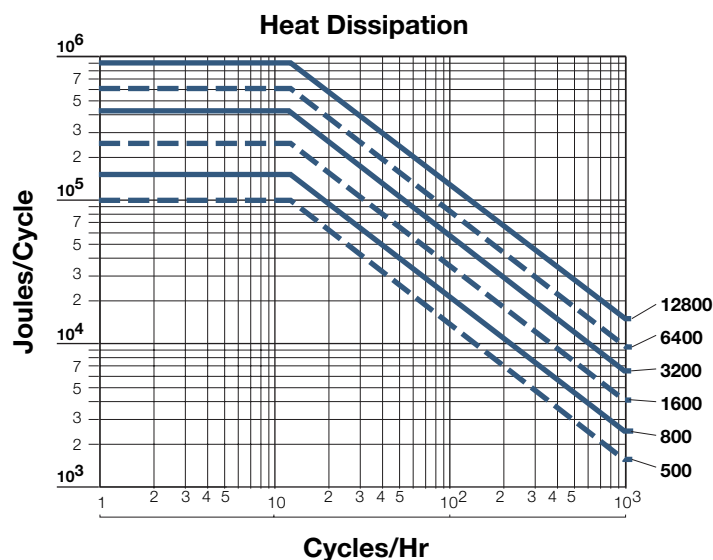
Pull-in = release time for 10 % torque left.

Drop-out = time to obtain 90 % torque.

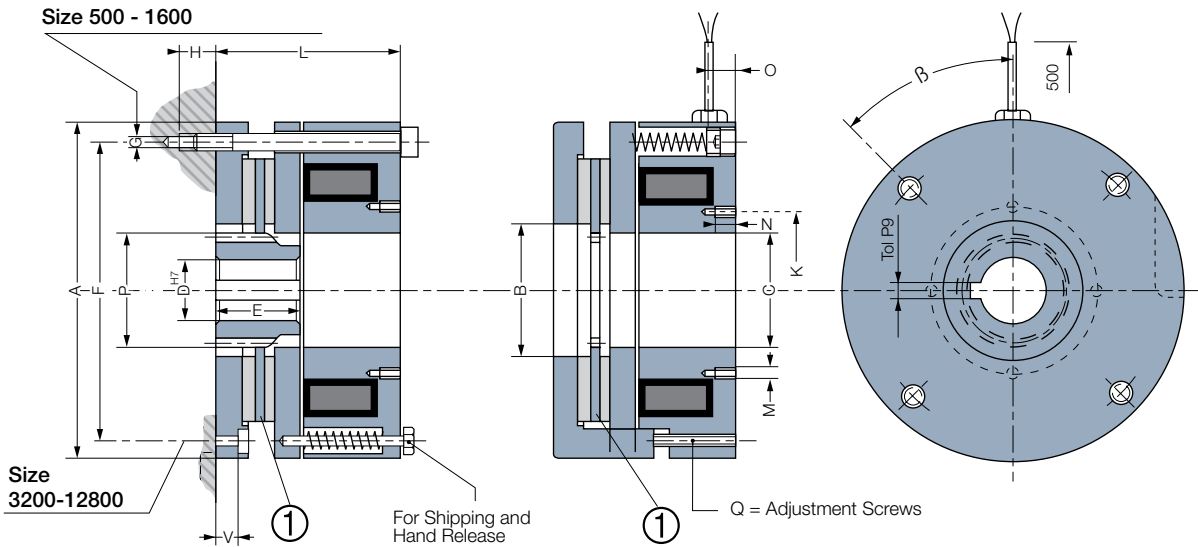
DC side operated, AC side operated $t \times 6$ (typ)

Switch time
on the DC side

Sizes		500	800	1600	3200	6400	12800
Pull-in	[ms]	400	550	650	1200	1800	2000
Drop-out	[ms]	200	320	380	420	950	1300



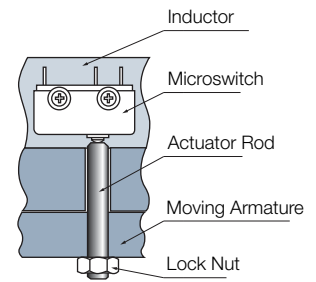
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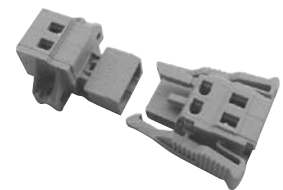
Sizes		500	800	1600	3200	6400*	12800*	
Nom. Torque	[Nm]	500	800	1600	3200	6400	12800	
Max. Speed	[min.]	3600	3000	2300	1800	1300	1200	
High Torque Version (HT)	[Nm]	800	1100	2200	-	-	-	
Max. Speed at High Torque	[min.]	650	500	400	-	-	-	
Voltage	[VDC]	103,5	103,5	103,5	103,5	103,5	103,5	
Power	P20 [W]	150	165	327	408	487	690	
	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	122	136	165	205	245	290	
	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	
	β	50°	45°	60°	22°30'	22°30'	22°30'	
Hub	Pressure Angle	α°	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	STD	[kgm ²]	0,0100	0,0282	0,0997	0,513	1,664	2,96
	HT	[kgm ²]	0,0156	0,0418	0,1379	-	-	-
Weight		[kg]	35	64	120	229	426	671
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 : 0,5/2,5mm²

Keyways according to ISO/R 773 / BS 4235 / DIN 6885-1 / NF E 22-175, tolerance P9
*Sizes 6400 and 12800, torque adjustment made by spring selection