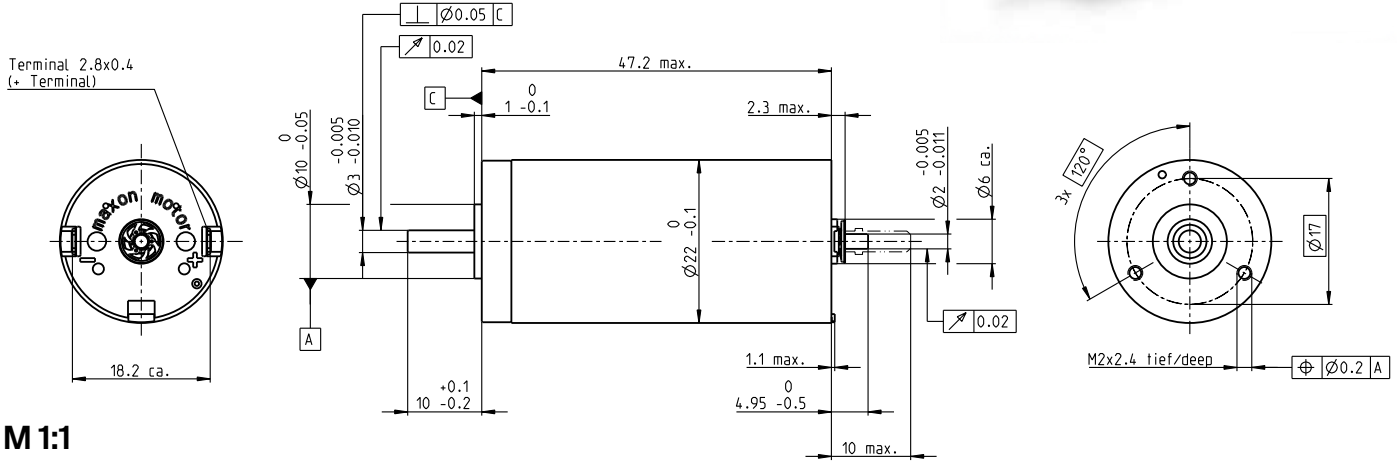


DCX 22 L Ø22 mm, graphite brushes, DC motor

Key Data: 20/49 W, 32.2 mNm, 18 000 rpm



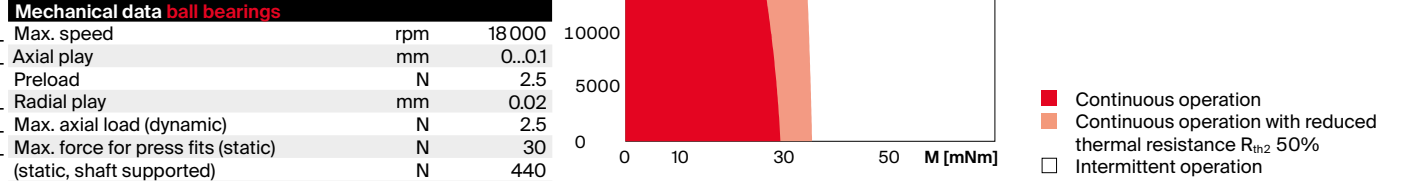
DCX



M 1:1

Motor Data							
1_	Nominal voltage	V	9	12	18	36	48
2_	No load speed	rpm	12300	11700	11800	11400	10100
3_	No load current	mA	118	81.8	54.6	26.3	16.2
4_	Nominal speed	rpm	11400	10700	10800	10400	9020
5_	Nominal torque	mNm	27.0	30.5	32.2	30.0	30.3
6_	Nominal current (max. continuous current)	A	4.00	3.21	2.26	1.03	0.687
7_	Stall torque	mNm	371	348	386	346	294
8_	Stall current	A	53.4	35.8	26.5	11.6	6.50
9_	Max. efficiency	%	90	91	91	90	90
10_	Terminal resistance	Ω	0.168	0.335	0.680	3.11	7.39
11_	Terminal inductance	mH	0.018	0.035	0.078	0.326	0.746
12_	Torque constant	mNm/A	6.95	9.73	14.6	29.9	45.2
13_	Speed constant	rpm/V	1370	981	654	320	211
14_	Speed/torque gradient	rpm/mNm	33.3	33.8	30.5	33.3	34.6
15_	Mechanical time constant	ms	3.27	3.21	3.13	3.23	3.20
16_	Rotor inertia	gcm ²	9.37	9.06	9.82	9.26	8.85

Thermal data			Operating Range	
17_	Thermal resistance housing-ambient	K/W	13.6	n [rpm] Winding 18 V
18_	Thermal resistance winding-housing	K/W	4.57	
19_	Thermal time constant winding	s	22	
20_	Thermal time constant motor	s	646	
21_	Ambient temperature ball bearings	°C	-40...+100	
	Ambient temperature sleeve bearings	°C	-30...+100	
22_	Max. winding temperature	°C	125	



Mechanical data ball bearings			Mechanical data sleeve bearings			Modular System			Details on catalog page 36		
23_	Max. speed	rpm	18 000	23_	Max. speed	rpm	18 000	Gear	Stages [opt.]	Sensor	Motor Control
24_	Axial play	mm	0...0.1	24_	Axial play	mm	0...0.2	375_GPX 22 A/C	1-2 [3-4]	473_ENX 10 EASY	532_ESCON Module 24/2
	Preload	N	2.5		Preload	N	0	376_GPX 22 LN/LZ	1-2 [3-4]	473_ENX 10 QUAD	532_ESCON 36/2 DC
25_	Radial play	mm	0.02	25_	Radial play	mm	0.02	377_GPX 22 HP	2-3 [4]	474_ENX 10 EASY XT	533_ESCON Module 50/5
26_	Max. axial load (dynamic)	N	2.5	26_	Max. axial load (dynamic)	N	0.1	378_GPX 22 UP	1-4	475_ENX 16 EASY	535_ESCON 50/5
27_	Max. force for press fits (static)	N	30	27_	Max. force for press fits (static)	N	80	380_GPX 26 A/C	3	476_ENX 16 EASY XT	541_EPOS4 Micro 24/5
	(static, shaft supported)	N	440		(static, shaft supported)	N	440	381_GPX 26 LN/LZ	3	477_ENX 16 EASY Abs.	542_EPOS4 Module 24/1.5
28_	Max. radial load [mm from flange]	N	16 [5]	28_	Max. radial load [mm from flange]	N	3 [5]	382_GPX 26 HP	4	478_ENX 16 EASY Abs. XT	542_EPOS4 Module 50/5
										486_ENX 16 RIO	543_EPOS4 Compact 24/5 3-axes
										517_ENC AEDL 5810	544_EPOS4 Compact 24/1.5
										518_ENC 30 HEDS 5540	545_EPOS4 Compact 50/5
										524_ENC 30 HEDL 5540	547_EPOS4 50/5
											548_EPOS4 Disk 60/8

Other specifications			
29_	Number of pole pairs		1
30_	Number of commutator segments		9
31_	Weight of motor	g	95
32_	Typical noise level	dBA	44

Configuration
 Bearing: Ball bearings preloaded/sleeve bearings
 Commutation: Precious metal brushes with or without CLL/
 graphite brushes/EMI filter
 Flange front/back: Standard flange/configurable flange/
 no flange
 Shaft front/back: Length/diameter/flat face
 Electric connection: Terminals or cable/
 alignment of connection/cable length/connector type