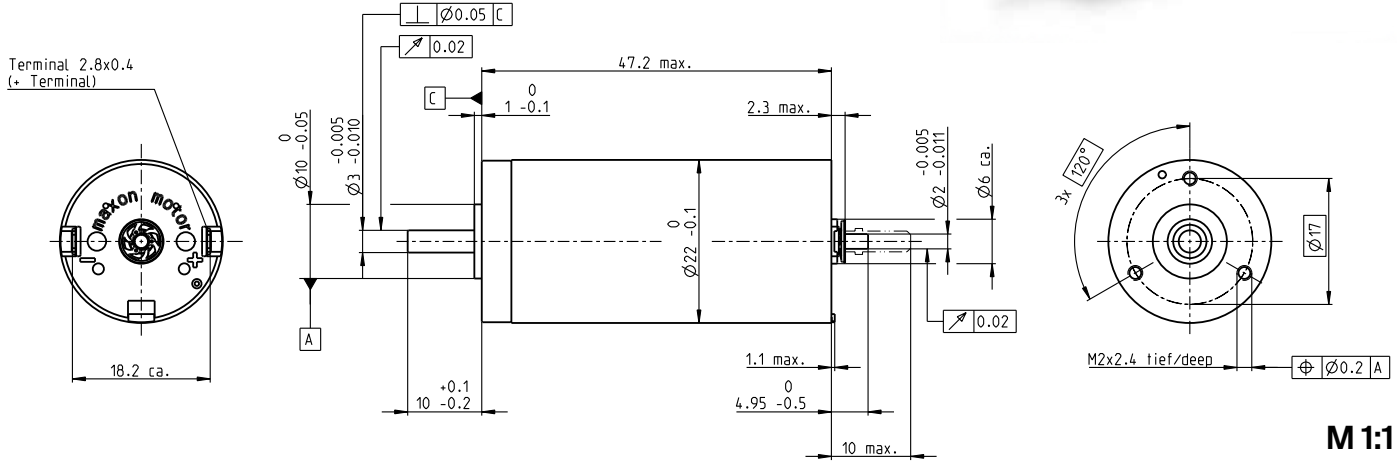


DCX 22 L Ø22 mm, graphite brushes, DC motor

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



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	gcm²	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 20000 15000 10000 5000 0 0 10 30 50 M [mNm]				
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								
23.	Max. speed	rpm	18 000					
24.	Axial play	mm	0...0.1					
	Preload	N	2.5					
25.	Radial play	mm	0.02					
26.	Max. axial load (dynamic)	N	2.5					
27.	Max. force for press fits (static)	N	30					
	(shaft supported)	N	440					
28.	Max. radial load [mm from flange]	N	16 [5]					
Mechanical data sleeve bearings			Modular system		Details on catalog page 40			
23.	Max. speed	rpm	18 000	Gear	Stages [opt.]	Sensor	Motor Control	
24.	Axial play	mm	0...0.2	390_GPX 22 A/C	1-2 [3-4]	507_ENX 10 EASY/QUAD	550_ESCON Module 24/2	
	Preload	N	0	391_GPX 22 LN/LZ	1-2 [3-4]	508_ENX 10 EASY XT	550_ESCON 36/2 DC	
25.	Radial play	mm	0.02	392_GPX 22 HP	2-3 [4]	509_ENX 16 EASY	551_ESCON Module 50/5	
26.	Max. axial load (dynamic)	N	0.1	394_GPX 22 UP	1-4	510_ENX 16 EASY XT	553_ESCON 50/5	
27.	Max. force for press fits (static)	N	80	396_GPX 26 A/C	3	511_ENX 16 EASY Abs.	557_ESCON2 Nano 24/2	
	(shaft supported)	N	440	397_GPX 26 LN/LZ	3	512_ENX 16 EASY Abs. XT	557_ESCON2 Micro 60/5	
28.	Max. radial load [mm from flange]	N	3 [5]	398_GPX 26 HP	4	518_ENX 22 EMT	563_EPOS4 Micro 24/5	
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				