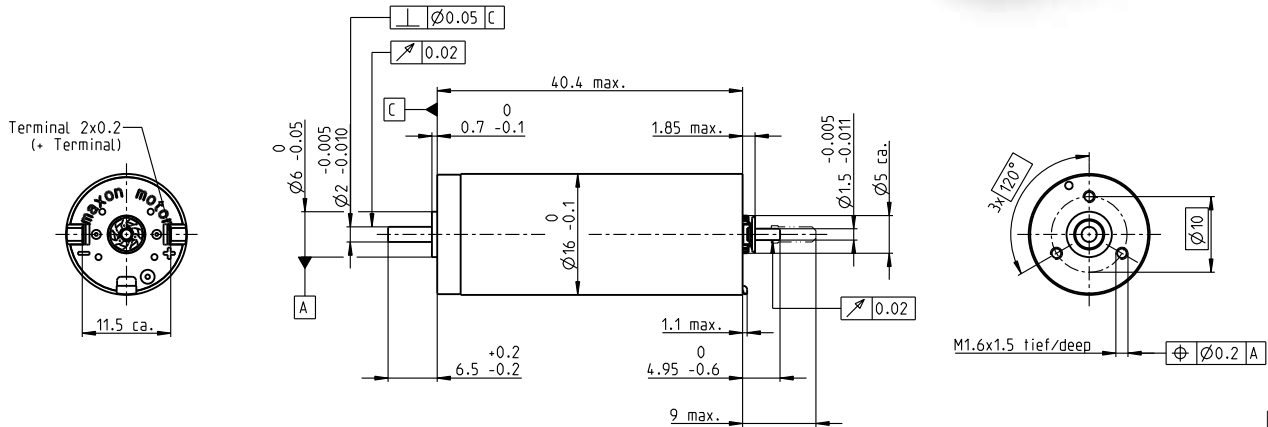
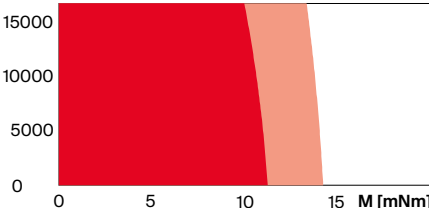


DCX 16 L Ø16 mm, graphite brushes, DC motor

Key data: 10/19 W, 11.8 mNm, 17000 rpm



M 1:1

Motor data								
1_	Nominal voltage	V	6	9	12	18	24	36
2_	No load speed	rpm	12800	13100	13200	12800	12800	12800
3_	No load current	mA	73.5	50.7	38.6	24.5	18.4	12.3
4_	Nominal speed	rpm	11000	11000	10700	10600	10600	10700
5_	Nominal torque	mNm	8.58	11.8	10.4	11.6	11.3	11.6
6_	Nominal current (max. continuous current)	A	2.00	1.85	1.24	0.896	0.651	0.447
7_	Stall torque	mNm	61.8	74.2	63.3	74.5	68.5	72
8_	Stall current	A	13.9	11.4	7.37	5.59	3.85	2.70
9_	Max. efficiency	%	85	87	83	86	86	87
10_	Terminal resistance	Ω	0.431	0.791	1.63	3.22	6.23	13.3
11_	Terminal inductance	mH	0.026	0.055	0.096	0.231	0.411	0.925
12_	Torque constant	mNm/A	4.44	6.52	8.59	13.3	17.8	26.7
13_	Speed constant	rpm/V	2150	1470	1110	716	537	358
14_	Speed/torque gradient	rpm/mNm	209	178	211	173	188	179
15_	Mechanical time constant	ms	4.77	4.47	5.21	4.70	4.48	4.37
16_	Rotor inertia	gcm ²	2.18	2.40	2.36	2.59	2.28	2.33
Thermal data			Operating range					
17_	Thermal resistance housing-ambient	K/W	17.9	n [rpm] Winding 12 V 				
18_	Thermal resistance winding-housing	K/W	7.21					
19_	Thermal time constant winding	s	21.5					
20_	Thermal time constant motor	s	294					
21_	Ambient temperature ball bearings	°C	-40...+100					
21_	Ambient temperature sleeve bearings	°C	-30...+100					
22_	Max. winding temperature	°C	125					
Mechanical data ball bearings								
23_	Max. speed	rpm	17 000					
24_	Axial play	mm	0...0.1					
	Preload	N	0.8					
25_	Radial play	mm	0.015					
26_	Max. axial load (dynamic)	N	0.8					
27_	Max. force for press fits (static)	N	18					
	(shaft supported)	N	300					
28_	Max. radial load [mm from flange]	N	10 [5]					
Mechanical data sleeve bearings			Modular system			Details on catalog page 40		
23_	Max. speed	rpm	15 000	Gear	Stages [opt.]	Sensor	Motor Control	
24_	Axial play	mm	0...0.2	381_GPX 16 A/C	1-2 [3-4]	507_ENX 10 EASY	550_ESCON Module 24/2	
	Preload	N	0	382_GPX 16 LN/LZ	1-2 [3-4]	507_ENX 10 QUAD	550_ESCON 36/2 DC	
25_	Radial play	mm	0.015	383_GPX 16 HP	2-3 [4]	508_ENX 10 EASY XT	557_ESCON2 Nano 24/2	
26_	Max. axial load (dynamic)	N	0.1	386_GPX 19 A/C	3-4	509_ENX 16 EASY	563_EPOS4 Micro 24/5	
27_	Max. force for press fits (static)	N	60	387_GPX 19 LN/LZ	3-4	510_ENX 16 EASY XT	564_EPOS4 Module 24/1.5	
	(shaft supported)	N	300	388_GPX 19 HP	4	511_ENX 16 EASY Abs.	564_EPOS4 Module 50/5	
28_	Max. radial load [mm from flange]	N	2 [5]			512_ENX 16 EASY Abs. XT	565_EPOS4 Compact 24/5 3-axes	
						519_ENX 16 RIO	566_EPOS4 Compact 24/1.5	
							567_EPOS4 Compact 50/5	
							569_EPOS4 50/5	
Other specifications			Configuration					
29_	Number of pole pairs		1					
30_	Number of commutator segments		7					
31_	Weight of motor	g	42					
32_	Typical noise level	dBA	40					