

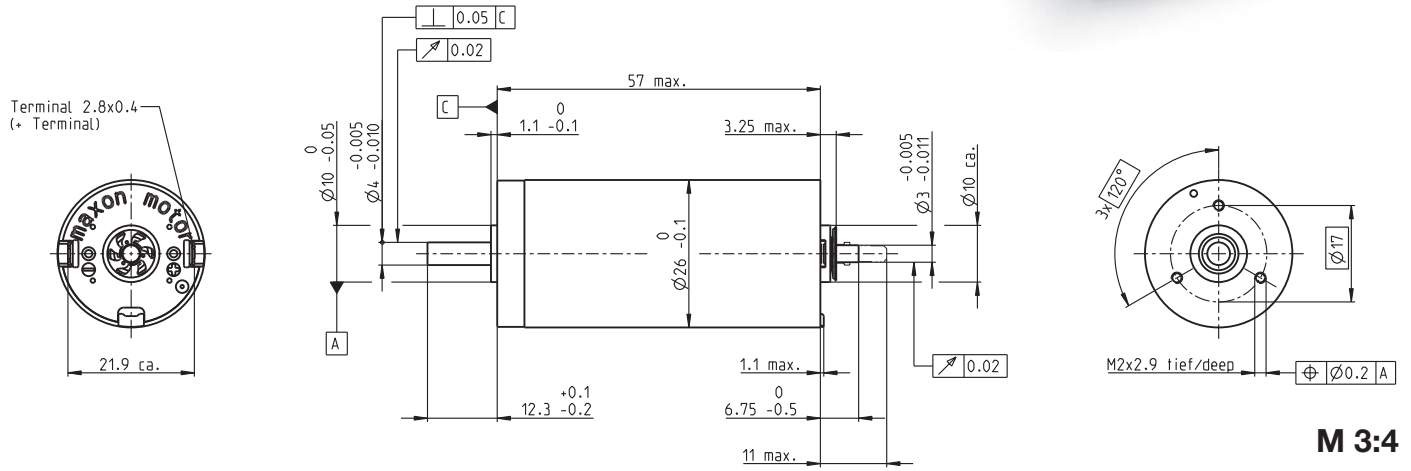
DCX 26 L Graphite Brushes

DC motor Ø26 mm

40/74 W 59.8 mNm 14400 rpm



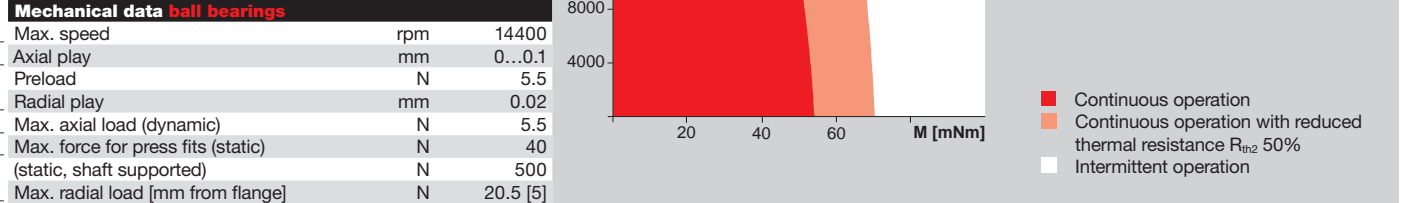
maxon X drives



M 3:4

Motor Data								
1_	Nominal voltage	V	12	18	24	36	48	60
2_	No load speed	rpm	10600	11100	10700	11100	10700	10900
3_	No load current	mA	131	93.0	65.7	46.5	32.9	27.3
4_	Nominal speed	rpm	9460	10000	9690	10000	9730	10000
5_	Nominal torque (max. continuous torque)	mNm	46.9	54.3	57.8	54.0	59.1	59.8
6_	Nominal current (max. continuous current)	A	4.50	3.59	2.76	1.79	1.41	1.17
7_	Stall torque	mNm	532	653	695	639	697	750
8_	Stall current	A	49.7	42.2	32.4	20.6	16.2	14.3
9_	Max. efficiency	%	87	89	90	90	91	91
10_	Terminal resistance	Ω	0.242	0.427	0.740	1.75	2.95	4.19
11_	Terminal inductance	mH	0.032	0.067	0.129	0.268	0.514	0.768
12_	Torque constant	mNm/A	10.7	15.5	21.4	31.0	42.9	52.4
13_	Speed constant	rpm/V	890	616	445	308	223	182
14_	Speed/torque gradient	rpm/mNm	20.1	17.0	15.4	17.4	15.3	14.6
15_	Mechanical time constant	ms	4.50	3.79	3.45	3.53	3.40	3.16
16_	Rotor inertia	gcm ²	21.4	21.3	21.4	19.4	21.2	20.7

Thermal data			Operating Range	
17_	Thermal resistance housing-ambient	K/W	10.2	n [rpm] Winding 18 V
18_	Thermal resistance winding-housing	K/W	3.01	
19_	Thermal time constant winding	s	24	
20_	Thermal time constant motor	s	620	
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			maxon Modular System				
23_	Max. speed	rpm	14400	maxon gear	Stages	maxon sensor	maxon motor control
24_	Axial play	mm	0...0.1	134_GPX 26 A/C	1-2	146_ENX 10 QUAD	416_ESCON 36/2 DC
	Preload	N	5.5	135_GPX 26 LN/LZ	1-2	147_ENX 16 EASY	417_ESCON Module 50/5
25_	Radial play	mm	0.02	136_GPX 26 HP	2-3	148_ENX 16 EASY Abs.	418_ESCON 50/5
26_	Max. axial load (dynamic)	N	5.5	137_GPX 32 A/C	3	404_ENC 30 HEDL 5540	424_EPOS2 24/2 (DC/EC)
27_	Max. force for press fits (static)	N	40	138_GPX 32 LN/LZ	3	407_ENC AEDL 5810	424_EPOS2 Module 36/2
	(static, shaft supported)	N	500	139_GPX 32 HP	4		425_EPOS2 24/5
28_	Max. radial load [mm from flange]	N	20.5 [5]				425_EPOS2 50/5
							428_EPOS2 P 24/5
							431_EPOS4 Module/Comp. 50/8
							435_MAXPOS 50/5

Other specifications		
29_	Number of pole pairs	1
30_	Number of commutator segments	11
31_	Weight of motor	g 170
32_	Typical noise level	dBA 44

Motor specifications may vary for version with sintered bearing (max. winding temperature 125 °C).

Configuration
 Bearing: Ball bearings preloaded/sleeve bearings
 Commutation: Precious metal brushes with CLL/graphite brushes
 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