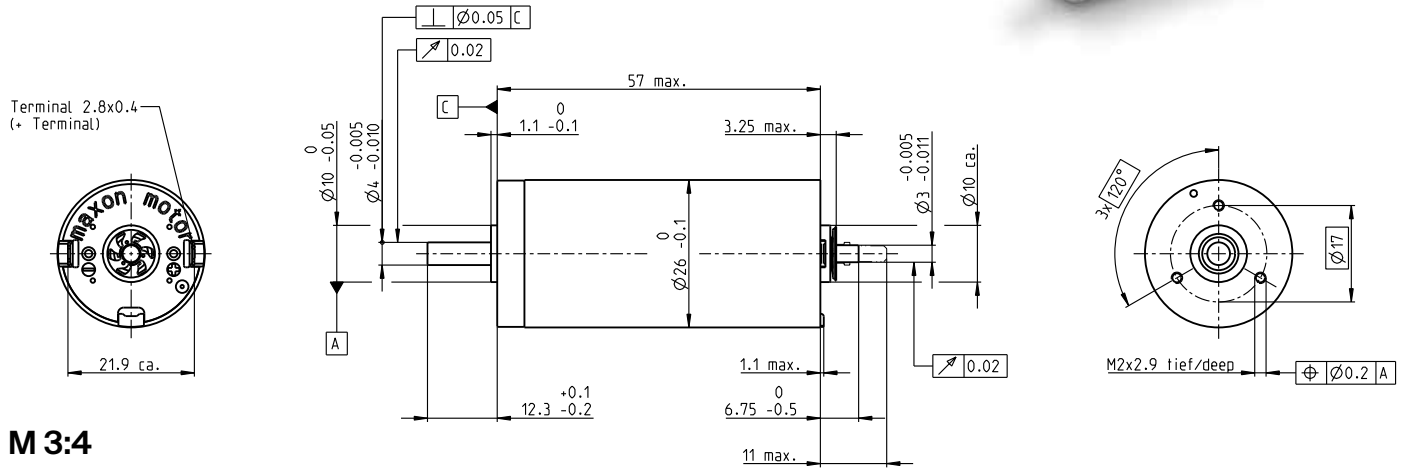


# DCX 26 L Ø26 mm, graphite brushes, DC motor

Key Data: 40/74 W, 59.8 mNm, 14 400 rpm



DCX



## 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	65.7	46.5	32.9	27.3
4_ Nominal speed	rpm	9460	10000	9690	10000	9730	10000
5_ Nominal torque	mNm	46.9	54.3	57.8	54	59.1	59.8
6_ Nominal current (max. continuous current)	A	4.5	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	%	88	90	91	90	91	91
10_ Terminal resistance	Ω	0.242	0.427	0.74	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	42.9	52.4
13_ Speed constant	rpm/V	890	616	445	308	223	182
14_ Speed/torque gradient	rpm/mNm	20.1	17	15.4	17.4	15.3	14.6
15_ Mechanical time constant	ms	4.5	3.79	3.45	3.53	3.4	3.16
16_ Rotor inertia	gcm <sup>2</sup>	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	155		

Mechanical data ball bearings		
23_ Max. speed	rpm	14400
24_ Axial play	mm	0..0.1
Preload	N	5.5
25_ Radial play	mm	0.02
26_ Max. axial load (dynamic)	N	5.5
27_ Max. force for press fits (static)	N	40
(static, shaft supported)	N	500
28_ Max. radial load [mm from flange]	N	20.5 [5]

Mechanical data sleeve bearings		Modular System		Details on catalog page 36	
23_ Max. speed	rpm	8600	<b>Gear</b>	<b>Sensor</b>	<b>Motor Control</b>
24_ Axial play	mm	0..0.2	380_GPX 26 A/C	473_ENX 10 EASY	532_ESCON 36/2 DC
Preload	N	0	381_GPX 26 LN/LZ	473_ENX 10 QUAD	533_ESCON Module 50/5
25_ Radial play	mm	0.02	382_GPX 26 HP	474_ENX 10 EASY XT	535_ESCON 50/5
26_ Max. axial load (dynamic)	N	0.1	383_GPX 32 A/C	475_ENX 16 EASY	541_EPOS4 Micro 24/5
27_ Max. force for press fits (static)	N	80	384_GPX 32 LN/LZ	476_ENX 16 EASY XT	543_EPOS4 Compact 24/5 3-axes
(static, shaft supported)	N	500	385_GPX 32 HP	477_ENX 16 EASY Abs.	542_EPOS4 Module 50/5
28_ Max. radial load [mm from flange]	N	5.5 [5]		478_ENX 16 EASY Abs. XT	545_EPOS4 Compact 50/5
				486_ENX 16 RIO	547_EPOS4 50/5
				517_ENC AEDL 5810	548_EPOS4 Disk 60/8
				518_ENC 30 HEDS 5540	
				524_ENC 30 HEDL 5540	

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  
 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