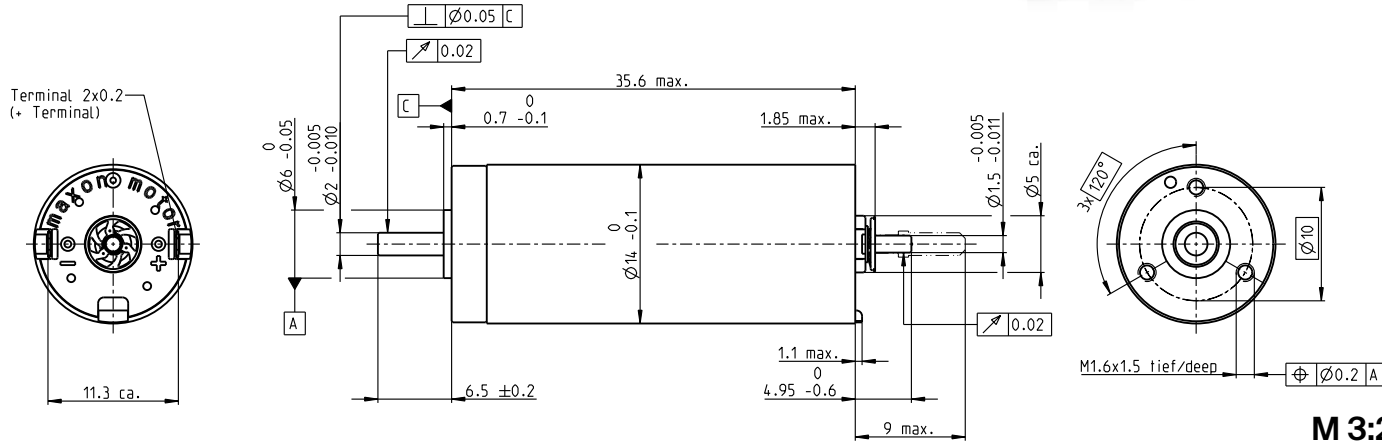


DCX 14 L Ø14 mm, graphite brushes, DC motor

Key data: 6/10 W, 6.9 mNm, 17000 rpm



M 3:2

Motor data

		V	4.5	6	9	12	18	24
1. Nominal voltage	V		4.5	6	9	12	18	24
2. No load speed	rpm		11600	10400	11700	10300	11600	10300
3. No load current	mA		73.9	46.4	37	23.2	18.5	11.6
4. Nominal speed	rpm		8460	7430	8750	7370	8760	7300
5. Nominal torque	mNm		6.36	6.96	6.88	6.91	6.94	6.66
6. Nominal current (max. continuous current)	A		1.81	1.31	0.974	0.651	0.492	0.314
7. Stall torque	mNm		23.5	24.8	27.8	24.7	28.5	22.9
8. Stall current	A		6.45	4.53	3.8	2.26	1.95	1.05
9. Max. efficiency	%		79.5	80.8	81.4	80.1	81.3	80.1
10. Terminal resistance	Ω		0.698	1.33	2.37	5.31	9.21	22.9
11. Terminal inductance	mH		0.0252	0.0567	0.101	0.227	0.403	0.908
12. Torque constant	mNm/A		3.65	5.47	7.3	10.9	14.6	21.9
13. Speed constant	rpm/V		2620	1740	1310	872	654	436
14. Speed/torque gradient	rpm/mNm		500	422	424	423	413	456
15. Mechanical time constant	ms		4.35	4.17	4.11	4.28	4.19	4.17
16. Rotor inertia	gcm ²		0.831	0.942	0.926	0.966	0.97	0.872

Thermal data

		K/W	22.2	8.63	10.3	226	-40...+100	-30...+100	125
17. Thermal resistance housing-ambient	K/W		22.2	8.63	10.3	226	-40...+100	-30...+100	125
18. Thermal resistance winding-housing	K/W		8.63	10.3	226	-40...+100	-30...+100	125	
19. Thermal time constant winding	s		10.3	226	-40...+100	-30...+100	125		
20. Thermal time constant motor	s		226	-40...+100	-30...+100	125			
21. Ambient temperature ball bearings	°C		-40...+100	-30...+100	125				
22. Max. winding temperature	°C		125						

Mechanical data ball bearings

		rpm	17000	0...0.1	0.8	0.015	0.8	18	300	10 [5]
23. Max. speed	rpm		17000	0...0.1	0.8	0.015	0.8	18	300	10 [5]
24. Axial play	mm		0...0.1	0.8	0.015	0.8	18	300	10 [5]	
25. Radial play	mm		0.015	0.8	18	300	10 [5]			
26. Max. axial load (dynamic)	N		0.8	18	300	10 [5]				
27. Max. force for press fits (static)	N		18	300	10 [5]					
28. Max. radial load [mm from flange]	N		10 [5]							

Mechanical data sleeve bearings

		rpm	15000	0...0.2	0.1	0.015	0.1	60	300	2 [5]
23. Max. speed	rpm		15000	0...0.2	0.1	0.015	0.1	60	300	2 [5]
24. Axial play	mm		0...0.2	0.1	0.015	0.1	60	300	2 [5]	
25. Radial play	mm		0.015	0.1	60	300	2 [5]			
26. Max. axial load (dynamic)	N		0.1	60	300	2 [5]				
27. Max. force for press fits (static)	N		60	300	2 [5]					
28. Max. radial load [mm from flange]	N		2 [5]							

Other specifications

29. Number of pole pairs		1
30. Number of commutator segments		7
31. Weight of motor	g	26
32. Typical noise level	dBA	40

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