

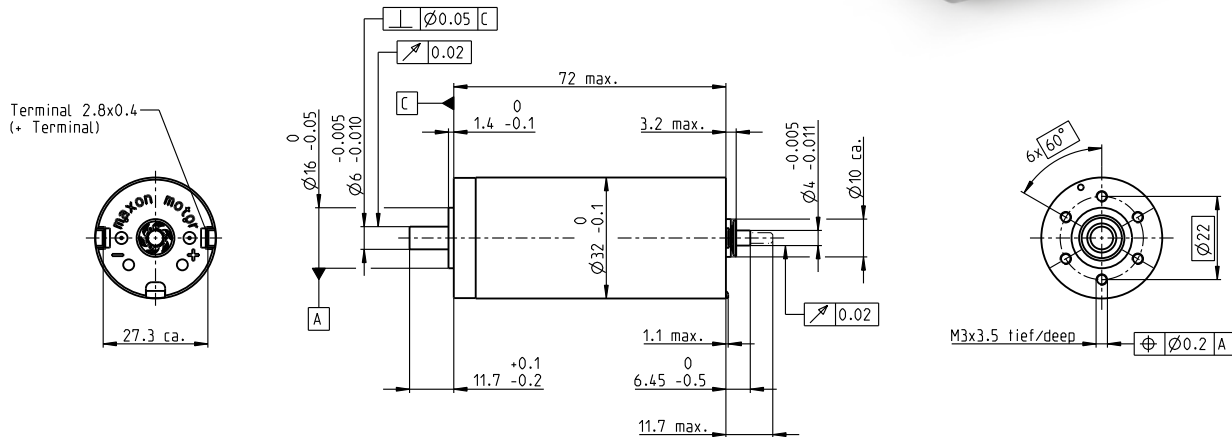
DCX 32 L Graphite Brushes

DC motor Ø32 mm

Key Data: 70/110 W, 128 mNm, 11300 rpm



DCX



M 1:2

Motor Data

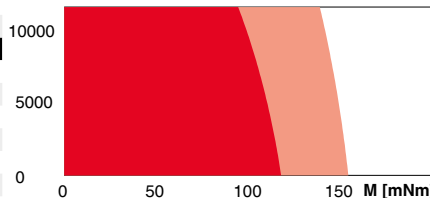
1. Nominal voltage	V	12	18	24	36	48	60
2. No load speed	rpm	7120	8630	8270	7940	7780	5840
3. No load current	mA	274	234	164	103	75.2	41.6
4. Nominal speed	rpm	6560	8070	7710	7410	7260	5290
5. Nominal torque (max. continuous torque)	mNm	89.4	101	108	119	123	128
6. Nominal current (max. continuous current)	A	6.00	5.42	4.12	2.87	2.17	1.35
7. Stall torque	mNm	1730	2120	1980	2020	2000	1420
8. Stall current	A	111	109	72.5	47.1	34.2	14.5
9. Max. efficiency	%	85	88	88	90	90	89
10. Terminal resistance	Ω	0.108	0.165	0.331	0.764	1.40	4.12
11. Terminal inductance	mH	0.034	0.053	0.103	0.254	0.473	1.31
12. Torque constant	mNm/A	15.6	19.5	27.3	42.9	58.5	97.5
13. Speed constant	rpm/V	612	490	350	223	163	97.9
14. Speed/torque gradient	rpm/mNm	4.24	4.15	4.24	3.96	3.92	4.14
15. Mechanical time constant	ms	3.44	3.30	3.24	3.19	3.11	3.11
16. Rotor inertia	gcm ²	77.6	75.9	72.8	76.8	75.9	71.7

Thermal data

17. Thermal resistance housing-ambient	K/W	7.28
18. Thermal resistance winding-housing	K/W	2.3
19. Thermal time constant winding	s	42.2
20. Thermal time constant motor	s	837
21. Ambient temperature	°C	-40...+100
22. Max. winding temperature	°C	155

Mechanical data ball bearings

23. Max. speed	rpm	11300
24. Axial play	mm	0...0.1
Preload	N	7
25. Radial play	mm	0.02
26. Max. axial load (dynamic)	N	7
27. Max. force for press fits (static)	N	22.6
(static, shaft supported)	N	2510
28. Max. radial load [mm from flange]	N	65.3 [5]



- Continuous operation
- Continuous operation with reduced thermal resistance R_{th2} 50%
- Intermittent operation

Other specifications

29. Number of pole pairs	1	maxon gear	Stages [opt.]	maxon sensor	maxon motor control
30. Number of commutator segments	11	347_GPX 32 A/C	1-2 [3]	433_ENX 10 EASY	487_ESCON Module 50/5
31. Weight of motor	g	325	348_GPX 32 LN/LZ	433_ENX 10 QUAD	488_ESCON Module 50/8 HE
32. Typical noise level	dBA	47	349_GPX 32 HP	434_ENX 10 EASY XT	489_ESCON 50/5

Configuration

Bearing: Ball bearings preloaded
 Commutation: 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

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