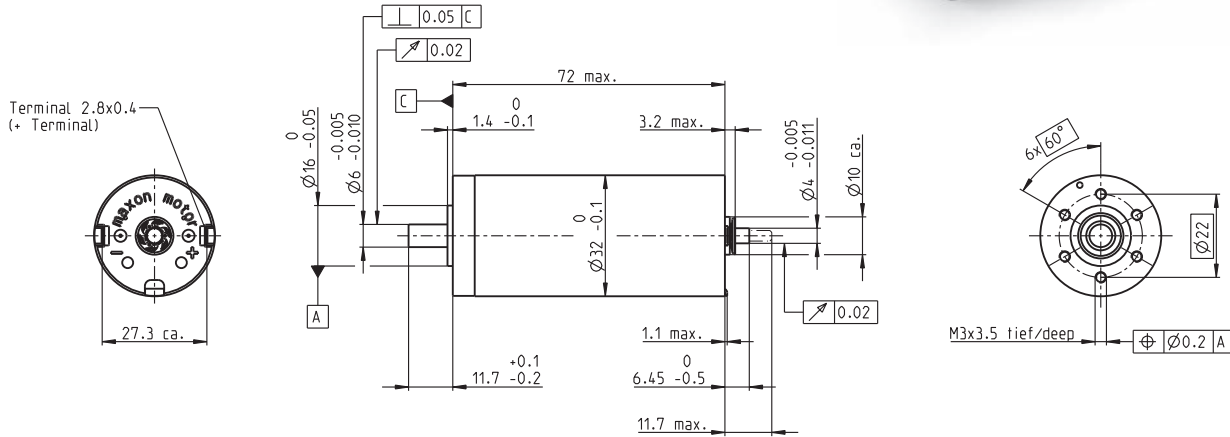


DCX 32 L Graphite Brushes

DC motor Ø32 mm

70/110 W 128 mNm 11 300 rpm



M 1:2

Motor Data

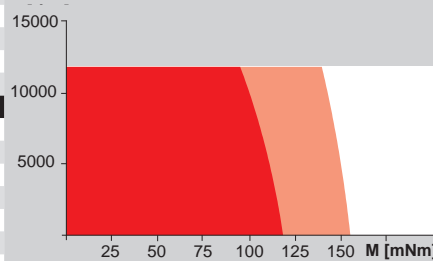
1_	Nominal voltage	V	12	18	24	36	48	60
2_	No load speed	rpm	7120	8630	8270	7940	7780	5840
3_	No load current	mA	274	234	164	103	75.2	41.6
4_	Nominal speed	rpm	6560	8070	7710	7410	7260	5290
5_	Nominal torque (max. continuous torque)	mNm	89.4	101	108	119	123	128
6_	Nominal current (max. continuous current)	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

Operating Range

n [rpm] Winding 36 V



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

Mechanical data ball bearings

23_	Max. speed	rpm	11 300
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) (static, shaft supported)	N	22.6 2510
28_	Max. radial load [mm from flange]	N	65.3 [5]

Other specifications

29_	Number of pole pairs		1
30_	Number of commutator segments		11
31_	Weight of motor	g	325
32_	Typical noise level	dBA	47

maxon Modular System

maxon gear	maxon sensor	maxon motor control
137_GPX 32 A/C 1-2	146_ENX 10 QUAD	417_ESCON Module 50/5
138_GPX 32 LN/LZ 1-2	147_ENX 16 EASY	418_ESCON 50/5
139_GPX 32 HP 2-3	148_ENX 16 EASY Abs.	418_ESCON 70/10
140_GPX 37 A 3	397_ENC 2RMHF	425_EPOS2 24/5
141_GPX 37 LN/LZ 3	404_ENC 30 HEDL 5540	425_EPOS2 50/5
	407_ENC AEDL 5810	425_EPOS2 70/10
		428_EPOS2 P 24/5
		431_EPOS4 Module/Comp. 50/8
		435_MAXPOS 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