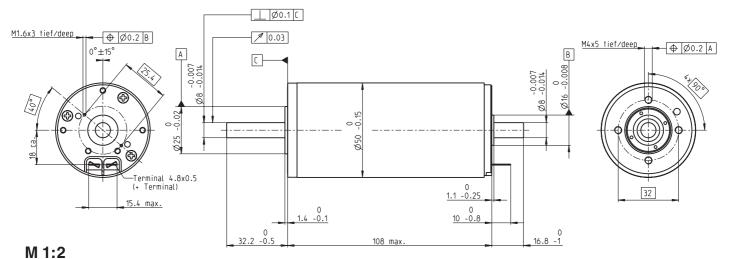
RE 50 Ø50 mm, Graphite Brushes, 200 Watt



Stock program

Specifications

Standard program
Special program (on request)

Special program (on request)									
		370354	370355	370356	370357				
Industrial Version IP54*		389089	389090	389091	389092				
Motor Data									
Values at nominal voltage									
Nominal voltage	V	24	36	48	70				
2 No load speed	rpm	5950	5680	4900	2760				
3 No load current	mA	236	147	88.4	27.4				
4 Nominal speed	rpm	5680	5420	4620	2470				
5 Nominal torque (max. continuous torque)	mNm	405	418	420	452				
6 Nominal current (max. continuous current		10.8	7.07	4.58	1.89				
7 Stall torque	mNm	8920	8920	7370	4340				
8 Starting current	Α	232	148	78.9	17.9				
9 Max. efficiency	%	94	94	94	92				
Characteristics									
Terminal resistance	Ω	0.103	0.244	0.608	3.9				
11 Terminal inductance	mH	0.0717	0.177	0.423	2.83				
12 Torque constant	mNm/A	38.5	60.4	93.4	242				
13 Speed constant	rpm/V	248	158	102	39.5				
14 Speed / torque gradient	rpm/mNm	0.668	0.638	0.666	0.638				
15 Mechanical time constant	ms	3.75	3.74	3.78	3.74				
16 Rotor inertia	gcm ²	536	560	542	560				

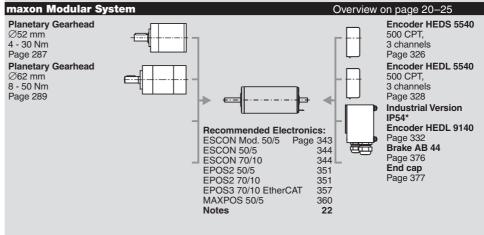
Part Numbers

Thermal data Thermal resistance housing-ambient 3.8 K/W 1.2 K/W 71.7 s 18 Thermal resistance winding-housing 19 Thermal time constant winding Thermal time constant motor 1370 s Ambient temperature -30...+100°C 22 Max. permissible winding temperature +125°C Mechanical data (preloaded ball bearings) 23 Max. permissible speed 9500 rpm 24 Axial play at axial load < 11.5 N 0 mm 0.1 mm > 11.5 N 25 Radial play 26 Max. axial load (dynamic) 27 Max. force for press fits (static) preloaded 30 N 150 N (static, shaft supported) 28 Max. radial load, 15 mm from flange 6000 N 110 N Other specifications 29 Number of pole pairs30 Number of commutator segments 15 1100 g Values listed in the table are nominal.

* Industrial version with radial shaft seal ring (resulting in increased no load current). IP54 protection only if mounted on brush side, in compliance with maxon modular system.

Explanation of the figures on page 79.

Operating Range Comments n [rpm] 200 W In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding 370355 8000 temperature will be reached during continuous operation at 25°C ambient. 6000 = Thermal limit. 4000-Short term operation The motor may be briefly overloaded (recurring). 150 300 450 M [mNm] Assigned power rating 2.5



April 2014 edition / subject to change maxon DC motor 115