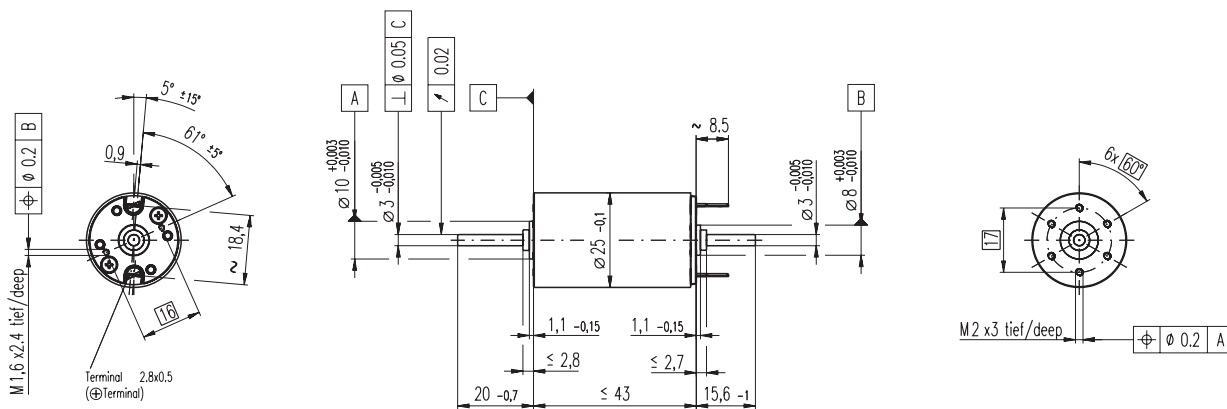


RE 25 \varnothing 25 mm, Graphite Brushes, 20 Watt



M 1:2

- Stock program
- Standard program
- Special program (on request)

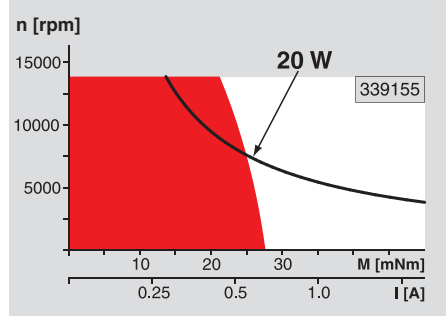
Order Number

302534 339149 339150 339151 339152 339153 339154 339155 339156 339157 339158

Motor Data (provisional)		302534	339149	339150	339151	339152	339153	339154	339155	339156	339157	339158
Values at nominal voltage												
1 Nominal voltage	V	7.2	9.0	12.0	18.0	24.0	30.0	36.0	48.0	48.0	48.0	48.0
2 No load speed	rpm	10600	9820	9770	10600	11100	9390	10300	9740	8630	6860	4740
3 No load current	mA	321	225	165	123	97.3	60.7	57.5	39.8	33.4	24.3	14.9
4 Nominal speed	rpm	9340	8590	8630	9530	10100	8300	9190	8660	7530	5720	3550
5 Nominal torque (max. continuous torque)	mNm	17.8	20.5	23.5	24.7	25.8	27.6	26.6	27.8	28.9	30.1	30.6
6 Nominal current (max. continuous current)	A	3.27	2.70	2.25	1.69	1.37	0.978	0.863	0.637	0.583	0.479	0.336
7 Stall torque	mNm	252	231	261	289	316	258	271	263	236	187	124
8 Starting current	A	42.1	28.1	23.2	18.4	15.6	8.61	8.24	5.67	4.51	2.84	1.30
9 Max. efficiency	%	74	76	79	81	83	83	83	83	83	82	79
Characteristics												
10 Terminal resistance	Ω	0.171	0.320	0.517	0.98	1.53	3.49	4.37	8.47	10.6	16.9	36.8
11 Terminal inductance	mH	0.0163	0.0308	0.0573	0.112	0.186	0.407	0.493	0.979	1.25	1.97	4.11
12 Torque constant	mNm / A	5.99	8.24	11.2	15.7	20.2	29.9	32.9	46.4	52.4	65.9	95.1
13 Speed constant	rpm / V	1590	1160	850	607	472	319	290	206	182	145	100
14 Speed / torque gradient	rpm / mNm	45.5	45.1	39.1	37.8	35.8	37.1	38.4	37.5	37.0	37.2	38.9
15 Mechanical time constant	ms	6.83	6.35	5.89	5.62	5.49	5.42	5.41	5.37	5.36	5.37	5.39
16 Rotor inertia	gcm ²	14.3	13.4	14.4	14.2	14.6	14.0	13.4	13.7	13.8	13.8	13.2

Specifications	Operating Range	Comments
----------------	-----------------	----------

Thermal data	
17 Thermal resistance housing-ambient	14.4 K / W
18 Thermal resistance winding-housing	5.1 K / W
19 Thermal time constant winding	27.6 s
20 Thermal time constant motor	535 s
21 Ambient temperature	-30 ... +100°C
22 Max. permissible winding temperature	+155°C
Mechanical data (ball bearings)	
23 Max. permissible speed	14000 rpm
24 Axial play	0.05 - 0.15 mm
25 Radial play	0.025 mm
26 Max. axial load (dynamic)	20 N
27 Max. force for press fits (static) (static, shaft supported)	60 N / 1000 N
28 Max. radial loading, 5 mm from flange	35 N



Continuous operation
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.

Short term operation
The motor may be briefly overloaded (recurring).

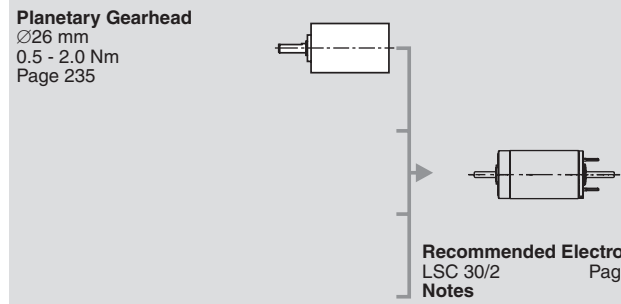
— Assigned power rating

Other specifications	
29 Number of pole pairs	1
30 Number of commutator segments	11
31 Weight of motor	115 g

maxon Modular System Overview on page 16 - 21

Values listed in the table are nominal.
Explanation of the figures on page 49.

- Option**
- Encoder MR on request
 - Encoder HED_ 5540 on request



Recommended Electronics:
LSC 30/2 Page 276
Notes 18