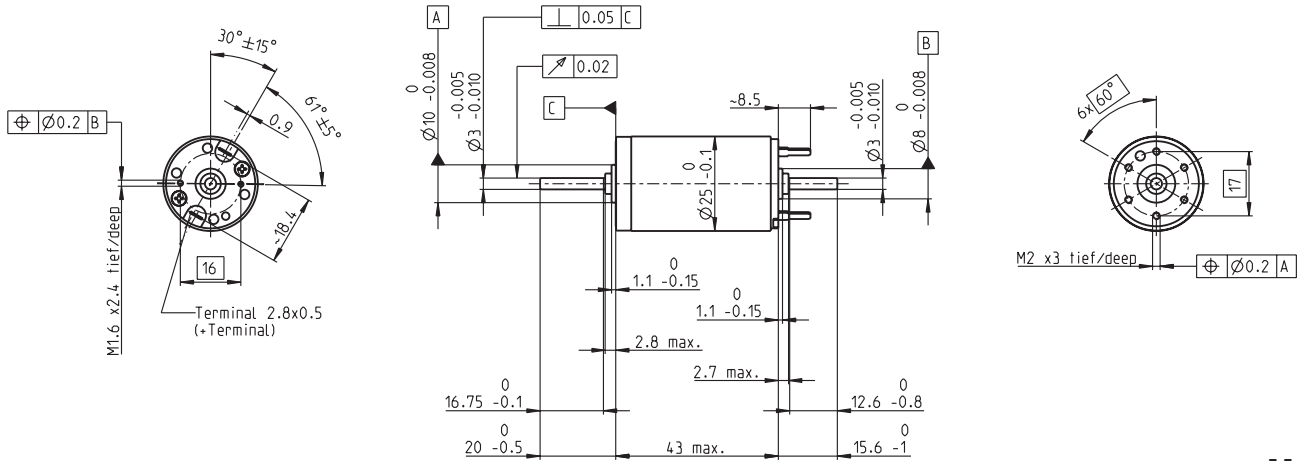


RE 25 Ø25 mm, Graphite Brushes, 20 Watt



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

Values at nominal voltage		7.2	9	12	18	24	30	36	48	48	48	48
1	Nominal voltage	V	7.2	9	12	18	24	30	36	48	48	48
2	No load speed	rpm	10500	9700	9620	10400	10900	9200	10100	9540	8450	6720
3	No load current	mA	133	93.2	68	50.6	40.2	25	23.7	16.4	13.7	9.89
4	Nominal speed	rpm	8830	8160	8240	9140	9620	7990	8840	8350	7260	5520
5	Nominal torque (max. continuous torque)	mNm	20.2	22.8	26.2	28.1	28.8	30.8	30.3	31.3	32	32.6
6	Nominal current (max. continuous current)	A	3.4	2.79	2.33	1.79	1.42	1.03	0.917	0.673	0.608	0.491
7	Stall torque	mNm	259	238	268	297	304	265	279	270	243	192
8	Starting current	A	42.1	28.1	23.2	18.4	14.6	8.61	8.24	5.67	4.51	2.84
9	Max. efficiency	%	78.6	81.2	84.1	86.4	87.5	87.9	88.2	88.7	88.5	87.8
Characteristics												
10	Terminal resistance	Ω	0.171	0.32	0.517	0.98	1.64	3.49	4.37	8.47	10.6	16.9
11	Terminal inductance	mH	0.0163	0.0308	0.0573	0.112	0.186	0.407	0.493	0.979	1.25	1.97
12	Torque constant	mNm / A	6.15	8.46	11.5	16.1	20.8	30.8	33.8	47.7	53.8	67.7
13	Speed constant	rpm / V	1550	1130	828	591	460	311	282	200	177	141
14	Speed / torque gradient	rpm / mNm	43.2	42.8	37.1	35.9	36.3	35.2	36.5	35.6	35.1	35.2
15	Mechanical time constant	ms	6.52	6.06	5.62	5.36	5.26	5.17	5.16	5.13	5.12	5.14
16	Rotor inertia	gcm ²	14.4	13.5	14.5	14.3	13.8	14	13.5	13.8	13.9	13.3

Specifications

- 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 29.2 s
 - 20 Thermal time constant motor 543 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) 60 N
 - 28 Max. radial loading, 5 mm from flange 1000 N

Other specifications

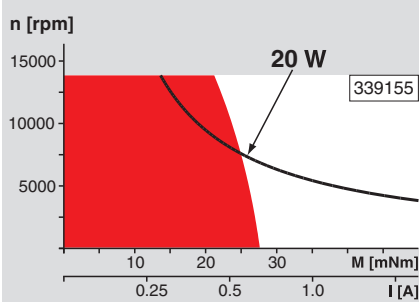
- 29 Number of pole pairs 1
- 30 Number of commutator segments 11
- 31 Weight of motor 115 g

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

Option

- Encoder MR on request
- Encoder HED_ 5540 on request

Operating Range



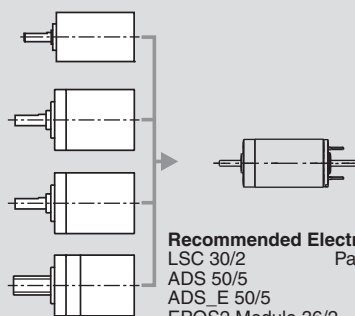
Comments

- 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**

maxon Modular System

Overview on page 16 - 21

- Planetary Gearhead**
Ø26 mm
0.5 - 2.0 Nm
Page 228
- Planetary Gearhead**
Ø32 mm
0.75 - 6.0 Nm
Page 230 / 231 / 233
- Koaxdrive**
Ø32 mm
1.0 - 4.5 Nm
Page 236
- Spindle Drive**
Ø32 mm
Page 249 / 250 / 251



- Recommended Electronics:**
- LSC 30/2 Page 282
 - ADS 50/5 282
 - ADS_E 50/5 283
 - EPOS2 Module 36/2 304
 - EPOS2 24/5 305
 - EPOS2 50/5 305
 - EPOS2P 24/5 308
 - Notes 18**

- Encoder MR**
128 - 1000 Imp.,
3 channels
Page 262
- Encoder HED_ 5540**
500 Imp.,
3 channels
Page 267 / 270
- DC-Tacho DCT**
Ø22 mm
0.52 V
Page 276
- Brake AB 28**
24 VDC
0.4 Nm
Page 318