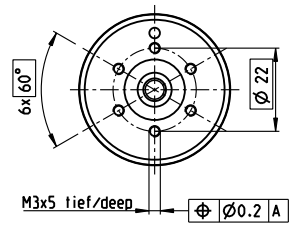
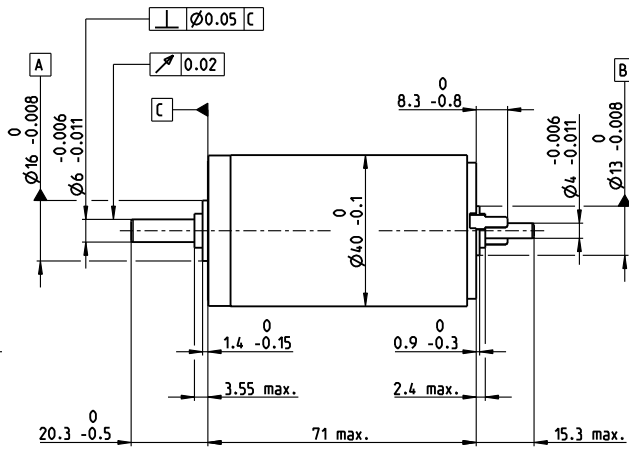
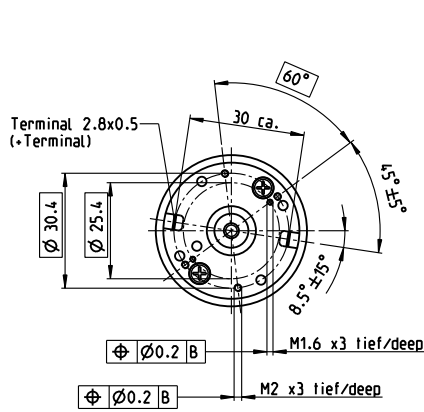


RE 40 Ø40 mm, graphite brushes, 150 watt

RE



M 1:2

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

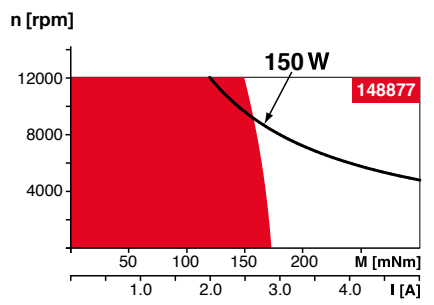
Part Numbers

Motor Data	148866	148867	148877	218008	218009	218010	218011	218012	218013	218014
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Values at nominal voltage		148866	148867	148877	218008	218009	218010	218011	218012	218013	218014
1 Nominal voltage	V	12	24	48	48	48	48	48	48	48	48
2 No load speed	rpm	6920	7580	7590	6420	5560	3330	2690	2130	1720	1420
3 No load current	mA	241	137	68.6	53.7	43.7	21.9	16.6	12.5	9.66	7.76
4 Nominal speed	rpm	6380	6940	7000	5810	4930	2710	2060	1510	1080	781
5 Nominal torque (max. continuous torque)	mNm	94.9	177	187	186	180	189	190	192	192	190
6 Nominal current (max. continuous current)	A	6	6	3.17	2.66	2.23	1.4	1.13	0.909	0.73	0.6
7 Stall torque	mNm	1720	2420	2560	2040	1620	1020	814	655	523	424
8 Stall current	A	105	80.2	42.4	28.6	19.7	7.43	4.79	3.06	1.97	1.32
9 Max. efficiency	%	88	91	92	91	91	89	89	88	86	85
Characteristics											
10 Terminal resistance	Ω	0.115	0.299	1.13	1.68	2.44	6.46	10	15.7	24.4	36.3
11 Terminal inductance	mH	0.024	0.082	0.33	0.46	0.613	1.7	2.62	4.14	6.41	9.32
12 Torque constant	mNm/A	16.4	30.2	60.3	71.3	82.2	137	170	214	266	321
13 Speed constant	rpm/V	581	317	158	134	116	69.7	56.2	44.7	35.9	29.8
14 Speed/torque gradient	rpm/mNm	4.05	3.14	2.97	3.16	3.45	3.29	3.31	3.27	3.29	3.37
15 Mechanical time constant	ms	5.89	4.67	4.28	4.2	4.19	4.16	4.15	4.15	4.15	4.16
16 Rotor inertia	gcm ²	139	142	137	127	116	121	120	121	120	118

Specifications Operating Range Comments

- Thermal data**
- 17 Thermal resistance housing-ambient: 4.7 K/W
 - 18 Thermal resistance winding-housing: 1.9 K/W
 - 19 Thermal time constant winding: 41.5 s
 - 20 Thermal time constant motor: 809 s
 - 21 Ambient temperature: -30...+100°C
 - 22 Max. winding temperature: +155°C
- Mechanical data (ball bearings)**
- 23 Max. speed: 12000 rpm
 - 24 Axial play: 0.05 - 0.15 mm
 - 25 Radial play: 0.025 mm
 - 26 Max. axial load (dynamic): 5.6 N
 - 27 Max. force for press fits (static) (static, shaft supported): 110 N / 1200 N
 - 28 Max. radial load, 5 mm from flange: 28 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: 13
 - 31 Weight of motor: 480 g

maxon Modular System Details on catalog page 38

Values listed in the table are nominal.
Explanation of the figures on page 82.

Option
Preloaded ball bearings

* 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.

- Planetary Gearhead**
Ø42 mm
3-15 Nm
Page 405
- Planetary Gearhead**
Ø52 mm
4-30 Nm
Page 410

- Recommended Electronics:** Page 38
- ESCON Mod. 50/5: 501
 - ESCON Mod. 50/8 (HE): 502
 - ESCON 50/5: 503
 - ESCON 70/10: 503
 - EPOS4 Mod./Comp. 50/5: 510
 - EPOS4 Module 50/8: 511
 - EPOS4 Comp. 50/8 CAN: 513
 - EPOS4 50/5: 515
 - EPOS4 70/15: 515
 - EPOS4 Disk 60/8: 516
 - EPOS4 Disk 60/12: 517
 - EPOS2 P 24/5: 520

- Encoder MR**
256-1024 CPT,
3 channels
Page 479
- Encoder HEDL_5540**
500 CPT,
3 channels
Page 486/489
- Brake AB 28**
24 VDC
0.4 Nm
Page 535
- Industrial Version IP54***
Encoder HEDL 9140
Page 493
- Brake AB 28**
Page 536
- End cap**
Page 541