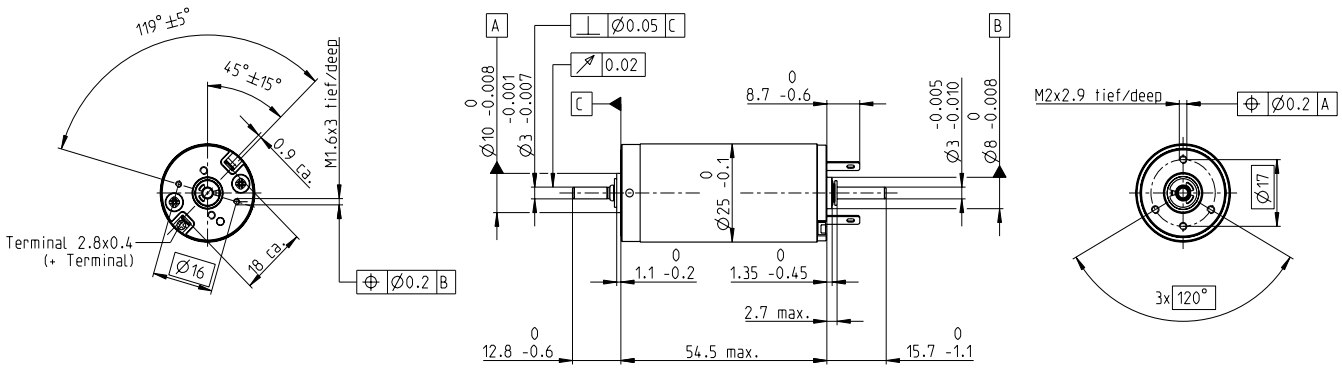


RE 25 Ø25 mm, precious metal brushes CLL, 10 watt

RE



M 1:2

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

Part Numbers

| Motor Data | 118740 | 118741 | 118742 | 118743 | 118744 | 118745 | 118746 | 118747 | 118748 |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

| Values at nominal voltage | | | 4.5 | 8 | 9 | 12 | 15 | 18 | 24 | 32 | 48 |
|---------------------------|---|------------------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| 1 | Nominal voltage | V | 4.5 | 8 | 9 | 12 | 15 | 18 | 24 | 32 | 48 |
| 2 | No load speed | rpm | 5360 | 5320 | 5230 | 4850 | 4980 | 4790 | 5190 | 5510 | 5070 |
| 3 | No load current | mA | 79.7 | 44.4 | 38.7 | 26.3 | 21.8 | 9.88 | 14.4 | 11.7 | 6.96 |
| 4 | Nominal speed | rpm | 4980 | 4520 | 4220 | 3800 | 3920 | 3710 | 4130 | 4450 | 4000 |
| 5 | Nominal torque | mNm | 11.4 | 20.9 | 23.9 | 28.6 | 28.2 | 28.7 | 28 | 27.9 | 27.9 |
| 6 | Nominal current (max. continuous current) | A | 1.5 | 1.5 | 1.5 | 1.24 | 1.01 | 0.811 | 0.652 | 0.516 | 0.317 |
| 7 | Stall torque | mNm | 131 | 132 | 119 | 129 | 131 | 126 | 136 | 144 | 132 |
| 8 | Stall current | A | 16.5 | 9.23 | 7.31 | 5.5 | 4.57 | 3.52 | 3.1 | 2.61 | 1.47 |
| 9 | Max. efficiency | % | 87 | 87 | 86 | 87 | 87 | 90 | 87 | 87 | 87 |
| Characteristics | | | | | | | | | | | |
| 10 | Terminal resistance | Ω | 0.273 | 0.867 | 1.23 | 2.18 | 3.28 | 5.11 | 7.73 | 12.3 | 32.6 |
| 11 | Terminal inductance | mH | 0.0275 | 0.0882 | 0.115 | 0.238 | 0.353 | 0.551 | 0.832 | 1.31 | 3.48 |
| 12 | Torque constant | mNm/A | 7.99 | 14.3 | 16.3 | 23.5 | 28.6 | 35.8 | 43.9 | 55.2 | 89.9 |
| 13 | Speed constant | rpm/V | 1200 | 668 | 584 | 406 | 334 | 267 | 217 | 173 | 106 |
| 14 | Speed/torque gradient | rpm/mNm | 40.9 | 40.5 | 44 | 37.7 | 38.3 | 38.2 | 38.3 | 38.5 | 38.6 |
| 15 | Mechanical time constant | ms | 4.99 | 4.4 | 4.37 | 4.25 | 4.23 | 4.22 | 4.22 | 4.22 | 4.23 |
| 16 | Rotor inertia | gcm ² | 11.7 | 10.4 | 9.49 | 10.8 | 10.6 | 10.6 | 10.5 | 10.5 | 10.5 |

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

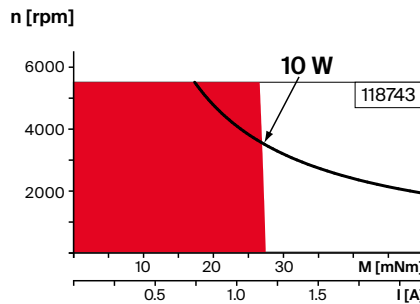
- Thermal data**
- 17 Thermal resistance housing-ambient 14 K/W
 - 18 Thermal resistance winding-housing 3.1 K/W
 - 19 Thermal time constant winding 12.5 s
 - 20 Thermal time constant motor 612 s
 - 21 Ambient temperature -20...+85°C
 - 22 Max. winding temperature +100°C

- Mechanical data (ball bearings)**
- 23 Max. speed 5500 rpm
 - 24 Axial play 0.05 - 0.15 mm
 - 25 Radial play 0.025 mm
 - 26 Max. axial load (dynamic) 3.2 N
 - 27 Max. force for press fits (static) 64 N
 - (static, shaft supported) 800 N
 - 28 Max. radial load, 5 mm from flange 16 N

- Other specifications**
- 29 Number of pole pairs 1
 - 30 Number of commutator segments 11
 - 31 Weight of motor 130 g
 - CLL = Capacitor Long Life

Values listed in the table are nominal.
Explanation of the figures on page 90.

- Option**
- Preloaded ball bearings



- 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**

| Modular System | Sensor | Motor Control |
|----------------|--------|---------------|
|----------------|--------|---------------|

| | | |
|--|---|---|
| <p>Gear</p> <ul style="list-style-type: none"> 416_GP 26 A 418_GP 32 BZ 419_GP 32 A 422_GP 32 C 429_KD 32 452-460_GP 32 S | <p>Sensor</p> <ul style="list-style-type: none"> 510_Encoder MR 128-1000 CPT 515_Encoder Enc 22 518_Encoder HEDS 5540 520_Encoder HEDL 5540 527_DC-Tacho DCT 22 | <p style="text-align: right;">Details on catalog page 44</p> <ul style="list-style-type: none"> 532_ESCON Module 24/2 532_ESCON 36/2 DC 533_ESCON Module 50/5 535_ESCON 50/5 541_EPOS4 Micro 24/5 542_EPOS4 Module 24/1.5 542_EPOS4 Module 50/5 543_EPOS4 Compact 24/5 3-axes 544_EPOS4 Compact 24/1.5 545_EPOS4 Compact 50/5 547_EPOS4 50/5 |
|--|---|---|