

DC direct-drive brushed motors

→ Ø 27.5 mm 3.2 Watts

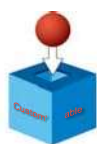
- Long service life
- Resistant to prolonged jamming
- Class A EMC interference suppression
- Compatible with 6 V, 9 V or 12 V battery power supply
- Optional class B interference suppression
- Optional encoder



Part numbers

	3.2 W	3.2 W
Type	827200	827200
Voltage	12 V	24 V
References		
Without option	82720001	82720002
With class B EMC filter (radiated)	82720003	82720004
With 1 pulse/revolution encoder	82720007	82720008
With 5 pulses/revolution encoder	82720009	82720010
With 12 pulses/revolution encoder	82720011	82720012
With 48 pulses/revolution encoder	82720005	82720006
No-load characteristics		
Speed of rotation (rpm)	4785	4740
Absorbed power (W)	1.2	1.2
Absorbed current (A)	0.098	0.049
Nominal characteristics		
Speed (rpm)	3500	3500
Torque (mNm)	7	7
Usable power (W)	2.6	2.6
Absorbed power (W)	5.0	5.0
Absorbed current (A)	0.42	0.21
Gearbox case temperature rise (°C)	25	25
Efficiency (%)	51	51
General characteristics		
Conformity to standard EN 55022 (radiated EMC)	Class A	Class A
Temperature rise conf. to EN 60950	✓	✓
Coil wire insulation class	H	H
Protection rating	IP 30	IP 30
Max. output power (W)	3,20	3,20
Start torque (mNm)	26	26
Starting current (A)	1,3	0,64
Resistance (Ω)	9	37,5
Inductance (mH)	13	52
Torque constant (Nm/A)	0,022	0,044
Electrical time constant (ms)	1,4	1,4
Mechanical time constant (ms)	16,5	16,5
Thermal time constant (mn)	6,3	6,3
Inertia (g.cm ²)	9	9
Weight (g)	70	70
Number of segments	5	5
Service life (h)	4000	4000
Sintered bronze bearings	✓	✓
Encoder characteristics		
Connection via connector	✓	✓
Output current (mA)	< 20 mA	< 20
Supply (V)	5	5

Product adaptations



- Encoder with different number of pulses per revolution
- Push-fit pinion
- Additional connectors

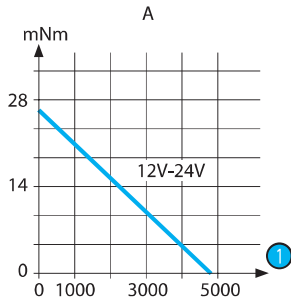
Stocked product

Product made to order

To order, see page 18

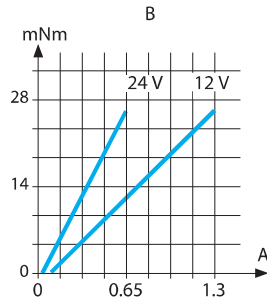
Curves

Curve: torque/speed 827200



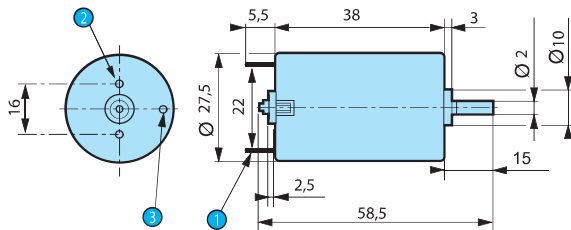
1 rpm

Curve: torque/current 827200



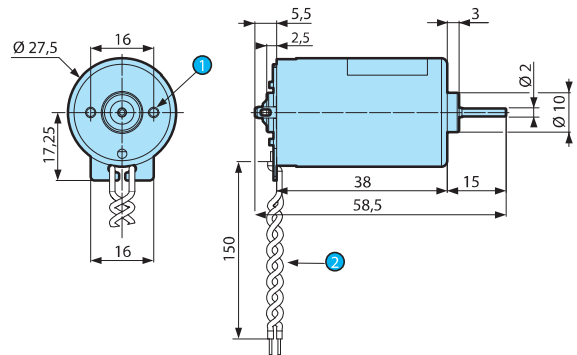
Dimensions

82720001 - 82720002



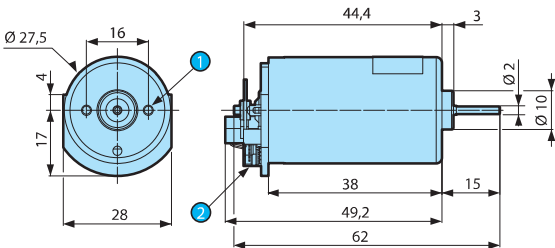
- 1 2 solder tags 2.8 x 0.5 mm
- 2 2 holes M2.6 screw depth max. 3 mm
- 3 Hole \varnothing 2.38 mm

With EMC filter 82720003 - 82720004



- 1 2 holes M2.6 depth 3 max.
- 2 AWG 24 leads

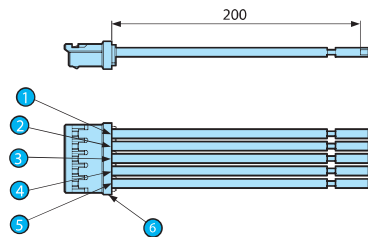
With encoder



- 1 2 holes M2.6 depth 3 max.
- 2 Molex connector 87438 - 0532

Connections

Accessory 79260417



- 1 Motor (+) → red
- 2 Motor (-) → blue
- 3 +5 V--- encoder power supply → white
- 4 0 V--- encoder power supply → blue
- 5 Encoder output signal → grey
- 6 Molex connector 87439 - 0500

Internal encoder diagram

