

### Ø 42 mm 22 to 52 Watts 31 W Part number 82800870



- Usable power : 20 to 50 W
- For high-power drive applications
- Sintered bronze bearings lubricated for life
- Power supply via 2 output leads
- Optional 1 or 2-channel encoder
- Optional EMC filter

#### Part numbers

	Type	Type	Voltage	References
82800870	31 W	828008	24 V	With 5 pulses/revolution 2-channel encoder

#### Specifications

##### No-load characteristics

Speed of rotation (rpm)	4010
Absorbed power (W)	12,24
Absorbed current (A)	0,51

##### Nominal characteristics

Speed (rpm)	3070
Torque (mNm)	70
Usable power (W)	22
Absorbed power (W)	41
Absorbed current (A)	1,71
Gearbox case temperature rise (°C)	40
Efficiency (%)	54

##### General characteristics

Insulation class (conforming to IEC 85)	F (155 °C)
Protection (IEC/EN 60529)	IP20
Max. output power (W)	31
Start torque (mNm)	298
Starting current (A)	6,16
Resistance (Ω)	3,9
Inductance (mH)	9,35
Torque constant (Nm/A)	0,0527
Electrical time constant (ms)	2,4
Mechanical time constant (ms)	15
Thermal time constant (mn)	12
Inertia (g.cm <sup>2</sup> )	110
Weight (g)	400
Number of segments	8
Service life (h)	3000
Sintered bronze bearings	■
Wires length (mm)	200

##### Encoder characteristics

Current consumption (mA)	0,5 →15
Output current (mA)	< 20 (25 °C)
Supply (V)	4,5 →35 DC
Ambient temperature (°C)	-25 →+85

#### Accessories

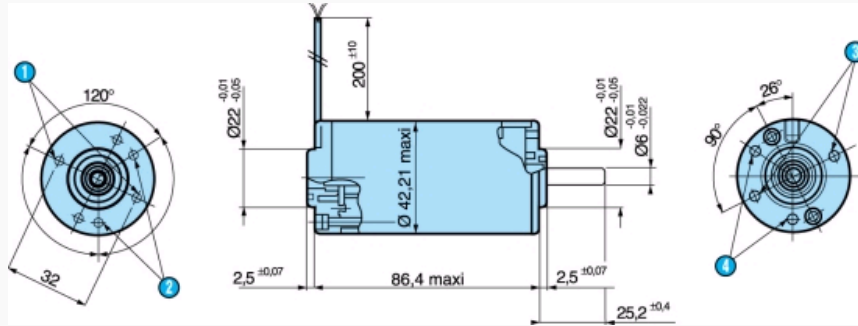
Connection	Code
Pre-assembled female connector, casing 179228-3, tags 179227-1 and leads AWG24 250 mm	79209895

#### Made to order products, available on request

- Built-in interference suppression
- Other supply voltages
- Shaft lengths at front and/or rear
- Motor 82 850 with 1 or 2 ball bearings
- Other fixing flanges on front and rear
- 200 pulses/rev optical encoder

Dimensions (mm)

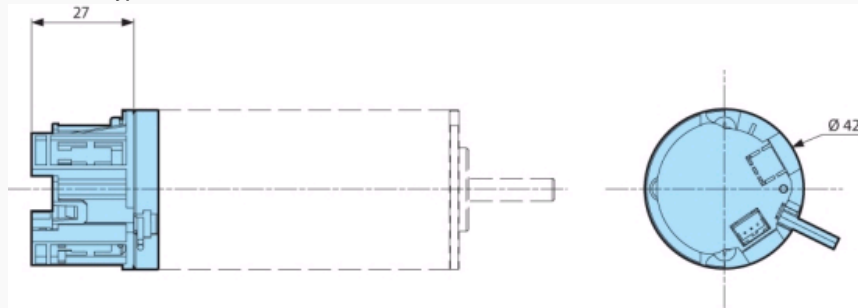
828000 without encoder



N°	Legend
1	2 holes M3 x 0.5 at 180° depth 5 over Ø 32
2	2 holes 2.75±0.05 at 120° depth 5 over Ø 32
3	2 holes M3 x 0.5 at 180° depth 5.5 over Ø 32
4	2 holes M3 x 0.5 at 120° depth 5.5 over Ø 32

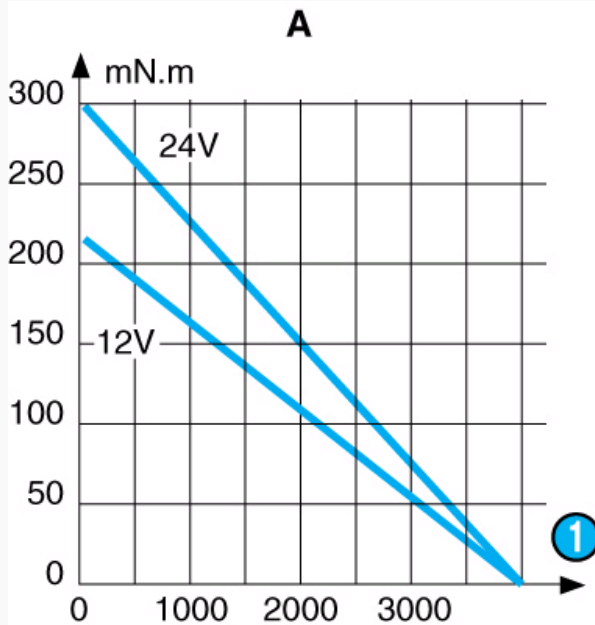
Dimensions (mm)

Encoder on types 828008 - 828500



Curves

828008

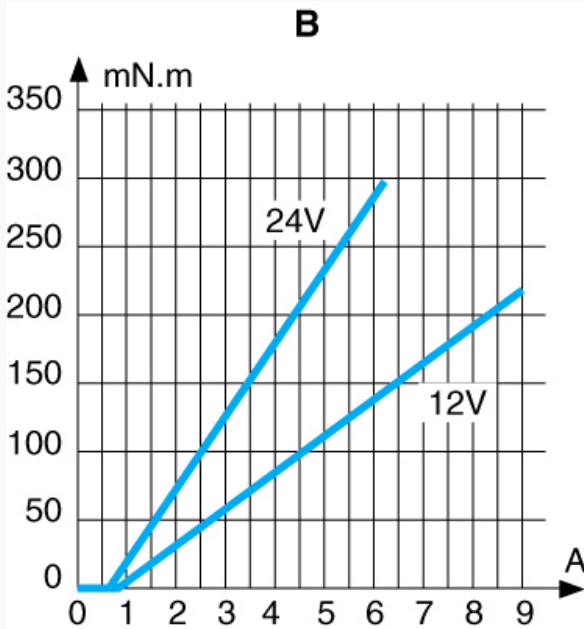


N°	Legend
1	rpm

✖	Torque/speed curve
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**Curves**

828008



N°	Legend
✖	Torque/current curve

**Connections**

**Encoder**

V DC	RD	RL
+ 5 V	190 Ω - 1/4 W	1,5 KΩ - 1/4 W
+ 12 V	560 Ω - 1/2 W	3,9 KΩ - 1/4 W
+ 24 V	1200 Ω - 1 W	8,2 KΩ - 1/4 W
+ 30 V	1500 Ω - 1 W	10 KΩ - 1/4 W

N°	Legend
1	Signal output
2	0 V DC (encoder power ground supply)
3	Emitting diode
4	Power supply V DC
5	Output 2
6	Earth

**Product adaptations**

- Special output shaft
- Pinion on output shaft
- Special supply voltage
- Special cable length
- Special ball bearings
- Optical or Hall effect encoder - 1 or 2 channels - other resolutions
- Special mounting plate
- Customised electronics
- Special connectors
- EMC filter