

## Ø 42 mm 14 to 31 Watts 31 W Part number 82800502



- Usable power : 12 to 22 Watts
- For high-power drive applications
- Sintered bronze bearings lubricated for life
- Power supply by 4.75 mm tags
- Interchangeable brushes
- Optional channel encoder

### Part numbers

	Type	Type	Voltage	References
82800502	31 W	828005	24 V	Without 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)	2000
Sintered bronze bearings	▪
Replaceable brushes	▪

#### Encoder characteristics

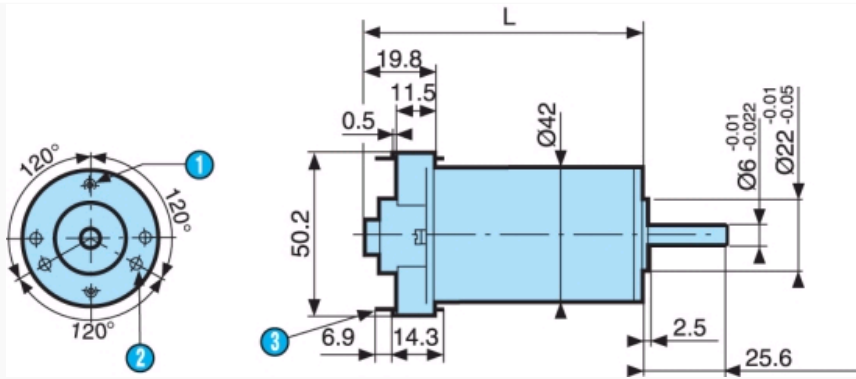
Output current (mA)	< 25 (25 °C)
Supply (V)	4,5 →30 DC
Ambient temperature (°C)	-40 →85 °C

### Made to order products, available on request

- Built-in interference suppression (82 830 5)
- Special interference suppression (82 800 5 - 82 810 5)
- Other supply voltages
- Motor with 1 ball bearing at front (82 800 5 or 82 810 5) (essential for vertical motor)
- Shaft lengths at front and/or rear
- Reversible 5 pulses/revolution magnetic encoder (1 or 5 pulses/revolution)
- Other fixing flanges on front or rear
- Short version possible on 82 830 5 (L = 90 mm)

### Dimensions (mm)

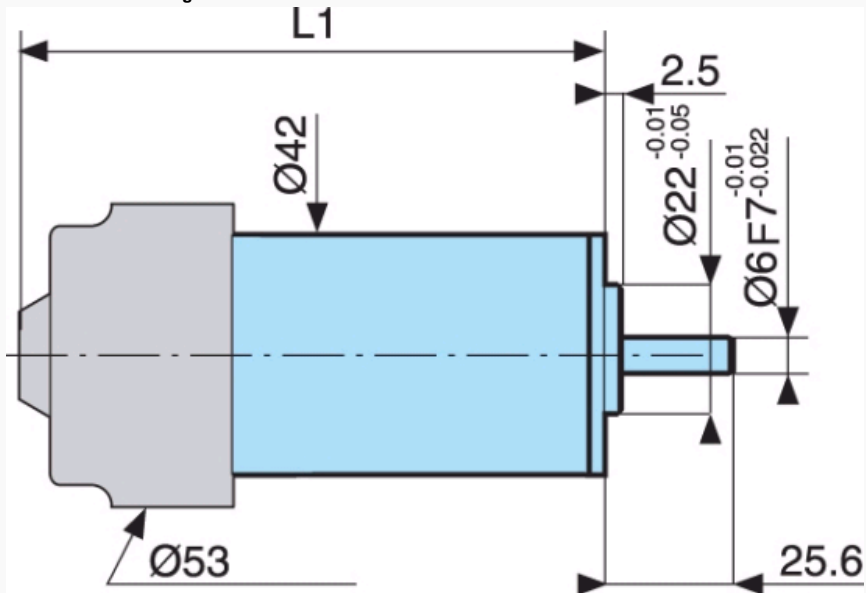
828005 - 828105



N°	Legend
1	2 x M3 at 180°, depth 5 mm over Ø 32
2	2 holes Ø 2.75 at 120° depth 5 mm over Ø 32
3	2 tags IEC 760, series 4.8 x 0.5
	L : 828005 : 84.8 mm max.
	L : 828105 : 69.8 mm max.

### Dimensions (mm)

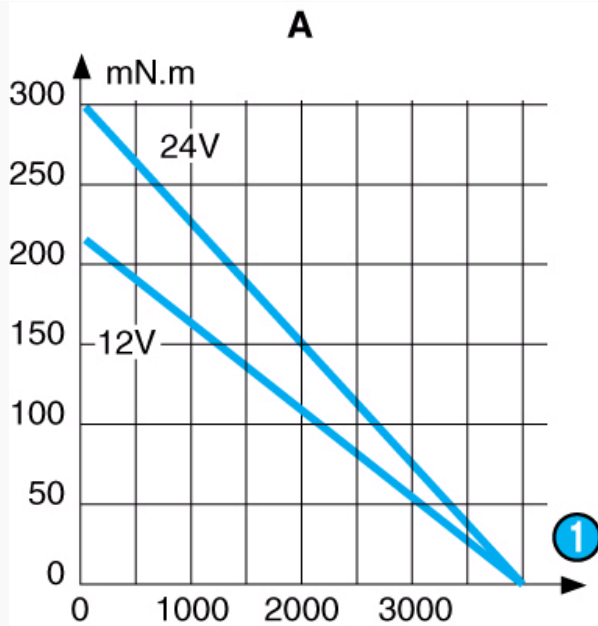
#### Dimensions with magnetic encoder



N°	Legend
	L1 : 828005 : 99.1 mm max.
	L1 : 828105 : 84.1 mm max.

### Curves

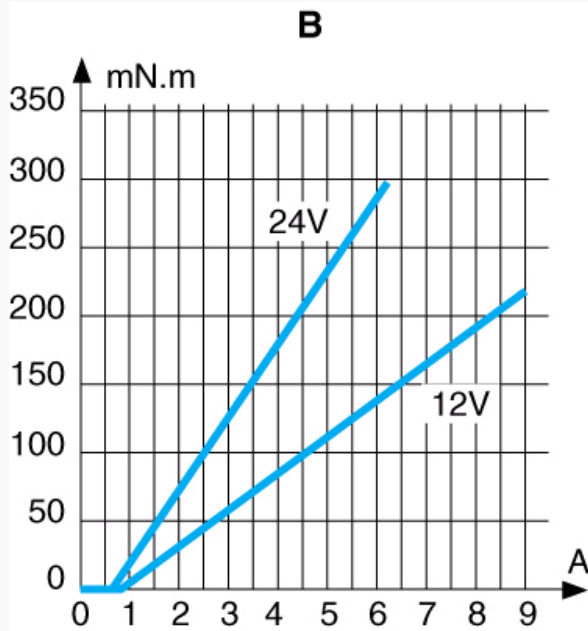
#### 828005



N°	Legend
1	rpm
	Torque/speed curve

**Curves**

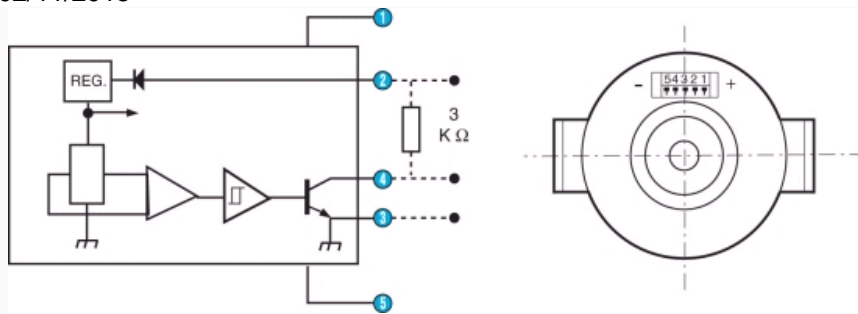
828005



N°	Legend
	Torque/current curve

**Connections**

Encoder and connector : STOCKO MKS 3735-6-0-505



Part number of female connector to be used : STOCKO MKF 17-230 / 260 / 330 / 360

N°	Legend
1	Motor power supply
2	+5 → +24 V DC (encoder power supply)
3	0 V DC (encoder power supply)
4	Encoder signal output
5	Motor power supply

#### Product adaptations



- Special output shaft
- Pinion on output shaft
- Special supply voltage
- Special ball bearings
- Optical or Hall effect encoder
- Special mounting plate
- Special connections