

Direct drive BRUSHLESS DC motors

→ 80 Watts

Ideal for movement and positioning applications

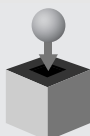
- Adjustable : 4 quadrant variable speed control
- Complete : Brake, 2 channel encoder and integrated CEM filter
- Compact : High efficiency and starting torque
- Open : Compatible with Crouzet Millenium II+ logic controller
- Flexible : 24 V supply allows battery operation



Specifications

	80 Watts PWM control	80 Watts 0-10 V control
Speed control	PWM	0-10 V
Part numbers	80 180 001	80 180 002
Supply voltage (V)	24 (18 → 37)	24 (18 → 37)
No-load characteristics		
Speed of rotation (rpm)	4 200	4 200
Absorbed current (A)	0.4	0.4
Nominal characteristics		
Speed (rpm)	3 250	3 250
Torque (mN.m)	240	240
Absorbed current (A)	4.8	4.8
Maximum characteristics		
Start torque (mN.m)	300	300
Starting current (A)	6.0	6.0
General characteristics		
Insulation class (conforming to IEC 85)	B (120°C)	B (120°C)
Casing temperature rise at 40°C ambient max. (°C)	20	20
Thermal time constant (min)	15	15
Inertia (g.cm ²)	105	105
Acoustic pressure at 50 cm (dBA)	50	50
Service life L10 (h)	20 000	20 000
0-10 V speed input characteristics		
Input impedance (kΩ)	-	440
Full scale speed (rpm)	-	4 200
PWM speed input characteristics		
Input impedance (kΩ)	19	-
Level 0 input voltage (V)	< 2.5	-
Level 1 input voltage (V)	> 11.5	-
Frequency range (Hz)	150 → 1000	-
Full scale speed (rpm)	4 200	-
Output characteristics		
Type of output	PNP	PNP
Max. current (mA)	50	50
Weight (g)	1 400	1 400

Products adaptations, available on request



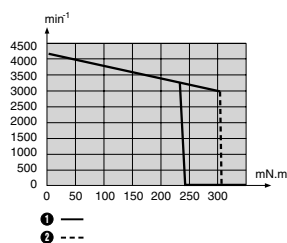
- 2 quadrant speed regulation
- Motors with hall effect sensors only
- Adaptations on electronics
- Special cable lengths
- Special connectors fitted to the cable

Products and specifications subject to change without notice.

Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com

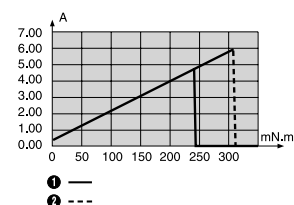
Curves

Speed/torque



- ① — Continuous operation
② --- Cyclic operation

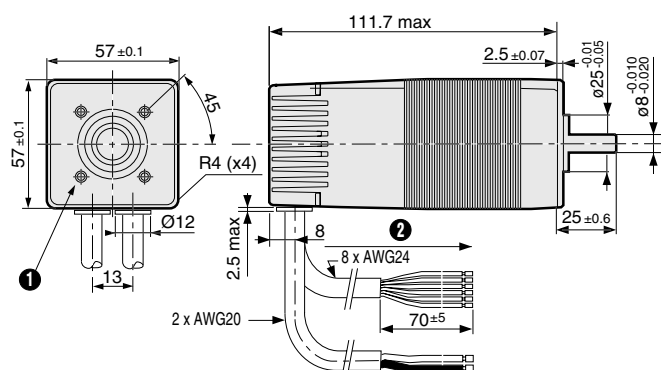
Current/torque



- ① — Continuous operation
② --- Cyclic operation

Dimensions

Short version 80 180 0



- ① 4 holes M5 x 0.86 H on Ø 40 depth 4.5 mm mini
② Cable length : 500 ± 15 mm

Connections

Marking on motor	Function	Wire colour	
*a	Power earth	Black (2nd harness)	1 power cable AWG20
*a	24 V power supply	Brown (2nd harness)	2 conductors UL2464
	Signal earth	Black	
	On/off input	Green	
	Direction input	Yellow	
	Speed setpoint	Orange	1 control cable AWG24
*b	12 points/rev encoder output	Brown	8 conductors UL2464
*b	Encoder direction output	Red	
	Torque limiting setpoint	Blue	
*b	Torque saturation output	Purple	

Using information

Precautions to take to avoid damaging the motor

- *a) Do not invert the polarities
*b) Do not short-circuit the encoder output (NPN)
Do not use the motor as a generator

Products and specifications subject to change without notice.

Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com

BRUSHLESS DC geared motors

→ 80 Watts with Ø 81 mm planetary gearbox - 0-10 V control

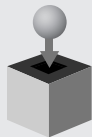
- Concentric output shaft,
- Ideal for high reduction ratios,
- Ideal for high torque applications,
- High efficiency,
- Reversible.



Specifications

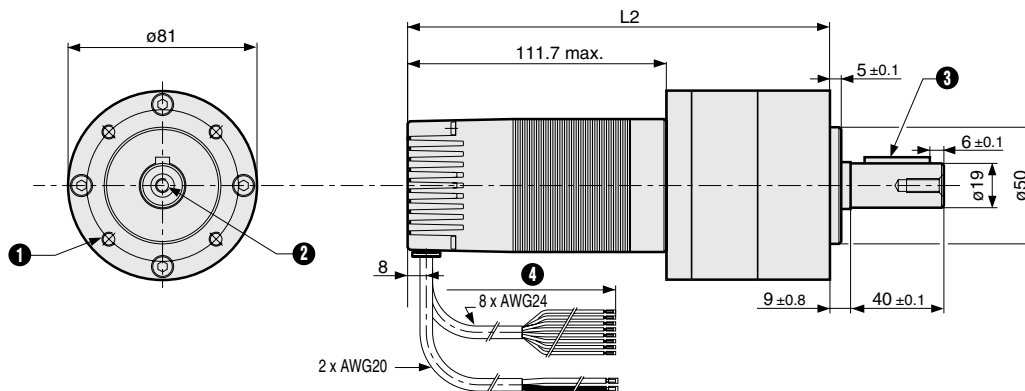
Ratios (i)	Output speed (rpm)	Available torque (N.m)	1 stage	2 stages	3 stages
5	650	1	80 189 704		
27	120	4.5		80 189 705	
139	23	20			80 189 706
General characteristics					
Motor			80 180	80 180	80 180
Speed control			0-10 V	0-10 V	0-10 V
Axial load (dynamic) N			80	120	200
Radial load (dynamic) N			200	300	500
Efficiency (%)			80	70	60
Casing temperature rise at 25°C			35	35	35
Weight (g)			3 200	3 900	4 600

Products adaptations, available on request



- 2 quadrant speed regulation
- Motors with hall effect sensors only
- Adaptations on electronics
- Special cable lengths
- Special connectors fitted to the cable

Dimensions



- ① 4 holes M6 x 12 x on Ø65
- ② Fixing hole M6 x 16
- ③ Cable length 500 ± 15 mm
- ④ Key A6 x 6 x 28 according to DIN6885

L2 1 stage : 182 mm max.
L2 2 stages : 203.9 mm max.
L2 3 stages : 226 mm max.

Using information

Respect the limits and precautions of use written in the 80W brushless motor section.

Products and specifications subject to change without notice.

Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com