

# D.C. direct drive brushed motors

→ Ø 32 mm 3.9 Watts

A range of small 32 mm diameter D.C. direct-drive brushed motors with 3.9 Watts output power.

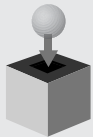
- Available in either 12 or 24 V D.C. versions.
- Sintered bronze bearings lubricated for life.
- Connection by 2.8 mm push-on terminals.
- Interference suppression fitted as standard.



## Specifications

	3.9 Watts	3.9 Watts with encoder 1 pulse/revolution	3.9 Watts	3.9 Watts with encoder 1 pulse/revolution
Type	82 860 0	82 860 0	82 860 0	82 860 0
Voltage	12 V	12 V	24 V	24 V
Part numbers	<b>82 860 003</b>	<b>82 860 501</b>	<b>82 860 004</b>	<b>82 860 502</b>
<b>No-load characteristics</b>				
Speed of rotation (rpm)	5000	5000	5000	5000
Absorbed power (W)	1.2	1.2	1.92	1.92
Absorbed current (A)	0.1	0.1	0.08	0.08
<b>Nominal characteristics</b>				
Speed (rpm)	3700	3700	3700	3700
Torque (mN.m)	7.7	7.7	7.7	7.7
Usable power (W)	3	3	3	3
Absorbed power (W)	6.2	6.2	6	6
Absorbed current (A)	0.43	0.43	0.26	0.26
Gearbox case temperature rise (°C)	50	50	50	50
Efficiency (%)	48	48	50	50
<b>General characteristics</b>				
Insulation class (conforming to IEC 85)	B (130 °C)	B (130°C)	B (130 °C)	B (130°C)
Protection rating	IP40	IP 40	IP40	IP 40
Max. output (W)	3.9	3.9	3.9	3.9
Start torque (mN.m)	30	30	30	30
Starting current (A)	1.5	1.5	0.76	0.76
Resistance (Ω)	8	8	32	32
Inductance (mH)	10	10	41.6	41.6
Torque constant (Nm/A)	0.0214	0.0214	0.0448	0.0448
Electrical time constant (ms)	1.3	1.3	1.3	1.3
Mechanical time constant (ms)	36	36	36	36
Thermal time constant (min)	8	8	8	8
Inertia (g.cm <sup>2</sup> )	19	19	19	19
Weight (g)	96	96	95	95
No of segments	3	3	3	3
Service life (h)	3000	3000	3000	3000
Sintered bronze bearings	✓	✓	✓	✓

## Products adaptations, available on request



- Special output shafts
- Pinion on output shaft
- Special supply voltages
- Special cable lengths
- Special output bearings
- Optional encoder
- Special mounting plate
- Customized electronics
- Special connectors

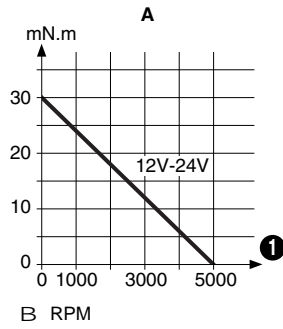
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Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / [www.crouzet-usa.com](http://www.crouzet-usa.com)

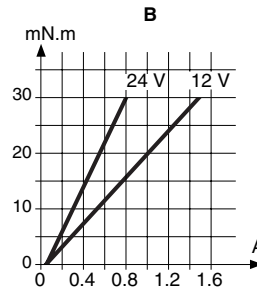
## Curves

A - Nominal speed and torque curves  
 B - Torque/Current curves

82 860 0

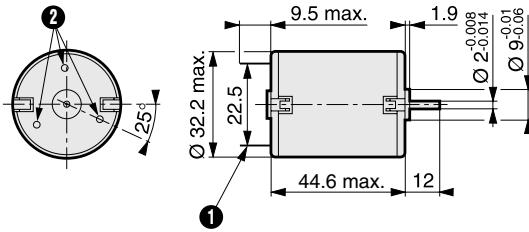


82 860 0



## Dimensions

82 860 0



B 2 tags NFC 20 - 120 series 2.8 x 0.5 mm

C 3 holes at 120° on Ø 26 mm : use self tapping screws M2.2 ; screw depth max 6 mm

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