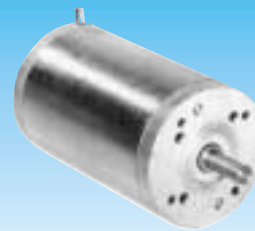


D.C. direct drive motors Ø 63 mm

- For low-speed drive applications
- Maximum usable power: 33 W
- Ø 63 mm : With 2 ball bearings
Supply connection by 2 leads



Applications

- Automatic swimming-pool cleaners
- Filtering systems
- Water circulators for whirlpool baths
- Paper drives for photocopiers
- Opening/closing of automatic doors
- Machines for making spectacle lenses

Made to order products, available on request

- other supply voltages
- shaft lengths at front and/or rear
- integrated interference suppression (82 830)
- shaft encoders
- other front and rear fixing plates
- short version possible (L = 90 mm)

Type

82 830 0

Nominal voltage

12 V

Part number

82 830 009

Standard Characteristics

Speed	rpm	2100
Absorbed power	W	4.8
Absorbed current	A	0.4

Characteristics - nominal

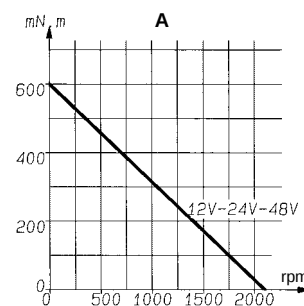
Speed	rpm	1500
Torque	mN.m	172
Output power	W	27
Absorbed power	W	43
Absorbed current	A	3.6
Gearbox case temperature rise	°C	50
Efficiency	%	62

General characteristics

Insulation class (conforming to IEC 85)		F (155 °C)
Degree of protection (IEC 529)		IP20
Maximum usable power	W	33
Start torque	mN.m	600
Start current	A	12
Resistance	Ω	1
Resistance : inductive	mH	1.4
Torque constant	Nm/A	0.0517
Electrical time constant	ms	1.4
Mechanical time constant	ms	19
Thermal time constant	min	37
Inertia	g.cm ²	514
Weight	g	840
No of segments		12
Life	h	5000
Ball bearings		yes
Lead length	mm	200

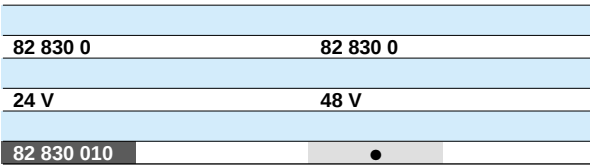
A - Torque/Speed curves

B - Torque/Current curves



Other information

Basic principles see page 1/5.



1500	1500
172	172
27	27
45	43
1.9	0.9
50	50
60	62

F (155 °C)	F (155 °C)
IP20	IP20
33	33
600	600
6.2	3
3.9	16
6.4	26.3
0.1	0.2069
1.64	1.64
19	30
37	37
492	496
840	840
12	12
5000	5000
yes	yes
200	200

Graph B shows the magnetic force (mN) as a function of current (A) for three different voltages. The data points are as follows:

Current (A)	Force (mN) at 48V	Force (mN) at 24V	Force (mN) at 12V
0	0	0	0
3	600	300	150
6	-	600	300
12	-	-	600

Technical drawing of a mechanical part showing three views: front view (left), side view (middle), and end view (right).

Front View (Left):

- 4 holes $\varnothing 3.65 \pm 0.05$ at 90° on $\varnothing 48$
- 25° 30'
- 13°
- 90°
- 4 holes M5 on $\varnothing 40$ depth 7 mm

Side View (Middle):

- 2.5 ± 0.1
- 200 ± 10
- 2.5 ± 0.1
- $\varnothing 63.2 \text{ max.}$
- $\varnothing 25 \frac{+0.05}{-0.05}$
- 103 max.
- 25 ± 0.5
- 4 holes M5 on $\varnothing 40$ depth 7 mm

End View (Right):

- 25° 30'
- 90°
- 4 holes M5 on $\varnothing 40$ depth 7 mm

	Standard products	3 Part number Example : D.C. direct drive motor - 82 830 009	
	Standard products, non stocked	1 Type Example : D.C. direct drive motor - 82 830 0 - 48 V	2 Nominal voltage