

D.C. direct drive motors Ø 42 mm

- For low-speed drive applications
- Maximum usable power: from 9 to 17 W
- Ø 42 mm : Sintered bronze bearings lubricated for life
Supply connection by 4.75 mm tags
Replaceable brushes



Applications

- Gas analysers
- Pumps/vacuum devices
- Cash registers
- Printers
- Mixers for automatic drink dispensers
- Compressors
- Spindle drives for engraving machines
- Document sorters
- Etc.

Made to order products, available on request

- other supply voltages
- motor with 1 front ball bearing
- shaft lengths at front and/or rear
- specific interference suppression
- magnetic encoder 5 pulses per revolution
- magnetic encoder with 2 directions of rotation (1 or 5 pulses per revolution)
- other front fixing plates

Types

Nominal voltage

82 800 0	82 800 0	82 800 0
12 V	24 V	48 V

Part numbers

82 800 036	82 800 037	82 800 038
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Standard characteristics

	rpm	2960	2750	2800
Speed	rpm	2960	2750	2800
Absorbed power	W	4.8	4.3	5.8
Absorbed current	A	0.4	0.18	0.12

Characteristics - nominal

	rpm	2000	2000	2000
Speed	rpm	2000	2000	2000
Torque	mN.m	75	75	72
Output power	W	15.7	15.6	15
Absorbed power	W	30	26.4	28.8
Absorbed current	A	2.5	1.1	0.6
Gearbox case temperature rise	°C	44	40	45
Efficiency	%	52	59	52

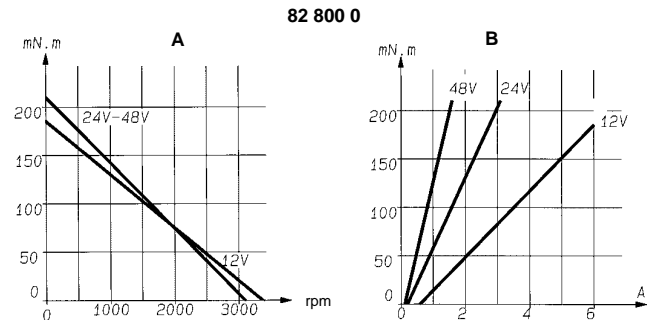
General characteristics

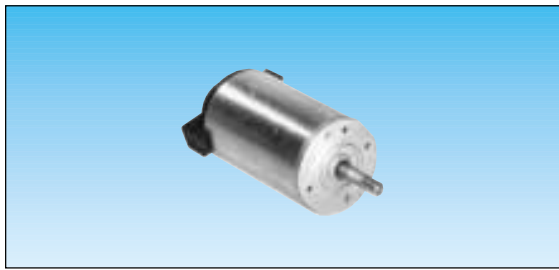
	F (155 °C)	F (155 °C)	F (155 °C)	
Insulation class (conforming to IEC 85)	F (155 °C)	F (155 °C)	F (155 °C)	
Degree of protection (IEC 529)	IP20	IP20	IP20	
Maximum usable power	W	16.3	17	16.7
Start torque	mN.m	185	210	210
Start current	A	5.8	2.7	1.5
Resistance	Ω	2	7.7	30
Resistance : inductive	mH	1.8	6.9	38
Torque constant	Nm/A	0.0342	0.0724	0.1419
Electrical time constant	ms	0.89	0.89	1.26
Mechanical time constant	ms	18	16	17
Thermal time constant	min	12	12	12
Inertia	g.cm ²	105	110	115
Weight	g	400	400	400
No of segments		8	8	8
Life	hr	3000	3000	3000
Sintered bronze bearings		•	•	•
Replaceable brushes		•	•	•

Motors with encoder, non stocked

Magnetic encoder 1 pulse per revolution (See the dimensions)	82 800 039	82 800 040	82 800 041
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- A - Torque/Speed curves
- B - Torque/Current curves





82 810 0 82 810 0 82 810 0

12 V 24 V 48 V

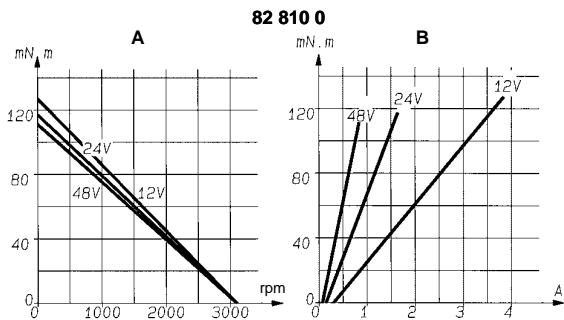
82 810 017 82 810 018 82 810 019

2850	2780	2800
4.8	4.3	3.6
0.4	0.18	0.076

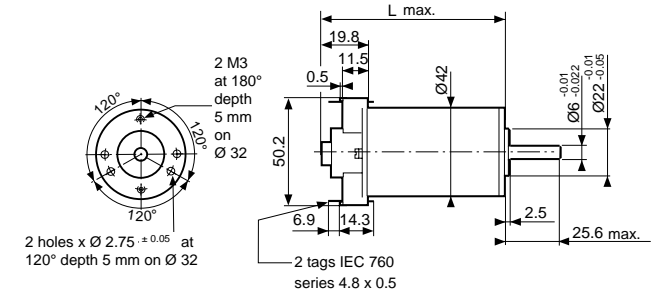
2000	2000	2000
45	41.5	39.4
9.4	8.7	8.2
20.4	15.6	18.2
1.7	0.65	0.38
45	46	45
46	55.7	45

F	F	F
(155 °C)	(155 °C)	(155 °C)
IP20	IP20	IP20
10.3	9.5	9
127	117	111
4	1.7	0.85
3.1	14.6	57.1
2.5	10.7	43.5
0.035	0.077	1.43
0.8	0.73	0.76
19	17	20
10	10	10
80	72	72
310	310	310
8	8	8
3000	3000	3000
•	•	•
•	•	•

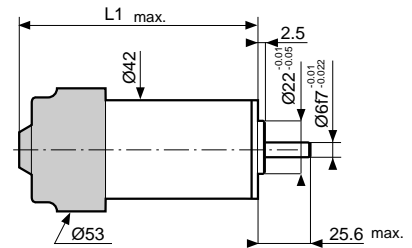
82 810 024 82 810 025 82 810 026



**Dimensions :
82 800 0 - 82 810 0**



Dimensions with magnetic encoder (see p. 1/43 for connection)



Type	L max. (mm)	L1 max. (mm)
82 800 0	84.8	99.1
82 810 0	69.8	84.1

To order, specify :

Standard products **1** Part number
Example : D.C. direct drive motor - 82 800 036

Standard products, non stocked **1** Part number
Example : D.C. direct drive motor - 82 800 039