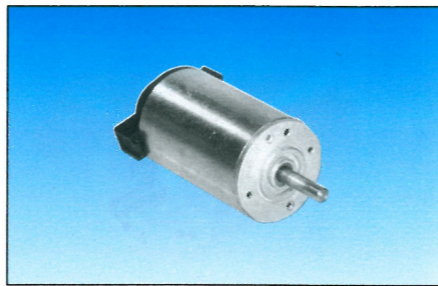


# D.C. direct drive motors Ø 42 mm

- 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.

## Types

	82 800 0	82 800 0	82 800 0
<b>Nominal voltage</b>	12 V	24 V	48 V
<b>Part numbers</b>	82 800 036	82 800 037	82 800 038

## 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

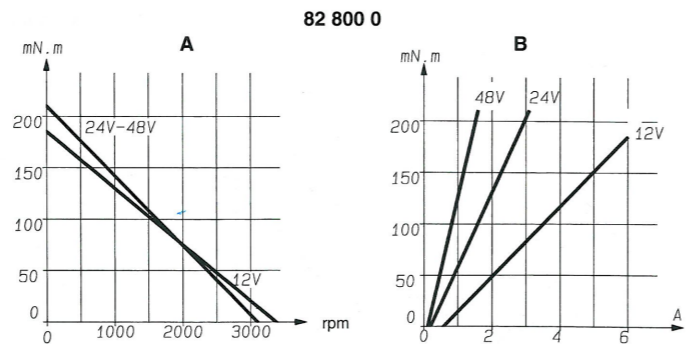
## General characteristics

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

## Motors with encoder, non stocked

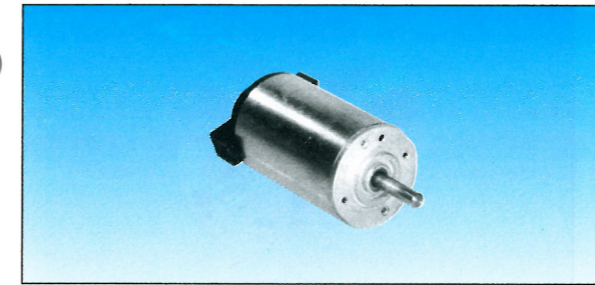
Magnetic encoder 1 pulse per revolution (See the dimensions)	82 800 039	82 800 040	82 800 041
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- A - Torque/Speed curves
- B - Torque/Current curves



## 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



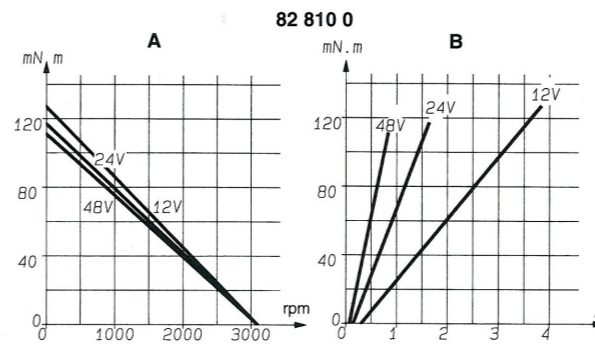
	82 810 0	82 810 0	82 810 0
<b>Nominal voltage</b>	12 V	24 V	48 V
<b>Part numbers</b>	82 810 017	82 810 018	82 810 019

	2850	2780	2800
Speed	2850	2780	2800
Absorbed power	4.8	4.3	3.6
Absorbed current	0.4	0.18	0.076

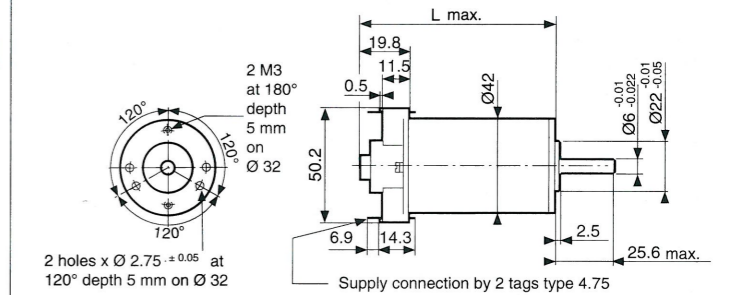
	2000	2000	2000
Speed	2000	2000	2000
Torque	45	41.5	39.4
Output power	9.4	8.7	8.2
Absorbed power	20.4	15.6	18.2
Absorbed current	1.7	0.65	0.38
Gearbox case temperature rise	45	46	45
Efficiency	48	48	45

	F	F	F
	(155 °C)	(155 °C)	(155 °C)
Insulation class (conforming to IEC 85)	F	F	F
Degree of protection (IEC 529)	IP20	IP20	IP20
Maximum usable power	10.3	9.5	9
Start torque	127	117	111
Start current	4	1.7	0.85
Resistance	3.1	14.6	57.1
Resistance : inductive	2.5	10.7	43.5
Torque constant	0.035	0.077	1.43
Electrical time constant	0.8	0.73	0.76
Mechanical time constant	19	17	20
Thermal time constant	10	10	10
Inertia	80	72	72
Weight	310	310	310
No of segments	8	8	8
Life	3000	3000	3000
Sintered bronze bearings	•	•	•
Replaceable brushes	•	•	•

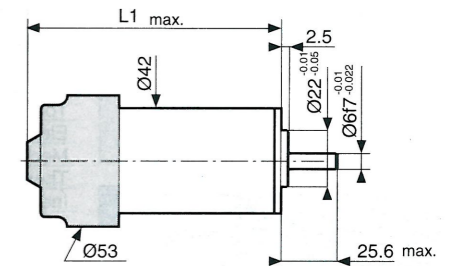
Magnetic encoder 1 pulse per revolution (See the dimensions)	82 810 024	82 810 025	82 810 026
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## Dimensions : 82 800 0 - 82 810 0



## Dimensions with magnetic encoder (see p. 1/41 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