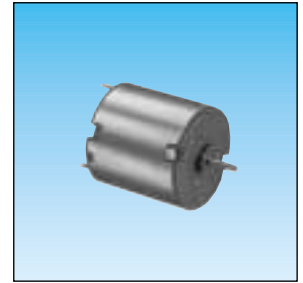
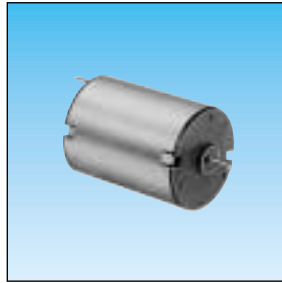


D.C. direct drive motors

- Maximum usable power : from 1 to 3.9 W
- Sintered bronze bearings lubricated for life
- Terminal connections 2.8 mm
- Interference suppression as standard on standard products



Applications

- Printers
- Photocopiers
- Diaphragm pumps
- Detection systems
- Drives for rotary beacons

Made to order products, available on request

- other supply voltages
- motors with 2 ball bearings
- shaft lengths at front and/or rear
- connection by radial tags or leads
- specific interference suppression
- encoder : 5 or 12 pulses per revolution

Other information

Basic principles see page 1/5.
Encoder connections see page 1/43.

Types

	82 860 0	82 860 0	82 840 0	82 840 0
Nominal voltage	12 V	24 V	12 V	24 V
Part numbers	82 860 003	82 860 004	•	•

Standard characteristics

	rpm	5000	5000	5000	5000
Speed	rpm	5000	5000	5000	5000
Absorbed power	W	1.2	1.92	0.96	1.44
Absorbed current	A	0.1	0.08	0.08	0.06

Characteristics - nominal

	rpm	3700	3700	3700	3700
Speed	rpm	3700	3700	3700	3700
Torque	mN.m	7.7	7.7	2.2	2.2
Output power	W	3	3	0.9	0.9
Absorbed power	W	6.2	6	2.16	2.88
Absorbed current	A	0.43	0.26	0.18	0.11
Gearbox case temperature rise	°C	50	50	50	50
Efficiency	%	48	50	42	32

General characteristics

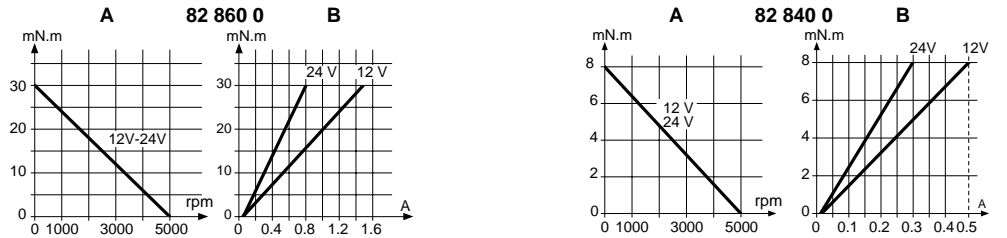
	B (130 °C)	B (130 °C)	B (130 °C)	B (130 °C)	
Insulation class (conforming to IEC 85)	B (130 °C)	B (130 °C)	B (130 °C)	B (130 °C)	
Degree of protection	IP40	IP40	IP40	IP40	
Maximum usable power	W	3.9	1	1	
Start torque	mN.m	30	30	8	8
Start current	A	1.5	0.76	0.50	0.3
Resistance	Ω	8	32	24	80
Resistance : inductive	mH	10	41.6	32	104
Torque constant	Nm/A	0.0214	0.0448	0.019	0.033
Electrical time constant	ms	1.3	1.3	1.35	1.3
Mechanical time constant	ms	36	36	46	40
Thermal time constant	min	8	8	7	7
Inertia	g.cm ²	19	19	9.5	9.5
Weight	g	96	95	68	68
No of segments		3	3	3	3
Life	h	3000	3000	3000	3000
Sintered bronze bearings	yes	yes	yes	yes	

Options: for standard products non stocked

With magnetic encoder 1 pulse/revolution depending on the codes	82 860 501	82 860 502	-	-
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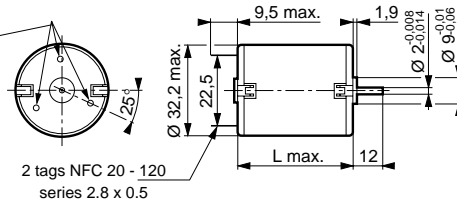
A- Nominal speed and torque curves

B- Torque/Current curves



Dimensions

3 holes at 120° on Ø26 mm : use self tapping screws M2.2 ; screw depth max 6 mm



Type	L max. (mm)
82 860 0	44.6
82 840 0	34.6

To order, specify :

Standard products

3

Part number

Example : D.C. direct drive motor - 82 860 003

Standard products, non stocked

1

Type

2

Voltage

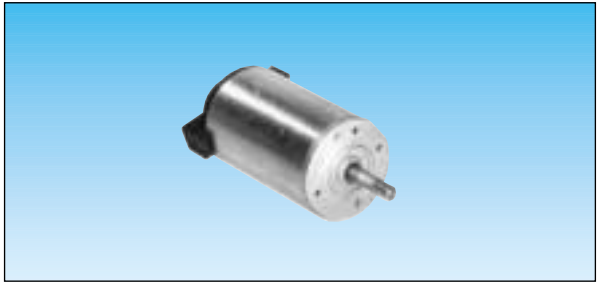
4

Option

Example : D.C. direct drive motor with magnetic encoder 1 pulse per revolution : 12 V : 82 860 501

D.C. direct drive motors Ø 42 and 63 mm

- For high-power drive applications
- Maximum usable power : from 14 to 67 W
- Ø 42 mm : Sintered bronze bearings lubricated for life
Supply connection by 4.75 mm tags
Replaceable brushes
- Ø 63 mm : With 2 ball bearings
Supply connection by 2 leads



Applications

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

- integrated interference suppression (82 830 5)
- specific interference suppression (82 800 5 - 82 810 5)
- other supply voltages
- motor with 1 front ball bearing (82 800 5 or 82 810 5)
- shaft lengths at front and/or rear
- magnetic encoder 5 pulses per revolution
- magnetic encoder with 2 directions of rotation (1 or 5 pulses per revolution)
- other front and rear fixing plates
- short version possible on 82 830 5 (L = 90 mm)

Types

	82 810 5	82 810 5	82 800 5	82 800 5
Nominal voltage	12 V	24 V	12V	24 V
Part numbers	82 810 501	82 810 502	82 800 501	82 800 502

Standard characteristics

	rpm	3840	3860	3920	4010
Speed	rpm	3840	3860	3920	4010
Absorbed power	W	12	11.28	9.96	12.24
Absorbed current	A	1	0.47	0.83	0.51

Characteristics - nominal

	rpm	2580	2750	2670	3070
Speed	rpm	2580	2750	2670	3070
Torque	mN.m	45	45	70	70
Output power	W	12	13	20	22
Absorbed power	W	31	32	37	41
Absorbed current	A	2.6	1.32	3.05	1.71
Gearbox case temperature rise	°C	32	33	38	40
Efficiency	%	39	40.8	54	54

General characteristics

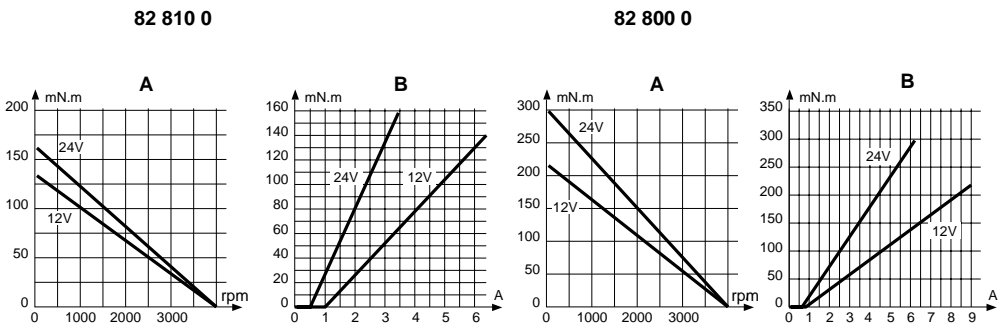
	F	F	F	F	
Insulation class (conforming to IEC 85)	(155 °C)	(155 °C)	(155 °C)	(155 °C)	
Degree of protection	IP20	IP20	IP20	IP20	
Maximum usable power	W	14	16	22	31
Start torque	mN.m	138	156	219	298
Start current	A	6.2	3.4	9	6.16
Resistance	Ω	1.94	7.06	1.33	3.9
Resistance : inductive	mH	4.45	16.94	2.67	9.35
Torque constant	Nm/A	0.0265	0.0532	0.0268	0.0527
Electrical time constant	ms	2.3	2.4	2	2.4
Mechanical time constant	ms	26	23	20	15
Thermal time constant	min	8	8	12	12
Inertia	g.cm ²	80	72	105	110
Weight	g	310	310	400	400
No of segments		8	8	8	8
Life	hr	2000	2000	2000	2000
Sintered bronze bearings		●	●	●	●
Ball bearings		—	—	—	—
Replaceable brushes	mm	●	●	●	●
Lead length (approx.)		—	—	—	—

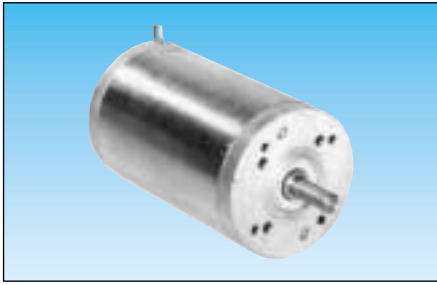
Motors with encoder, non stocked

Magnetic encoder 1 pulse per revolution following SP 1737.00 (see dimensions)	82 810 504	82 810 505	82 800 504	82 800 505
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A - Torque/Speed curves

B - Torque/Current curves





82 830 5 82 830 5

12 V 24 V

82 830 501 82 830 502

3400	3660
12.6	12
1.05	0.5

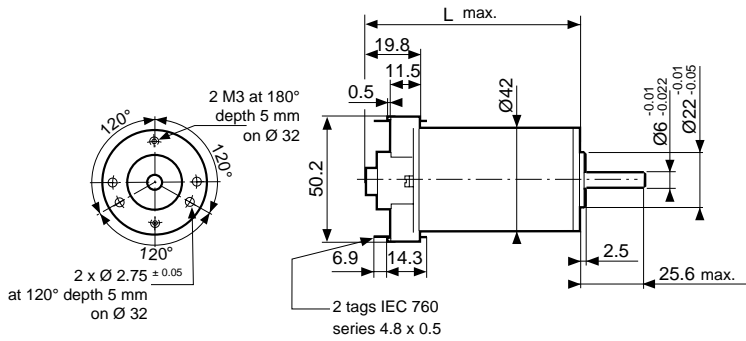
2630	2770
170	170
47	50
72	72
6	3
46	50
65	69.4

F	F
(155 °C)	(155 °C)
IP20	IP20
67	67
750	700
23.1	11.8
0.52	2.03
1.19	4.68
0.034	0.0619
2.3	2.3
33	33
20	18
520	500
840	840
12	12
4000	4000
—	—
—	—
200	200

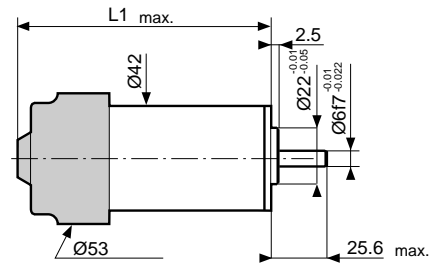
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Dimensions :
82 800 5 - 82 810 5 standard

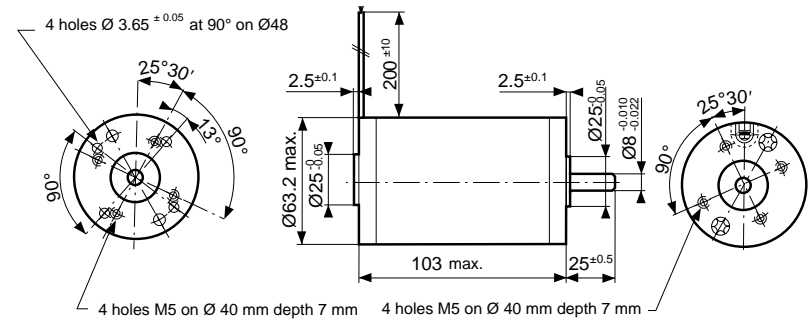
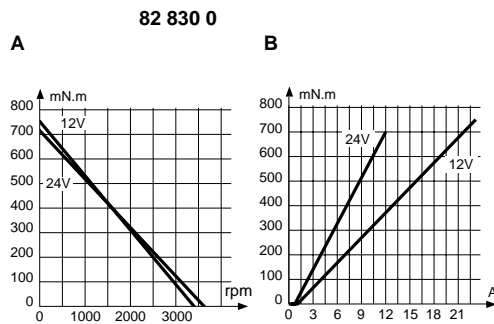


Dimensions with magnetic encoder (see p.1/43 for connections)



Type	L max. (mm)	L1 max. (mm)
82 800 5	84.8	99.1
82 810 5	69.8	84.1

82 830 5 standard



To order, specify :

Standard products,
non stocked

1

Part number
Example : D.C. direct drive motor - 82 810 501 or D.C. direct drive motor - with encoder 82 810 504