















# D.C. Motors



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# DC Motors Selection guide

Gearbox Speed		Torque max (Nm)		0.5		1.2
		Type of Gearbox		81 012	81 021	81 032.1
<b>Direct Motors</b>						
Power usable (w)	Torque nominal (mN.m)	Speed nominal (rpm)	Voltage supply (V)	Type of motor dimensions (mm)		
3	7.7	3700	12	▶ p. 4 82 860 0 Ø 32 	▶ p.18 82 862 1.5 ... 441 rpm 	▶ p.16 82 861 0.36... 430 rpm 
			24			
8.7	41.5	2000	12	▶ p. 8 82 810 0 Ø 42 		▶ p.20 82 812 20... 130 rpm 
9.4	45		24			
12	45	2580	12	▶ p. 6 82 810 5 Ø 42 		
13		2750	24			
16	75	2000	12	▶ p. 8 82 800 0 Ø 42 		▶ p.20 82 802 20... 130 rpm 
			24			
20	70	2670	12	▶ p. 6 82 800 5 Ø 42 		
22		3070	24			
20	70	2670	12	▶ p.10 82 800 8 Ø 42 		
22		3070	24			
27	172	1500	12	▶ p.12 82 830 0 Ø 63 		
			24			
32	100	3100	12	▶ p.10 82 850 0 Ø 42 		
33		3200	24			
47	170	2630	12	▶ p.12 82 830 5 Ø 63 		
50		2770	24			
90	270	3200	24	▶ p.14 82 890 0 Ø 63 		
95		3360	48			

### Selection of a geared motor

This choice is based upon the desired usable power at the gearbox output shaft

$$\text{Power (W)} = \frac{2\pi}{60} C n \quad (\text{Nm}) \quad (\text{Rpm})$$

A geared motor must have usable power equal to or greater than the power required to rotate the load desired. It is selected by checking that the point corresponding to the required operating conditions (torque and speed output) is higher than the nominal torque versus speed curve of the geared motor. The required torque output of a geared motor must be within its maximum recommended torque for continuous duty.

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2			5			6
81 033	81 043	81 044	81 035	81 035	81 037	81 032 6
► p.22 <b>82 869</b> 	► p.26 <b>82 863</b> 	► p.28 <b>82 864</b> 			► p.32 <b>82 867</b> 	
0.9 ... 108 rpm	99... 662 rpm	2... 66 rpm			1.72... 344 rpm	
	► p.24 <b>80 813</b> 	► p.30 <b>80 814</b> 		► p.34 <b>80 815</b> 	► p.36 <b>80 817</b> 	► p.42 <b>82 812</b> 
	60... 400 rpm	1... 40 rpm		10.5... 616 rpm	1.04... 208 rpm	4 / 8 / 12 rpm
	► p.24 <b>80 803</b> 	► p.30 <b>80 804</b> 		► p.34 <b>80 805</b> 	► p.36 <b>80 807</b> 	► p.42 <b>82 802</b> 
	60... 400 rpm	1... 40 rpm		10.5... 616 rpm	1.04... 208 rpm	4 / 8 / 12 rpm
			► p.38 <b>80 835</b> 			► p.44 <b>82 832</b> 
			7.4... 426 rpm			5... 69 rpm
				► p.40 <b>80 855</b> 		
				13.8... 805 rpm		

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# 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.

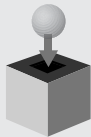
- Available in either 12 or 24 V D.C. versions.
- Sintered bronze bearings lubricated for life.
- Connection by 2.8 mm push-on terminals.
- Interference suppression fitted as standard.



## 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

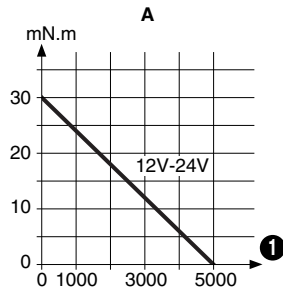
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## Curves

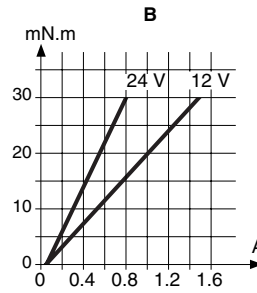
A - Nominal speed and torque curves  
 B - Torque/Current curves

82 860 0



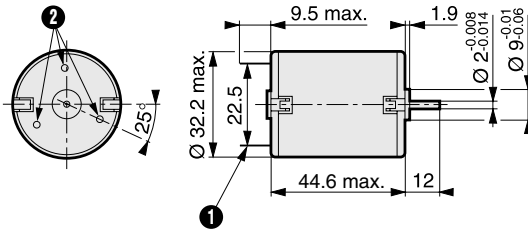
B RPM

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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# D.C. direct drive brushed motors

→ Ø 42 mm 14 to 31 Watts

A range of 42 mm diameter D.C. direct-drive brushed motors with 14 to 31 W output power.

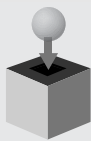
- Available in either 12 or 24 V D.C. versions.
- Sintered bronze bearings lubricated for life
- Replaceable brushes
- Magnetic encoder option



## Specifications

	14 Watts	16 Watts	22 Watts	31 Watts
Type	82 810 5	82 810 5	82 800 5	82 800 5
Voltage	12 V	24 V	12 V	24 V
<b>Part numbers</b>	<b>82 810 501</b>	<b>82 810 502</b>	<b>82 800 501</b>	<b>82 800 502</b>
<b>No-load characteristics</b>				
Speed of rotation (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
<b>Nominal characteristics</b>				
Speed (rpm)	2580	2750	2670	3070
Torque (mN.m)	45	45	70	70
Usable 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
<b>General characteristics</b>				
Insulation class (conforming to IEC 85)	F (155 °C)	F (155 °C)	F (155 °C)	F (155 °C)
Protection (IEC 529) Housing	IP20	IP20	IP20	IP20
Max. output (W)	14	16	22	31
Start torque (mN.m)	138	156	219	298
Starting current (A)	6.2	3.4	9	6.16
Resistance (Ω)	1.94	7.06	1.33	3.9
Inductance (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 <sup>2</sup> )	80	72	105	110
Weight (g)	310	310	400	400
No of segments	8	8	8	8
Service life (h)	2000	2000	2000	2000
Sintered bronze bearings	✓	✓	✓	✓
Replaceable brushes (mm)	✓	✓	✓	✓

## 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

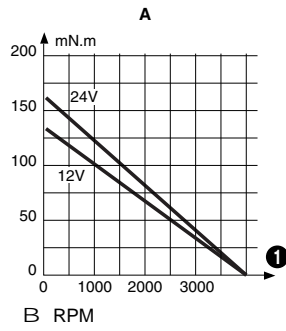
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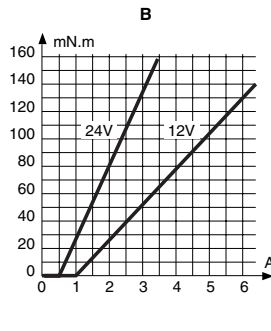
## Curves

A - Torque/Speed curves  
B - Torque/Current curves

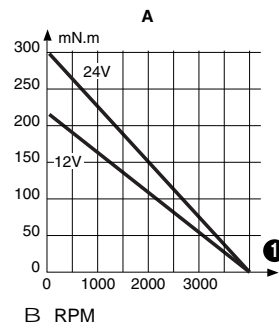
82 810 5



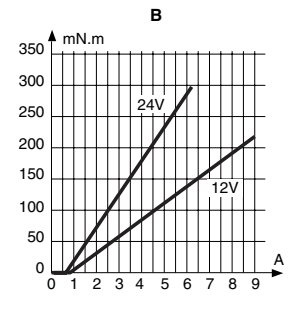
82 810 5



82 800 5

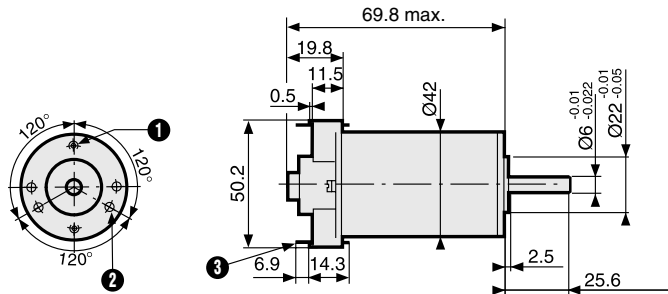


82 800 5



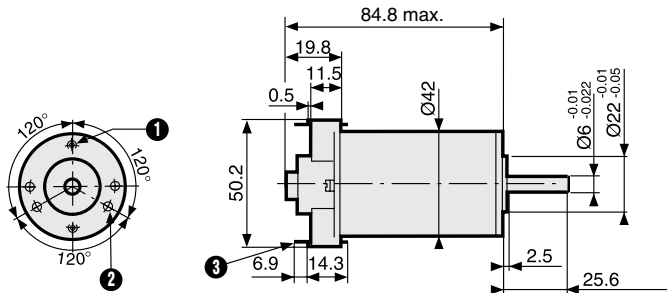
## Dimensions

82 810 5



- B 2 M3 at 180° depth 5 mm on Ø 32
- C 2 x Ø 2.75 at 120° depth 5 mm on Ø 32
- D 2 tags IEC 760 series 4.8 x 0.5 mm

82 800 5



- B 2 M3 at 180° depth 5 mm on Ø 32
- C 2 x Ø 2.75 at 120° depth 5 mm on Ø 32
- D 2 tags IEC 760 series 4.8 x 0.5 mm

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# D.C. direct drive brushed motors

→ Ø 42 mm 10 to 17 Watts

A range of 42 mm diameter D.C. direct-drive brushed motors with 10 or 17 Watts output power.

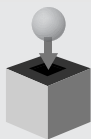
- Available in either 12, 24 or 48V D.C. versions
- Sintered bronze bearings lubricated for life
- Supply connection by 4.75 mm tags
- Replaceable brushes
- Optional magnetic encoder



## Specifications

	10 Watts	10 Watts	17 Watts	17 Watts
Type	82 810 0	82 810 0	82 800 0	82 800 0
Voltage	12 V	24 V	12 V	24 V
<b>Part numbers</b>	<b>82 810 017</b>	<b>82 810 018</b>	<b>82 800 036</b>	<b>82 800 037</b>
<b>No-load characteristics</b>				
Speed of rotation (rpm)	2850	2780	2960	2750
Absorbed power (W)	4.8	4.3	4.8	4.3
Absorbed current (A)	0.4	0.18	0.4	0.18
<b>Nominal characteristics</b>				
Speed (rpm)	2000	2000	2000	2000
Torque (mN.m)	45	41.5	75	75
Usable power (W)	9.4	8.7	15.7	15.6
Absorbed power (W)	20.4	15.6	30	26.4
Absorbed current (A)	1.7	0.65	2.5	1.1
Gearbox case temperature rise (°C)	45	46	44	40
Efficiency (%)	46	55.7	52	59
<b>General characteristics</b>				
Insulation class (conforming to IEC 85)	F (155 °C)	F (155 °C)	F (155 °C)	F (155 °C)
Protection (IEC 529) Housing	IP20	IP20	IP20	IP20
Max. output (W)	10.3	9.5	16.3	17
Start torque (mN.m)	127	117	185	210
Starting current (A)	4	1.7	5.8	2.7
Resistance (Ω)	3.1	14.6	2	7.7
Inductance (mH)	2.5	10.7	1.8	6.9
Torque constant (Nm/A)	0.035	0.077	0.0342	0.0724
Electrical time constant (ms)	0.8	0.73	0.89	0.89
Mechanical time constant (ms)	19	17	18	16
Thermal time constant (min)	10	10	12	12
Inertia (g.cm <sup>2</sup> )	80	72	105	110
Weight (g)	310	310	400	400
No of segments	8	8	8	8
Service life (h)	3000	3000	3000	3000
Sintered bronze bearings	✓	✓	✓	✓
Replaceable brushes (mm)	✓	✓	✓	✓

## 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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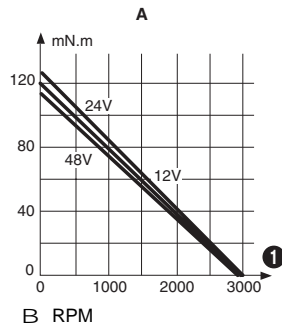
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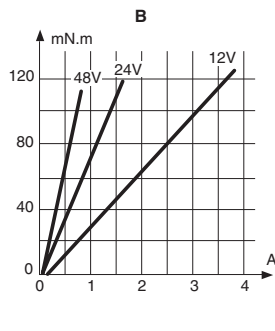
## Curves

A - Torque/Speed curves  
B - Torque/Current curves

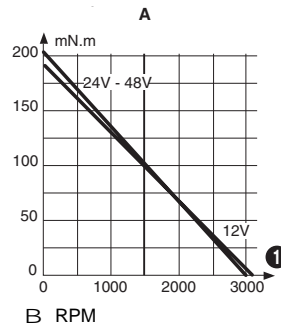
82 810 0



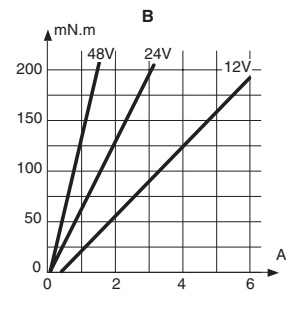
82 810 0



82 800 0

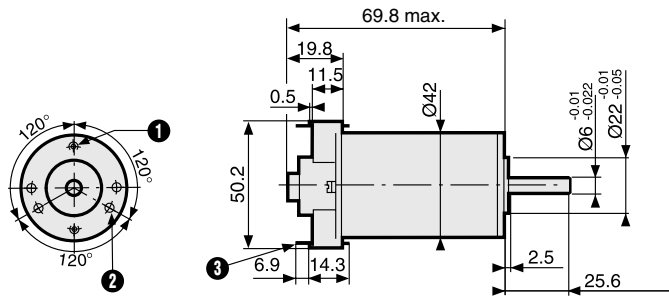


82 800 0



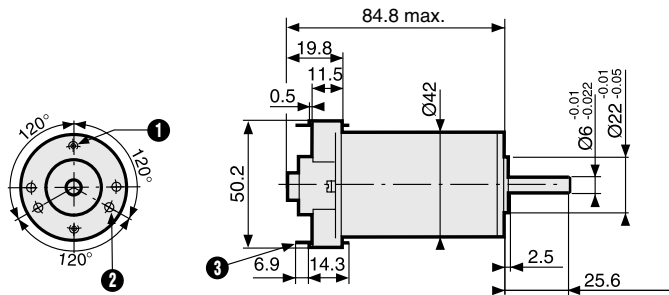
## Dimensions

82 810 0



- B 2 M3 at 180° depth 5 mm on Ø 32
- C 2 holes x Ø 2.75<sup>±0.05</sup> at 120° C depth 5 mm Ø 32
- D 2 tags IEC 760 series 4.8 x 0.5 mm

82 800 0



- B 2 M3 at 180° depth 5 mm on Ø 32
- C 2 x Ø 2.75<sup>±0.05</sup> at 120° depth 5 mm Ø 32
- D 2 tags IEC 760 series 4.8 x 0.5 mm

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# D.C. direct drive brushed motors

→ Ø 42 mm 22 to 52 Watts

A range of 42 mm diameter D.C. direct-drive brushed motors with 22 to 52 Watts output power.

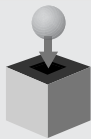
- Available in either 12 or 24 V D.C. versions.
- Sintered bronze bearings lubricated for life
- Supply connection by 2 leads



## Specifications

	22 Watts	31 Watts	42 Watts	52 Watts
Type	82 800 8	82 800 8	82 850 0	82 850 0
Voltage	12 V	24 V	12 V	24 V
<b>Part numbers</b>	<b>82 800 801</b>	<b>82 800 802</b>	<b>82 850 001</b>	<b>82 850 002</b>
<b>No-load characteristics</b>				
Speed of rotation (rpm)	3920	4010	4150	4050
Absorbed power (W)	9.96	12.24	7.32	7.44
Absorbed current (A)	0.83	0.51	0.61	0.31
<b>Nominal characteristics</b>				
Speed (rpm)	2670	3070	3100	3200
Torque (mN.m)	70	70	100	100
Usable power (W)	20	22	32.5	33.5
Absorbed power (W)	37	41	51	52
Absorbed current (A)	3.05	1.71	4.25	2.15
Gearbox case temperature rise (°C)	38	40	63	54
Efficiency (%)	54	54	63	64
<b>General characteristics</b>				
Insulation class (conforming to IEC 85)	F (155 °C)	F (155 °C)	F (155 °C)	F (155 °C)
Protection (IEC 529) Terminal	IP20	IP20	IP20	IP20
Max. output (W)	22	31	42	52
Start torque (mN.m)	219	298	390	490
Starting current (A)	9	6.16	14.8	9.6
Resistance (Ω)	1.33	3.9	0.81	2.5
Inductance (mH)	2.67	9.35	0.7	2.5
Torque constant (Nm/A)	0.0268	0.0527	0.027	0.052
Electrical time constant (ms)	2	2.4	0.85	1
Mechanical time constant (ms)	20	15	16	13
Thermal time constant (min)	12	12	26	21
Inertia (g.cm <sup>2</sup> )	105	110	140	140
Weight (g)	400	400	640	640
No of segments	8	8	8	8
Service life (h)	3000	3000	3000	3000
Sintered bronze bearings	✓	✓	✓	✓
Wires length (mm)	200	200	200	200

## 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

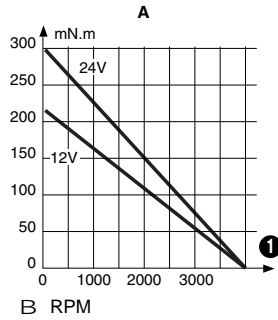
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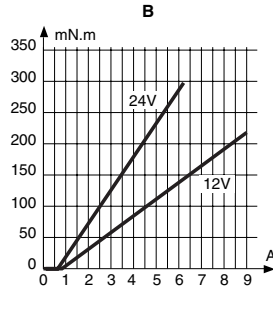
## Curves

A - Torque/Speed curves  
B - Torque/Current curves

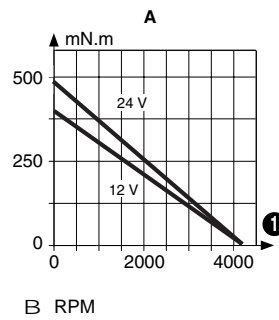
82 800 8



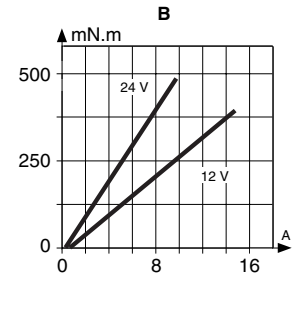
82 800 8



82 850 0

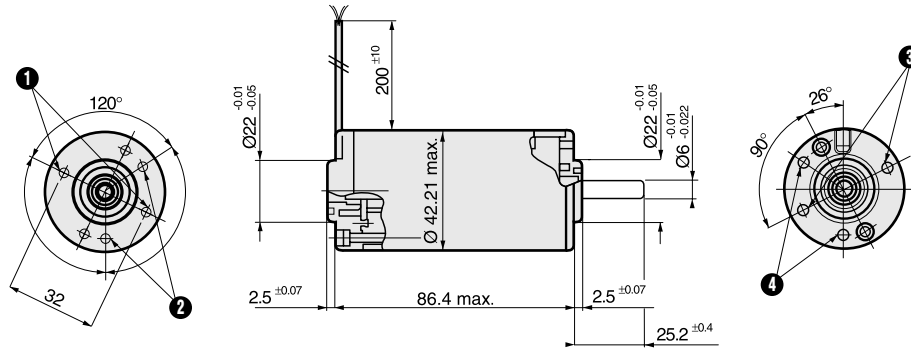


82 850 0



## Dimensions

82 800 8



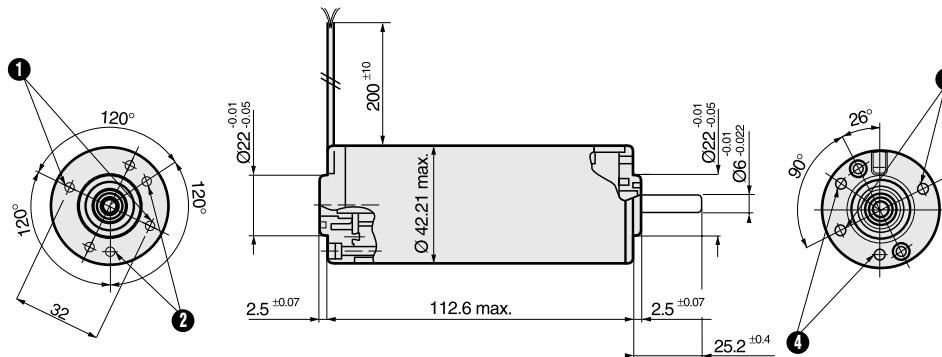
B 2 holes M3 x 0.5 at 180° depth 5 on  $\varnothing 32$

C 2 holes 2.75  $\pm 0.05$  at 120° depth 5 mm on  $\varnothing 32$

D 2 holes M3 x 0.5 at 180° depth 5.5 on  $\varnothing 32$

E 2 holes M3 x 0.5 at 120° depth 5.5 on  $\varnothing 32$

82 850 0



B 2 holes M3 x 0.5 at 180° depth 5 mm on  $\varnothing 32$

C 2 holes 2.75  $\pm 0.05$  at 120° depth 5 mm on  $\varnothing 32$

D 2 holes M3 x 0.5 at 180° depth 5.5 mm on  $\varnothing 32$

E 2 holes M3 x 0.5 at 120° depth 5.5 mm on  $\varnothing 32$

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# D.C. direct drive brushed motors

→ Ø 63 mm 33 to 67 Watts

A range of 63mm diameter D.C. direct-drive brushed motors with 33 to 67 W output power.

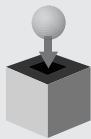
- Available in either 12, 24 or 48V D.C. versions.
- Ball bearings on output shaft
- Supply connection by 2 leads



## Specifications

	33 watts	33 Watts	67 Watts	67 Watts
Type	82 830 0	82 830 0	82 830 5	82 830 5
Voltage	12 V	24 V	12 V	24 V
<b>Part numbers</b>	<b>82 830 009</b>	<b>82 830 010</b>	<b>82 830 501</b>	<b>82 830 502</b>
<b>No-load characteristics</b>				
Speed of rotation (rpm)	2100	2100	3400	3660
Absorbed power (W)	4.8	4.8	12.6	12
Absorbed current (A)	0.4	0.2	1.05	0.5
<b>Nominal characteristics</b>				
Speed (rpm)	1500	1500	2630	2770
Torque (mN.m)	172	172	170	170
Usable power (W)	27	27	47	50
Absorbed power (W)	43	45	72	72
Absorbed current (A)	3.6	1.9	6	3
Gearbox case temperature rise (°C)	50	50	46	50
Efficiency (%)	62	60	65	69.4
<b>General characteristics</b>				
Insulation class (conforming to IEC 85)	F (155 °C)	F (155 °C)	F (155 °C)	F (155 °C)
Protection (IEC 529) Terminal	IP20	IP20	IP20	IP20
Max. output (W)	33	33	67	67
Start torque (mN.m)	600	600	750	700
Starting current (A)	12	6.2	23.1	11.8
Resistance (Ω)	1	3.9	0.52	2.03
Inductance (mH)	1.4	6.4	1.19	4.68
Torque constant (Nm/A)	0.0517	0.1	0.034	0.0619
Electrical time constant (ms)	1.4	1.64	2.3	2.3
Mechanical time constant (ms)	19	19	33	33
Thermal time constant (min)	37	37	20	18
Inertia (g.cm <sup>2</sup> )	514	492	520	500
Weight (g)	840	840	840	840
No of segments	12	12	12	12
Service life (h)	5000	5000	4000	4000
Ball bearings	✓	✓	✓	✓
Wires length (mm)	200	200	200	200

## 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

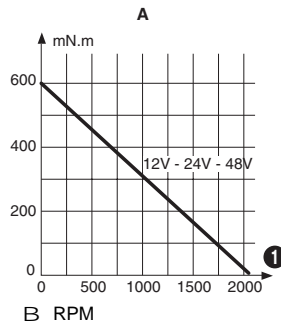
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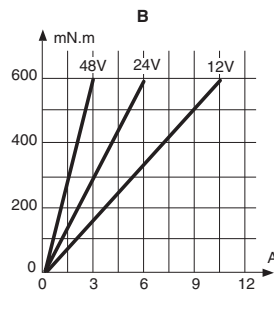
## Curves

A - Torque/Speed curves  
B - Torque/Current curves

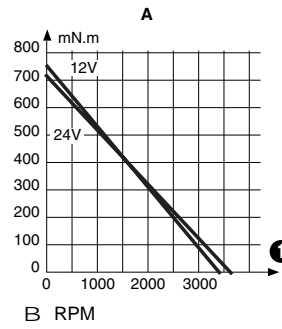
82 830 0



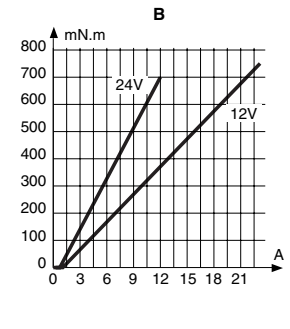
82 830 0



82 830 5

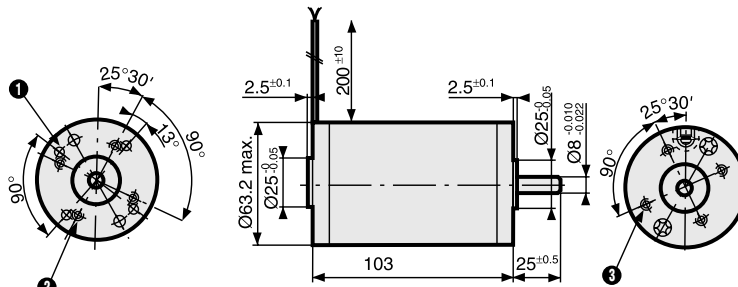


82 830 5



## Dimensions

82 830 0



- B 4 holes  $\text{Ø} 3.65 \pm 0.05$  at  $90^\circ$  on  $\text{Ø} 48$
- C 4 holes M5 on  $\text{Ø} 40$  depth 7 mm
- D 4 holes M5 on  $\text{Ø} 40$  depth 7 mm

Products and specifications subject to change without notice.

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

# D.C. direct drive brushed motors

→ Ø 63 mm 194 to 255 Watts

A range of D.C. direct-drive brushed motors with a case diameter of 63 mm and between 194 and 255 Watts output power.

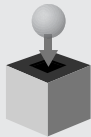
- Available in either 24 or 48V D.C. versions
- Ball bearings on output shaft
- Supply connection by 2 leads



## Specifications

	194 Watts	255 Watts
Type	82 890 0	82 890 0
Voltage	24 V	48 V
<b>Part numbers</b>	<b>82 890 001</b>	<b>82 890 002</b>
<b>No-load characteristics</b>		
Speed of rotation (rpm)	3700	3750
Absorbed power (W)	10.8	9.6
Absorbed current (A)	0.45	0.2
<b>Nominal characteristics</b>		
Speed (rpm)	3200	3360
Torque (mN.m)	270	270
Usable power (W)	90	95
Absorbed power (W)	120	118
Absorbed current (A)	5.00	2.45
Gearbox case temperature rise (°C)	50	50
Efficiency (%)	75	80
<b>General characteristics</b>		
Insulation class (conforming to IEC 85)	F (155 °C)	F (155 °C)
Protection (IEC 529) Terminal	IP20	IP20
Max. output (W)	194	255
Start torque (mN.m)	2000	2600
Starting current (A)	34.1	21.7
Resistance (Ω)	0.7	2.2
Inductance (mH)	1.05	4.62
Torque constant (Nm/A)	0.059	0.12
Electrical time constant (ms)	1.5	2.1
Mechanical time constant (ms)	16	12
Thermal time constant (min)	41	36
Inertia (g.cm <sup>2</sup> )	795	795
Weight (g)	1580	1580
No of segments	12	12
Service life (h)	5000	5000
Ball bearings	✓	✓
Wires length (mm)	200	200

## 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

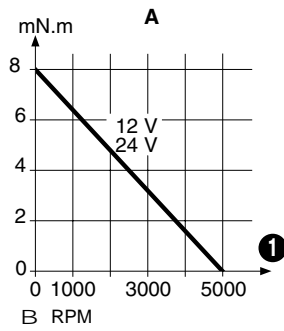
Products and specifications subject to change without notice.

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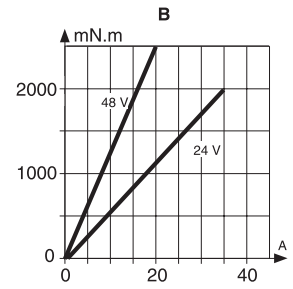
## Curves

A - Torque/Speed curves  
B - Torque/Current curves

82 890 0

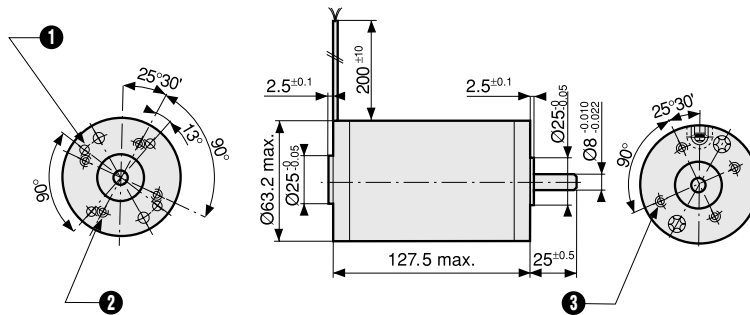


82 890 0



## Dimensions

82 890 0



- B 4 holes  $\varnothing 3.65^{+0.05}$  at  $90^\circ$  on  $\varnothing 48$
- C 4 holes M5 on  $\varnothing 40$  depth 7 mm
- D 4 holes M5 on  $\varnothing 40$  depth 7 mm

Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 0.5 Nm    3.9 Watts

A range of D.C. geared motors with ovoid gearbox.

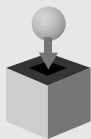
- Mechanical rating of gearbox with output shaft stalled : 0.5 Nm.
- 3.9 Watt motor versions.
- Available in either 12 or 24 V D.C.
- Gearbox ratios options for 0.36 to 430 rpm.



## Specifications

		3.9 Watts	3.9 Watts
Type		82 861 0	82 861 0
Voltage		12 V	24 V
Standard speed (rpm)		4300	4300
Output speed (rpm)	Ratios (i)		
430	10	<b>82 861 006</b>	<b>82 861 015</b>
215	20	<b>82 861 007</b>	<b>82 861 016</b>
179	24	<b>82 861 0X00024B</b> ●	<b>82 861 0Y00024B</b> ●
143	30	<b>82 861 008</b>	<b>82 861 017</b>
108	40	<b>82 861 009</b>	<b>82 861 018</b>
90	48	<b>82 861 0X00048B</b> ●	<b>82 861 0Y00048B</b> ●
54	80	<b>82 861 010</b>	<b>82 861 019</b>
49	90	<b>82 861 0X00090B</b> ●	<b>82 861 0Y00090B</b> ●
29	150	<b>82 861 0X00150B</b> ●	<b>82 861 0Y00150B</b> ●
22	200	<b>82 861 011</b>	<b>82 861 020</b>
11	375	<b>82 861 012</b>	<b>82 861 021</b>
8.6	500	<b>82 861 013</b>	<b>82 861 022</b>
5.8	750	<b>82 861 0X00750B</b> ●	<b>82 861 0Y00750B</b> ●
3.6	1200	<b>82 861 014</b>	<b>82 861 023</b>
1.8	2400	<b>82 861 0X02400B</b> ●	<b>82 861 0Y02400B</b> ●
0.80	5400	<b>82 861 0X05400B</b> ●	<b>82 861 0Y05400B</b> ●
0.36	12000	<b>82 861 0X12000B</b> ●	<b>82 861 0Y12000B</b> ●
General characteristics			
Motor		82 860 0	82 860 0
Gearbox		81 021 0	81 021 0
Maximum permitted torque from gearmotor under continuous conditions (for 1 millions turns) Nm		0.5	0.5
Axial load (static) daN		1	1
Radial load (static) daN		8	8
Max. output (W)		3.9	3.9
Nominal output (W)		3	3
Gearbox case temperature rise (°C)		50	50
Weight (g)		160	160

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

Products and specifications subject to change without notice.

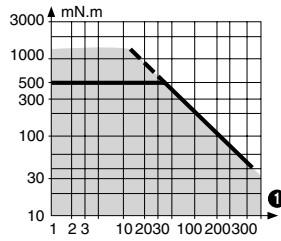
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## Curves

The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

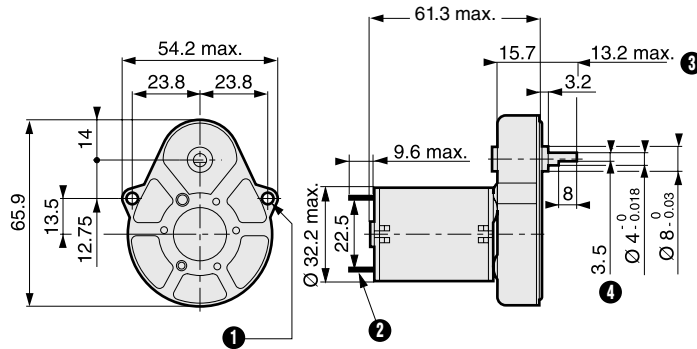
Nominal speed and torque curves



B RPM

## Dimensions

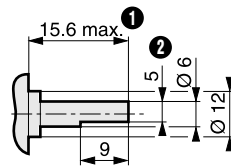
82 861 0



- B 2 fixing holes  $\text{Ø } 3.2$
- C 2 tags NFC 20-120 series 2.8 x 0.5 mm
- D (shaft pushed-in  $\leftarrow$ )
- E 3.5 mm across flats

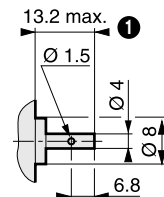
## Options

Shaft 70 999 421  
SP1295.10



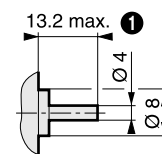
- B (shaft pushed-in  $\leftarrow$ )
- C 5 across flat

Shaft 79 200 779



- B (shaft pushed-in  $\leftarrow$ )

Shaft 79 200 967



- B (shaft pushed-in  $\leftarrow$ )

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# D.C. geared motors with brushes

→ 0.5 Nm 3.9 Watts

A range of D.C. geared motors with sintered metal gears.

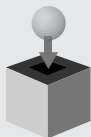
- Mechanical rating of gearbox with output shaft stalled : 0.5 Nm.
- 3.9 Watt motor power
- Available in either 12 or 24 V D.C. versions.
- Gearbox ratios options for 1.5 to 441 rpm.
- Options with magnetic encoder.



## Specifications

		3.9 Watts	3.9 Watts
Type		82 862 0/2	82 862 0/2
Voltage		12 V	24 V
Output speed (rpm)	Ratios (i)		
441	9.76	<b>82 862 001</b>	<b>82 862 004</b>
141	30.6	<b>82 862 002</b>	<b>82 862 005</b>
45	95.4	<b>82 862 003</b>	<b>82 862 006</b>
14	298	<b>82 862 201</b>	<b>82 862 204</b>
5	931	<b>82 862 202</b>	<b>82 862 205</b>
1.5	2910	<b>82 862 203</b>	<b>82 862 206</b>
General characteristics			
Motor		82 860 0	82 860 0
Gearbox		81 012 0 / 81 012 2	81 012 0 / 81 012 2
Maximum permitted torque from gearmotor under continuous conditions (for 1 millions turns) N.m		0.5	0.5
Axial load (static) daN		1	1
Radial load (static) daN		8	8
Max. output (W)		3.9	3.9
Nominal output (W)		3	3
Gearbox case temperature rise (°C)		50	50
Weight (g)		160 / 170	160 / 170

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

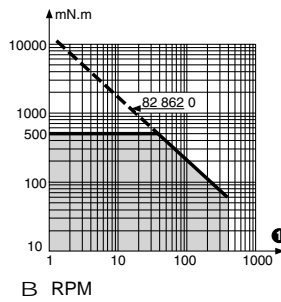
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## Curves

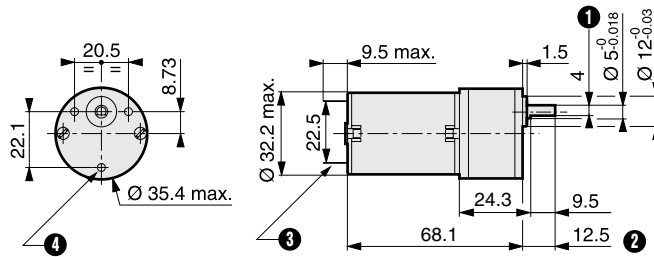
The shaded zone represents the operating range of the geared motor.  
 The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
 For higher torque ratings, service life will be reduced.

Nominal speed and torque curves



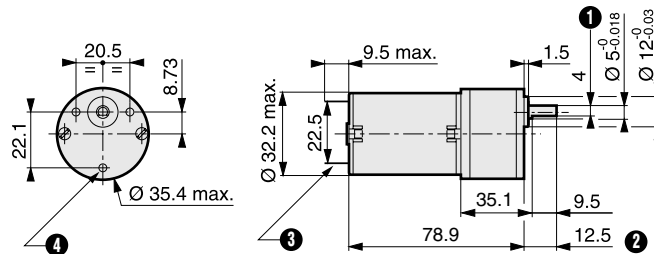
## Dimensions

### 82 862 0



- B 4 mm across flats
- C (shaft pushed-in ←)
- D 2 tags NFC 20-120 series 2.8 x 0.5 mm
- E 3 holes M3 depth 4.5 mm

### 82 862 2



- B 4 mm across flats
- C (shaft pushed-in ←)
- D 2 tags NFC 20-120 series 2.8 x 0.5 mm
- E 3 holes M3 depth 4.5 mm

Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 1.2 Nm 10 and 17 Watts

A range of D.C. geared motors with solid metal gears

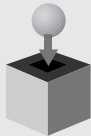
- Mechanical rating of gearbox with output shaft stalled : 1.2 Nm
- 10 and 17 Watt motor power
- Available in either 12, 24 or 48 V D.C.
- Gearbox ratios options for 20 to 100 rpm



## Specifications

		17 Watts	17 Watts	10 Watts	10 watts
Type		82 802 0	82 802 0	82 812 0	82 812 0
Voltage		12 V	24 V	12 V	24 V
Output speed (rpm)	Ratios (i)				
100	26	82 802 0X00026Z ●	82 802 0Y00026Z ●	82 812 0X00026Z ●	82 812 0Y00026Z ●
80	32.5	82 802 0X032.5Z ●	82 802 0Y032.5Z ●	82 812 0X032.5Z ●	82 812 0Y032.5Z ●
60	130/3	82 802 0X43.33Z ●	82 802 0Y43.33Z ●	82 812 0X43.33Z ●	82 812 0Y43.33Z ●
38	67.6	82 802 0X067.6Z ●	82 802 0Y067.6Z ●	82 812 0X067.6Z ●	82 812 0Y067.6Z ●
30	598/7	82 802 0X85.43Z ●	82 802 0Y85.43Z ●	82 812 0X85.43Z ●	82 812 0Y85.43Z ●
20	130	82 802 0X00130Z ●	82 802 0Y00130Z ●	82 812 0X00130Z ●	82 812 0Y00130Z ●
General characteristics					
Motor		82 800 0	82 800 0	82 810 0	82 810 0
Gearbox		81 032 1	81 032 1	81 032 1	81 032 1
Maximum permitted torque from gearmotor under continuous conditions for 10 millions turns Nm		1.2	1.2	1.2	1.2
Axial load (dynamic) daN		3.5	3.5	3.5	3.5
Radial load (dynamic) daN		5	5	5	5
Max. output (W)		16.3	17	10.3	9.5
Nominal output (W)		15.7	15.6	9.4	8.7
Gearbox case temperature rise (°C)		44	40	45	46
Weight (g)		670	670	670	670

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

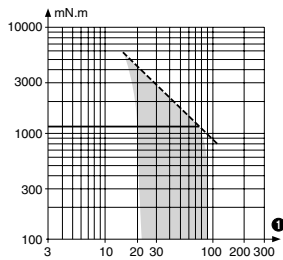
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## Curves

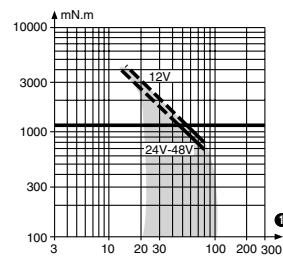
The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves  
82 802 0



B RPM

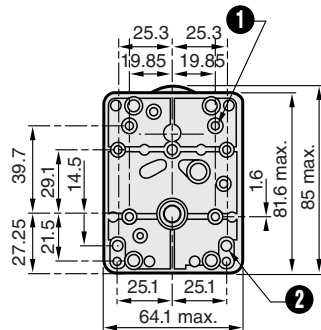
Nominal speed and torque curves  
82 812 0



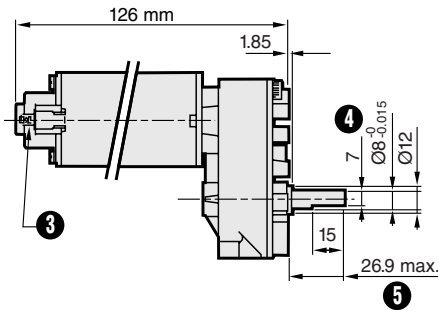
B RPM

## Dimensions

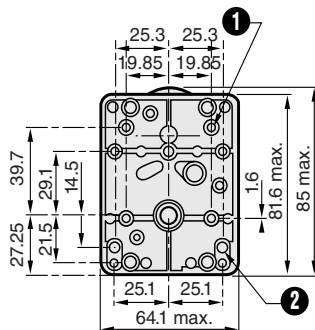
82 802 0 Standard



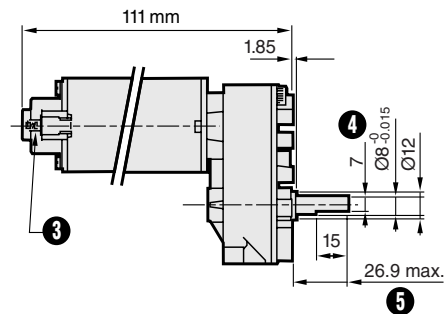
- B 4 holes M4 depth 7.5 mm
- C 3 holes M5 at 120° depth 7.5 mm
- D 2 tags IEC 760 series 4.8 x 0.5 mm
- E 7 mm across flats
- F (shaft pushed-in ←)



82 812 0 Standard



- B 8 holes M4 depth 7.5 mm
- C 3 holes M5 at 120° depth 7.5 mm
- D 2 tags IEC 760 series 4.8 x 0.5 mm
- E 7 mm across flats
- F (shaft pushed-in ←)



Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 2 Nm 3.9 Watts

A range of D.C. geared motors with ovoid gearbox.

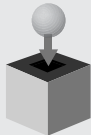
- Mechanical rating of gearbox with output shaft stalled : 2 Nm.
- 3.9 Watt motor versions.
- Available in either 12 or 24 V D.C.
- Gearbox ratios options for 0.36 to 430 rpm.
- Alternative shaft options.



## Specifications

		3.9 Watts	3.9 Watts
Type		82 869 0	82 869 0
Voltage		12 V	24 V
<b>Output speed (rpm)</b>	<b>Ratios (i)</b>		
108	40	<b>82 869 001</b>	<b>82 869 011</b>
54	80	<b>82 869 006</b>	<b>82 869 012</b>
27	160	<b>82 869 007</b>	<b>82 869 013</b>
13	320	<b>82 869 008</b>	<b>82 869 014</b>
7.2	600	<b>82 869 009</b>	<b>82 869 015</b>
5.4	800	<b>82 869 0X00800X ●</b>	<b>82 869 0Y00800X ●</b>
2.9	1500	<b>82 869 010</b>	<b>82 869 016</b>
0.90	4800	<b>82 869 0X04800X ●</b>	<b>82 869 0Y04800X ●</b>
<b>General characteristics</b>			
Motor		82 860 0	82 860 0
Gearbox		81 033 0	81 033 0
Maximum permitted torque from gearmotor under continuous conditions for 1 millions turns Nm		2	2
Axial load (static) daN		1	1
Radial load (static) daN		10	10
Max. output (W)		3.9	3.9
Nominal output (W)		3	3
Gearbox case temperature rise (°C)		50	50
Weight (g)		240	240

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

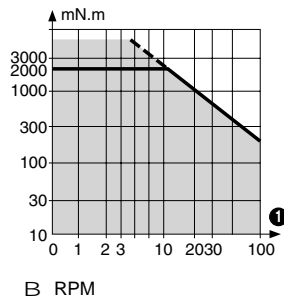
Products and specifications subject to change without notice.

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

## Curves

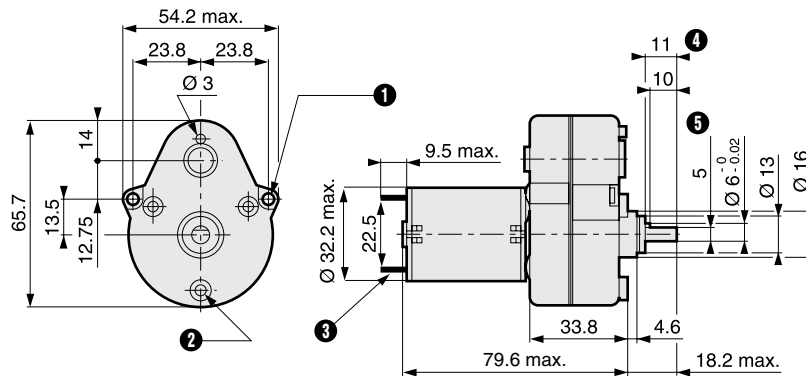
The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves



## Dimensions

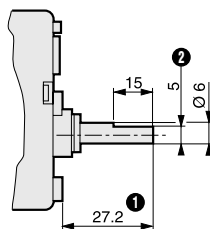
82 869 0



- B 2 fixing holes Ø 3.2
- C 3 bosses Ø 7.2 at 120° on R=19.5 with 3 M3 holes
- D 2 tags NFC 20-120 series 2.8 x 0.5 mm
- E (shaft pushed-in ←)
- F 5 mm across flats

## Options

Shaft 79 202 573



- B (shaft pushed-in ←)
- C 5 across flat

Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 2 Nm 10 and 17 Watts

A range of D.C. geared motors with solid metal gears

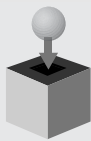
- Mechanical rating of gearbox with output shaft stalled : 1.2 Nm
- 10 and 17 Watt motor power
- Available in either 12, 24 or 48 V D.C.
- Gearbox ratios options for 60 to 400 rpm



## Specifications

		17 Watts	17 Watts	10 Watts	10 Watts
Type		80 803 0	80 803 0	80 813 0	80 813 0
Voltage		12 V	24 V	12 V	24 V
Output speed (rpm)	Ratios (i)				
400	13/2	80 803 0X006.5Z ●	80 803 0Y006.5Z ●	80 813 0X006.5Z ●	80 813 0Y006.5Z
301	855/99	80 803 0X8.636Z ●	80 803 0Y8.636Z ●	80 813 0X8.636Z ●	80 813 0Y8.636Z
161	728/45	80 803 005	80 803 008	80 813 0X16.18Z ●	80 813 0Y16.18Z
120	65/3	80 803 0X21.67Z ●	80 803 0Y21.67Z ●	80 813 0X21.67Z ●	80 813 0Y21.67Z
103	455/18	80 803 0X25.28Z ●	80 803 0Y25.28Z ●	80 813 0X25.28Z ●	80 813 0Y25.28Z
80	32.5	80 803 006	80 803 009	80 813 0X32.5Z ●	80 813 0Y32.5Z
60	130/3	80 803 007	80 803 010	80 813 0X43.33Z ●	80 813 0Y43.33Z
General characteristics					
Motor		82 800 0	82 800 0	82 810 0	82 810 0
Gearbox		81 043 0	81 043 0	81 043 0	81 043 0
Maximum permitted torque from gearmotor under continuous conditions for 1 millions turns Nm		2	2	2	2
Axial load (dynamic) daN		2	2	2	2
Radial load (dynamic) daN		2	2	2	2
Max. output (W)		16.3	17	10.3	9.5
Nominal output (W)		15.7	15.6	9.4	8.7
Gearbox case temperature rise (°C)		44	40	45	46
Weight (g)		600	600	500	500

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

Products and specifications subject to change without notice.

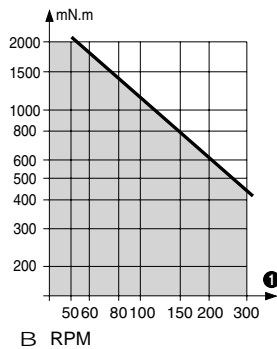
Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com



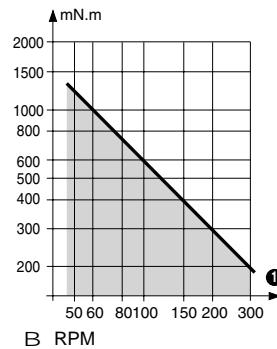
## Curves

The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves  
80 803 0

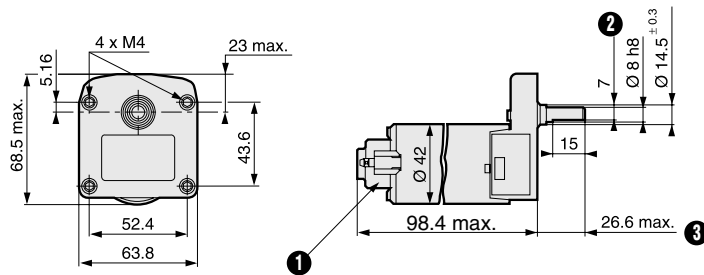


Nominal speed and torque curves  
80 813 0



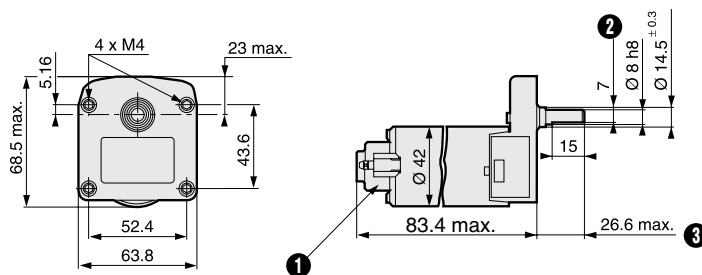
## Dimensions

### 80 803 0 Standard



- B 2 tags IEC 760 series 4.8 x 0.5 mm
- C 7 mm across flats
- D (shaft pushed-in ←)

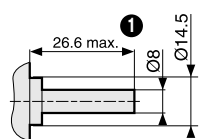
### 80 813 0 Standard



- B 2 tags IEC 760 series 4.8 x 0.5 mm
- C 7 mm across flats
- D (shaft pushed-in ←)

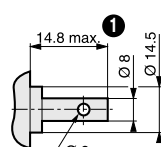
## Options

### Shaft 79 261 300



B (shaft pushed-in ←)

### Shaft 79 261 309



B (shaft pushed-in ←)

Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 2 Nm 3.9 Watts

A range of D.C. geared motors with metal gearbox.

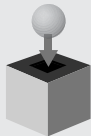
- Mechanical rating of gearbox with output shaft stalled : 2 Nm.
- 3.9 Watt motor power.
- Available in either 12 or 24 V D.C.
- Gearbox ratios options for 99 to 662 rpm.



## Specifications

		3.9 Watts	3.9 Watts
Type		82 863 0	82 863 0
Voltage		12 V	24 V
<b>Output speed (rpm)</b>	<b>Ratios (i)</b>		
662	13/2	<b>82 863 0X006.5Z ●</b>	<b>82 863 0Y006.5Z ●</b>
498	855/99	<b>82 863 0X8.636Z ●</b>	<b>82 863 0Y8.636Z ●</b>
266	728/45	<b>82 863 0X16.18Z ●</b>	<b>82 863 0Y16.18Z ●</b>
198	65/3	<b>82 863 0X21.67Z ●</b>	<b>82 863 0Y21.67Z ●</b>
170	455/18	<b>82 863 0X25.28Z ●</b>	<b>82 863 0Y25.28Z ●</b>
132	32.5	<b>82 863 0X032.5Z ●</b>	<b>82 863 0Y032.5Z ●</b>
99	130/3	<b>82 863 0X43.33Z ●</b>	<b>82 863 0Y43.33Z ●</b>
<b>General characteristics</b>			
Motor		82 860 0	82 860 0
Gearbox		81 043 0	81 043 0
Maximum permitted torque from gearmotor under continuous conditions (for 1 millions turns) N.m		2	2
Axial load (dynamic) daN		2	2
Radial load (dynamic) daN		2	2
Max. output (W)		3.9	3.9
Nominal output (W)		3	3
Gearbox case temperature rise (°C)		50	50
Weight (g)		285	285

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

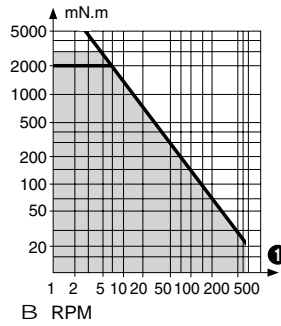
Products and specifications subject to change without notice.

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

## Curves

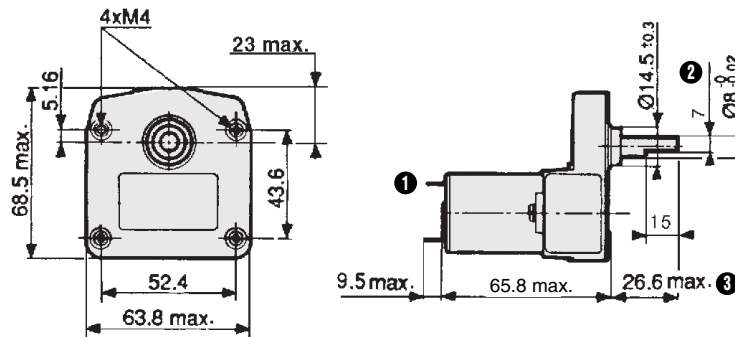
The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves



## Dimensions

82 863 0



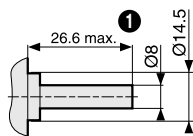
B 2 tags NFC 20-120 series 2.8 x 0.5 mm

C 7 mm across flats

D (shaft pushed-in ←)

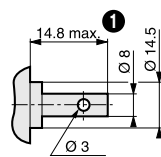
## Options

Shaft 79 261 300



B (shaft pushed-in ←)

Shaft 79 261 309



B (shaft pushed-in ←)

Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 2 Nm 3.9 Watts

A range of D.C. geared motors with metal gearbox.

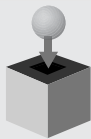
- Mechanical rating of gearbox with output shaft stalled : 2 Nm.
- 3.9 Watt motor versions.
- Available in either 12 or 24 V D.C.
- Gearbox ratios options for 2 to 66 rpm.



## Specifications

		3.9 Watts		3.9 Watts
Type		82 864 0		82 864 0
Voltage		12 V		24 V
<b>Output speed (rpm)</b>	<b>Ratios (i)</b>			
66	65	<b>82 864 0X00065Z ●</b>		<b>82 864 0Y00065Z ●</b>
40	325/3	<b>82 864 0X108.3Z ●</b>		<b>82 864 0Y108.3Z ●</b>
26	162.5	<b>82 864 0X162.5Z ●</b>		<b>82 864 0Y162.5Z ●</b>
13	325	<b>82 864 0X00325Z ●</b>		<b>82 864 0Y00325Z ●</b>
7	650	<b>82 864 0X00650Z ●</b>		<b>82 864 0Y00650Z ●</b>
2	2600	<b>82 864 0X02600Z ●</b>		<b>82 864 0Y02600Z ●</b>
<b>General characteristics</b>				
Motor		82 860 0		82 860 0
Gearbox		81 044 0		81 044 0
Maximum permitted torque from gearmotor under continuous conditions (for 1 millions turns) N.m		2		2
Axial load (dynamic) daN		2		2
Radial load (dynamic) daN		2		2
Max. output (W)		3.9		3.9
Nominal output (W)		3		3
Gearbox case temperature rise (°C)		50		50
Weight (g)		355		355

## Products adaptations



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

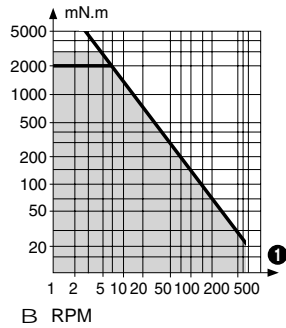
Products and specifications subject to change without notice.

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

## Curves

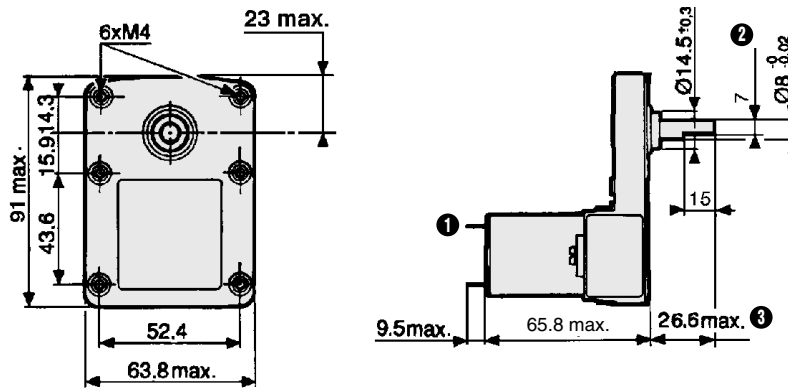
The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves



## Dimensions

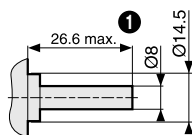
82 864 0



- B 2 tags NFC 20-120 series 2.8 x 0.5 mm
- C 7 mm across flats
- D (shaft pushed-in ←)

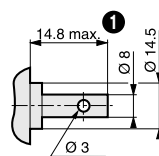
## Options

Shaft 79 261 300



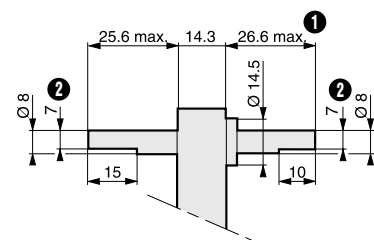
- B (shaft pushed-in ←)

Shaft 79 261 309



- B (shaft pushed-in ←)

Shaft 79 261 314



- B (shaft pushed-in ←)
- C 7 across flat

Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 2 Nm 10 and 17 Watts

A range of D.C. geared motors with solid metal gears.

- Mechanical rating of gearbox with output shaft stalled : 2 Nm.
- 10 and 17 Watt motor power.
- Available in either 12, 24 or 48 V D.C.
- Gearbox ratios options for 1 to 40 rpm.



## Specifications

		17 Watts	17 Watts	10 Watts	10 Watts
Type		80 804 0	80 804 0	80 814 0	80 814 0
Voltage		12 V	24 V	12 V	24 V
Output speed (rpm)	Ratios (i)				
40	65	80 804 0X00065Z ●	80 804 0Y00065Z ●	80 814 0X00065Z ●	80 814 0Y00065Z ●
24	325/3	80 804 006	80 804 009	80 814 0X108.3Z ●	80 814 0Y108.3Z ●
16	162.5	80 804 0X162.5Z ●	80 804 0Y162.5Z ●	80 814 0X162.5Z ●	80 814 0Y162.5Z ●
8	325	80 804 007	80 804 010	80 814 0X00325Z ●	80 814 0Y00325Z ●
4	650	80 804 008	80 804 011	80 814 0X00650Z ●	80 814 0Y00650Z ●
1	2600	80 804 0X02600Z ●	80 804 0Y02600Z ●	80 814 0X02600Z ●	80 814 0Y02600Z ●
General characteristics					
Motor		82 800 0	82 800 0	82 810 0	82 810 0
Gearbox		81 044 0	81 044 0	81 044 0	81 044 0
Maximum permitted torque from gearmotor under continuous conditions for 1 millions turns Nm		2	2	2	2
Axial load (dynamic) daN		2	2	2	2
Radial load (dynamic) daN		2	2	2	2
Max. output (W)		16.3	17	10.3	9.5
Nominal output (W)		15.7	15.6	9.3	8.7
Gearbox case temperature rise (°C)		44	40	45	46
Weight (g)		670	670	570	570

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

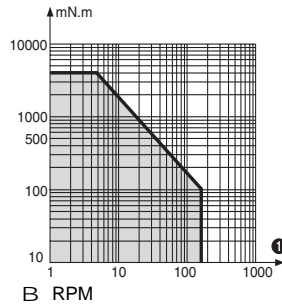
Products and specifications subject to change without notice.

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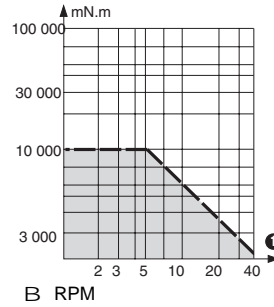
## Curves

The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves  
80 804 0

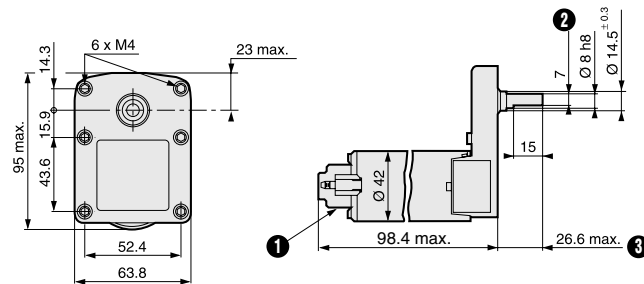


Nominal speed and torque curves  
80 814 0



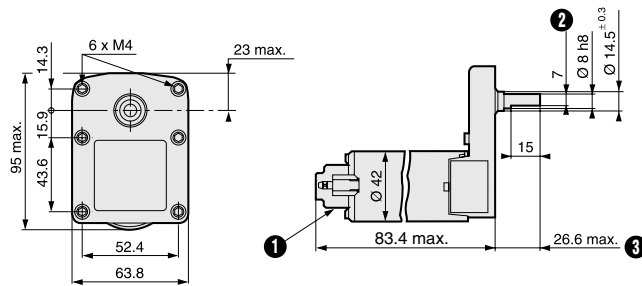
## Dimensions

### 80 804 0 Standard



- B 2 tags IEC 760 series 4.8 x 0.5 mm
- C 7 mm across flats
- D (shaft pushed-in ←)

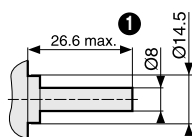
### 80 814 0 Standard



- B 2 tags IEC 760 series 4.8 x 0.5 mm
- C 7 mm across flats
- D (shaft pushed-in)

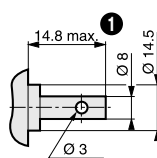
## Options

### Shaft 79 261 300



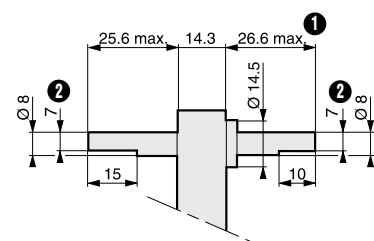
- B (shaft pushed-in ←)

### Shaft 79 261 309



- B (shaft pushed-in ←)

### Shaft 79 261 314



- B (shaft pushed-in ←)
- C 7 across flat

Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 5 Nm 3.9 Watts

A range of D.C. geared motors with solid metal gears.

- Mechanical rating of gearbox with output shaft stalled : 5 Nm.
- 3.9 Watt motor versions.
- Available in either 12 or 24 V D.C.
- Gearbox ratios options for 1.7 to 344 rpm.
- Interference suppression on standard products



## Specifications

		3.9 Watts	3.9 watts
Type		82 867 0	82 867 0
Voltage		12 V	24 V
<b>Output speed (rpm)</b>	<b>Ratios (i)</b>		
344	12.5	<b>82 867 001</b>	<b>82 867 007</b>
258	50/3	<b>82 867 0X16.67Z</b> ●	<b>82 867 0Y16.67Z</b> ●
172	25	<b>82 867 002</b>	<b>82 867 008</b>
103	125/3	<b>82 867 003</b>	<b>82 867 009</b>
69	62.5	<b>82 867 004</b>	<b>82 867 010</b>
34	125	<b>82 867 005</b>	<b>82 867 011</b>
17	250	<b>82 867 0X00250Z</b> ●	<b>82 867 0Y00250Z</b> ●
8.6	500	<b>82 867 006</b>	<b>82 867 012</b>
1.72	2500	<b>82 867 0X2500Z</b> ●	<b>82 867 0Y2500Z</b> ●
<b>General characteristics</b>			
Motor		82 860 0	82 860 0
Gearbox		81 037 0	81 037 0
Maximum permitted torque from gearmotor under continuous conditions (for 1 millions turns) N.m		5	5
Axial load (dynamic) daN		2	2
Radial load (dynamic) daN		3	3
Max. output (W)		3.9	3.9
Nominal output (W)		3	3
Gearbox case temperature rise (°C)		50	50
Weight (g)		465	465

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

Products and specifications subject to change without notice.

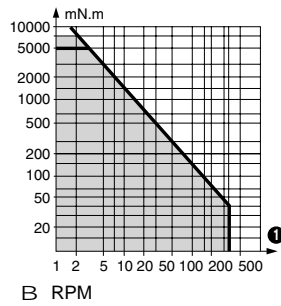
Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / [www.crouzet-usa.com](http://www.crouzet-usa.com)



## Curves

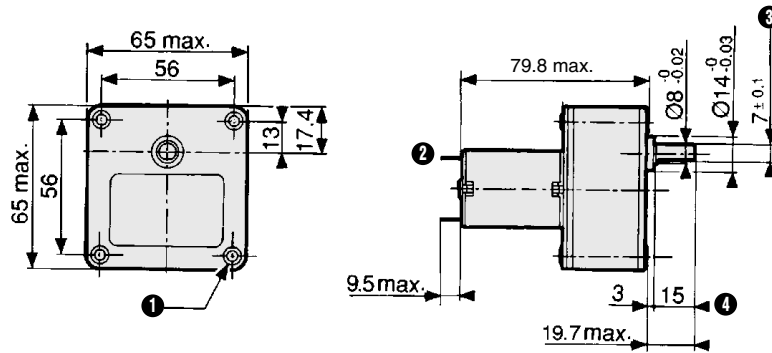
The shaded zone represents the operating range of the geared motor.  
 The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
 For higher torque ratings, service life will be reduced.

Nominal speed and torque curves  
 82 867 0



## Dimensions

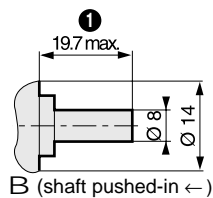
82 867 0



- B 4 fixing holes  $\varnothing$  M4 x 12 mm
- C 2 tags NFC 20-120 series 2.8 x 0.5 mm
- D 7 mm  $\pm$ 0.1 across flats
- E (shaft pushed-in  $\leftarrow$ )

## Options

Shaft 79 206 478



B (shaft pushed-in  $\leftarrow$ )

Products and specifications subject to change without notice.

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

# D.C. geared motors with brushes

→ 5 Nm 10 and 17 Watts

A range of D.C. geared motors with solid metal gears.

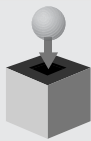
- Mechanical rating of gearbox with output shaft stalled : 5 Nm.
- 10 and 17 Watt motor power.
- Available in either 12, 24 or 48 V D.C.
- Gearbox ratios options for 10.5 to 616 rpm.



## Specifications

	17 Watts	17 Watts	10 Watts	10 Watts	
Type	80 805 0	80 805 0	80 815 0	80 815 0	
Voltage	12 V	24 V	12 V	24 V	
Standard speed (rpm)	2600 rpm	2600 rpm	2600 rpm	2600 rpm	
Output speed (rpm)	Ratios (i)				
616	4.22	80 805 0X04.22Z ●	80 805 0Y04.22Z ●	80 815 0X04.22Z ●	80 815 0Y04.22Z ●
385	6.75	80 805 0X06.75Z ●	80 805 0Y06.75Z ●	80 815 0X06.75Z ●	80 815 0Y06.75Z ●
339.5	7.66	80 805 0X07.66Z ●	80 805 0Y07.66Z ●	80 815 0X07.66Z ●	80 815 0Y07.66Z ●
212	12.25	80 805 0X12.25Z ●	80 805 0Y12.25Z ●	80 815 0X12.25Z ●	80 815 0Y12.25Z ●
170	15.31	80 805 0X15.31Z ●	80 805 0Y15.31Z ●	80 815 0X15.31Z ●	80 815 0Y15.31Z ●
106	24.5	80 805 0X024.5Z ●	80 805 0Y024.5Z ●	80 815 0X024.5Z ●	80 815 0Y024.5Z ●
68	38.28	80 805 0X38.28Z ●	80 805 0Y38.28Z ●	80 815 0X38.28Z ●	80 815 0Y38.28Z ●
53	49	80 805 0X00049Z ●	80 805 0Y00049Z ●	80 815 0X00049Z ●	80 815 0Y00049Z ●
42.5	61.25	80 805 0X61.25Z ●	80 805 0Y61.25Z ●	80 815 0X61.25Z ●	80 815 0Y61.25Z ●
21	122.5	80 805 0X122.5Z ●	80 805 0Y122.5Z ●	80 815 0X122.5Z ●	80 815 0Y122.5Z ●
10.5	245	80 805 0X00245Z ●	80 805 0Y00245Z ●	80 815 0X00245Z ●	80 815 0Y00245Z ●
General characteristics					
Motor	82 800 0	82 800 0	82 810 0	82 810 0	
Gearbox	81 035 0	81 035 0	81 035 0	81 035 0	
Maximum permitted torque from gearmotor under continuous conditions (N.m)	5	5	5	5	
Axial load (dynamic) daN	6	6	6	6	
Radial load (dynamic) daN	6	6	6	6	
Max. output (W)	16.3	17	10.3	9.5	
Nominal output (W)	15.7	15.6	9.4	8.7	
Gearbox case temperature rise (°C)	44	40	45	46	
Weight (g)	920	920	820	820	

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

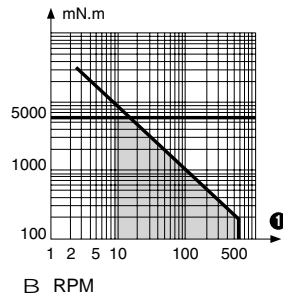
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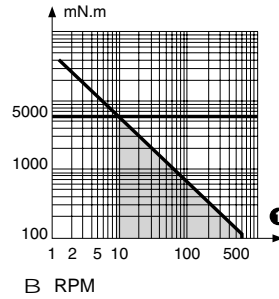
## Curves

The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves  
80 805 0

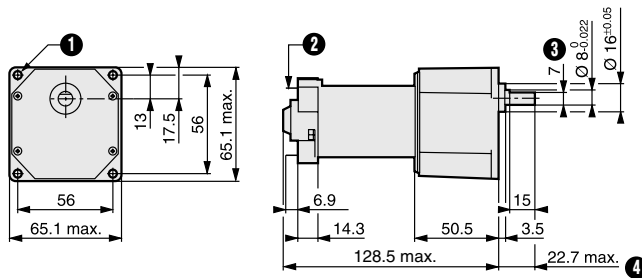


Nominal speed and torque curves  
80 815 0



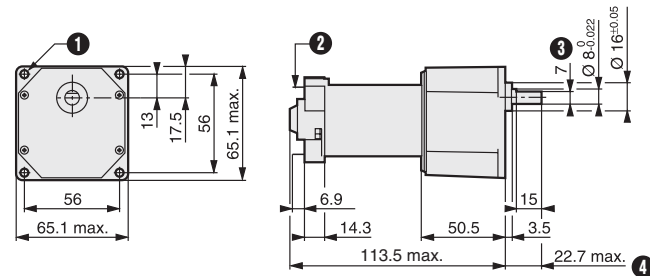
## Dimensions

80 805 0



- B 4 fixing holes Ø 4.2
- C 2 tags IEC 760 series 4.8 x 0.5 mm
- D 7 mm ±0.1 across flats
- E (shaft pushed-in ←)

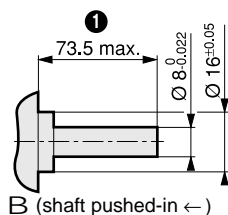
80 815 0 Standard



- B 4 fixing holes Ø 4.2
- C 2 tags IEC 760 series 4.8 x 0.5 mm
- D 7 mm ±0.1 across flats
- E (shaft pushed-in ←)

## Options

Gearbox shaft 79 290 064



B (shaft pushed-in ←)

Products and specifications subject to change without notice.

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# D.C. geared motors with brushes

→ 5 Nm 10 and 17 Watts

A range of D.C. geared motors with solid metal gears.

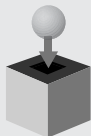
- Mechanical rating of gearbox with output shaft stalled : 5 Nm.
- 10 and 17 Watt motor power.
- Available in either 12, 24 or 48 V D.C.
- Gearbox ratios options for 1 to 208 rpm.



## Specifications

		17 Watts	17 Watts	10 watts	10 Watts
Type		80 807 0	80 807 0	80 817 0	80 817 0
Voltage		12 V	24 V	12 V	24 V
Output speed (rpm)	Ratios (i)				
208	12.5	<b>80 807 012</b>	<b>80 807 018</b>	<b>80 817 0X012.5Z ●</b>	<b>80 817 0Y012.5Z ●</b>
156	50/3	<b>80 807 0X16.67Z ●</b>	<b>80 807 0Y16.67Z ●</b>	<b>80 817 0X16.67Z ●</b>	<b>80 817 0Y16.67Z ●</b>
104	25	<b>80 807 013</b>	<b>80 807 019</b>	<b>80 817 0X00025Z ●</b>	<b>80 817 0Y00025Z ●</b>
62	125/3	<b>80 807 014</b>	<b>80 807 020</b>	<b>80 817 0X41.67Z ●</b>	<b>80 817 0Y41.67Z ●</b>
42	62.5	<b>80 807 015</b>	<b>80 807 021</b>	<b>80 817 0X062.5Z ●</b>	<b>80 817 0Y062.5Z ●</b>
21	125	<b>80 807 016</b>	<b>80 807 001</b>	<b>80 817 0X00125Z ●</b>	<b>80 817 0Y00125Z ●</b>
10	250	<b>80 807 0X00250Z ●</b>	<b>80 807 0Y00250Z ●</b>	<b>80 817 0X00250Z ●</b>	<b>80 817 0Y00250Z ●</b>
5.20	500	<b>80 807 017</b>	<b>80 807 022</b>	<b>80 817 0X00500Z ●</b>	<b>80 817 0Y00500Z ●</b>
1.04	2500	<b>80 807 0X2500Z ●</b>	<b>80 807 0Y02500Z ●</b>	<b>80 817 0X02500Z ●</b>	<b>80 817 0Y02500Z ●</b>
General characteristics					
Motor		82 800 0	82 800 0	82 810 0	82 810 0
Gearbox		81 037 0	81 037 0	81 037 0	81 037 0
Maximum permitted torque from gearmotor under continuous conditions for 1 millions turns N.m		5	5	5	5
Axial load (dynamic) daN		2	2	2	2
Radial load (dynamic) daN		3	3	3	3
Max. output (W)		16.3	17	10.3	9.5
Nominal output (W)		15.7	15.6	9.4	8.7
Gearbox case temperature rise (°C)		44	40	45	46
Weight (g)		800	800	710	710

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

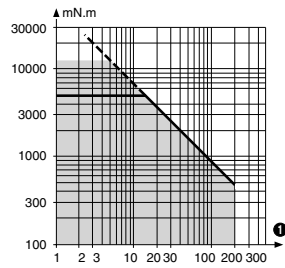
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## Curves

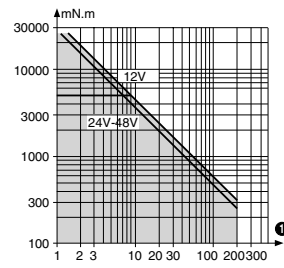
The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves  
80 807 0



B RPM

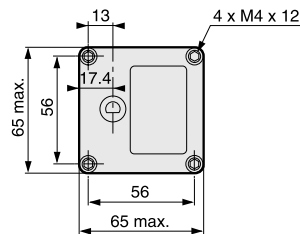
Nominal speed and torque curves  
80 817 0



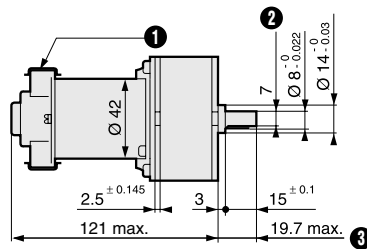
B RPM

## Dimensions

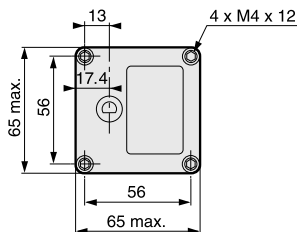
80 807 0 Standard



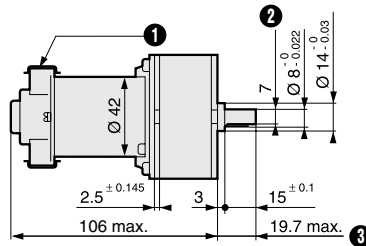
- B 2 tags IEC 760 series 4.8 x 0.5 mm
- C 7 mm across flats
- D (shaft pushed-in ←)



80 817 0 Standard

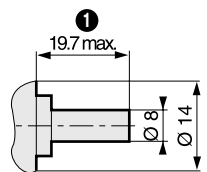


- B 2 tags IEC 760 series 4.8 x 0.5 mm
- C 7 mm across flats
- D (shaft pushed-in ←)



## Options

Gearbox shaft 79 206 478



B (shaft pushed-in ←)

Products and specifications subject to change without notice.

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# D.C. geared motors with brushes

→ 5 Nm 33 Watts

A range of D.C. geared motors with solid metal gears.

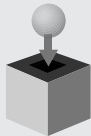
- Mechanical rating of gearbox with output shaft stalled : 5 Nm.
- 33 Watt motor power.
- Available in either 12, 24 or 48 V D.C.
- Gearbox ratios options for 7.4 to 426 rpm.



## Specifications

	33 Watts		33 Watts	
Type	80 835 0		80 835 0	
Voltage	12 V		24 V	
Standard speed (rpm)	1800 rpm		1800 rpm	
Output speed (rpm)	Ratios (i)			
426	4.22	80 835 0X04.22Z ●		80 835 0Y04.22Z ●
266	6.75	80 835 012		80 835 009
235	7.66	80 835 0X07.66Z ●		80 835 0Y07.66Z ●
147	12.25	80 835 013		80 835 004
118	15.31	80 835 0X15.31Z ●		80 835 0Y15.31Z ●
73	24.5	80 835 014		80 835 002
47	38.28	80 835 015		80 835 003
37	49	80 835 0X00049Z ●		80 835 0Y00049Z ●
29.4	61.25	80 835 016		80 835 008
14.7	122.5	80 835 017		80 835 006
7.4	245	80 835 018		80 835 005
General characteristics				
Motor	82 830 0		82 830 0	
Gearbox	81 035 0		81 035 0	
Maximum permitted torque from gearmotor under continuous conditions (N.m)	5		5	
Axial load (dynamic) daN	6		6	
Radial load (dynamic) daN	6		6	
Max. output (W)	33		33	
Nominal output (W)	27		27	
Gearbox case temperature rise (°C)	50		50	
Weight (g)	1540		1540	

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

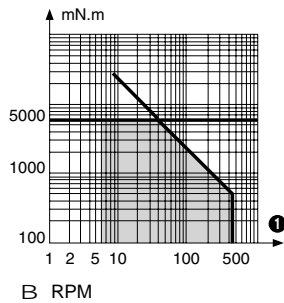
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## Curves

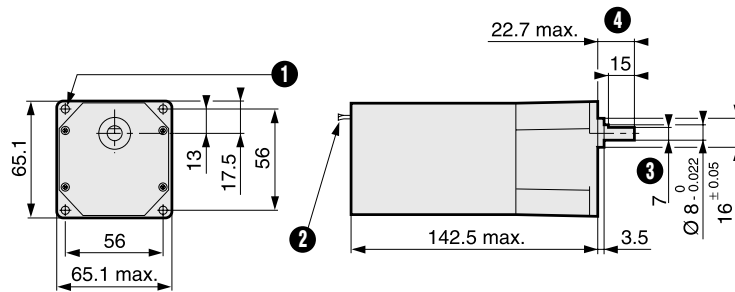
The shaded zone represents the operating range of the geared motor.  
 The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
 For higher torque ratings, service life will be reduced.

Nominal speed and torque curves



## Dimensions

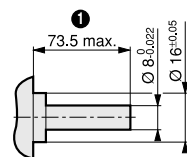
80 835 0



- B 4 fixing holes Ø 4.2
- C Lead length 200 mm ±10
- D 7 mm across flats
- E (shaft pushed-in ←)

## Options

Gearbox shaft 79 290 064



- B (shaft pushed-in ←)

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# D.C. geared motors with brushes

→ 5 Nm 40 to 52 Watts

A range of D.C. geared motors with solid metal gears.

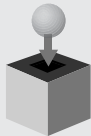
- Mechanical rating of gearbox with output shaft stalled : 5 Nm.
- 40 to 52 Watt motor versions.
- Available in either 12 or 24 V D.C.
- Gearbox ratios options for 13.8 to 805 rpm.



## Specifications

	42 Watts	52 Watts
Type	80 855 0	80 855 0
Voltages	12 V	24 V
Standard speed (rpm)	3400 rpm	3400 rpm
<b>Output speed (rpm)</b>	<b>Ratios (i)</b>	
805	4.22	80 855 0X04.22Z ●
503	6.75	80 855 0X06.75Z ●
444	7.66	80 855 0X07.66Z ●
277	12.25	80 855 0X12.25Z ●
222	15.31	80 855 0X15.31Z ●
139	24.5	80 855 0X024.5Z ●
89	38.28	80 855 0X38.28Z ●
69	49	80 855 0X00049Z ●
55	61.25	80 855 0X61.25Z ●
28	122.5	80 855 0X122.5Z ●
13.8	245	80 855 0X00245Z ●
<b>General characteristics</b>		
Motor	82 850 0	82 850 0
Gearbox	81 035 0	81 035 0
Maximum permitted torque from gearmotor under continuous conditions (2.5 million revolution) (N.m)	5	5
Axial load (dynamic) daN	6	6
Radial load (dynamic) daN	6	6
Max. output (W)	42	52
Nominal output (W)	32	32
Gearbox case temperature rise (°C)	45	45
Weight (g)	985	985

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

Products and specifications subject to change without notice.

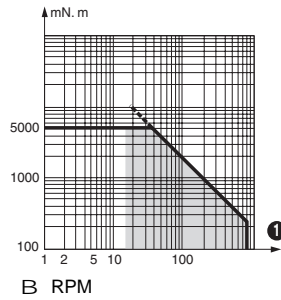
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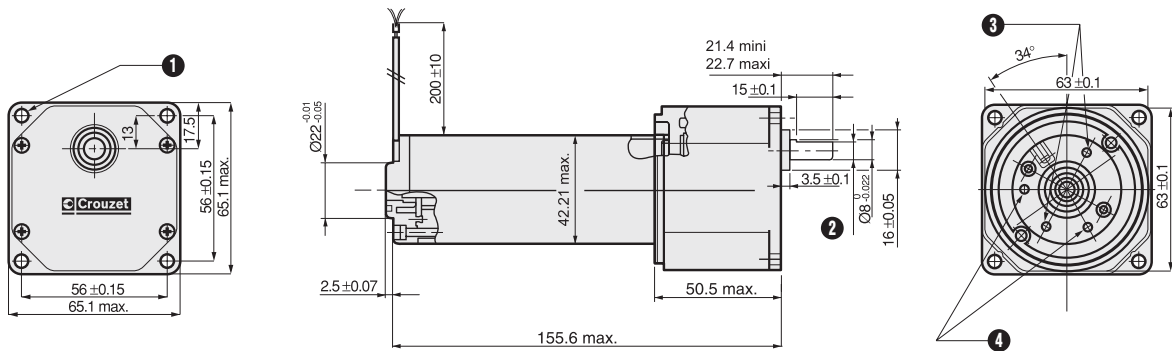
## Curves

The shaded zone represents the operating range of the geared motor.  
 The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
 For higher torque ratings, service life will be reduced.

Nominal speed and torque curves



## Dimensions



- B 4 fixing holes  $\text{Ø} 4.2$
- C  $7 \text{ mm} \pm 0.1$  across flats
- D 2 holes  $\text{M}3 \times 0.5$  at  $180^\circ$  depth 4 on  $\text{Ø} 32$
- E 2 holes  $2.5 \pm 0.5$  at  $120^\circ$  depth 4.5 on  $\text{Ø} 32$

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# D.C. geared motors with brushes

→ 6 Nm 10 and 17 Watts

A range of D.C. geared motors with solid metal gears.

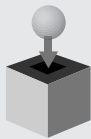
- Mechanical rating of gearbox with output shaft stalled : 6 Nm.
- 10 and 17 Watt motor power.
- Available in either 12, 24 or 48 V D.C.
- Gearbox ratios options for 4 to 12 rpm.



## Specifications

		10 Watts	10 Watts	17 Watts	17 Watts
Type		82 812 5	82 812 5	82 802 5	82 802 5
Voltage		12 V	24 V	12 V	24 V
Output speed (rpm)	Ratios (i)				
		<b>82 812 5X216.7Z</b> ●	<b>82 812 5Y216.7Z</b> ●	<b>82 802 5X216.7Z</b> ●	<b>82 802 5Y216.7Z</b> ●
12	650/3	<b>82 812 5X00338Z</b> ●	<b>82 812 5Y00338Z</b> ●	<b>82 802 5X00338Z</b> ●	<b>82 802 5Y00338Z</b> ●
8	338	<b>82 812 5X00650Z</b> ●	<b>82 812 5Y00650Z</b> ●	<b>82 802 5X00650Z</b> ●	<b>82 802 5Y00650Z</b> ●
4	650				
General characteristics					
Motor		82 810 0	82 810 0	82 800 0	82 800 0
Gearbox		81 032 6	81 032 6	81 032 6	81 032 6
Maximum permitted torque from gearmotor under continuous conditions for 10 millions turns N.m		6	6	6	6
Axial load (dynamic) daN		3.5	3.5	3.5	3.5
Radial load (dynamic) daN		5	5	5	5
Max. output (W)		10.3	9.5	16.3	17
Nominal output (W)		9.4	8.7	15.7	15.6
Gearbox case temperature rise (°C)		45	46	44	40
Weight (g)		880	880	880	880

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

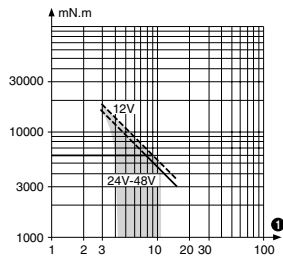
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## Curves

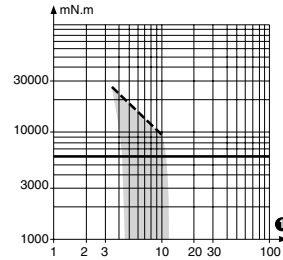
The shaded zone represents the operating range of the geared motor.  
The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
For higher torque ratings, service life will be reduced.

Nominal speed and torque curves  
82 812 5



B RPM

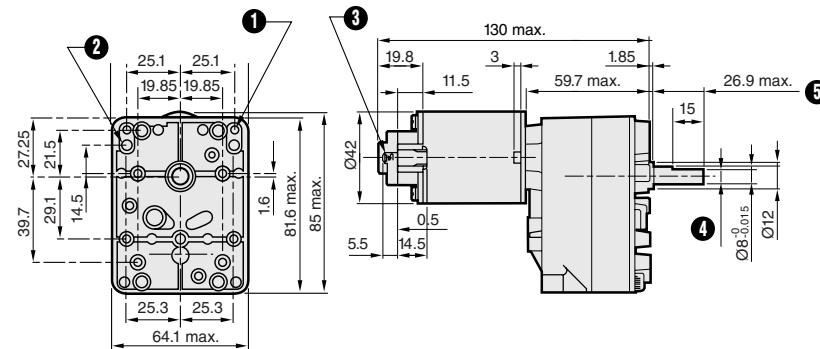
Nominal speed and torque curves  
82 802 5



B RPM

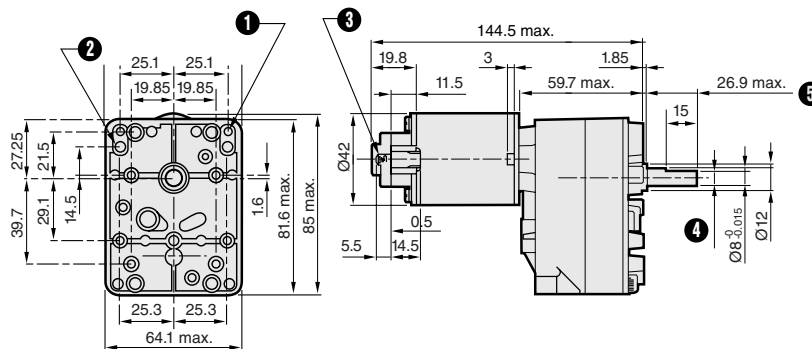
## Dimensions

82 812 5 Standard



- B 8 holes M4 depth 7.5 mm
- C 3 holes M5 at 120° depth 7.5 mm
- D 2 tags IEC 760 series 4.8 x 0.5 mm
- E 7 mm across flats
- F (shaft pushed-in ←)

82 802 5 Standard



- B 8 holes M4 depth 7.5 mm
- C 3 holes M5 at 120° depth 7.5 mm
- D 2 tags IEC 760 series 4.8 x 0.5 mm
- E 7 mm across flats
- F (shaft pushed-in ←)

Products and specifications subject to change without notice.

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# D.C. geared motors with brushes

→ 6 Nm 33 Watts

A range of D.C. geared motors with solid metal gears.

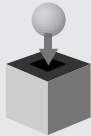
- Mechanical rating of gearbox with output shaft stalled : 6 Nm.
- 33 Watt motor power.
- Available in either 12, 24 or 48 V D.C.
- Gearbox ratios options for 5 to 14 rpm.



## Specifications

		33 Watts		33 Watts
Type		82 832 5		82 832 5
Voltages		12 V		24 V
<b>Output speed (rpm)</b>	<b>Ratios (i)</b>			
14	130	<b>82 832 5X00130Z ●</b>		<b>82 832 5Y00130Z ●</b>
8	650/3	<b>82 832 5X216.7Z ●</b>		<b>82 832 5Y216.7Z ●</b>
5	338	<b>82 832 5X00338Z ●</b>		<b>82 832 5Y00338Z ●</b>
<b>General characteristics</b>				
Motor		82 830 0		82 830 0
Gearbox		81 032 6		81 032 6
Maximum permitted torque from gearmotor under continuous conditions for 10 millions turns N.m		6		6
Axial load (dynamic) daN		3.5		3.5
Radial load (dynamic) daN		5		5
Max. output (W)		33		33
Nominal output (W)		27		27
Gearbox case temperature rise (°C)		50		50
Weight (g)		1400		1400

## Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

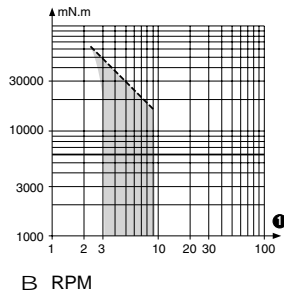
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## Curves

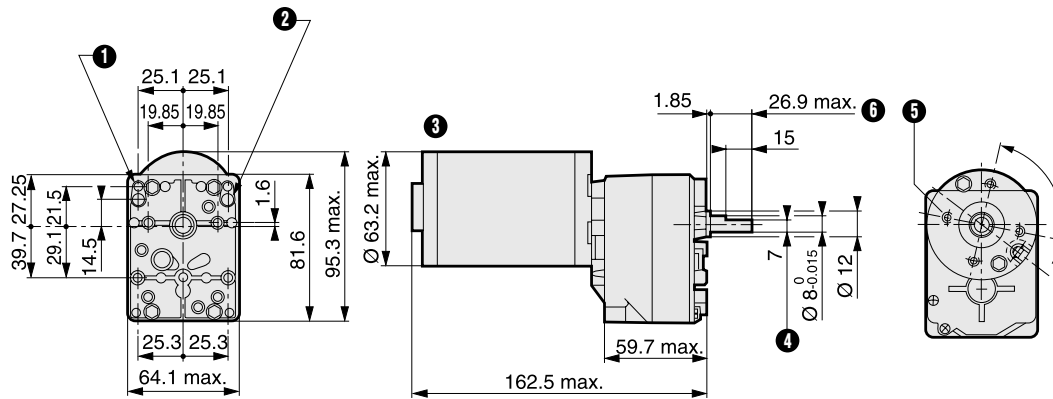
The shaded zone represents the operating range of the geared motor.  
 The horizontal line marks the maximum torque available in continuous duty cycle for a given life.  
 For higher torque ratings, service life will be reduced.

Nominal speed and torque curves



## Dimensions

82 832 5



- B 3 holes M5 at 120° depth 7.5 mm
- C 8 holes M4 depth 7.5 mm
- D Lead length 200 mm
- E 7 mm across flats
- F 4 holes M5 on Ø 40 depth 7 mm
- G (shaft pushed-in ←)

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# D.C. geared motors with brushes

→ 50 Nm 22 to 42 Watts

- Gearbox torque rating : 0.8 to 25 Nm.
- Associated DC motors : 15 to 90 watts.
- DC planetary geared motors with brushes
- Speed range : 11 to 454 rpm.



## Specifications

			22 Watts		42 Watts	
			80 809 2		80 859 3	
Type			12 V	24 V	12 V	24 V
Voltages						
Number of stages	Speed (rpm)	Ratios				
1	454	6.75	80 809 2X06.75 ●	80 809 2Y06.75 ●		
1	477	6.75			80 859 3X06.75 ●	80 859 3Y06.75 ●
2	122	25.0	80 809 2X00025 ●	80 809 2Y00025 ●		
2	128	25.0			80 859 3X00025 ●	80 859 3Y00025 ●
2	69	46	80 809 2X00046 ●	80 809 2Y00046 ●		
2	70	46			80 859 3X00046 ●	80 859 3Y00046 ●
3	33	93	80 809 2X00093 ●	80 809 2Y00093 ●		
3	34	93			80 859 3X00093 ●	80 859 3Y00093 ●
3	20	169	80 809 2X00169 ●	80 809 2Y00169 ●		
3	19	169			80 859 3X00169 ●	80 859 3Y00169 ●
3	12	308	80 809 2X00308 ●	80 809 2Y00308 ●		
3	11	308			80 859 3X00308 ●	80 859 3Y00308 ●
<b>General characteristics</b>						
Motor			82 800 5		82 850 0	
Gearbox			81 049 2		81 049 3	
Max. torque Nm			0.8 (1 stage) 2 (2 stages) 4 (3 stages)		3 (1 stage) 7.5 (2 stages) 15 (3 stages)	
Efficiency (%)			0.75 (1 stage) 0.7 (2 stages) 0.65 (3 stages)		0.8 (1 stage) 0.75 (2 stages) 0.7 (3 stages)	
Radial load (dynamic) daN			1.5 (1 stage) 3 (2 stages) 4.5 (3 stages)		16 (1 stage) 23 (2 stages) 30 (3 stages)	
Axial load (dynamic) daN			0.5 (1 stage) 1 (2 stages) 1.5 (3 stages)		5 (1 stage) 8 (2 stages) 11 (3 stages)	
Output ball bearing			No		Yes	
Sintered bronze output bearing			Yes		No	

## Products adaptations, available on request



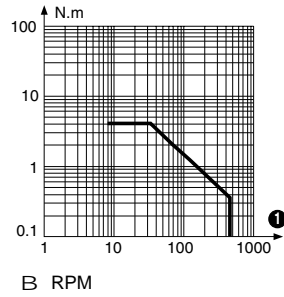
- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

Products and specifications subject to change without notice.

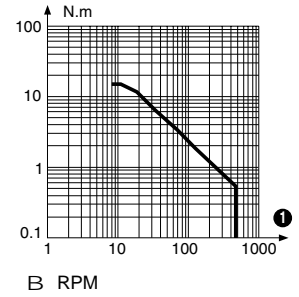
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## Curves

80 809 2

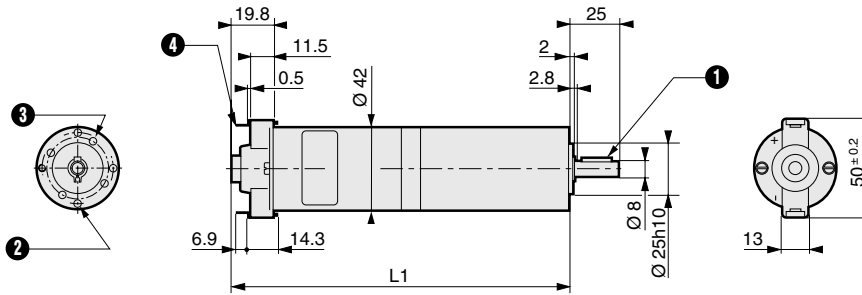


80 859 3



## Dimensions

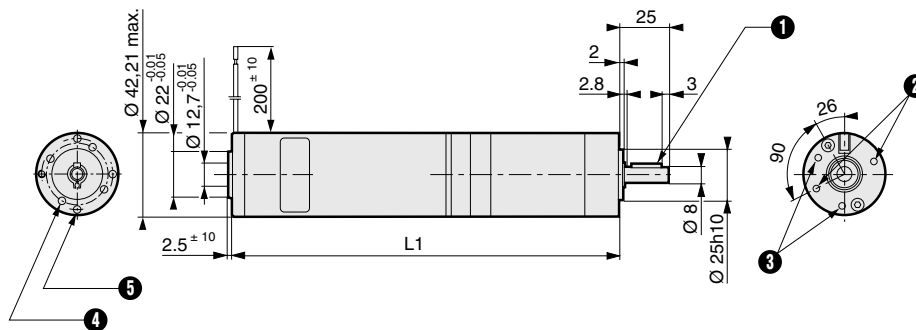
80 809 2



- B Key 3 x 3 x 16
- C 4 M4 x 10 on Ø 36
- D 4 holes for M3 self-tapping screws on Ø32, depth 10
- E 2 tags 4.75

- L1 1 stage : 134 mm
- L1 2 stages : 147 mm
- L1 3 stages : 160 mm

80 859 3



- B Key 3 x 3 x 16
- C 2 M3 x 0.5 at 180° depth 5.5 on Ø32
- D 2 M3 x 0.5 at 120° depth 5.5 on Ø32
- E 4 M4 x 10 on Ø36
- F 4 M3 x 10 on Ø32

- L1 1 stage : 162 mm
- L1 2 stages : 175 mm
- L1 3 stages : 188 mm

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# D.C. geared motors with brushes

→ 50 Nm 67 to 195 Watts

- Gearbox torque rating : 0.8 to 25 Nm.
- Associated DC motors : 15 to 90 watts.
- DC planetary geared motors with brushes
- Speed range : 11 to 454 rpm.



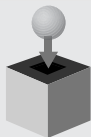
## Specifications

			67 Watts		195 Watts	
			80 839 4		80 899 5	
Type			12 V	24 V	24 V	48 V
Voltages						
Number of stages	Speed (rpm)	Ratios				
1	410	6.75	80 839 4X06.75 ●	80 839 4Y06.75 ●		
1	474	6.75			80 899 5X06.75 ●	80 899 5Z06.75 ●
2	110	25.0	80 839 4X00025 ●	80 839 4Y00025 ●		
2	128	25.0			80 899 5X00025 ●	80 899 5Z00025 ●
2	62	46	80 839 4X00046 ●	80 839 4Y00046 ●		
2	70	46			80 899 5X00046 ●	80 899 5Z00046 ●
3	30	93	80 839 4X00093 ●	80 839 4Y00093 ●		
3	34	93			80 899 5X00093 ●	80 899 5Z00093 ●
3	18	169	80 839 4X00169 ●	80 839 4Y00169 ●		
3	19	169			80 899 5X00169 ●	80 899 5Z00169 ●
3	11	308	80 839 4X00308 ●	80 839 4Y00308 ●		
3	11	308			80 899 5X00308 ●	80 899 5Z00308 ●

### General characteristics

	82 830 5	82 890 0
Motor	82 830 5	82 890 0
Gearbox	81 049 4	82 849 5
Max. torque Nm	2 (1 stage) 5 (2 stages) 10 (3 stages)	4 (1 stage) 12 (2 stages) 25 (3 stages)
Efficiency (%)	0.75 (1 stage) 0.7 (2 stages) 0.65 (3 stages)	0.8 (1 stage) 0.75 (2 stages) 0.7 (3 stages)
Radial load (dynamic) daN	20 (1 stage) 32 (2 stages) 45 (3 stages)	20 (1 stage) 32 (2 stages) 45 (3 stages)
Axial load (dynamic) daN	6 (1 stage) 10 (2 stages) 15 (3 stages)	6 (1 stage) 10 (2 stages) 15 (3 stages)
Output ball bearing	Yes	Yes
Sintered bronze output bearing	No	No

### Products adaptations, available on request



- Special supply voltages
- Special lead lengths
- Optional encoder
- Special connectors
- Special output shafts
- Special gearbox ratios
- Special gear material
- Special output bearings
- Special mounting plate

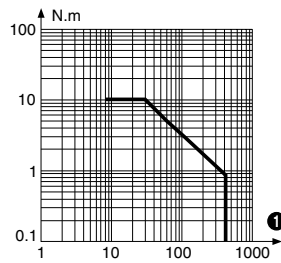
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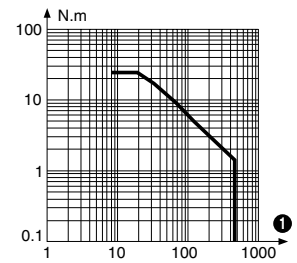
## Curves

80 839 4



B RPM

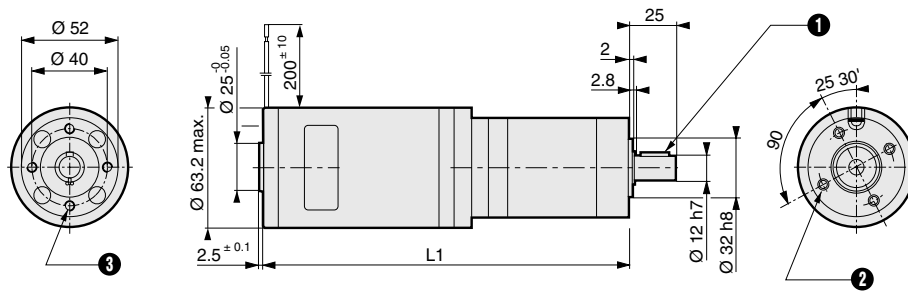
80 899 5



B RPM

## Dimensions

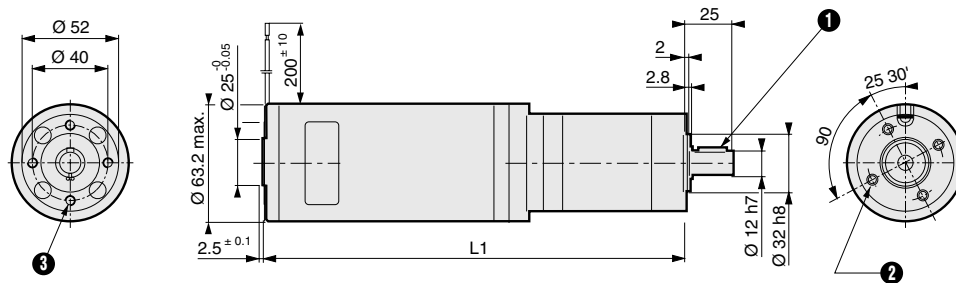
80 839 4



- B Key 4 x 4 x 16
- C 4 M5 x 0.86 h depth 7 on  $\varnothing 40$
- D 4 M5 x 10

- L1 1 stage : 159 mm
- L1 2 stages : 173 mm
- L1 3 stages : 187 mm

80 899 5



- B Key 4 x 4 x 16
- C 4 M5 x 0.86 h depth 7 on  $\varnothing 40$
- D 4 M5 x 10

- L1 1 stage : 184 mm
- L1 2 stages : 198 mm
- L1 3 stages : 212 mm

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# Magnetic Encoder

- For motors: 82 800 0 - 82 810 0 - 82 800 5 - 82 810 5 - 82 860
- For geared motors: 80 813 0 - 80 814 0 - 80 803 0 - 80 804 0 - 82 842 5 - 82 842 6 - 82 862 5 - 82 862 6

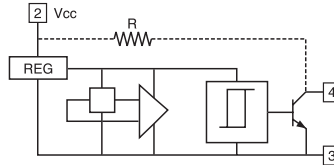
## Magnetic encoders, resolution of 1 pulse per revolution

### Technology

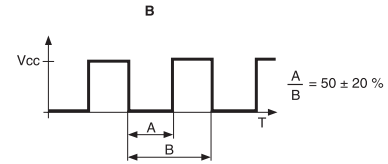
A magnetic wave is generated by a magnet integrated in the motor shaft. A Hall effect sensor reads this information and converts it into a square wave within the motor.

### General layout

Vdc from .4 to 24 volts - current: 50 mA



### Output Signal



## 82 800 0 - 82 810 0 - 82 800 5 - 82 810 5 - 80 313 0 - 80 814 0 - 80 803 0 - 80 604 0

### Applications

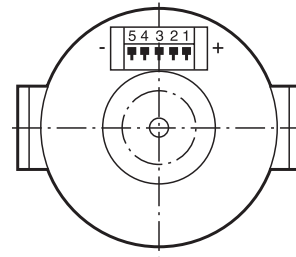
- Measuring systems for feed dispensing equipment
- Position settings for automatic access points
- Servomotors
- Magnetic encoder gives resolution of 5 pulses per revolution

### Connections - Motor and encoder power supplies must be kept separate

- 1 - Motor Supply +
- 2 - Encoder supply +
- 3 - Encoder ground
- 4 - Encoder output ~
- 5 - Motor ground

- 1- An integrated connector HE14 / 2.54 mm is used for motor and encoder power supplies and encoder output signals.
- 2 - Resistance R should be added (Value depends on Vdc)
- 3- Recommended customer connectors : STOCKO MKF 17-230/260/330/360 - LUMBERG 2.5 MBX

Made to order products,  
available on request



## 82 860 - 82 842 5 - 82 842 6 - 82 862 5 - 82 862 6

### Applications

- Positioning dental radiology equipment
- Adjusting Venetian blinds
- Measuring systems for coffee machines
- Magnetic encoder with a resolution of 5 or 12 pulses per revolution

### Connections - Motor and encoder power supplies must be kept separate

- 1 - + Motor supply output tag
- 2 - - Motor supply output tag
- 3 - Brown wire for + Vdc encoder supply
- 4 - Yellow wire for encoder signal
- 5 - Blue wire for encoder ground

- 1 - Encoder power supply and signal : lead length 135 mm
- 2 - Resistance R should be added (Value depends on Vdc)
- 3 - Standard motors 82 860 5 with magnetic encoders are equipped with interference suppression

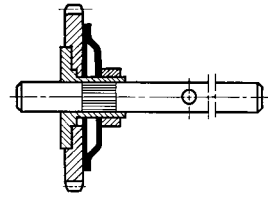
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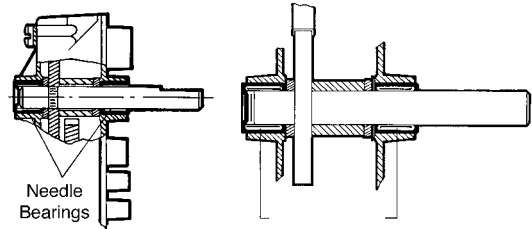
## Friction clutch for 81 021

This device is situated inside the gearbox and is particularly recommended when gearbox protection is required if accidental overloading occurs.  
In this system, the final gear is connected to the gearbox output shaft by means of a friction assembly.  
In some cases, this device can be used for time adjustment or zero reset on timers.  
The standard torque setting is : 1.8 to 2.5 cm/kg for gearbox 81 021

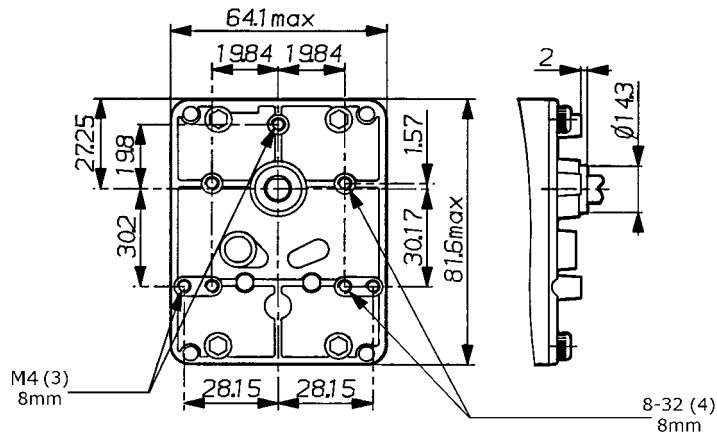


## Needle Bearings for 81 032

Where operating conditions are severe, e.g. where there are high radial or alternating loads, it is advisable for needle bearings to be substituted for the normal bearings.  
Please consult us.  
Note: applies to 81 032 gearboxes only.



## Cover 2 for 81 032



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