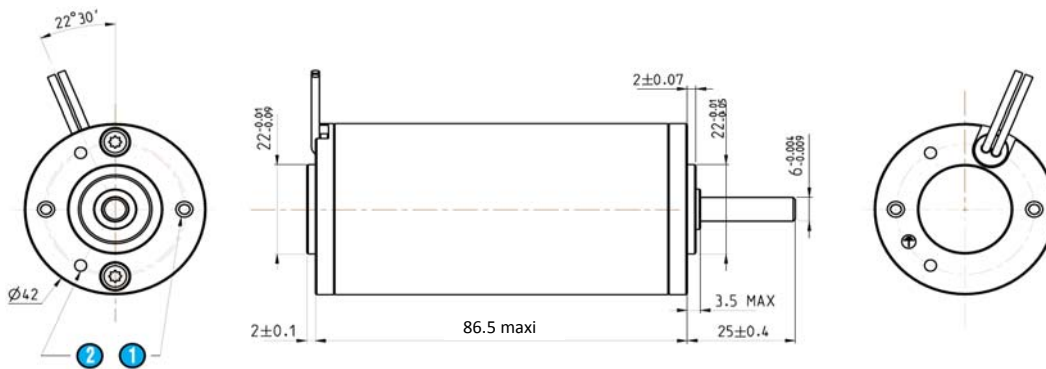


Dc mind Brush motor Data sheet

89 800 008

Series

89 800



① 2 x M3 at 180°, depth 5 mm and 32mm diameter

② 2 x holes of 2,75 mm diameter, at 120°, depth 5 mm and 32mm diameter

General characteristics

Motor characteristics at (1)		24 Vdc	
At no load - A			
Speed	rpm	4 000	+10%
Current	A	0,115	
EMC (55022)	class	B	
Life (2)	h	10 000	
At max efficiency - B			
Speed	rpm	3 500	+10%
Torque (4)	mNm	41	
Power output	W	15	
Current	A	0,84	
Efficiency	%	75	
EMC (55022)	class	B	
Life (2)	h	5 000	
At nominal load - C			
Speed	rpm	3 100	+10%
Torque (4)	mNm	75	
Power output	W	24	
Current	A	1,43	
Efficiency	%	71	
EMC (55022)	class	B	
Life (2)	h	4 000	
Others			
Starting torque	mNm	344	
Starting current	A	6,1	
Max. output power	W	36	
Motor parameters (1)			
Allowed speed	rpm	10 000	max
Rated torque	mNm	75	
Electrical time constant	ms	0,8	
Mechanical time constant	ms	13	
Factor torque / speed	mNm/rpm	0,08333	
Dry friction	mNm	3	
Viscous friction	mNm/krpm	1,2	
Rotor inertia	gcm ²	110	
Thermal Resistance	°/W	10	
Stator poles		2	
Collector blades		8	
Cogging torque	mNm	6	
Weight (g)	g	450	
Noise level	dBA	35	

Winding parameters (1)			
Torque constant	mNm/A	57	+10%
Constant electromotive force	Volts/(rad/s)	0,057	+10%
	V / Krpm	5,98	+10%
Resistance	Ohms	3,9	+10%
Inductance	mH	3	
Start voltage	Volts	0,55	
Current demagnetization	(magnets at 150 ° C)	A	22

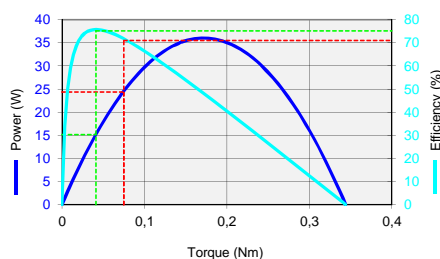
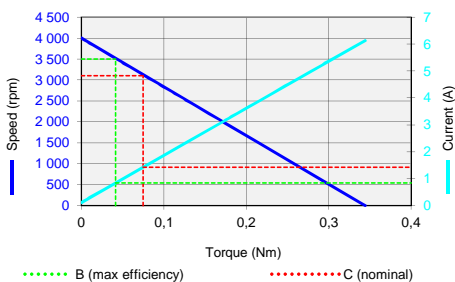
Generic parameters			
Motor for direct current supply			✓
Output shaft with ball bearings			✓
Max. Radial force (20mm from front face)	N		100
Max. axial force(5)	N		70
Temperature range	CEI60068-2-1/2	°C	-30 / 70
Storage temperature		°C	-40 / 100
Dielectric (1min 2mA 50Hz)	CEI60335	Vdc	500
Motor insulation	CEI60085	class	E (120°C)
Enameled wire insulation		class	F (155°C)
Salt spray	CEI60068-2-58	severity	2
Degree of protection	CEI60529	IP	65
EMC			
Electrostatic Discharge	CEI61000-4-2	level	3
Electrical fast transient / burst test	CEI61000-4-4	level	3
Surge test	CEI61000-4-5	level	2
Radiated emission		class	B

Approvals			
Designed in accordance with UL			1004
ROHS	2002/95/CE		✓
EC			✓
Designed for medical machines using the standard			EN60601-1

Values without tolerances, are average production values.

- (1) Cold motor, 20 ° C ambient temperature
- (2) Continuous cycle, one direction
- (3) Continuously rated torque, zero radial and axial loads
- (4) Max torque for continuous operation at 20 ° C, decrease this value for higher ambient temperature
- (5) Pinion or pulley fitting are done at the Crouzet factory, before final assembly.

Curves



Performance / Motor curves (1)					
Voltage supply		Vdc			
		24			
Output data					
		A	B	C	D
Speed	rpm	4 000	3 500	3 100	0
Torque (4)	mNm	0	41	75	344
Current	A	0,1	0,8	1,4	6,1
Power output	W	-	15	24	-
Efficiency	%	-	75	71	-

Specifications subject to change without notice. Updated february 29, 2012.