Turntable Coreless DC motor

The motor has an ironless rotor with (9) nine oblique windings and a permanent magnet stator, implying extremely high efficiency, low mechanical time constant, high starting torque and smooth running at all speeds. The brush-commutator construction combined with (9) build-in bi-polar electrolytic capacitors connected between the commutator segments for spark suppression, make the motor suitable for heavy duty applications. Ball bearing allow for radial and axial force on the 6 mm shaft. A second shaft at the rear side permits mounting a of a DC or frequency tacho generator, or an optical encoder.
The ironless rotor motor is supplied with rear mounting plate ready to affix a optical encoder.

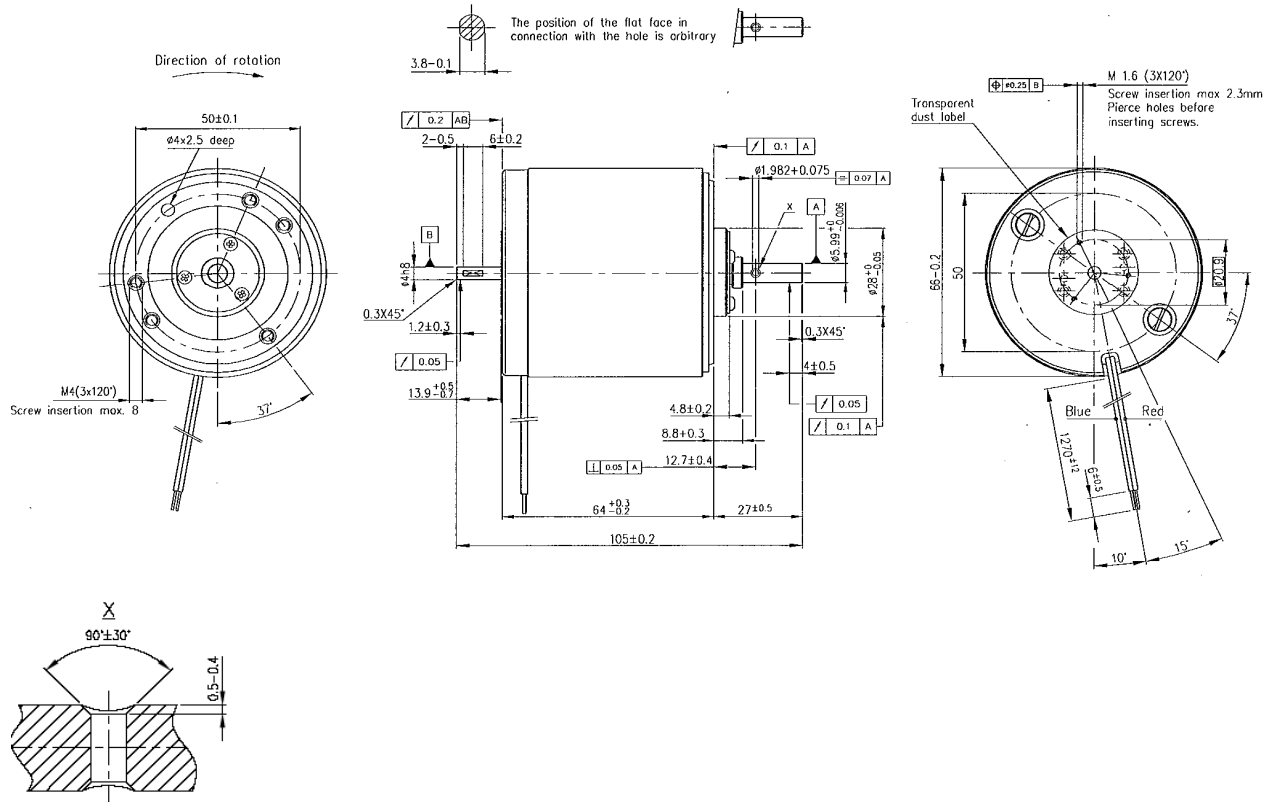
Features

* Ironless rotor with oblique winding
* Low mechanical time constant
* High starting torque
* Low moment of inertia
* Combination of the above commutation/brush construction with sintered Ball bearing ensures long life smooth running and low noise

Applications:

* Medical pumps
* Medium & high speed sorters
* Instrumentation recorders
* Robotics
* Radar equipment
* Printer carriage drive
* Ink Pumps

Motor Dimensions

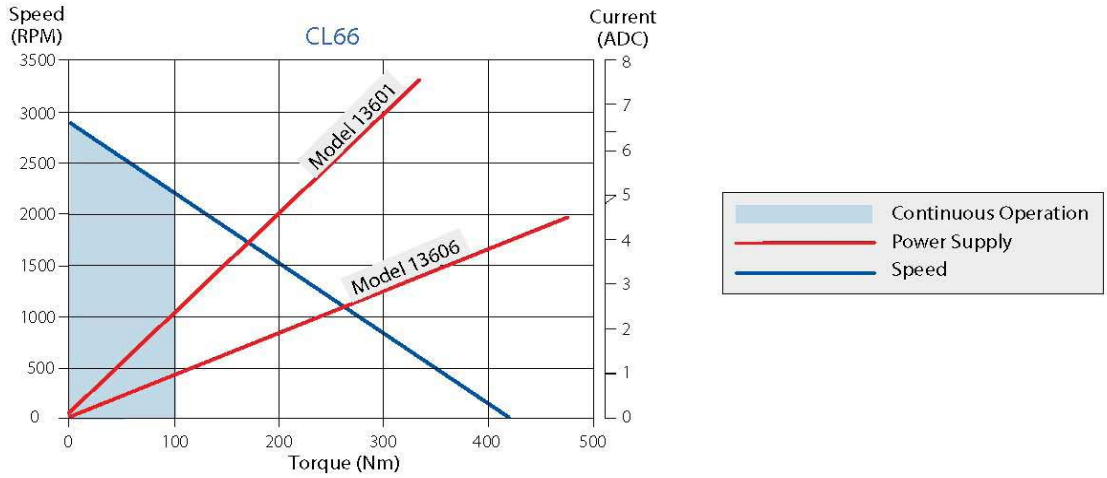


MJK, INC.
396 Chase PKWY Waterbury CT 06708 Telephone # (203) -596-1258 Fax # (203) 757-1724
www.mjkinc.net **e-mail** **inquiry@mjkinc.net**

MOTOR TECHNICAL DATA

Ordering Part Number 9904 120		**13811**
Nominal voltage	V	24
Nominal torque	mNm	100
Nominal speed	rev/Min	1800
Input power	W	25
Speed no load	rev/Min	2650
Direction of rotation		reversible
E.M.F. at 3000 rev/min	V	26.8
Torque constant	mNm/A	85.3
Rotor resistance measured without brushes	Ohm	6
Current at nominal voltage *at nominal torque	mA	1220
*at no load	(max) mA	65
Starting Current @ rated Voltage	Amps	5.3
Rotor inductance	mH	3.5
Rotor moment of inertia	Kgm^2	2.14E-05
Max voltage	V	32
Ambient temperature range * Operating	°C	-10 +60
*Storage	°C	-40+70
Mechanical time constant of motor	ms	17
Thermal resistance between winding & housing	(Typ)°K/W	2.6
Thermal resistance between winding & ambient	(Typ)°K/W	6.6
Test volts(DC) between housing and terminals	V	500
Bearing		Ball
Special feature Rear bearing		Ball
Max radial force	N	100
Max axial force	N	15
Mass	g	900

CL66 – Performance



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