

Turntable Coreless DC motor

The ironless rotor motors have been designed for applications which require high efficiency and smooth running at all speeds.

No magnetic detent (holding) torque allows motor to be adjusted forward or reverse effortlessly. Precious-metal commutation with 9 segment and 3 brushes ensure optimum commutation making the motor effortlessly suitable for accurate electronic speed control or optimum function as servo motor or DC Tachogenerator



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 slide bearing ensures long life smooth running and low noise

Applications:

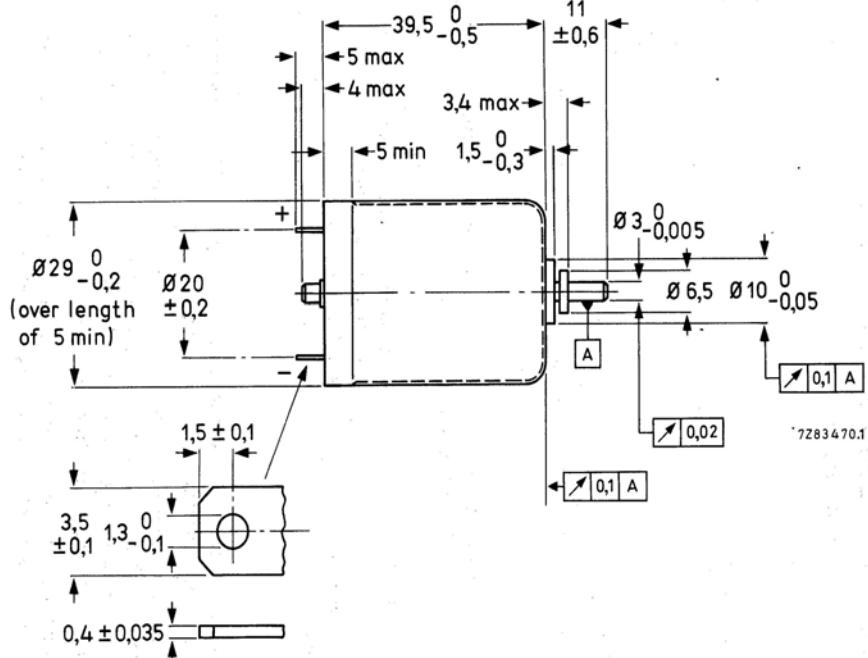
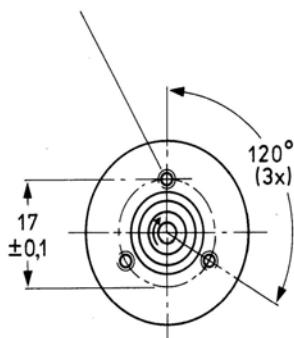
- * High quality turntable which utilize belt drive platter.
- * video recorders (capstan and reel drive)
- * digital cassette and cartridge recorders
- * recording measuring instruments
- * Echo sounders
- * Telephone answering equipment

Motor Dimensions

TECHNICAL DATA

Outlines

M2 (3x); permissible depth of screw insertion: 3 mm



MOTOR TECHNICAL DATA

Ordering Part Number	9904 120		18105	18215
Nominal voltage	V	12	24	
Nominal torque	mNm		10	
Nominal speed	rev/Min		2440	
Input power	W		3	
Speed no load	rev/Min		3840	
Direction of rotation			reversible	
E.M.F. at 3000 rev/min	V	10.8	21.6	
Torque constant	mNm/A	29	58	
Rotor resistance measured without brushes	Ohm	12.5	49	
Current at nominal voltage				
*at nominal torque	mA	370	185	
*at no load	(max) mA	31	16	
Starting Current @ rated Voltage	Amps	0.96	0.49	
Rotor inductance	mH	0.89	3.55	
Rotor moment of inertia	Kgm ²		9.00E-07	
Max voltage	V	15	30	
Ambient temperature range				
* Operating	°C		-10 +60	
*Storage	°C		-40+70	
Mechanical time constant of motor	ms		13	
Thermal resistance between winding & housing	(Typ)°K/W		5.2	
Thermal resistance between winding & ambient	(Typ)°K/W		16.3	
Test volts(DC) between housing and terminals	V		500	
Bearing			slide	
Special feature Rear bearing			slide	
Max radial force	N		5	
Max axial force	N		0.5	
Mass	g		125	

CL29 – Performance

