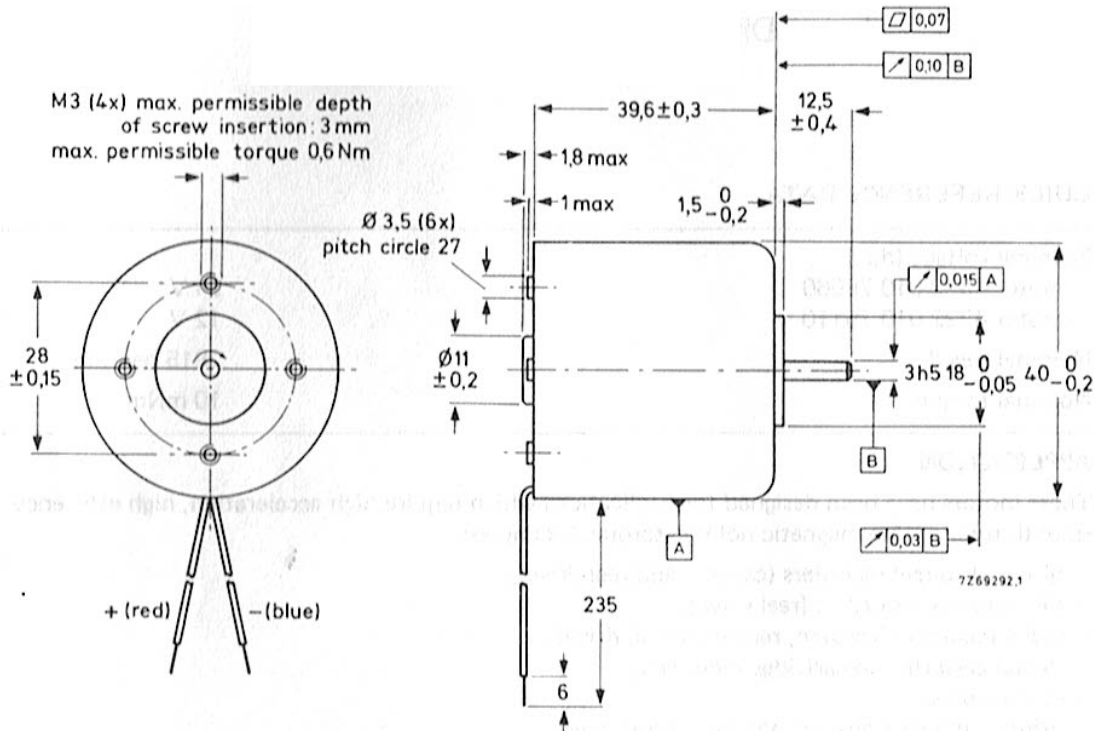


MJK, Inc.

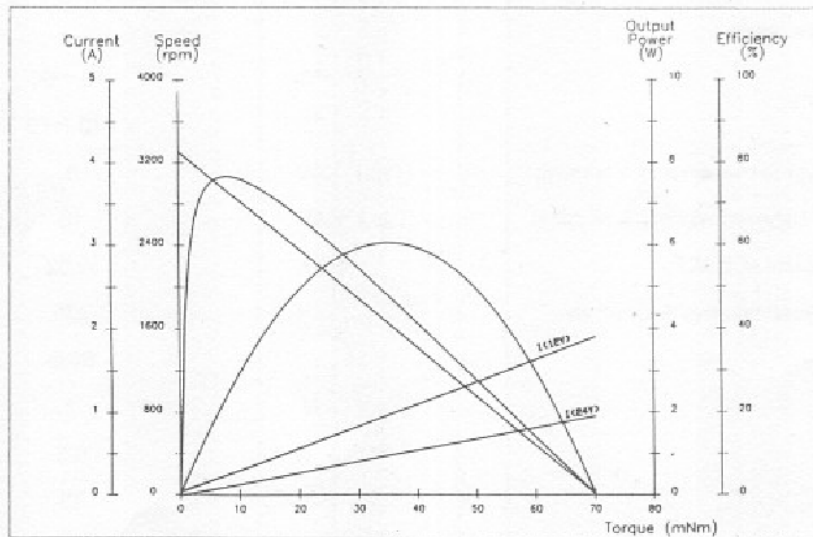
CL40

Coreless DC Motor



Typical Performance Curves

DC MOTOR TYPE 9904 120 16111/16206 - Typical curves for 12/24 V.



TECHNICAL DATA

Ordering Part Number	9904 120	16111	16141	16206*
Nominal voltage	V	12	12	24
Nominal torque	mNm			
		10		
Nominal speed	Rev./Min.	2850		
Input power	W	3,6		
Speed, no load	Rev./Min.	3300		
Direction of rotation		reversible		
E.M.F. at 3000 rev/min.	V	11	11	22
Torque constant	Nm/A	35×10^{-2}	35×10^{-3}	$70,0 \times 10^{-3}$
Rotor resistance measured without brushes	Ohm	6,2	6,2	24,5
Current at nominal voltage				
* at nominal torque	mA	300	300	150
* at no load	(max) mA	30	24	15
Starting torque at nominal voltage	(typ.) mNm	65		
Rotor inductance	mH	0,8	0,8	3,3
Rotor moment of inertia	Kgm ² 10 ⁻⁴	3,92		
Mechanical time constant of motor	ms	19,6		
Ambient temperature range				
* Operating	°C	-10 + 60		
* Storage	°C	-40 + 70		
Thermal resistance between winding & housing	(Typ.) °K/W	6		
Thermal resistance between winding & ambient	(Typ.) °K/W	16		
Temperature coefficient of E.M.F.	% / K	-0,02		
Test volt. (DC) between housing & terminals	V	500		
Bearings		Slide		
Max. radial force	N	7		
Max. axial force	N	0,5		
Max. Voltage	V	15	15	30
Mass	g	205		

Special feature : - Rear thrust bearing
 : - 16141 for lower speed applications