

CL 40 Coreless DC motor

7 Watt

Features

- No Iron loss; smooth speed
 - Smooth operation
 - Low inertia rotor, for rapid response
 - Special shafts
 - Encoder
 - Other supply voltages
 - Spur or planetary gearhead
 - Ball Bearings
- Options:**
- Connecting wires
 - Integrated EMI suppression
 - Tacho



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 Motion Solutions That Change the Game

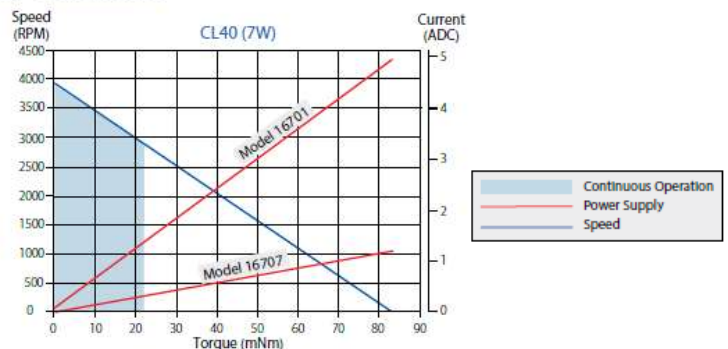
Motor data

Motor order number	9904120 16701	9904120 16702	9904120 16703	9904120 16704	9904120 16705	9904120 16706	9904120 16707	
Nominal voltage	6	9	12	15	18	24	30	V
Nominal torque	22	22	22	22	22	22	22	mNm
Nominal speed	2650	3010	2700	2920	3050	2980	2930	rpm
Nominal current	1520	1090	760	635	540	400	320	mA
No load speed	3780	4050	3780	3940	4050	3980	3940	rpm
No load current max.	60	44	30	25	22	16	13	mA
EMF at 3000 rpm	4.71	6.59	9.42	11.3	13.2	17.9	22.6	V
Torque constant	15.0	21.0	30.0	36.0	42.0	57.0	72.0	mNm/A
Terminal resistance	1.2	2.2	4.6	6.3	8.4	15.6	25.1	Ω
Starting torque at nominal voltage	74	86	77	85	89	87	85	mNm
Starting current at nominal voltage	5.0	4.1	2.6	2.4	2.1	1.5	1.2	A
Rotor inductance	0.15	0.29	0.59	0.85	1.16	2.14	3.41	mH
Rotor moment of inertia	4x10 ⁻⁶	4x10 ⁻⁶	4x10 ⁻⁶	4x10 ⁻⁶	4x10 ⁻⁶	4x10 ⁻⁶	4x10 ⁻⁶	kgm ²
Mechanical time constant	20	20	20	19	19	19	19	Ms
Thermal resistance winding-housing	5.5	5.5	5.5	5.5	5.5	5.5	5.5	K/W
Thermal resistance housing-ambient	13	13	13	13	13	13	13	K/W

CL40 (7W) - Performance

General data

Type of bearings	sleeve	
Commutation system	precious	
Maximum radial load	5	N
Maximum axial load (static)	0.5	N
Ambient temp. range operating	-10/+60	°C
Ambient temp. range storage	-40/+70	°C
Mass of motor	200	g



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