



Brushless Servo Motors

ULTRA COMPACT SERVO MOTORS

- Up to 30% increased power density
- Up to 20% reduced dimensions
- Sophisticated design, intended for extreme torque stability and precision



TECHNICAL DATA

Motor Type

B71.12U 12.5 Nm - 4500 rpm - 10 poles - 400V

PERFORMANCE DATA

Type	B71.12U
Stall torque (Deltat=105°C) Mo Nm	12.5
Rated speed n rpm	4500
Rated power P _n kW	3.7
Rated torque (Deltat=105°C) Mn Nm	7.80
Peak torque M _{pk} Nm	31.5
Max speed n _{max} rpm	5000
Moment of inertia J 10?? Kgm ²	6.80
Thermal time constant T _{th} min	38
Voltage constant k _e V _s	0.63
Torque constant k _t Nm/A	1.09
Resistance phase to phase (20°C) R _w ?	0.60
Inductance phase to phase L _w mH	7.7
B.E.M.F. @ rated speed E _n Vrms	296

Stall current I_o Arms	11.5
Rated current I_n Arms	7.1
Peak current I_{pk} Arms	40.0
Connection type/size	7/1
Weight kg	8.1

Mechanical Data

Design	Aluminium
Degree of protection	IP 65
Bearings DE	6205
Bearings NDE	6203
Lubrication grease	low & high temperature grease
Regreasing device	permanent lubrication
Cooling	radiation and natural convection
Vibration Level	A (normal)

Electrical Data

Voltage	400V
Poles	10
Thermal protection threshold θ_{max} °C	140