



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 - 2200 rpm - 10 poles - 400V

PERFORMANCE DATA

Type	B71.12U
Stall torque (Deltat=105°C) Mo Nm	12.5
Rated speed n rpm	2200
Rated power P_n kW	2.4
Rated torque (Deltat=105°C) Mn Nm	10.30
Peak torque M_{pk} Nm	31.5
Max speed n_{max} rpm	5000
Moment of inertia J 10?? Kgm²	6.8
Thermal time constant T_{th} min	38
Voltage constant k_e V_s	1.28
Torque constant k_t Nm/A	2.22
Resistance phase to phase (20°C) R_w ?	2.54
Inductance phase to phase L_w mH	29.6
B.E.M.F. @ rated speed E_n Vrms	296

Stall current I_o Arms	5.6
Rated current I_n Arms	4.6
Peak current I_{pk} Arms	19.7
Connection type/size	7/1
Weight kg	9.5

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