



# FI-140 series DD Motor

MAIN PARAMETERS	FI-14085	FI-140120	FI-140188
Voltage(VAC)	220	220	220
Rated torque (Nm)	10.5	14	36
Instant Max Torque (Nm)	29.4	35	100
Torque constant (Nm/Arms)	4.2	7	4
Rated Current (Arms)	2.5	2	9
Instant Max Current (Arms)	7	5	25
Resistance (Ω)	5.9	3.3	1.28
Inductance (mH)	6	6	12.5
Pole-pairs number (2P)	14	13	13
Back EMF coefficient (Vrims/rad/s)	3.4	2	2.4
Rated Output (W)	220.1	440.2	1131.8
Rotor inertia 10 <sup>-4</sup> kg.m <sup>2</sup>	70	85	102
Rated Speed (rpm)	200	300	300
Max Speed (rpm)	350	600	600
Positioning accuracy(arc_sec)	± 20	± 20	± 20
Repeat positioning accuracy (arc_sec)	± 1.5	± 1.5	± 1.5
Encoder resolution (sin/cos)	8192	8192	8192
Axial load (N)	2500	3200	4000
Radial load (N.m)	30	80	110
Axial runout (mm)	≤0.005	≤0.005	≤0.005
Radial runout (mm)	≤0.005	≤0.005	≤0.005
Weight (kg)	5.6	8	8
Motor height L(mm)	85	120	188

## Specification & drawing

