

# SERVO

## SMH40 Series



Motor Type	SMH40—53028ENL	SMH40—103028ENL
Rated power P <sub>n</sub> (W)	50	100
Rated torque T <sub>n</sub> (Nm)	0.16	0.32
Rated speed n <sub>n</sub> (rpm)	3000	3000
Rated current I <sub>n</sub> (A)	0.7	1.2
DC Link Voltage U <sub>DC</sub> (V)	300	300
Maximum torque T <sub>m</sub> (Nm)	0.48	0.96
Maximum current I <sub>m</sub> (A)	2.1	3.6
Standstill torque T <sub>s</sub> (Nm)	0.176	0.352
Standstill current I <sub>s</sub> (A)	0.77	1.32
Voltage constant K <sub>e</sub> (V/krpm)	16	16
Torque constant K <sub>t</sub> (Nm/A)	0.265	0.265
Resistance line-line R <sub>L</sub> (Ω)	16.6	5.53
Inductance line-line L <sub>L</sub> (m H)	14	6
Electrical time constant τ <sub>e</sub> (ms)	0.84	1.08
Mechanical time constant τ <sub>m</sub> (ms)	1.28	0.86
Rotor moment of inertia J <sub>m</sub> (kgcm <sup>2</sup> )	0.031	0.059
Pole number	8	8
Max. voltage rising du/dt (kV/μs)	8	8
Insulation class	F	F
Max. radial force F <sub>r</sub> (N)	120	120
Max. axial force F <sub>a</sub> (N)	60	60
Weight (Kg)	0.5	0.73
Feedback device	2500p/rev incremental encoder	
Temperature sensor	n.a.	
Cooling method	Totally enclosed non-ventilated	
Protection level	IP64	
Environmental conditions	Temperature	-20°C~40°C
	Humidity	Below 90%RH (No dewing)
	Environment	Far away active gas, combustible gas, oil drop, ash.
	Installation altitude	Up to 1000m : rated power Above 1000m : 1.5% power Decreasing per 100m,max.4000m
Rating conditions	Mounting	Aluminum flange 175*200*10mm
	Temperature	60K housing temperature ring at 40°C ambient