DC Servo Motors
MSS Series

MSK

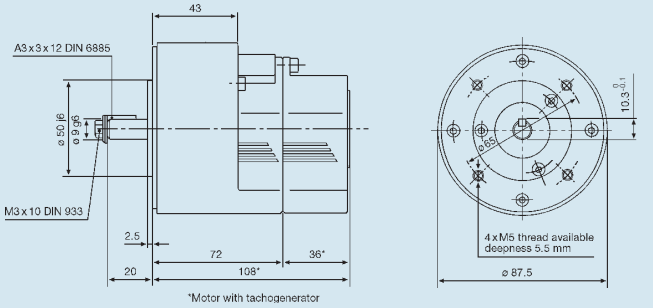
Available as "kit" motor (shaftless version) for direct mounting on the shaft of a machine.
Characteristics and curves correspond to Kit Option.

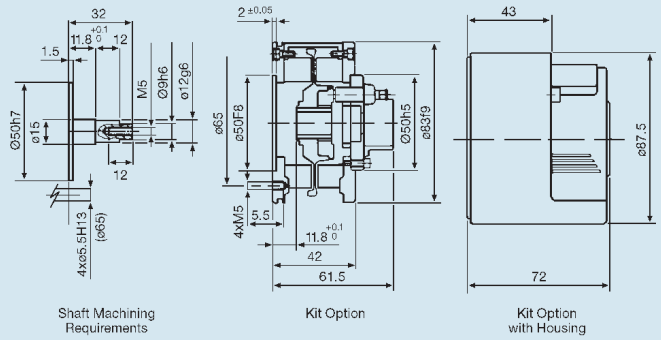
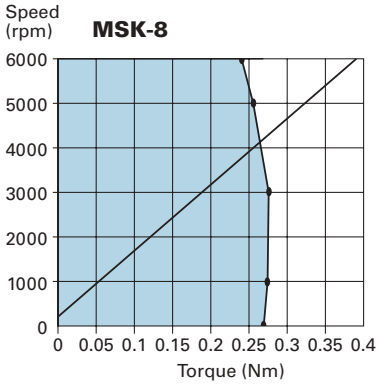
Technical Specifications

	SYMBOLS	UNITS	MSK-8
RATED SPEED	n	rpm	6,000
RATED VOLTAGE ±5%	U	V	40
RATED CURRENT	I	A	5.2
RATED OUTPUT POWER (1)	P	W	149
EFFICIENCY	η	%	71.6
RATED TORQUE	T	Nm	0.24
MAXIMUM TORQUE (2)	Tmax	Nm	1.2
MAXIMUM SPEED (3)	n max	rpm	10,000
EMF CONSTANT ±5%	K_E	V/1000 rpm	5.5
TORQUE CONSTANT ±5%	K_T	Nm/A	0.053
FRICTION TORQUE	T_F	Nm	0.01
DAMPING CONSTANT	K_D	Nm/1000 rpm	0.004
TERMINAL RESISTANCE (25°C)	R	Ω	1.04
ARMATURE INDUCTANCE	L	µH	>60
INERTIA	J	kg m^2 10^{-3}	0.031
MECHANICAL TIME CONSTANT	τ_M	ms	11.2
TRANSITORY POWER	P_S	kW/s	46
THERMAL TIME CONSTANT ROTOR TO HOUSING	τ_{AC}	s	110
THERMAL TIME CONSTANT (1) HOUSING TO AMBIENT	τ_{CA}	s	1,000
THERMAL RESISTANCE ROTOR TO HOUSING	R_{AC}	°C/W	0.66
THERMAL RESISTANCE (1) HOUSING TO AMBIENT	R_{CA}	°C/W	1
RADIAL LOAD (at mid-length of shaft)	F_R	N	220
AXIAL LOAD	F_A	N	150
MASS (Only motor. No options)	M	kg	1.178

(1) With a 300x300x10 aluminium heat sink plate
(2) For an S3 cycle
(3) Maximum speed in continuous service. During a very short time 12,000 rpm
REMARK: Characteristics could be altered by any additional assembling

Dimensions





Available Kit Option with housing + Tachogenerator