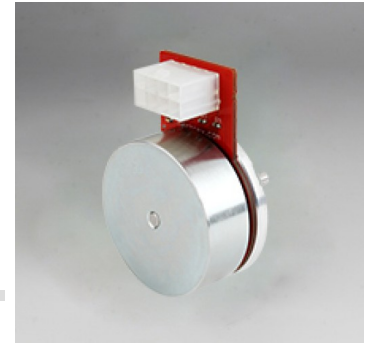




BO42



Out-runner 42mm BLDC Motor

Design

SO Series Motors are Brushless DC Outrunner motors with 42mm diameter. These Motors are available with sensor and without sensor. Robust Ball bearings ensure excellent service life with >5000Hrs. Drivers are also available as an Add-On unit on special request. These motors are available in different speed and different voltage on special request. These Motors are used in combination with many Mechtex gearheads. Depending on the application, output speed, load applied etc the type of gearhead can be selected. Various types of gears i.e poly acetal, sintered iron, brass & steel gears can be used based on the load considerations. Poly acetal or sintered gears usually are used for noise dampening & complete poly acetal gears are used when the output torque required is less. All bearings are permanently lubricated and therefore require no maintenance.

Features

SO Series Motors are Brushless DC Outrunner motors with 42mm diameter. These Motors are available with sensor and without sensor. Robust Ball bearings ensure excellent service life with >5000Hrs. Drivers are also available as an Add-On unit on special request. These motors are available in different speed and different voltage on special request. These Motors are used in combination with many Mechtex gearheads. Depending on the application, output speed, load applied etc the type of gearhead can be selected. Various types of gears i.e poly acetal, sintered iron, brass & steel gears can be used based on the load considerations. Poly acetal or sintered gears usually are used for noise dampening & complete poly acetal gears are used when the output torque required is less. All bearings are permanently lubricated and therefore require no maintenance.

Application

Industrial Machines, Vending Machines, HVAC , Computer Peripherals, Automation, Defence Equipment.

Options

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Standard Data

Parameter	Value	Unit
Motor type	Brushless dc motor	
Ambient temperature operation	-40 to + 100	°C
Storage & Transport Temperature	-25 to + 75	°C
Combination with Mechtex Gear Series	GB5P/5H,GB 38OCP,GB B/C/L,GB 3/4/7/8,GB V/U/W/X/M	
Standard motor voltages	24 volts	Vdc
Weight	110	g
Sensor Supply Range	4.2 ~ 24	Vdc
Sensor Output	Open collector	
Terminal Inductance ±15%	0.48 mH @1 Khz	mH
Terminal Resistance	1.2	Ω
Rotor Inertia	135	gcm ²
Winding Type Insulation Class	Star Connection E	
Electrical Enclosure	40	IP
Life expectancy	>=5000 hours @ Rated Torque	
Direction	Reversible	

Technical Data

Parameter	Value	Unit
Physical Data for (Dim. mm)	42X21.3	Dia x height
No load data for Voltage	24	VDC
No load data for Speed	6710	RPM
No load data for No-Load	0.230	Current A
Data at Rated Torque for Speed	4994	RPM
Data at Rated Torque for Current	2.300	AMPs
Data at Rated Torque for Torque	8.300	Ncm
Data at Rated Torque for Effie	75	%
Data at Rated Torque for Power	41.350	W(out)
Data at Rated Torque for Power	55.200	W(in)
Stall for Torque	78	Ncm
Stall for Current	23.3	A

Dimensional Drawing

