



BI28

In-runner 28mm BLDC Motor

Design

PI Series Motors are Brushless DC inrunner motors with 24mm diameter. In these BLDC Motors a very compact driver mounted on back side of motor with facility of Forward/Reversed, PWM FUNCTION & Taco output functions as default. These motors are available in different speed and different voltage on special request. This motor is available in bush bearing with life of => 2000 Hrs. 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

PI Series Motors are Brushless DC inrunner motors with 24mm diameter. In these BLDC Motors a very compact driver mounted on back side of motor with facility of Forward/Reversed, PWM FUNCTION & Taco output functions as default. These motors are available in different speed and different voltage on special request. This motor is available in bush bearing with life of => 2000 Hrs. 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, Military equipments

Options

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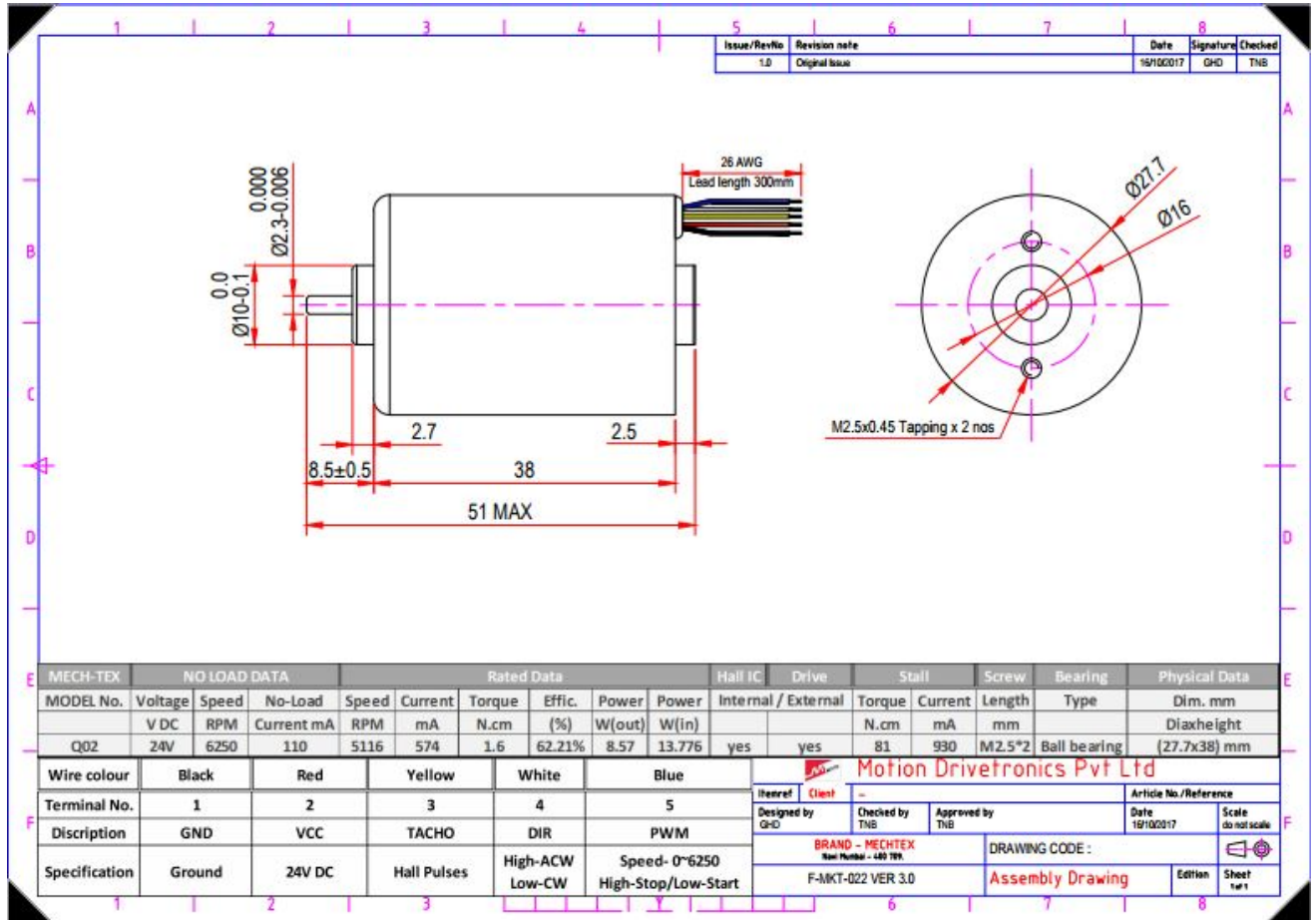
Standard Data

Parameter	Value	Unit
Motor type	Brushless dc motor	
Ambient temperature operation	-20 to+105	°C
Storage & Transport Temperature	-25 to+110	°C
Combination with Mechtex Gear Series	GB5P/5H,GB 38OCP, GB B/C/L,GB 374/7/8, GBV/U/W/X/M	
Standard motor voltages	24,12 volts	V
Weight Insulation Class	86 E	g
Electrical Enclosure	40	IP
Mounting Life expectancy	By snap clip or by screws £ 2000 hours @ Rated Torque	
Direction	Reversible	

Technical Data

Parameter	Value	Unit
Physical Data for (Dim. mm)	28X38	Dia x height
No load data for Voltage	24	VDC
No load data for Speed	6250	RPM
No load data for No-Load	0.11	Current A
Data at Rated Torque for Speed	4965	RPM
Data at Rated Torque for Current	0.466	AMPS
Data at Rated Torque for Torque	1.6	Ncm
Data at Rated Torque for Effie	71	%
Data at Rated Torque for Power	7.94	W(out)
Data at Rated Torque for Power	11.18	W(in)
Stall for Torque	8.1	Ncm
Stall for Current	1.8	A

Dimensional Drawing



MECH-TEX	NO LOAD DATA				Rated Data				Hall IC	Drive	Stall	Screw	Bearing	Physical Data	
MODEL No.	Voltage	Speed	No-Load	Speed	Current	Torque	Effic.	Power	Power	Internal / External	Torque	Current	Length	Type	Dim. mm
	V DC	RPM	Current mA	RPM	mA	N.cm	(%)	W(out)	W(in)		N.cm	mA	mm		Dia x height
Q02	24V	6250	110	5116	574	1.6	62.21%	8.57	13.776	yes	yes	81	930	M2.5*2	Ball bearing (27.7x38) mm

Wire colour	Black	Red	Yellow	White	Blue	Motion Drivetronics Pvt Ltd					
Terminal No.	1	2	3	4	5	Brand	Client	-		Article No./Reference	
Discription	GND	VCC	TACHO	DIR	PWM	Designed by	Checked by	Approved by		Date	Scale
Specification	Ground	24V DC	Hall Pulses	High-ACW Low-CW	Speed- 0~6250 High-Stop/Low-Start	BRAND - MECHTEX New Number - 440 791		DRAWING CODE :		19/10/2017	do not scale
						F-MKT-022 VER 3.0		Assembly Drawing		1	1