

BI24



In-runner 24mm BLDC Motor

Design

BI2418 Series Motors are inrunner Brushless DC motors with 24mm diameter and 18mm height. These motors have a very compact inbuilt driver with features like Direction control, PWM Function & Tacho output functions. Available in different speeds and different voltages on special request. Available in bush bearing with life of ≥ 5000 Hrs as default. These motors can be combined with wide range of Mechtex gearheads depending on the application, output speed & torque requirement.

Standard Data

Motor Type		Inrunner brushless dc motor
Configuration		9N-6P
Ambient Temperature Operation	°C	-20 to +80°C
Storage & Transport Temperature	°C	-20 to +100°C
Weight	g	26
Insulation Class		E
Electrical Enclosure	IP	40 (As per IEC 60529)
Life expectancy		≥ 5000 hours @ Rated Torque

Pin Configuration

Pin 1	Vcc	DC Supply +VE (8-24V)
Pin 2	GND	DC Supply -VE
Pin 3	FG _{OUT}	Frequency Generated Output
Pin 4	DIR	Direction Control Input
Pin 5	PWM	PWM for speed control(10khz-30khz)
Pin 6	BRK	Brake Input

Technical Data

MECHTEX MODEL No.	Physical data		No load data			Data at Rated Torque				Stall	
	Dia x height mm	Voltage V DC	Speed RPM	Current mA	Speed RPM	Current mA	Torque cNm	Power W(out)	Torque cNm	Current mA	
BI2418	24.2 X 18	12	10600	100	8000	350	0.3	2.5	1	680	
	24.2 X 18	24	9000	60	7550	170	0.3	2.3	1.45	700	

*Other speeds & voltages on special request

Dimensional Drawing

