



MERCURY MOTOR™

H10025 Hollow Brushless Servo Motor

Outrunner brushless motor, with driver and serial ports

Cables run-through the hollow hole

Application:Humanoid Robots, Autonomous Vehicles' Steer

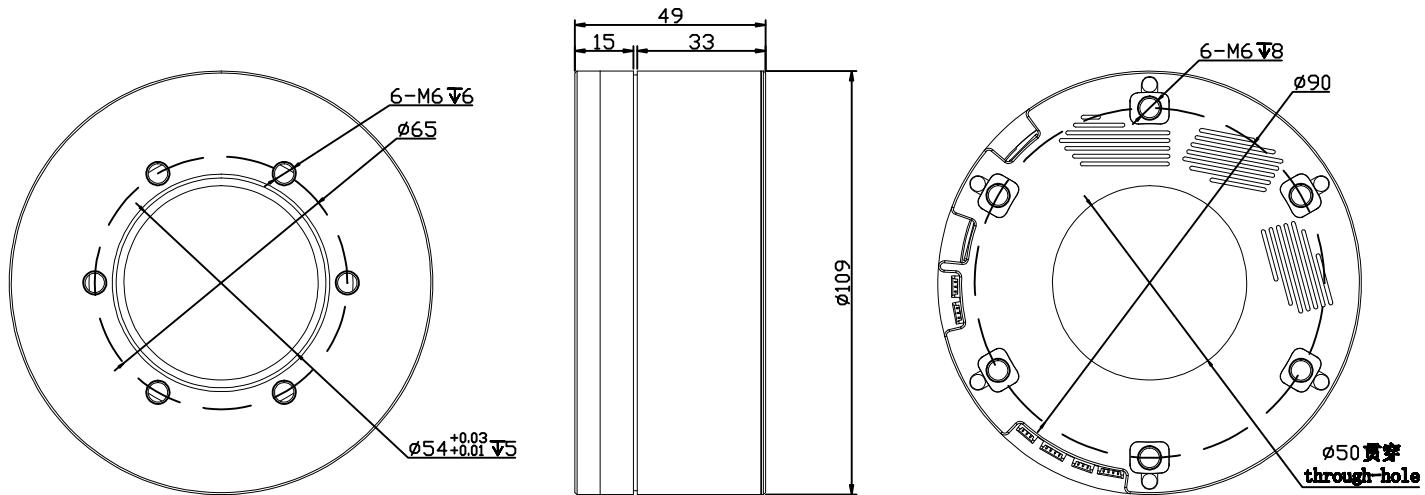


(mounting face side)



(back side)

Dimension



Specification

Basic Parameter	Unit	Type:HB10025
Motor type		Brushless Servo Motor
Voltage range	V	24~48
Peak torque	N.m	15
Rated torque	N.m	4
Peak current	A	40
Continuous current	A	<8
Instantaneous power	W	1900
Rated power	W	384
Outer diameter	mm	109
Minimum inner diameter	mm	50
Height	mm	49
Weight	g	1130
Motor Parameter		
Number of pole pairs	Pair	21
Wire resistance	ohm	0.51
Wire inductance	uH	280
Torque constant	N.M/A	0.375
Speed constant	v/krpm	43.63
Control Accuracy Parameter		
Maximum speed	rpm	1000
Minimum speed	rpm	0.01
Encoder type		Single turn absolute value
Encoder resolution	bit	20
Repeated positioning accuracy	°	±0.004
Absolute accuracy	°	±0.004
Rated of speed change	%	<±0.5
Speed resolution	Hz	0.0001
Dynamic Parameter		
Rotor Inertia	Kgcm²	946.6
Bearing type		6811ZZ
Bearing accuracy		P5
Bearing dynamic load Cr	kN	8.8
Bearing static load C0r	kN	8.1
Working temperature range	°C	5~50
Noise	dB	<50
Interface Parameter		
Number of interface		7
Control interface①		CAN&CAN FD
Control interface②		PWM
Configuration interface		RS485
The Second encoder interface		Only support our hollow encoder module
Support Mode (changes with fireware upgrade)		
Position mode		Position speed current three closed loop mode
Speed mode		Speed closed loop mode
Current(torque)mode		Torque closed loop mode