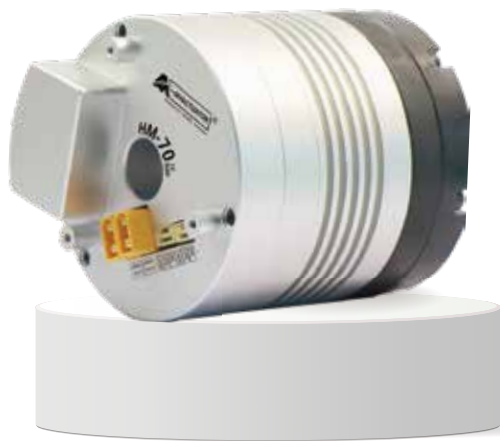


HM Series Harmonic Mini Actuator

CAN BUS



* The pictures of this series of products are subject to the actual products.

Product Features



Small size



LightWeight



Low Noise



High Efficiency



CAN BUS



Dual Encoder

EPS-HM Series Naming Conventions

EPS - HM - 70 - 26 - 100 - C

1

2

3

4

5

6

- 1

EPS:

Brand Name

E-Efficiency P-Precision S-Smart
- 2

HM:

HM Stands For The Series Name:

Harmonic Mini Actuator
- 3

70:

Module outer diameter

70mm
- 4

26:

Rated Torque

26 N.m
- 5

100:

Gear ratio

100:1
- 6

C:

Communication

CAN BUS

For example

Model	EPS-HM-50-05-80-C
Illustrate	EPS: Brand Name
	HM: Harmonic Mini Actuator
	50: Module outer diameter
	05: Rated Torque
	80: Gear ratio
	C: Communication CAN BUS

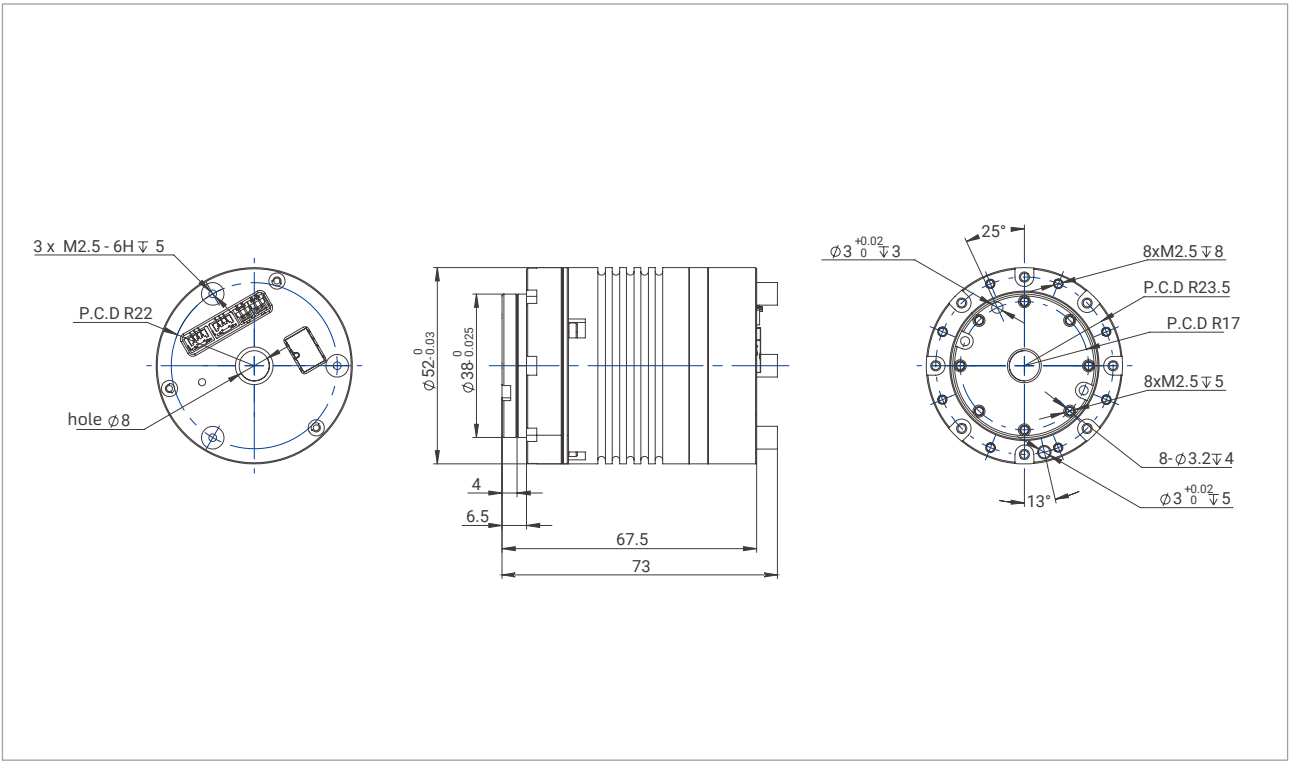
Series Name
EPS-HM
Motor Simplified Name
HM-50



Dual encoder

Actuator Full Name	Communication	With Brake/Without Brake	Gear ratio
EPS-HM-50-05-80-C	CAN BUS	N (without brake)	80

Installation Drawing



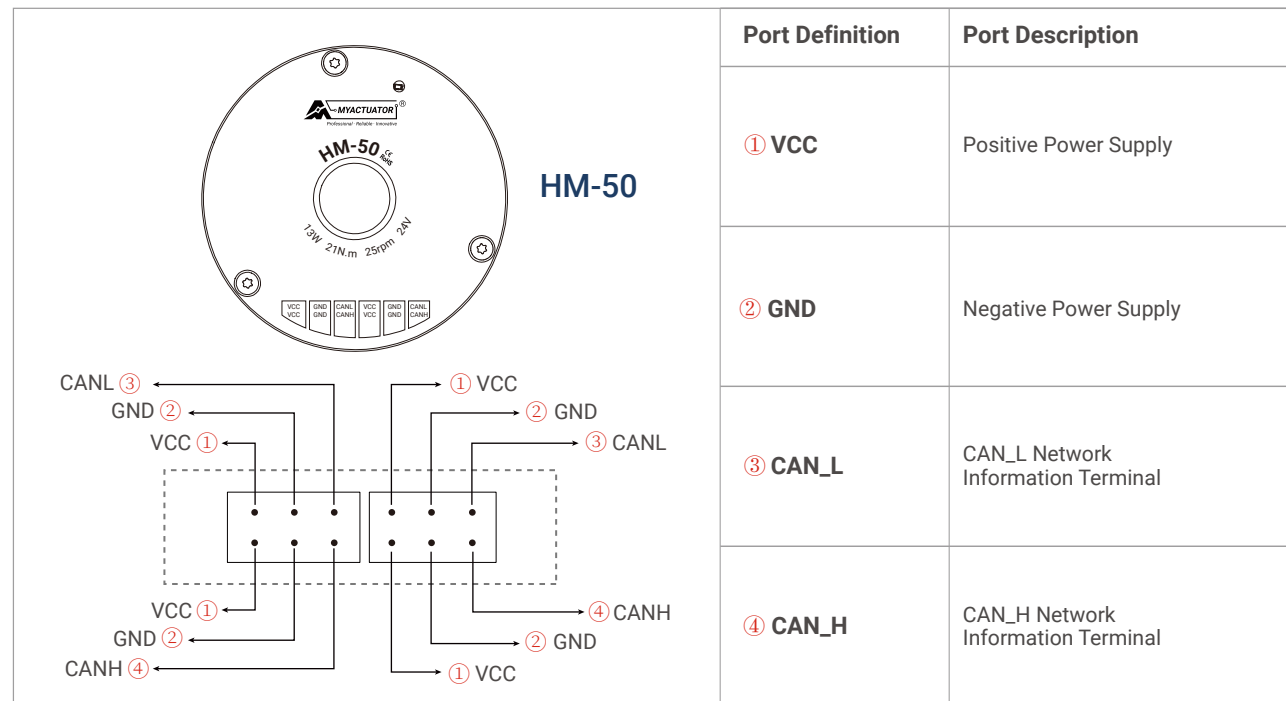
Product Parameters

Parameters	Unit	HM-50
Gear ratio	—	80
Input Voltage	V	24
No Load Speed	RPM	40
No Load Current	A	0.25
Rated Speed	RPM	25
Rated Torque	N.m	5
Rated Power	W	13
Rated Current	A(rms)	1.4
Peak Torque	N.m	21
Peak Current	A(rms)	5
Motor Back-EMF Constant	Vdc/Krpm	12
Module Torque Constant	N.m/A	3.65
Motor Phase Resistance	Ω	2.7
Motor Phase Inductance	mH	0.47
Pole Pair	—	13
3 Phase Connection	—	Y
Backlash	Arcsec	<40
Inertia	kg.m ²	0.29
Encoder Type	—	Dual Encoder ABS-14BIT (Input) / ABS-17BIT (Output)
Repeat Position Accuracy	Degree	< 0.01
Communication	—	CAN BUS
Weight	Kg	0.38
Insulation Grade	—	F

Stall Torque Data

	Torque (N.m)	Temperature Rise (°C)	Stall Time (s)	Phase Current (Arms)
HM-50	7.5	11	15	2.1
	10	37	10	2.8
	15	44	8	4.1
	21	38	5	5.9

HM-50 Interface Description



HM-50 Packaging Information



List:

- A. Power supply + communication line *2
- B. CAN BUS Communication Module *1 (For each order, there will be a free USB-CAN adapter. If need more, please contact sales to buy.)

HM-50 Accessories Marking Instructions

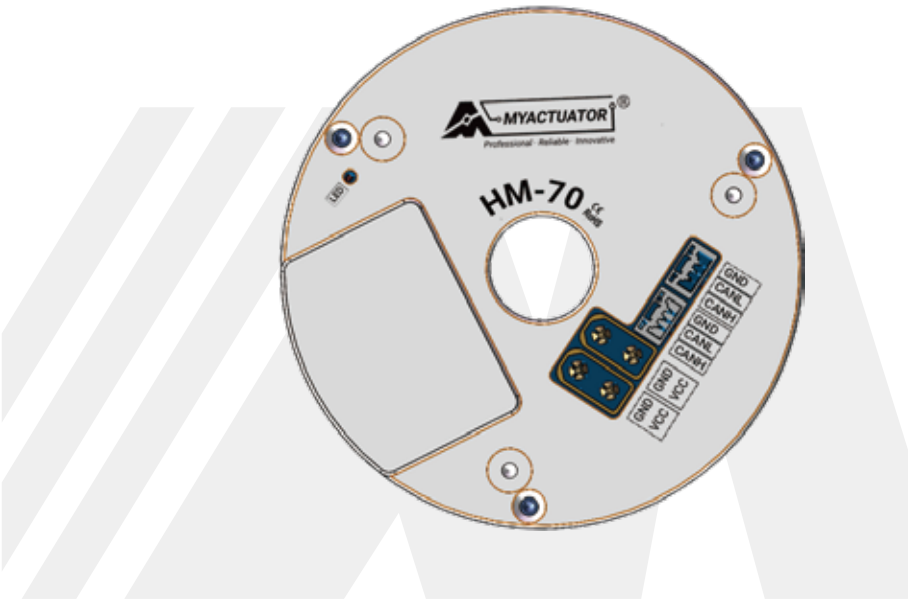
A	Power supply + communication line	
	① Red Line	VCC Positive Power Supply
	② Black Line	GND Negative Power Supply
	③ Yellow Line	CAN_L Network Information Terminal
	④ White line	VCC Positive Power Supply
	⑤ Blue Line	GND Negative Power Supply
B	CAN BUS Communication Module	
	① CAN-L	CAN_L Network Information Terminal
	② CAN-H	CAN_H Network Information Terminal
	③ CAN-G	GND Ground
	④ OFF	120Ω Terminal Resistance
	⑤ ON	120Ω Terminal Resistance
Notes: For each order, there will be a free USB-CAN adapter. If need more, please contact sales to buy.		

Series Name

EPS-HM

Motor Simplified Name

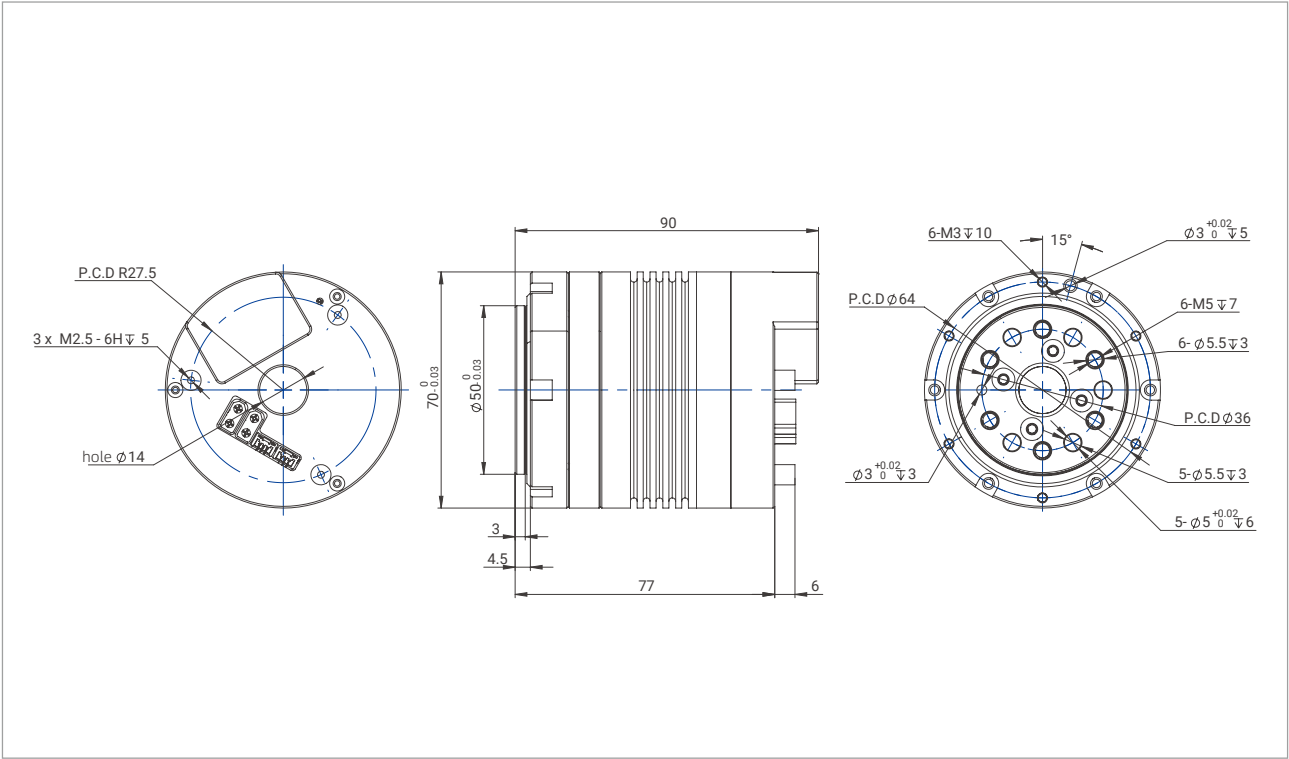
HM-70



Dual encoder

Actuator Full Name	Communication	With Brake/Without Brake	Gear ratio
EPS-HM-70-26-100-C	CAN BUS	N (without brake)	100

Installation Drawing



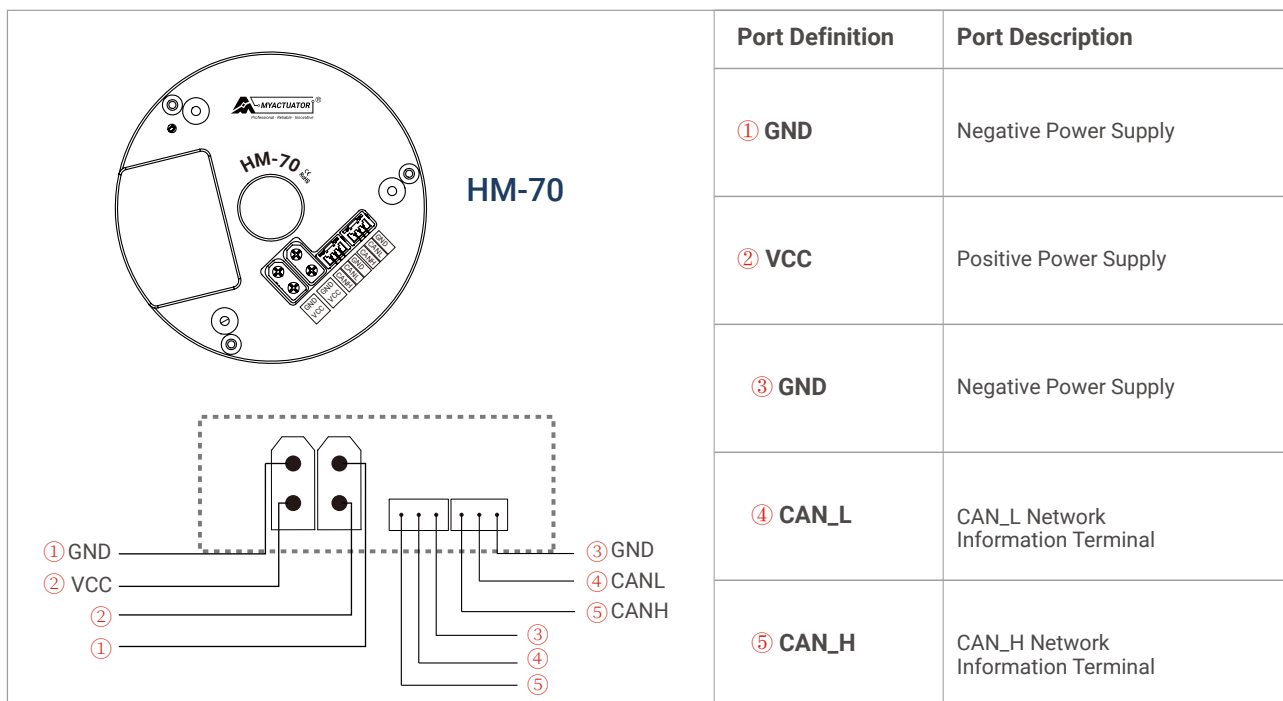
Product Parameters

Parameters	Unit	HM-70
Gear ratio	—	100
Input Voltage	V	24
No Load Speed	RPM	25
No Load Current	A	0.25
Rated Speed	RPM	20
Rated Torque	N.m	26
Rated Power	W	55
Rated Current	A(rms)	5.0
Peak Torque	N.m	65.0
Peak Current	A(rms)	12.6
Motor Back-EMF Constant	Vdc/Krpm	12.00
Module Torque Constant	N.m/A	5.17
Motor Phase Resistance	Ω	0.94
Motor Phase Inductance	mH	0.41
Pole Pair	—	10
3 Phase Connection	—	Y
Backlash	Arcsec	<40
Inertia	kg.m²	0.32
Encoder Type	—	Dual Encoder ABS-14BIT (Input) / ABS-17BIT (Output)
Repeat Position Accuracy	Degree	< 0.01
Communication	—	CAN BUS
Weight	Kg	0.8
Insulation Grade	—	F

Stall Torque Data

	Torque (N.m)	Temperature Rise (°C)	Stall Time (s)	Phase Current (Arms)
HM-70	39	26	15	7.5
	47	44	10	9.2
	52	47	8	10
	65	36	5	12.3

HM-70 Interface Description



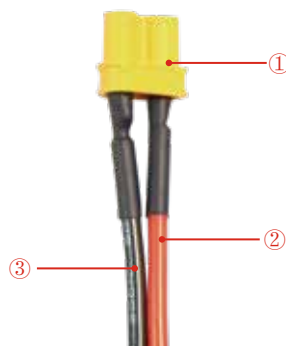
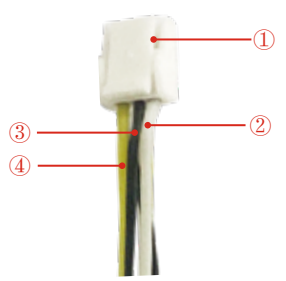


HM-70 Packaging Information



List:

- A. Power Supply Cable *2
- B. CAN BUS Communication Cable *2
- C. 120Ω Terminal Resistance *1
- D. CAN BUS Communication Module *1 (For each order, there will be a free USB-CAN adapter. If need more, please contact sales to buy.)

HM-70 Accessories Marking Instructions

A 	Power Supply Cable	
	① XT30(2+2) Connector	
	② Red Line	VCC Positive Power Supply
B 	CAN BUS Communication Cable	
	① GH1.25-3P Connector	
	② White Line	GND Negative Power Supply
	③ Black Line	CAN_L Network Information Terminal
C 	120Ω Terminal Resistance	
D 	CAN BUS Communication Module	
	① CAN-L	CAN_L Network Information Terminal
	② CAN-H	CAN_H Network Information Terminal
	③ CAN-G	GND Ground
	④ OFF	120Ω Terminal Resistance
	⑤ ON	120Ω Terminal Resistance
Notes : For each order, there will be a free USB-CAN adapter. If need more, please contact sales to buy.		