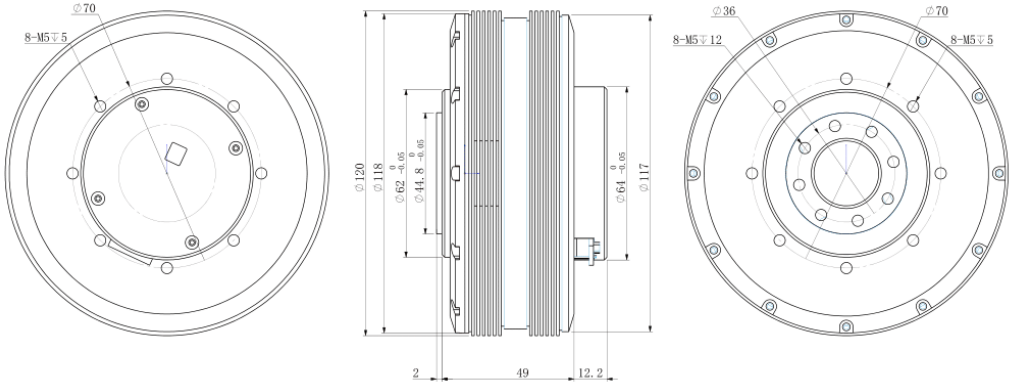
MF12025 V2

DIMENSIONS [mm]

Weight : 1150g approx.



MOTOR DATA			Outer Rotor Brushless DC Motor
1	Nominal Voltage	VDC	24
2	Nominal Torque	Nm	5.2
3	Nominal Speed	rpm	20
4	Nominal Current	A	2.6
5	Max Speed	rpm	120
6	Max Torque	Nm	6.2
7	Max Current	A	3.3
8	Max Output Power	W	18
9	Speed Constant	rpm/V	5.1
10	Torque Constant	Nm/A	2.1
11	Winding Type		Y
12	Number of Winding Turns		20
13	Resistance (phase to phase)	Ω	2.8
14	Inductance (phase to phase)	mH	5.0
15	Number of Poles		42
16	Rotor Inertia	gcm^2	5500
17	Working Temperature	℃	-20~+80
18	Bearing Nominal Load	N	1560
DRIVER DATA			**32-bit MCU / FOC Control / Trapezoidal Acceleration**
19	Input Voltage	VDC	7.4~32
20	Output Current	A	Nominal 9 / Max 15
21	Encoder		15-bit or 18-bit Absolute Angle-sensing Magnetic Encoder
22	Communication		RS485 or CAN
23	Communication Frequency	Hz	RS485 : 500 / CAN : 2000 (based on default baud rate)
24	RS485 Baud Rate	bps	9.6K, 19.2K, 38.4K, 57.6K, 115.2K(default), 230.4K, 460.8K, 1M, 2M
25	CAN Baud Rate	bps	125K, 250K, 500K,1M(default)
26	Control Cycle		Open Loop 24KHz / Speed Loop 8KHz / Position Loop 8KHz

DRIVER INTERFACE PIN ASSIGNMENT

Pin --- B / L	RS485 - B / CAN - L
Pin --- A / H	RS485 - A / CAN - H
Pin --- V-	Power Supply - Negative
Pin --- V-	Power Supply - Negative
Pin --- V-	Power Supply - Negative
Pin --- V+	Power Supply - Positive
Pin --- V+	Power Supply - Positive
Pin --- V+	Power Supply - Positive
Pin --- T	UART Transmitter
Pin --- R	UART Receiver
Pin --- G	Signal GND

MF12025 V2

CHARACTERISTIC CURVE

Input Current | Efficiency | Output Power | Output Torque