M2DC Series—DC Servo System



The M2DC Series Servo System from MOONS' features drives that are high on functionality with a range of control options, programmable notch filters, an anti-vibration algorithm and auto-tuning. The drives are designed to be used with MOONS' servo motors in the 60/100/200/300/400/550W/750W power range. The M2DC drives can communicate over Modbus/RTU, CANopen, Ethernet/IP and Ethernet(eSCL). Using MOONS' Q Programmer software they can create complex motion programs that can be stored in thedrive and then run in a stand-alone mode.

Features:

- 20-70V DC Input
- Easy to Use On-line Auto Tuning
- Internal Regeneration Resistors
- Build-In Soft PLC - Q Programmer
- Pulse Position Control Modes
- Anlaog Position, Speed, Torque Modes
- SCL/eSCL Language Communication
- Support Modbus, CANopen, EtherNet/IP, Ethernet(eSCL) Communication Protocols
- Friendly Tuning Software

M2DC Servo Drive Numbering Information

M2DC - □ □ □ 5 □ - *

M2 Series DC Servo Drive

Current Code	Continuous Current (RMS)	Peak Current (RMS)
6D0	6.0A	18.0A
10D	10.0A	30.0A
20D	20.0A	50.0A

Voltage Code	Input Voltage
5	20-70VDC

Communication Type	Configuration	Description	Communication
S	USB Mini-B	Basic Type	- - -
Q		Q Type	RS-232
R		Q Type(Modbus/RTU Type)	RS-485
C		CANopen Type	CANBus
D		eSCL Type	Ethernet
IP		EtherNet/IP Type	Ethernet

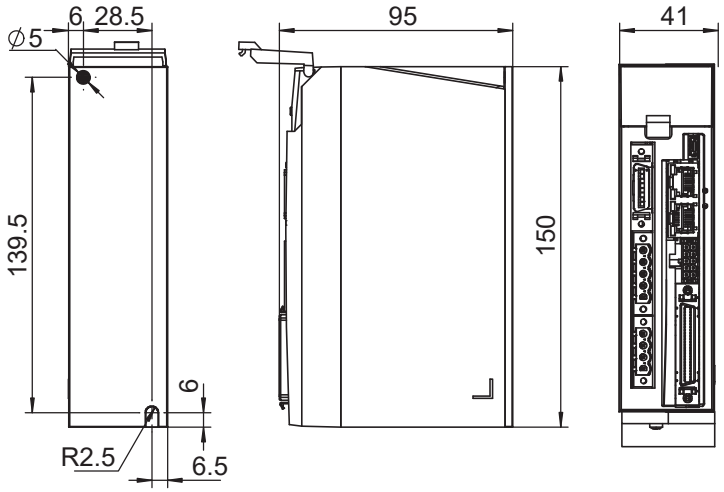
Customized Specification(If Applicable)

M2DC Drive Specifications

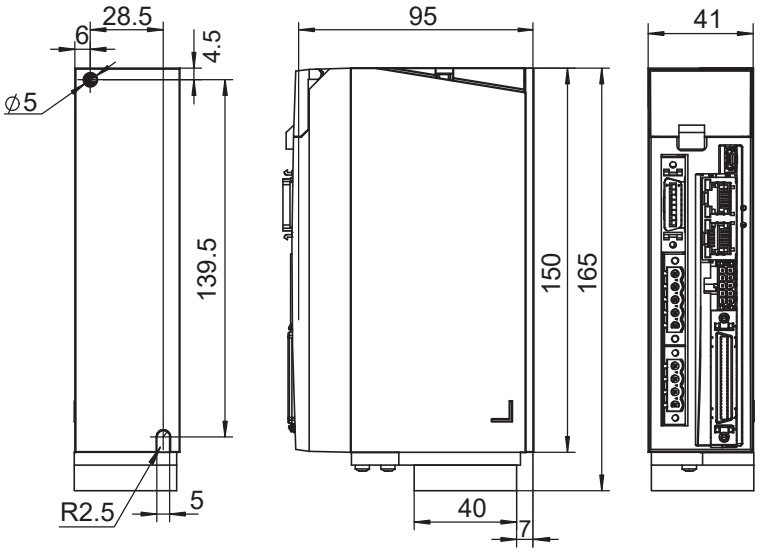
Basic Specifications	Input Power	M2DC-6D0 M2DC-10D M2DC-20D	Main Circuit	20~60VDC
			Control Circuit	10~60VDC
	Environment	Temperature		Ambient temperature: 0°C to 50°C(If the ambient temperature of servo drive is higher than 40°C, please install the drive in a well-ventilated location) Storage temperature: -20°C to 65°C
		Humidity		Both operating and storage: 10 to 85%RH or less
		Altitude		Lower than 1000m
		Vibration		9.8m/s^2 or less, 10 to 60Hz (No continuous use at resonance frequency)
	Control method			PWM Sinusoidal wave drive
	Encoder feedback			2500 ppr Optical Encoder with Shared Commutation Signals
	I/O	Digital Signals	Input	8 optical isolated multi function inputs, 5-24VDC, 20mA 2 optical isolated multi function inputs, 5-24VDC, 20mA
			Output	6 optical isolated multi function outputs, 30VDC max, 20mA
		Analog Signals	Input	2 inputs (12Bit A/D: 2 input)
		Pulse Signals	Input	2 inputs (Photo-coupler input, Line receiver input) Photocoupler input is compatible with both line driver I/F and open collector I/F. Line receiver input is compatible with line driver I/F.
			Output	4 outputs (Line driver: 3 outputs, open collector: 1 outputs)
	Communication	USB Mini-B		Connection with PC or 1 : 1 communication to a host.
		RS-232		RS-232 Communication
		RS-485		RS-485 Communication & Modbus/RTU
		CAN bus		CANopen Bus Communication
		Ethernet		EtherNET/IP, eSCL
	Front panel			4 keys (MODE, UP, DOWN, SET) , 5-digit LED display
	Regeneration Resistor			Built-in regenerative resistor 20W
	Control mode			(1) Position mode (2) Analog Velocity mode (3) Analog Position mode (4) Analog Position mode (5) Velocity Change mode (6) Command Torque mode (7) Command Velocity mode (8) Position Tables
	Control Input Signal			(1) Servo-ON input (2) Alarm clear input (3) CW/CCW Limit (4) Pulse& Direction or CW/CCW input (5) Gain Switch (6) Control mode Switch (7) Pulse Inhibition (8) Gear switch (9) Velocity Change mode (10) Analog input (11) General input
	Control Output Signal			(1) Alarm output (2) Servo-Ready output (3) External brake release (4) Speed reached output (5) Torque reached output (6) Position reached output (7) TachOut (8) Servo-on status output (9) General output
	Certification			RoHS
	Drive Mass		M2DC-6D0	0.59kg
			M2DC-10D	0.59kg
			M2DC-20D	0.61kg

M2DC Drive Dimensions (Unit:mm)

☐ M2DC-6D0/10D



☐ M2DC-20D



M2DC Servo Motor Numbering Information

SM0602FE4-KCD-NNV

SM Series

Frame Size
04-□40mm
06-□60mm
08-□80mm

Motor Length			
	□40	□60	□80
01	60W	200W	300W
02	100W	400W	550W
03			750W

Winding(DC)	
E	80V
F	60V
G	48V
H	36V

Encoder Type
E4: 2500 ppr Optical Encoder with Shared Commutation Signals

Shaft and Lead/Connector Style
KCD: Standard Keyway, Non-sealed Connector, For Windings up to 6 Amps
KCF: Standard Keyway, Non-sealed Connector, For Windings 10 Amps

Brake Option
N: No Brake
B: 24VDC Brake

Customized Specification

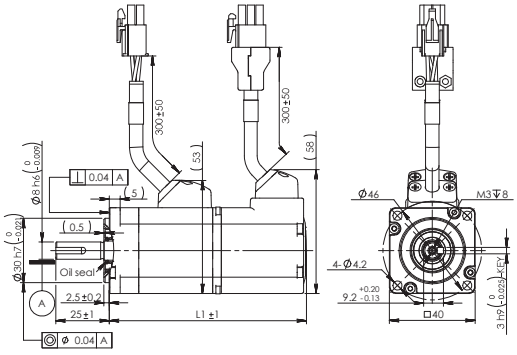
M2DC Servo Motor Specifications and Dimensions—Frame 40mm

Specifications

Model		SM0401HE4-KCD-*NV	SM0402FE4-KCD-*NV
Recommanded Drive Input Voltage (DC-Bus)		**36**	**60**
Rated Output Power Rated Speed Max. Speed	watts rpm rpm	60 3000 6000	100 3000 6000
Rated Torque Peak Torque	Nm Nm	0.19 0.48	0.32 0.91
Rated Current Peak Current	A (rms) A (rms)	5.7 14.3	5.2 15.6
Voltage Constant±5% Torque Constant±5% Winding Resistance(Line-Line) Winding Inductance(Line-Line)	V (rms) / K rpm Nm / A (rms) Ohm @25°C mH (typ.)	2.1 0.035 0.36 0.39	3.8 0.061 0.48 0.58
Rotor Inertia Rotor Inertia - With Brake	$Kg{\cdot}m^2$ $Kg{\cdot}m^2$	0.0232×10^{-4} 0.0298×10^{-4}	0.0428×10^{-4} 0.0494×10^{-4}
Shaft Load - Axial Shaft Load - Radial (End of Shaft) Weight Weight - With Brake	N (max.) N (max.) kg kg	50 50 0.4 0.65	50 60 0.55 0.8

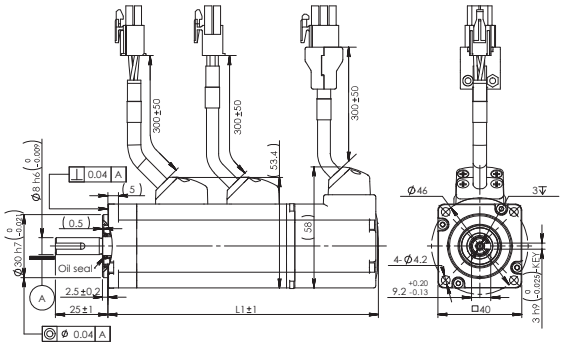
Dimensions (Unit:mm)

1) Without Brake



Without Brake	L1
SM0401HE4-KCD-NNV	92
SM0402FE4-KCD-NNV	109

2) With Brake

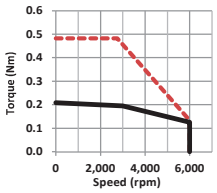


With Brake	L1
SM0401HE4-KCD-BNV	129
SM0402FE4-KCD-BNV	147

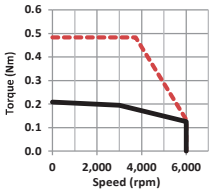
Torque Curves

Note: The torque and maximum speed depand on the DC bus voltage.Please choose proper supply voltage.

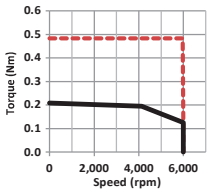
DC Bus--24VDC
SM0401HE4(60 Watts) -5.7 Amps



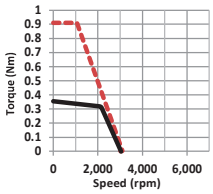
DC Bus--36VDC
SM0401HE4(60 Watts) - 5.7 Amps



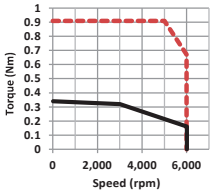
DC Bus--48VDC
SM0401HE4(60 Watts) - 5.7 Amp



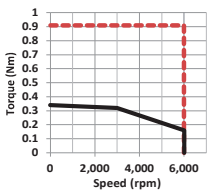
DC Bus--24VDC
SM0402FE4(100 Watts) -5.2Amps



DC Bus--48VDC
SM0402FE4(100 Watts) -5.2Amps



DC Bus--60VDC
SM0402FE4(100 Watts) -5.2Amps



Max. Intermittent Torque
Max. Continuous Torque

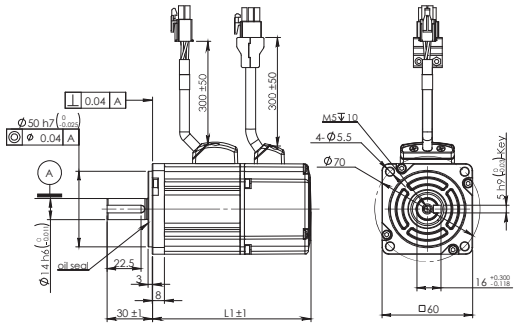
M2DC Servo Motor Specifications and Dimensions—Frame 60mm

Specifications

Model		SM0601GE4-KCF-*NV	SM0602FE4-KCF-*NV	SM0602GE4-KCF-*NV
Recommanded Drive Input Voltage (DC-Bus)		**48**	**60**	**48**
Rated Output Power Rated Speed Max. Speed	watts rpm rpm	200 3000 6000	400 3000 6000	400 3000 4500
Rated Torque Peak Torque	Nm Nm	0.64 1.9	1.26 3.6	1.27 3.4
Rated Current Peak Current	A (rms) A (rms)	10 30	10 30	12 36
Voltage Constant±5% Torque Constant±5% Winding Resistance(Line-Line) Winding Inductance(Line-Line)	V (rms) / K rpm Nm / A (rms) Ohm @25°C mH (typ.)	4.1 0.065 0.192 0.56	7.5 0.124 0.25 0.84	6.3 0.103 0.214 0.6
Rotor Inertia Rotor Inertia - With Brake	$Kg{\cdot}m^2$ $Kg{\cdot}m^2$	0.165×10^{-4} 0.22×10^{-4}	0.272×10^{-4} 0.326×10^{-4}	0.272×10^{-4} 0.326×10^{-4}
Shaft Load - Axial Shaft Load - Radial (End of Shaft) Weight Weight - With Brake	N (max.) N (max.) kg kg	70 200 1.1 1.6	70 240 1.4 1.9	70 240 1.4 1.9

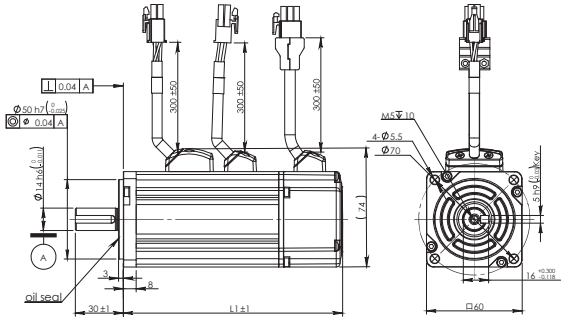
Dimensions (Unit:mm)

1) Without Brake



Without Brake	L1
SM0601GE4-KCF-NNV	105
SM0602FE4-KCF-NNV	125
SM0602GE4-KCF-NNV	125

2) With Brake

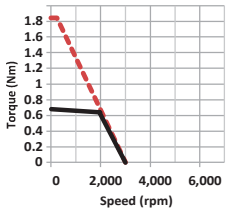


With Brake	L1
SM0601GE4-KCF-BNV	145
SM0602FE4-KCF-BNV	165
SM0602GE4-KCF-BNV	165

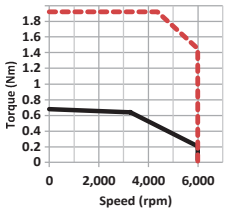
Torque Curves

Note: The torque and maximum speed depand on the DC bus voltage.Please choose proper supply voltage.

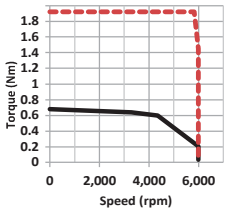
DC Bus--24VDC
SM0601GE4(200 Watts) -10Amps



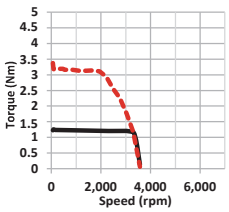
DC Bus--48VDC
SM0601GE4(200 Watts) -10Amps



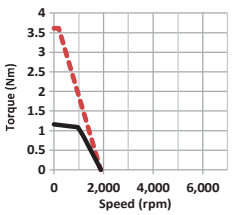
DC Bus--60VDC
SM0601GE4(200 Watts) -10Amps



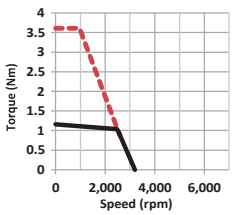
DC Bus--48VDC
SM0602GE4(400 Watts) -12Amps



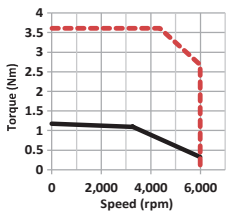
DC Bus--24VDC
SM0602FE4(400 Watts) -10Amps



DC Bus--48VDC
SM0602FE4(400 Watts) -10Amps



DC Bus--60VDC
SM0602FE4(400 Watts) -10Amps



Max. Intermittent Torque
Max. Continuous Torque

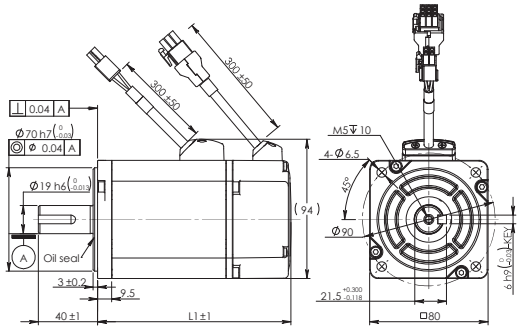
M2DC Servo Motor Specifications and Dimensions—Frame 80mm

Specifications

Model		SM0801GE4-KCF-*NV	SM0802EE4-KCF-*NV
Recommanded Drive Input Voltage (DC-Bus)		**48**	**80**
Rated Output Power Rated Speed Max. Speed	watts rpm rpm	300 3000 6000	550 3000 5500
Rated Torque Peak Torque	Nm Nm	0.95 2.3	1.8 4.6
Rated Current Peak Current	A (rms) A (rms)	10 25	10 28
Voltage Constant±5% Torque Constant±5% Winding Resistance(Line-Line) Winding Inductance(Line-Line)	V (rms) / K rpm Nm / A (rms) Ohm @25°C mH (typ.)	6.2 0.096 0.188 0.85	11.2 0.176 0.22 1.25
Rotor Inertia Rotor Inertia - With Brake	$Kg{\cdot}m^2$ $Kg{\cdot}m^2$	0.45×10^{-4} 0.53×10^{-4}	0.63×10^{-4} 0.71×10^{-4}
Shaft Load - Axial Shaft Load - Radial (End of Shaft) Weight Weight - With Brake	N (max.) N (max.) kg kg	90 200 1.7 2.5	90 240 2.2 3.0

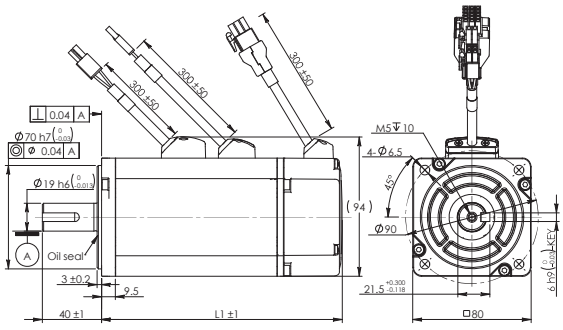
Dimensions (Unit:mm)

1) Without Brake



Without Brake	L1
SM0801GE4-KCF-NNV	101
SM0802EE4-KCF-NNV	116

2) With Brake

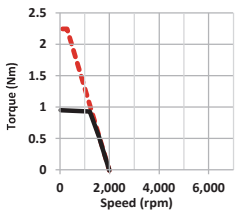


With Brake	L1
SM0801GE4-KCF-BNV	148
SM0802EE4-KCF-BNV	163

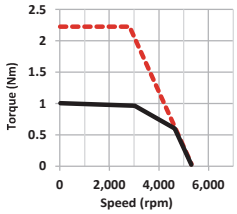
Torque Curves

Note: The torque and maximum speed depand on the DC bus voltage.Please choose proper supply voltage.

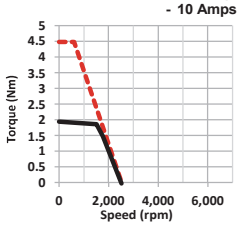
DC Bus--24VDC
SM0801GE4(300 Watts) -10Amps



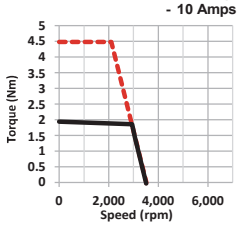
DC Bus--48VDC
SM0801GE4(300 Watts) -10Amps



48 VDC
SM0802 (550 Watts) - winding E - 10 Amps



60 VDC
SM0802 (550 Watts) - winding E - 10 Amps



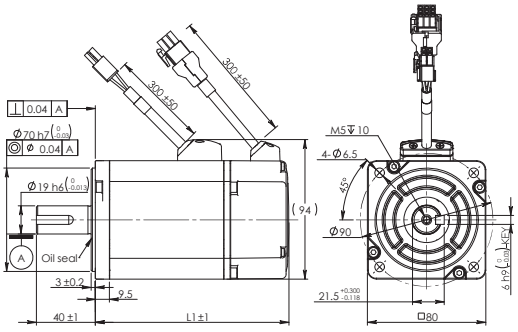
Max. Intermittent Torque
Max. Continuous Torque

M2DC Servo Motor Specifications and Dimensions—Frame 80mm

Model		SM0803GE4-KCF-NNV
Recommanded Drive Input Voltage (DC-Bus)		**48**
Rated Output Power Rated Speed Max. Speed	watts rpm rpm	750 3000 3600
Rated Torque Peak Torque	Nm Nm	2.4 6
Rated Current Peak Current	A (rms) A (rms)	22.5 56.5
Voltage Constant±5% Torque Constant±5% Winding Resistance(Line-Line) Winding Inductance(Line-Line)	V (rms) / K rpm Nm / A (rms) Ohm @25°C mH (typ.)	7.8 0.11 0.06 0.43
Rotor Inertia Rotor Inertia - With Brake	$Kg{\cdot}m^2$ $Kg{\cdot}m^2$	0.89×10^{-4} 0.97×10^{-4}
Shaft Load - Axial Shaft Load - Radial (End of Shaft) Weight Weight - With Brake	N (max.) N (max.) kg kg	90 270 2.6 3.4

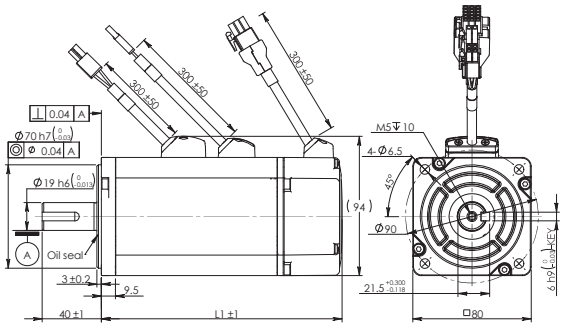
☐ Dimensions (Unit:mm)

1) Without Brake



Without Brake	L1
SM0803GE4-KCF-NNV	130.8

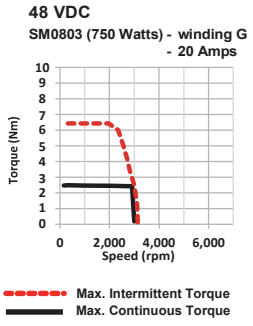
2) With Brake



With Brake	L1
SM0803GE4-KCF-BNV	178

☐ Torque Curves

Note: The torque and maximum speed depand on the DC bus voltage.Please choose proper supply voltage.



M2DC—Gearhead Servo Motors—40mm Frame

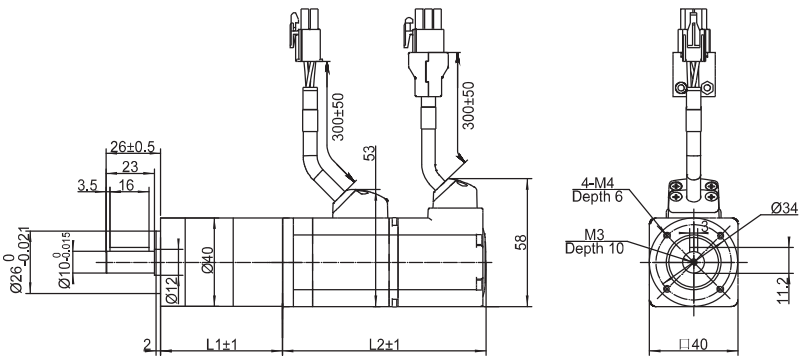
☐ Specifications

Without Brake Type		SM0401HE4-KCD-NNV-PG05A	SM0401HE4-KCD-NNV-PG10A	SM0401HE4-KCD-NNV-PG20A	SM0402FE4-KCD-NNV-PG05A	SM0402FE4-KCD-NNV-PG10A	SM0402FE4-KCD-NNV-PG20A
With Brake Type		**SM0401HE4-KCD-BNV-PG05A**	**SM0401HE4-KCD-BNV-PG10A**	**SM0401HE4-KCD-BNV-PG20A**	**SM0402FE4-KCD-BNV-PG05A**	**SM0402FE4-KCD-BNV-PG10A**	**SM0402FE4-KCD-BNV-PG20A**
Motor Power	W	60			100		
Gear Ratio		5	10	20	5	10	20
Max.Output Torque	N·m	0.95	1.9	3.8	1.6	3.2	6.4
Peak Output Torque	N·m	2.4	4.8	11.4	4.65	9.3	18.6
Max Permissible Output Torque	N·m	6	8	12	6	8	40
Stage		1	1	2	1	1	2
Back lash	arcmin	≤12	≤12	≤15	≤12	≤12	≤15
Efficiency		96%	96%	94%	96%	96%	94%
Rated Output Speed	r/min	600	300	150	600	300	150
Max.Output Speed	r/min	1200	600	300	1200	600	300
Motor Rotor Inertia	$Kg·m^2$	$0.0232x10^{-4}$ *($0.0298x10^{-4}$)			$0.0428x10^{-4}$ *($0.0494x10^{-4}$)		
Gearhead Inertia	$Kg·m^2$	$0.015x10^{-4}$	$0.019x10^{-4}$	$0.019x10^{-4}$	$0.015x10^{-4}$	$0.019x10^{-4}$	$0.019x10^{-4}$
L1 Without Brake	mm	67.5	67.5	80.5	67.5	67.5	80.5
L2 Without Brake	mm	92	92	92	109	109	109
L1 With Brake	mm	67.5	67.5	80.5	67.5	67.5	80.5
L2 With Brake	mm	129	129	129	147	147	147
Matching Drive		M2DC-6D05 ☐					

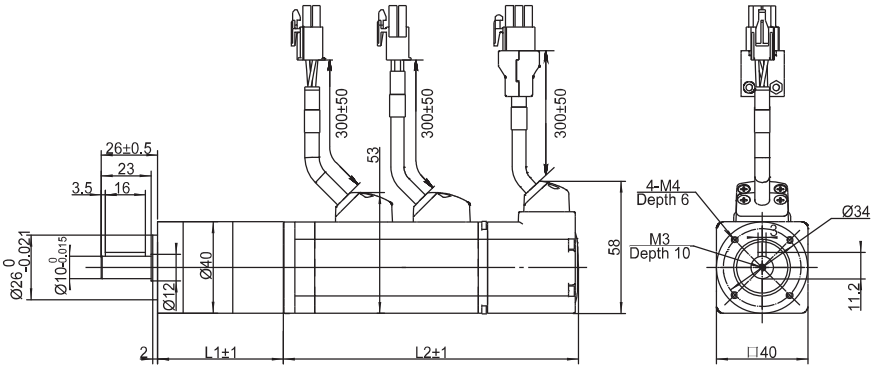
(*) With Brake

☐ Dimensions (Unit:mm)

1) Without Brake



2) With Brake



M2DC—Gearhead Servo Motors—60mm Frame

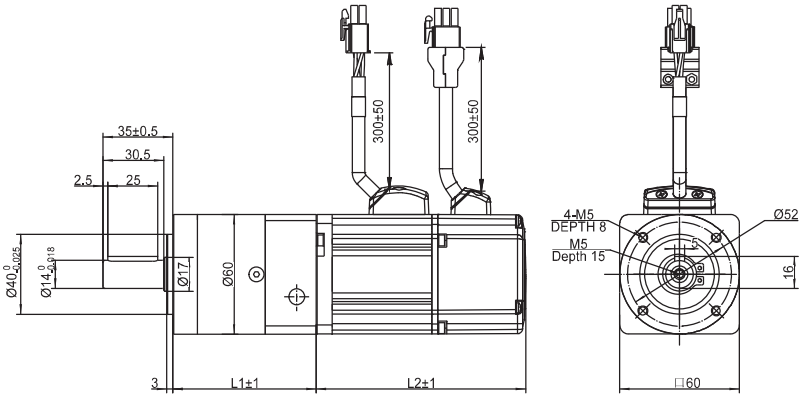
☐ Specifications

Without Brake Type		SM0601GE4-KCF-NNV-PG05A	SM0601GE4-KCF-NNV-PG10A	SM0601GE4-KCF-NNV-PG20A	SM0602FE4-KCF-NNV-PG05A	SM0602FE4-KCF-NNV-PG10A	SM0602FE4-KCF-NNV-PG20A
With Brake Type		**SM0601GE4-KCF-BNV-PG05A**	**SM0601GE4-KCF-BNV-PG10A**	**SM0601GE4-KCF-BNV-PG20A**	**SM0602FE4-KCF-BNV-PG05A**	**SM0602FE4-KCF-BNV-PG10A**	**SM0602FE4-KCF-BNV-PG20A**
Motor Power	W	200			400		
Gear Ratio		5	10	20	5	10	20
Max.Output Torque	N·m	3.2	6.4	12.8	6.35	12.7	25.4
Peak Output Torque	N·m	9.5	19	38	19	38	76
Max Permissible Output Torque	N·m	32	24	88	32	24	88
Stage		1	1	2	1	1	2
Back lash	arcmin	≤10	≤10	≤15	≤10	≤10	≤15
Efficiency		96%	96%	94%	96%	96%	94%
Rated Output Speed	r/min	600	300	150	600	300	150
Max.Output Speed	r/min	1200	600	300	1200	600	300
Motor Rotor Inertia	$Kg·m^2$	$0.165x10^{-4}$ *($0.22x10^{-4}$)			$0.272x10^{-4}$ *($0.326x10^{-4}$)		
Gearhead Inertia	$Kg·m^2$	$0.078x10^{-4}$	$0.054x10^{-4}$	$0.075x10^{-4}$	$0.078x10^{-4}$	$0.054x10^{-4}$	$0.075x10^{-4}$
L1 Without Brake	mm	78.5	78.5	91.5	78.5	78.5	91.5
L2 Without Brake	mm	105	105	105	125	125	125
L1 With Brake	mm	78.5	78.5	91.5	78.5	78.5	91.5
L2 With Brake	mm	145	145	145	165	165	165
Matching Drive		M2DC-10D5 ☐					

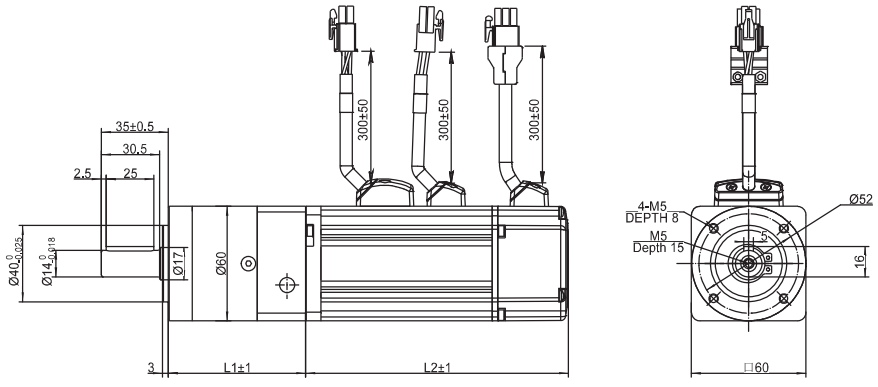
(*) With Brake

☐ Dimensions (Unit:mm)

1) Without Brake



2) With Brake



M2DC—Gearhead Servo Motors—80mm Frame

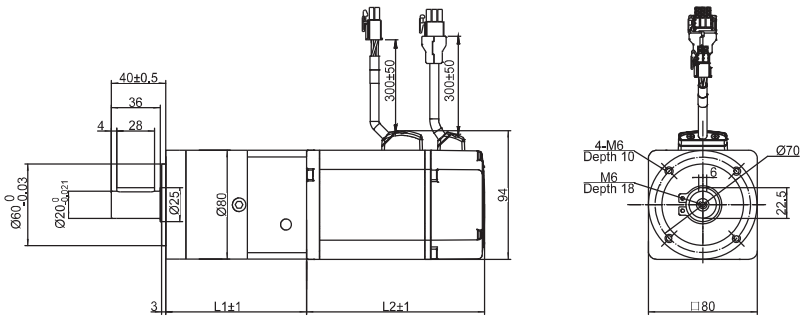
Specifications

Without Brake Type		SM0801GE4-KCF-NNV-PG05A	SM0801GE4-KCF-NNV-PG10A	SM0801GE4-KCF-NNV-PG20A	SM0802EE4-KCF-NNV-PG05A	SM0802EE4-KCF-NNV-PG10A	SM0802EE4-KCF-NNV-PG20A
With Brake Type		**SM0801GE4-KCF-BNV-PG05A**	**SM0801GE4-KCF-BNV-PG10A**	**SM0801GE4-KCF-BNV-PG20A**	**SM0802EE4-KCF-BNV-PG05A**	**SM0802EE4-KCF-BNV-PG10A**	**SM0802EE4-KCF-BNV-PG20A**
Motor Power	W	300			550		
Gear Ratio		5	10	20	5	10	20
Max.Output Torque	N·m	4.75	9.5	19	9	18	36
Peak Output Torque	N·m	11.5	23	46	23	46	92
Max Permissible Output Torque	N·m	100	80	240	100	80	240
Stage		1	1	2	1	1	2
Back lash	arcmin	≤10	≤10	≤15	≤10	≤10	≤15
Efficiency		96%	96%	94%	96%	96%	94%
Rated Output Speed	r/min	600	300	150	600	300	150
Max.Output Speed	r/min	1200	600	300	1200	600	300
Motor Rotor Inertia	$Kg·m^2$	$0.45x10^{-4}$ *($0.53x10^{-4}$)			$0.63x10^{-4}$ *($0.71x10^{-4}$)		
Gearhead Inertia	$Kg·m^2$	$0.45x10^{-4}$	$0.39x10^{-4}$	$0.44x10^{-4}$	$0.45x10^{-4}$	$0.39x10^{-4}$	$0.44x10^{-4}$
L1 Without Brake	mm	104	104	122	104	104	122
L2 Without Brake	mm	101	101	101	116	116	116
L1 With Brake	mm	104	104	122	104	104	122
L2 With Brake	mm	148	148	148	163	163	163
Matching Drive		M2DC-10D5 □					

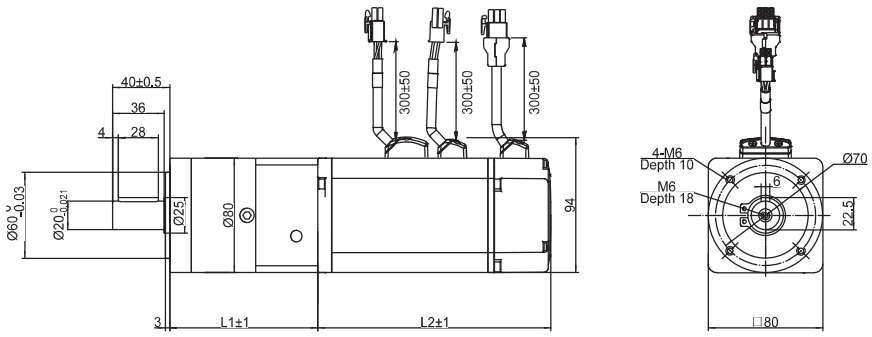
(*) With Brake

Dimensions (Unit:mm)

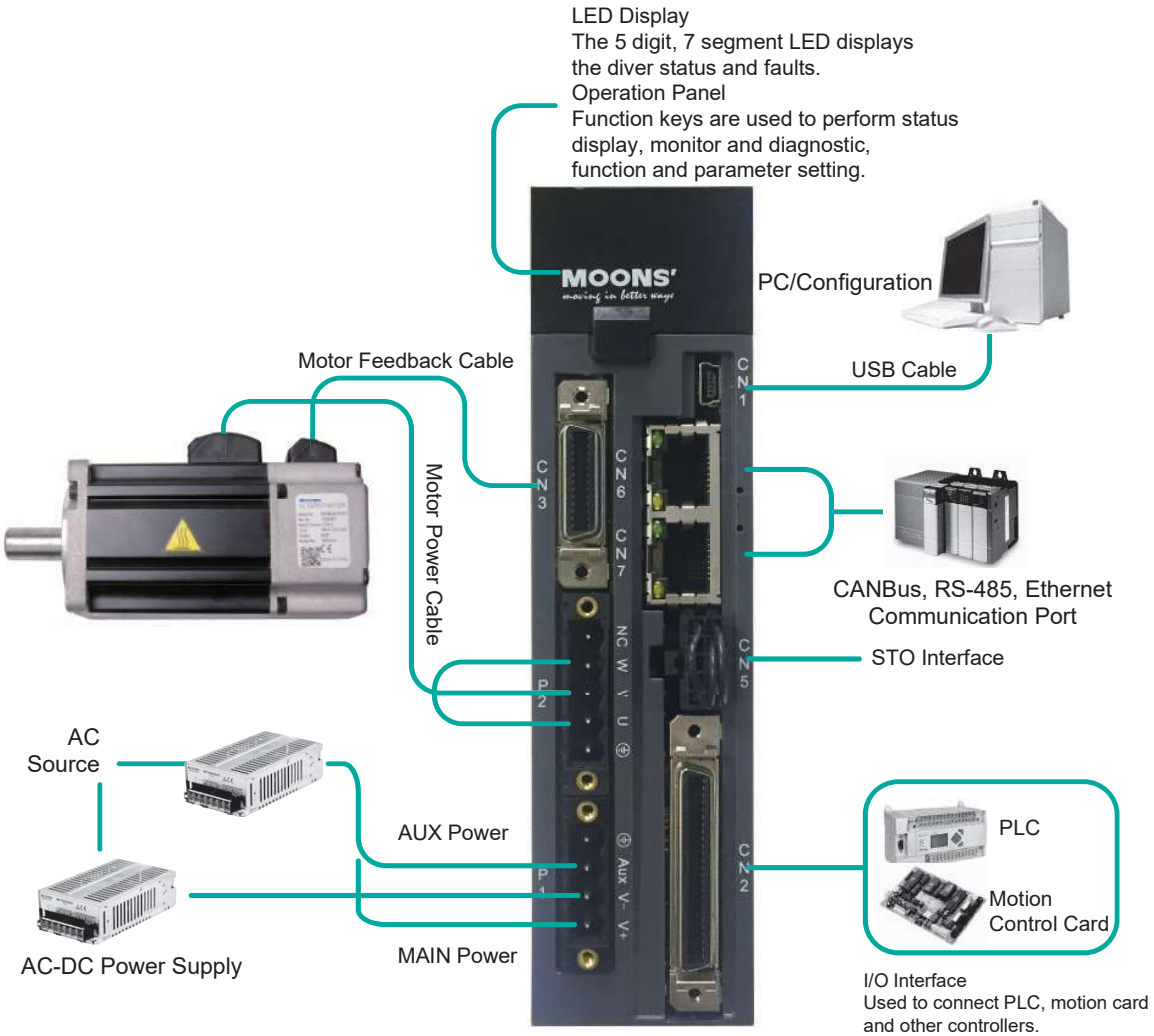
1) Without Brake



2) With Brake



M2DC System Configration



Drive Motor Matching Table

Servo Drive			
			
Basic Type	M2DC-6D05S	M2DC-10D5S	M2DC-20D5S
Q Program Type (RS-232 Communication)	M2DC-6D05Q	M2DC-10D5Q	M2DC-20D5Q
Q Program Type (RS-485 Communication)	M2DC-6D05R	M2DC-10D5R	M2DC-20D5R
CANopen	M2DC-6D05C	M2DC-10D5C	M2DC-20D5C
eSCL	M2DC-6D05D	M2DC-10D5D	M2DC-20D5D
EtherNet/IP*	M2DC-6D05IP	M2DC-10D5IP	M2DC-20D5IP

Matching Motor				
	 40 Frame, 60W, 100W	 60 Frame, 200W, 400W	 80 Frame, 300W, 550W	 80 Frame, 750W
Without Brake	SM0401HE4-KCD-NNV SM0402FE4-KCD-NNV	SM0601GE4-KCF-NNV SM0602FE4-KCF-NNV SM0602GE4-KCF-NNV	SM0801GE4-KCF-NNV SM0802EE4-KCF-NNV	SM0803GE4-KCF-NNV
With Brake	SM0401HE4-KCD-BNV SM0402FE4-KCD-BNV	SM0601GE4-KCF-BNV SM0602FE4-KCF-BNV SM0602GE4-KCF-BNV	SM0801GE4-KCF-BNV SM0802EE4-KCF-BNV	SM0803GE4-KCF-BNV

Gearhead Motor				
Without Brake	SM0401HE4-KCD-NNV-PG**A SM0402FE4-KCD-NNV-PG**A	SM0601GE4-KCF-NNV-PG**A SM0602FE4-KCF-NNV-PG**A	SM0801GE4-KCF-NNV-PG**A SM0802EE4-KCF-NNV-PG**A	
With Brake	SM0401HE4-KCD-BNV-PG**A SM0402FE4-KCD-BNV-PG**A	SM0601GE4-KCF-BNV-PG**A SM0602FE4-KCF-BNV-PG**A	SM0801GE4-KCF-BNV-PG**A SM0802EE4-KCF-BNV-PG**A	

* For the latest details, Please contact our company.
** Standard gear ratios are 5:1; 10:1 and 20:1.

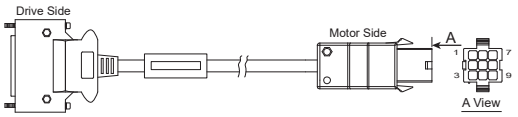
Accessories				
IO Connector		M2-50P		
USB mini-B Configuration		2620-150		
Standard* Cable	Motor power	1630-X00	1627-X00	1641-X00
	Encoder	2627-X00		
	Brake **	1602-X00		
Flexible** Cable	Motor power	1631-X00	1628-X00	1642-X00
	Encoder	2621-X00		
	Brake ***	1602-X00-C05		

* Standard: Can not be used in a drag chain.
* * Bending test: Min. bend radius: 100mm, Travel distance: 60mm, Lifetime: 5,000,000c.

Encoder Cables

◆ Standard Type

P/N	Description
2627-100	M2 Common Encoder Cable, Shielded, 1m
2627-300	M2 Common Encoder Cable, Shielded, 3m
2627-500	M2 Common Encoder Cable, Shielded, 5m
2627-1000	M2 Common Encoder Cable, Shielded, 10m



◆ Flexible Encoder Cable - Extra Type

P/N	Description
2621-100	M2 Flexible Encoder Cable, 1m
2621-300	M2 Flexible Encoder Cable, 3m
2621-500	M2 Flexible Encoder Cable, 5m
2621-1000	M2 Flexible Encoder Cable, 10m

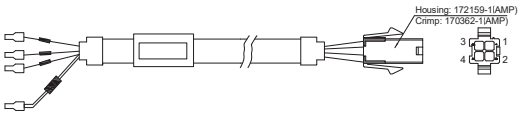
*: Min. band radius: 100mm; Travel distance: 600mm; Lifetime: 5,000,000c

Connect to drive TYCO 3-2232346-1	Signal	Colour	Connect to Motor AMP 172161-1
1	A+/U+	Blue	1
2	B+/V+	Green	2
3	Z+/W+	Yellow	3
14	A-/U-	Blue/Black	4
15	B-/V-	Green/Black	5
16	Z-/W-	Yellow/Black	6
11	+5V	Red	7
24	GND	Black	8
26	Shield	Shield	9

Motor Power Cable—M2DC-6D0

◆ Standard Type

P/N	Description
1630-100	M2DC-6D0 Common Motor Cable, 1m
1630-300	M2DC-6D0 Common Motor Cable, 3m
1630-500	M2DC-6D0 Common Motor Cable, 5m
1630-1000	M2DC-6D0 Common Motor Cable, 10m



◆ Flexible Motor Cable - Extra Type

P/N	Description
1631-100	M2DC-6D0 Flexible Motor Cable, extra type, Shielded, 1m
1631-300	M2DC-6D0 Flexible Motor Cable, extra type, Shielded, 3m
1631-500	M2DC-6D0 Flexible Motor Cable, extra type, Shielded, 5m
1631-1000	M2DC-6D0 Flexible Motor Cable, extra type, Shielded, 10m

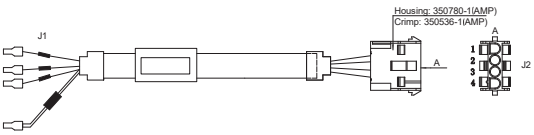
*: Min. band radius: 100mm; Travel distance: 600mm; Lifetime: 5,000,000c

Connect to drive 5452571(Phoenix)	Signal	Colour	Connect to Motor AMP 172159-1
U	U	Red	1
V	V	Yellow	2
W	W	Blue	3
⏚	PE	Yellow/Green	4

Motor Power Cable—M2DC-10D

◆ Standard Type

P/N	Description
1627-100	M2DC-10D Common Motor Cable, Shielded, 1m
1627-300	M2DC-10D Common Motor Cable, Shielded, 3m
1627-500	M2DC-10D Common Motor Cable, Shielded, 5m
1627-1000	M2DC-10D Common Motor Cable, Shielded, 10m



◆ Flexible Motor Cable - Extra Type

P/N	Description
1628-100	M2DC-10D Flexible Motor Cable, extra type, Shielded, 1m
1628-300	M2DC-10D Flexible Motor Cable, extra type, Shielded, 3m
1628-500	M2DC-10D Flexible Motor Cable, extra type, Shielded, 5m
1628-1000	M2DC-10D Flexible Motor Cable, extra type, Shielded, 10m

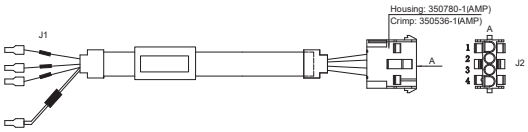
*: Min. band radius: 100mm; Travel distance: 600mm; Lifetime: 5,000,000c

Connect to drive 5452571(Phoenix)	Signal	Colour	Connect to Motor AMP 350780-1
U	U	Red	1
V	V	Yellow	2
W	W	Blue	3
⏚	PE	Yellow/Green	4

Motor Power Cable—M2DC-20D

◆ Standard Type

P/N	Description
1641-100	M2DC-20D Common Motor Cable, Shielded, 1m
1641-300	M2DC-20D Common Motor Cable, Shielded, 3m
1641-500	M2DC-20D Common Motor Cable, Shielded, 5m



◆ Flexible Motor Cable - Extra Type

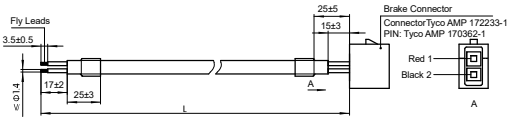
P/N	Description
1642-100	M2DC-20D Flexible Motor Cable, extra type, Shielded, 1m
1642-300	M2DC-20D Flexible Motor Cable, extra type, Shielded, 3m
1642-500	M2DC-20D Flexible Motor Cable, extra type, Shielded, 5m

*: Min. band radius: 100mm; Travel distance: 600mm; Lifetime: 5,000,000c

Connect to drive	Signal	Colour	Connect to Motor
5452571(Phoenix)			AMP 350780-1
U	U	Red	1
V	V	Yellow	2
W	W	Blue	3
⏚	PE	Yellow/Green	4

Motor Brake Cable

P/N	Description
1602-100	M2 Motor Brake Cable, 1m
1602-300	M2 Motor Brake Cable, 3m
1602-500	M2 Motor Brake Cable, 5m
1602-1000	M2 Motor Brake Cable, 10m



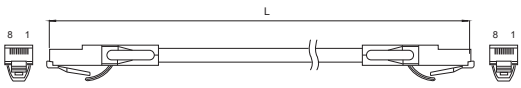
P/N	Description
1602-100-C05	M2 Flexible Motor Brake cable, 1m
1602-300-C05	M2 Flexible Motor Brake cable, 3m
1602-500-C05	M2 Flexible Motor Brake cable, 5m
1602-1000-C05	M2 Flexible Motor Brake cable, 10m

USB mini-B Configuration Cable

Description	P/N	Num.	Manufacturer	Details
USB mini-B Configuration Cable	2620-150	1	MOONS'	For connector CN1

CN6\CN7 RS-485/CANopen Daisy Chain Cable

P/N	Description
2012-030	Common type, Twisted-pair, 0.3m
2012-300	Common type, Twisted-pair, 3m
2013-030	Shielded type, Twisted-pair, 0.3m
2013-300	Shielded type, Twisted-pair, 3m



Connector Accessories

◆ I/O Connector-CN2

P/N	M2-50P

◇ Includes

Item	P/N	Num.	Manufacturer	Details
Connector (drive side)	5-2232346-1	1	TYCO	For I/O connector CN2

◆ Power Connector Kit(Drive side Below 6A)

P/N	M2 Motor Connector Kit

◇ Includes

Item	P/N	Num.	Manufacturer	Details
Connector (drive side)	3-2232346-1	1	TYCO	For encoder connector CN3
Connector	172159-1	1		For motor power connector
Connector	172233-1	1		For motor brake connector
Connector PIN	170362-1	6		For motor power connector
Connector	172161-1	1		For motor encoder connector
Connector PIN	770834-1	9		

◆ Motor Connector Kit(Above 10A)

P/N	M2 Motor Connector Kit2

◇ Includes

Item	P/N	Num.	Manufacturer	Details
Connector	350780-1	1	TYCO	For motor power connector
Connector PIN	350536-1	4		For motor power connector
Connector	172233-1	1		For motor brake connector
Connector PIN	170362-1	2		For motor brake connector
Connector	172161-1	1		For motor encoder connector
Connector PIN	770834-1	9		For motor encoder connector
Connector (drive side)	3-2232346-1	1		For encoder connector CN3

◆ Encoder Connector-CN3

P/N	M2-26P

◇ Includes

Item	P/N	Num.	Manufacturer	Details
Connector (drive side)	3-2232346-1	1	TYCO	For encoder connector CN3

◆ STO Connector Kit

P/N	STO Connector Kit

◇ Includes

Item	P/N	Num.	Manufacturer	Details
STO connector	STO connector	1	Molex	For connector CN5
Connector	43025-1000	1		
Connector PIN	43030-0005	10		