2-phase Stepping Driver

PMM-MD-23120-10

DC24V/36V

Unipolar type

(Applicable motor rated current 1.2A/phase, 2A/phase)

Micro-step (200 X 1~180 divisions)

(Smooth operation and low vibration even at low speeds.)

● Applicable motor

□42 □50 □56 □60 ø86

Standard combined stepping motors

Dimensions of stepping motor	Stepping motor model number		Rated current [A/phase]	Holding torque [N·m(oz·in)]	Rotor inertia [x 10^{-4}kg·m^2(oz·in^2)]	Mass(Weight) [kg(lbs)]	Page
	Single shaft	Double shaft					
□42mm	103H5205-0440	103H5205-0410	1.2	0.2(28.32)	0.036(0.20)	0.23(0.51)	69 Page
	103H5208-0440	103H5208-0410	1.2	0.3(42.48)	0.056(0.31)	0.29(0.64)	
	103H5209-0440	103H5209-0410	1.2	0.32(45.31)	0.062(0.34)	0.31(0.68)	
	103H5210-0440	103H5210-0410	1.2	0.37(52.39)	0.074(0.40)	0.37(0.82)	
□50mm	103H6701-0440	103H6701-0410	2	0.28(39.6)	0.057(0.31)	0.35(0.77)	75 Page
	103H6703-0440	103H6703-0410	2	0.49(69.4)	0.118(0.65)	0.5(1.10)	
	103H6704-0440	103H6704-0410	2	0.52(73.6)	0.14(0.77)	0.5(1.10)	
□56mm	103H7121-0440	103H7121-0410	2	0.39(55.2)	0.1(0.55)	0.47(1.04)	79 Page
	103H7123-0440	103H7123-0410	2	0.83(117.5)	0.21(1.15)	0.65(1.43)	
	103H7124-0440	103H7124-0410	2	0.98(138.8)	0.245(1.34)	0.8(1.76)	
	103H7126-0440	103H7126-0410	2	1.27(179.8)	0.36(1.97)	0.98(2.16)	
□60mm	103H7821-0440	103H7821-0410	2	0.78(110.5)	0.275(1.50)	0.6(1.32)	87 Page
	103H7822-0440	103H7822-0410	2	1.17(165.7)	0.4(2.19)	0.77(1.70)	
	103H7823-0440	103H7823-0410	2	2.1(297.4)	0.84(4.59)	1.34(2.95)	
ø86mm	103H8221-0441	103H8221-0411	2	2.15(304.5)	1.45(7.93)	1.5(3.31)	91 Page
	103H8222-0441	103H8222-0411	2	4.13(584.8)	2.9(15.86)	2.5(5.51)	
	103H8223-0441	103H8223-0411	2	6.27(887.9)	4.4(24.06)	3.5(7.72)	

- For information about the general specifications and dimensions of each stepping motor, refer to its page.

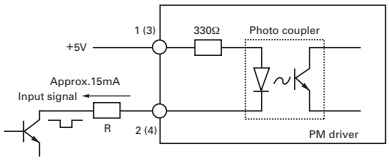
Specifications of PM Driver

Item			PMM-MD-23120-10
Basic specifications		Input source	DC24V/36V±10%
		Source current	3A
		Rated current	2A/phase (Changeable to 1.2A/phase, refer to Page 46)
	Environment	Operating ambient temperature	0~+50˚C
		Conservation temperature	-20~+70˚C
		Operating ambient humidity	35~85% RH (no condensation)
		Conservation humidity	10~90% RH (no condensation)
		Vibration resistance	4.9m/s² Frequency range 10~55Hz, Direction: along X,Y and Z axes, for 2 hours each.
		Impact resistance	Considering the NDS-C-0110 standard section 3.2.2 division "C", not influenced.
		Withstand voltage	Not influenced when AC500V is applied between power input terminal and cabinet for one minute.
		Insulation resistance	10MΩ MIN. measured with DC500V megohmmeter between input terminal and cabinet.
		Mass(Weight)	0.6kg(1.32lbs)
Function		Selection, setting function	Pulse input mode selection-- DIP switches enables selection of Pulse and direction and 2-input mode. Resolution setting-- Rotary switches enables 8 divisions ranging from 1~180 resolutions. Power down --- External signal input enables to turn off the current that flows through the stepping motor. Automatic current down selection-- Automatic current down function can be selected. Resolution selection--- External signal input enables to select 2 resolutions. Driving current switch setting-- The rotary switch enables to set driving current of the stepping motor from rated current to 0%.
I/O signals		Signal Name (Brevity code)	Pin No. (CN3)
		CW pulse Input signal (CW)	1 2
		(CK)	In the 2-input mode, inputs driving pulses to rotate in CW direction. In the Pulse and direction mode, inputs driving pulse train to rotate the step motor rotation. Photo coupler input method, input resistance 330Ω Input signal voltage: H = 4.0 to 5.5V, L = 0 to 0.5V Maximum input frequency:20kpulse/s
		CCW pulse Input signal (CCW)	3 4
		(U/D)	In the 2-input mode, inputs driving pulses to rotate in CCW direction. In the Pulse and direction mode, inputs rotation direction signals to the stepping motor. Internal photo coupler ON (CMOS type: "H" level:) --- CW direction Internal photo coupler OFF (CMOS type: "L" level)--- CCW direction. Photo coupler input method, input resistance 330Ω Input signal voltage: H = 4.0 to 5.5V, L = 0 to 0.5V Maximum input frequency:20kpulse/s
		Step angle setting selection input (S. SEL)	5 6 Input S.SEL signal to select step angle selection rotary switch (S.SEL). S.SEL input signal ON (Internal photo coupler ON) --- SEL2 setting is enabled. S.SEL input signal OFF (Internal photo coupler OFF) --- SEL1 setting is enabled. Photo coupler input method, input resistance 330Ω Input signal voltage: H = 4.0 to 5.5V, L = 0 to 0.5V
		Power down input signal (PD)	7 8 Inputs PD signal to turn off the current that flows through the stepping motor. PD input signal ON (Internal photo coupler ON) --- Power down functrion is enabled. PD input signal OFF (Internal photo coupler OFF) --- Power down function is disabled. Photo coupler input method, input resistance 330Ω

- Stepping motor rotation in the CW direction means clockwise rotation when facing the output shaft (the flange side) of the stepping motor. CCW direction means counterclockwise rotation when facing the same side.

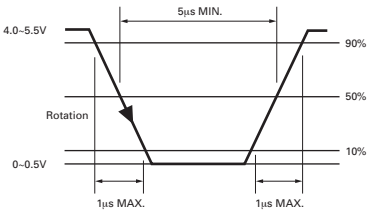
Operation, Connection, and Function

Input circuit configuration (CW, CCW)



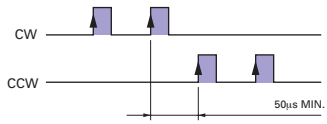
- Pulse duty 50% MAX.
- When the crest value of the input signal is 5V, the external limit resistance R must be 0Ω
  When the crest value of the input signal exceeds 5V, use the external limit resistance R to limit the input current to approximately 15mA.

Input signal specifications



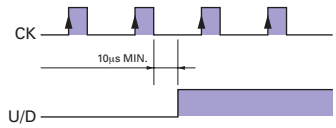
Timing of command pulse

- 2-input mode (CW, CCW)



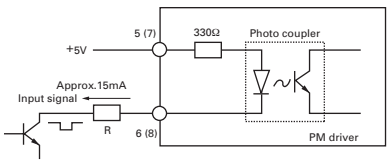
- The internal photo coupler turns ON within the ■ and, at its rising edge to ON, the internal circuit (stepping motor) is activated.
- When applying the pulse to CW, turn OFF the CCW side internal photo coupler.
- When applying the pulse to CCW, turn OFF the CW side internal photo coupler.

- Pulse and direction mode (CK,U/D)



- The internal photo coupler turns ON within the ■ and, at the rising edge to ON of the CK photo coupler, the internal circuit (stepping motor) is activated.
- Switching the input signal U/D shall be performed while the internal photo coupler on the CK side is OFF.

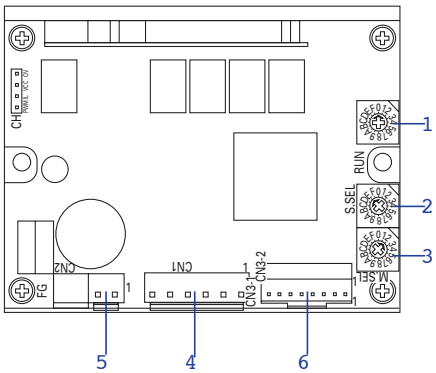
Input circuit configuration (PD, S, SEL)



- When the crest value of the input signal is 5V, the external limit resistance R must be 0Ω
  When the crest value of the input signal exceeds 5V, use the external limit resistance R to limit the input current to approximately 15mA.

Operation, Connection, and Function

PM deriver component names



1 Operation-current selection rotary switch (RUN)

Enable to select operating current value to stepping motor.

Dial	0	1	2	3	4	5	6	7
Stepping motor current (A/phase)	2.0	1.8	1.6	1.4	1.2	1.0	0.8	0.6
Dial	**8**	**9**	**A**	**B**	**C**	**D**	**E**	**F**
Stepping motor current (A/phase)	0	0	0	0	0	0	0	0

- Factory setting is "0".

2 Stepping angle selection rotary switch (S.SEL)

Enable to select standard step angle of stepping motor for 8 divisions ranging from 1~180 resolutions.

Dial		0	1	2	3	4	5	6	7
Division	SEL1	1	2	5	10	20	40	80	180
	SEL2	1	1	1	1	1	1	1	1
Dial		**8**	**9**	**A**	**B**	**C**	**D**	**E**	**F**
Division	SEL1	1	2	5	10	20	40	80	180
	SEL2	2	2	2	2	2	2	2	2

- Factory setting is "E".

3 Mode selection rotary switch (M.SEL)

Enable to select every mode

Dial		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Pulse input	2 input	○		○		○		○		○		○		○		○	
	Pulse and direction		○		○		○		○		○		○		○		○
Automatic current down	OFF	○	○			○	○			○	○			○	○		
	ON			○	○			○	○			○	○			○	○
Low vibration method	OFF	○	○	○	○	○	○	○	○								
	ON									○	○	○	○	○	○	○	○

- Factory setting is "2".
- Enable at ○
- When low vibration is selected at 8~F, S.SEL setting is ignored and operate at low vibration mode of 1 division.

4 Connector (CN1)

Connect motor power wire.

5 Connector (CN2)

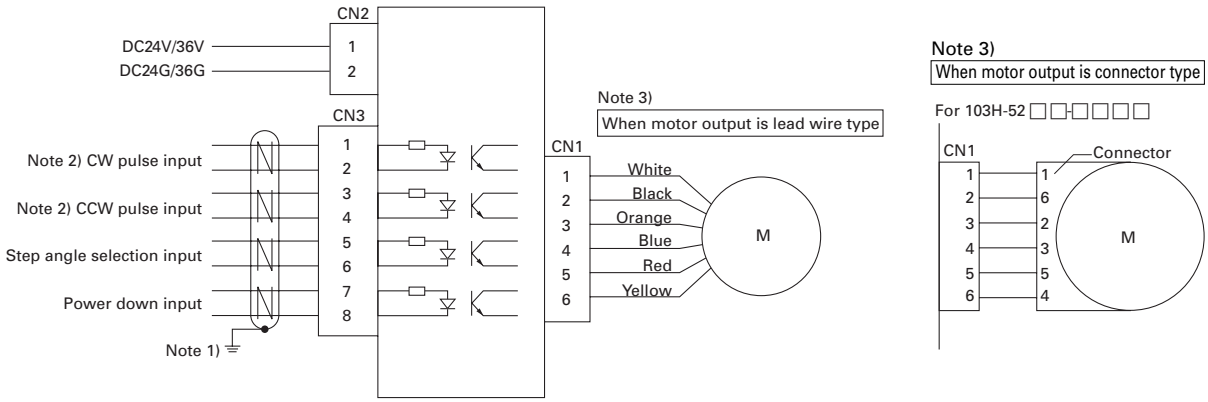
Connect DC power wire.

6 Connector (CN3)

Connect I/O wire.

Operation, Connection, and Function

External wiring diagram



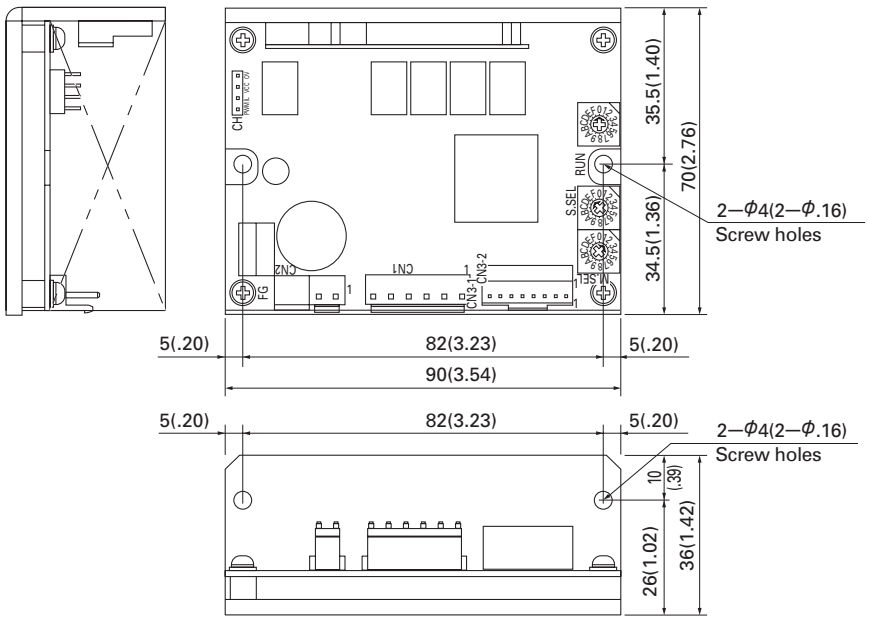
Note 1) Use twist pair shielded cables.
Note 2) Selection is possible between "2-input mode (CW pulse, CCW pulse)" and "Pulse and direction mode (CW, C/D)" by the mode selection rotary switch
Note 3) Motor output of stepping motor models 103H52 □□ is connector type. Motor side pin number and driver side connector (CN1) pin number is not match. So please be careful when connecting.

● Connectors used

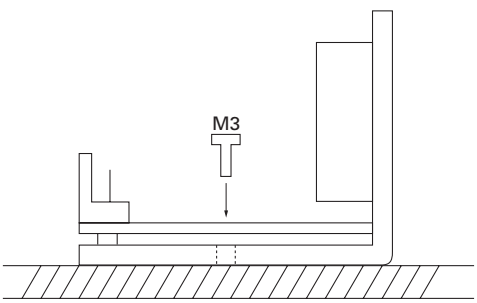
Driver side		Corresponding connector model number	Maker
Use for	Model No.		
Stepping motor (CN1)	B6P-VH	Applicable housing: VHR-6N Applicable contact: SVH-21T-P1.1	J.S.T. MFG. CO., LTD
DC Power source (CN2)	B2P-VH	Applicable housing: VHR-2N Applicable contact: SVH-21T-P1.1	J.S.T. MFG. CO., LTD
I/O signal (CN3)	IL-8P-S3 EN2-1	Applicable housing: IL-8S-S3L-(N) Applicable contact: IL-C2-1-10000	Japan Aviation Electronics Industry,Ltd

• For the applicable connector, the client is requested to procure or place orders with us from the optional connector sets or the connector cables we offer (Refer to the page 55).

Dimensions [Unit:mm(inch)]



Mounting direction and mounting position

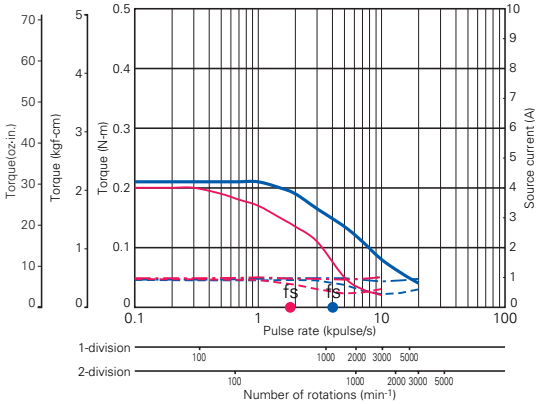


- Install the PM driver vertically.
- As shown in the figure, fix the PM driver by using the M3 screws through two fitting holes (2-φ 4) on the bottom surface of PM driver(no fitting metals are necessary).

Pulse Rate-Torque Characteristics/Pulse Rate-Power Current Characteristics

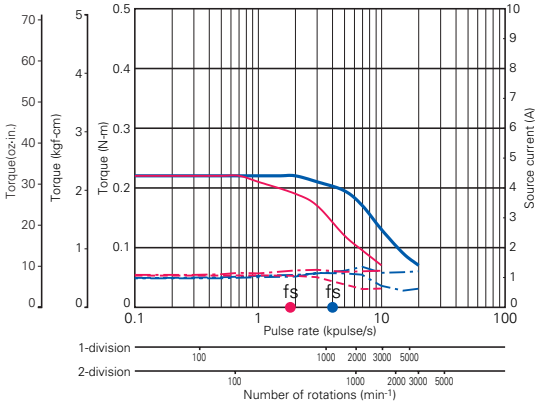
fs: No load maximum starting pulse rate. ■ 1-division is specified ■ 2-division is specified

●103H5205-04□□ : 24V



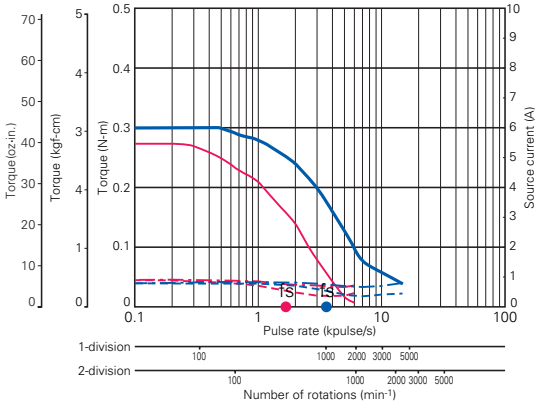
Source voltage: DC24V, Operating current :1.2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H5205-04□□ : 36V



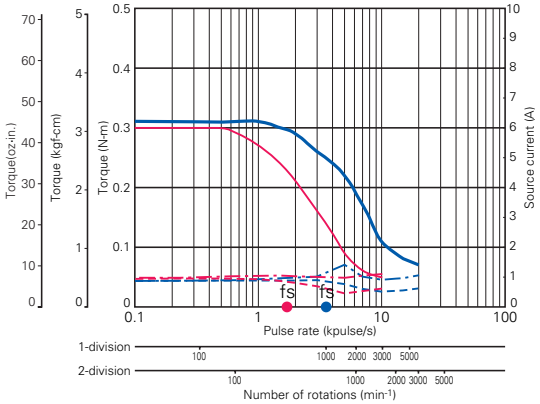
Source voltage: DC36V, Operating current :1.2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H5208-04□□ : 24V



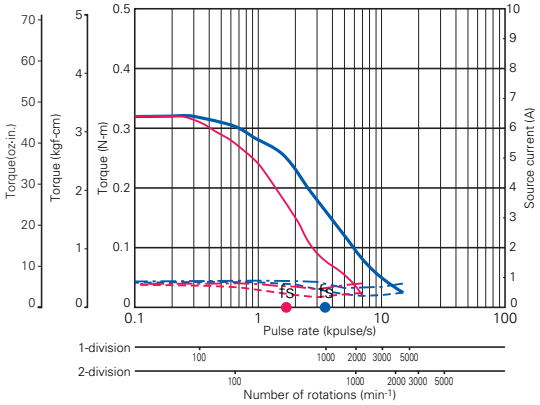
Source voltage: DC24V, Operating current :1.2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H5208-04□□ : 36V



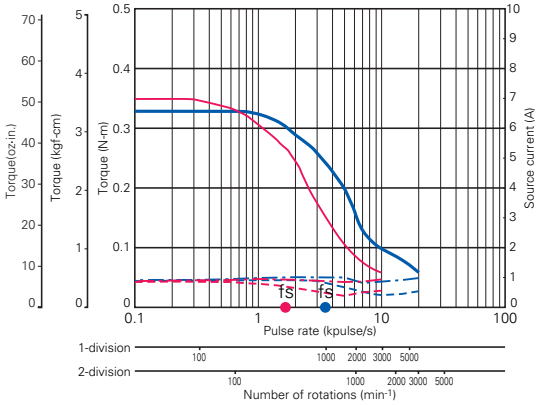
Source voltage: DC36V, Operating current :1.2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H5209-04□□ : 24V



Source voltage: DC24V, Operating current :1.2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H5209-04□□ : 36V



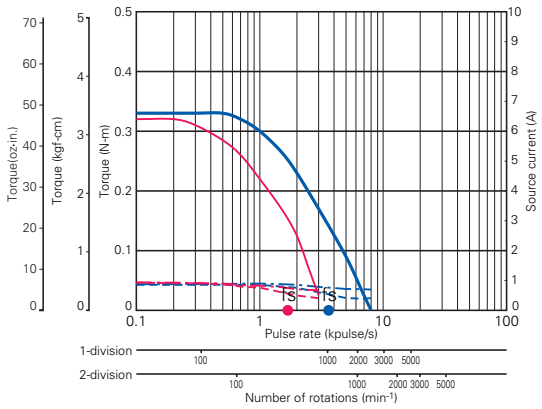
Source voltage: DC36V, Operating current :1.2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

Pulse Rate-Torque Characteristics/Pulse Rate-Power Current Characteristics

fs: No load maximum starting pulse rate. ■ 1-division is specified ■ 2-division is specified

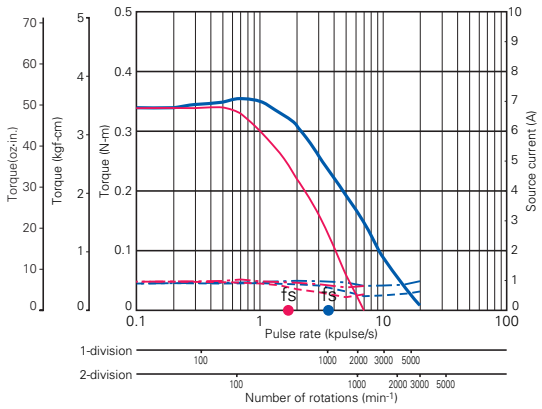
PMM-BA-4803 PMM-BA-4804
PMM-UA-4303 PMM-UA-4304
PMM-MD-23210-10/23211-10 PMM-MD-23220-21/23221-21 PMM-MD-23220-10/23221-10
PMM-MD-23120

●103H5210-04□□ : 24V



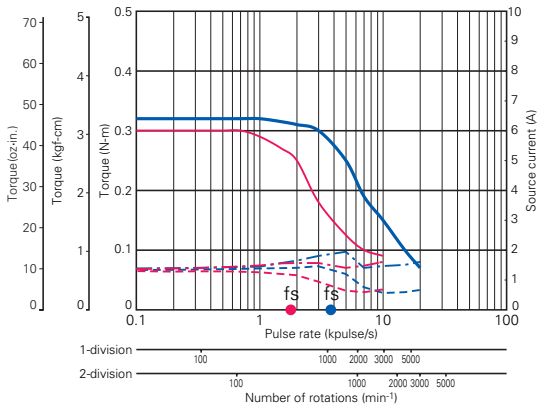
Source voltage: DC24V, Operating current :1.2A/phase
—— Pull-Out torque [JL1=0.94x10-4kg·m2 (5.14 oz·in2) Use the rubber coupling]
-·- Source current (TL=MAX), - - - Source current (TL=0)

●103H5210-04□□ : 36V



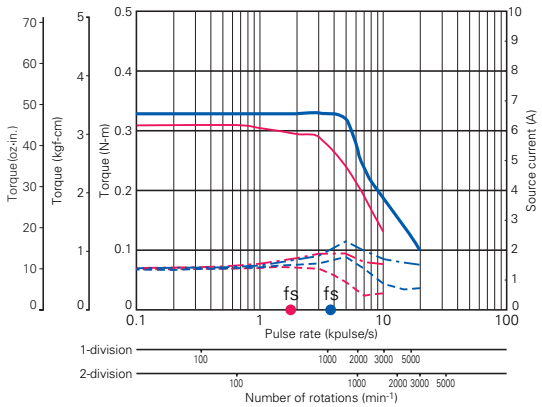
Source voltage: DC36V, Operating current :1.2A/phase
—— Pull-Out torque [JL1=0.94x10-4kg·m2 (5.14 oz·in2) Use the rubber coupling]
-·- Source current (TL=MAX), - - - Source current (TL=0)

●103H6701-04□□ : 24V



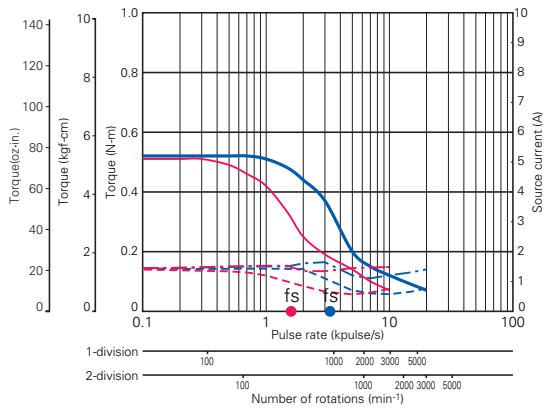
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=0.94x10-4kg·m2 (5.14 oz·in2) Use the rubber coupling]
-·- Source current (TL=MAX), - - - Source current (TL=0)

●103H6701-04□□ : 36V



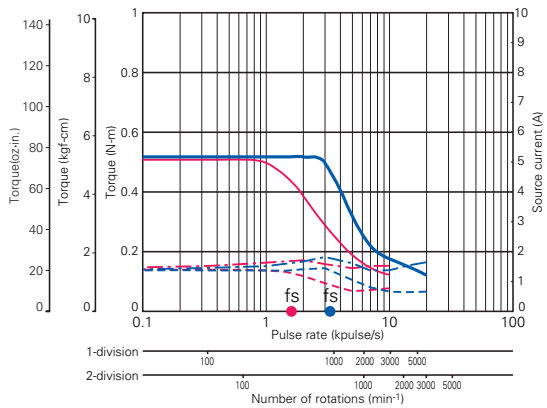
Source voltage: DC36V, Operating current : 2A/phase
—— Pull-Out torque [JL1=0.94x10-4kg·m2 (5.14 oz·in2) Use the rubber coupling]
-·- Source current (TL=MAX), - - - Source current (TL=0)

●103H6703-04□□ : 24V



Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=0.94x10-4kg·m2 (5.14 oz·in2) Use the rubber coupling]
-·- Source current (TL=MAX), - - - Source current (TL=0)

●103H6703-04□□ : 36V

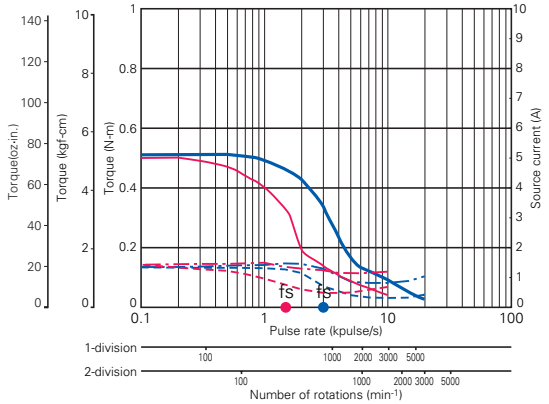


Source voltage: DC36V, Operating current : 2A/phase
—— Pull-Out torque [JL1=0.94x10-4kg·m2 (5.14 oz·in2) Use the rubber coupling]
-·- Source current (TL=MAX), - - - Source current (TL=0)

Pulse Rate-Torque Characteristics/Pulse Rate-Power Current Characteristics

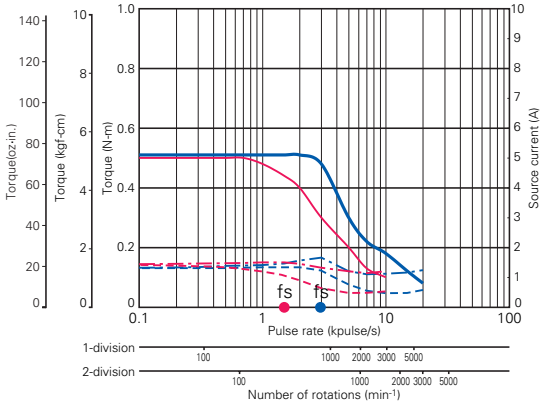
fs: No load maximum starting pulse rate. ■ 1-division is specified ■ 2-division is specified

●103H6704-04□□ : 24V



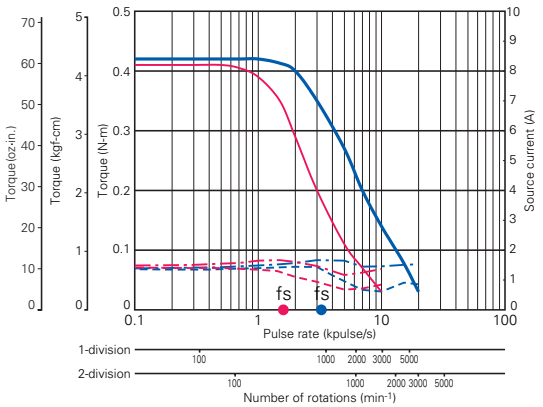
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H6704-04□□ : 36V



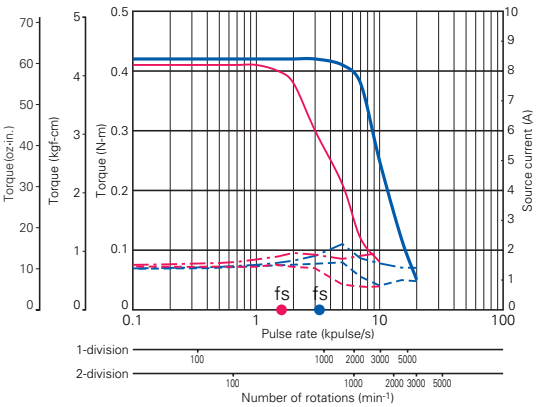
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H7121-04□□ : 24V



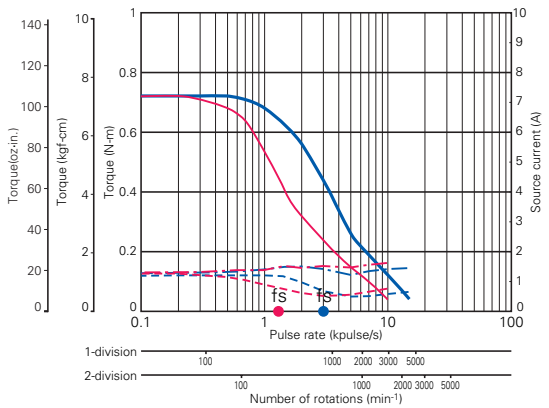
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H7121-04□□ : 36V



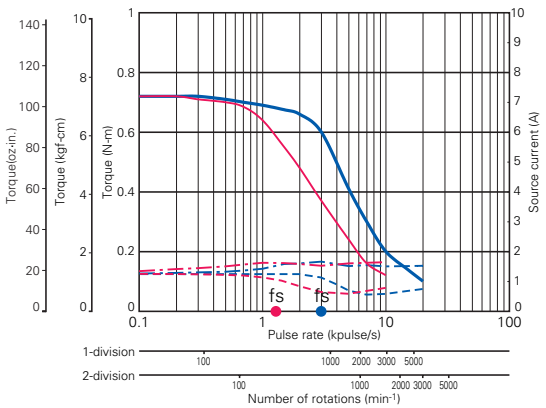
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H7123-04□□ : 24V



Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H7123-04□□ : 36V



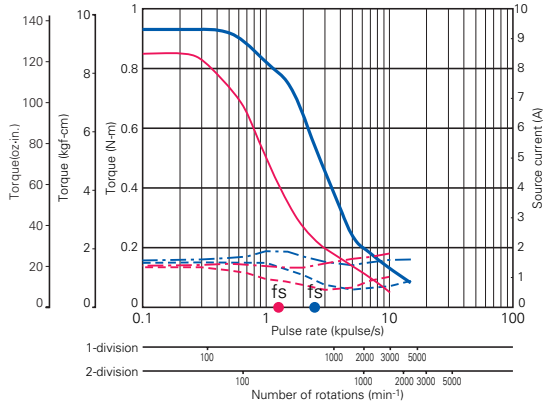
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

Pulse Rate-Torque Characteristics/Pulse Rate-Power Current Characteristics

fs:No load maximum starting pulse rate. ■ 1-division is specified ■ 2-division is specified

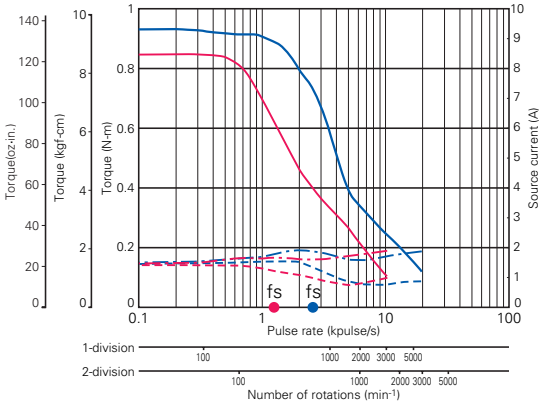
PMM-BA-4803 PMM-BA-4804
PMM-UA-4303 PMM-UA-4304
PMM-MD-23210-10/23211-10 PMM-MD-23220-21/23221-21 PMM-MD-23220-10/23221-10
PMM-MD-23120

●103H7124-04□□ : 24V



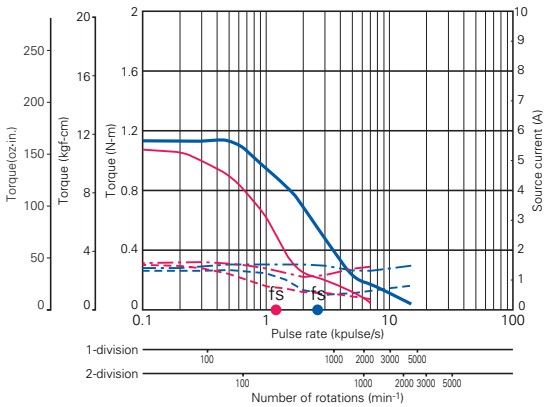
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=2.6x10-4kg·m2 (14.22 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

●103H7124-04□□ : 36V



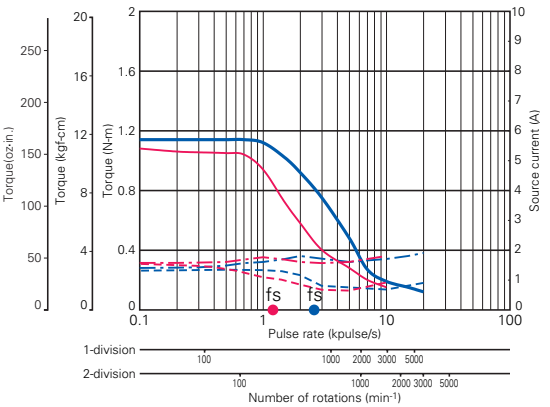
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=2.6x10-4kg·m2 (14.22 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

●103H7126-04□□ : 24V



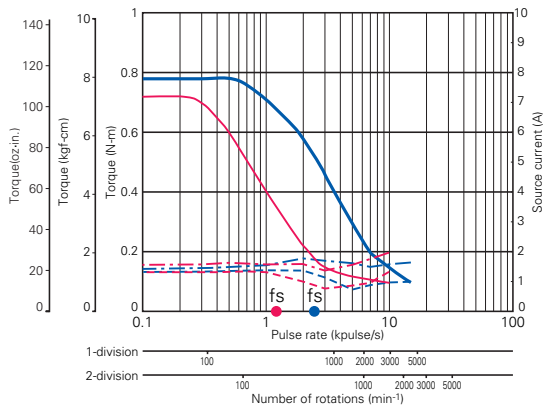
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=2.6x10-4kg·m2 (14.22 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

●103H7126-04□□ : 36V



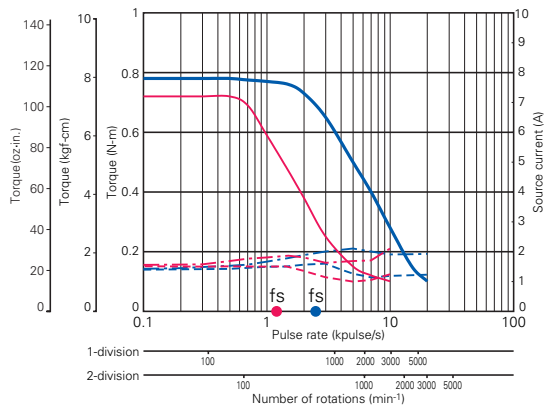
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=2.6x10-4kg·m2 (14.22 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

●103H7821-04□□ : 24V



Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=2.6x10-4kg·m2 (14.22 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

●103H7821-04□□ : 36V

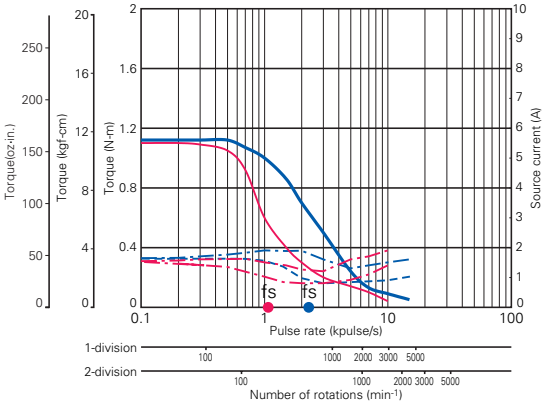


Source voltage: DC24V, Operating current t: 2A/phase
—— Pull-Out torque [JL1=2.6x10-4kg·m2 (14.22 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

Pulse Rate-Torque Characteristics/Pulse Rate-Power Current Characteristics

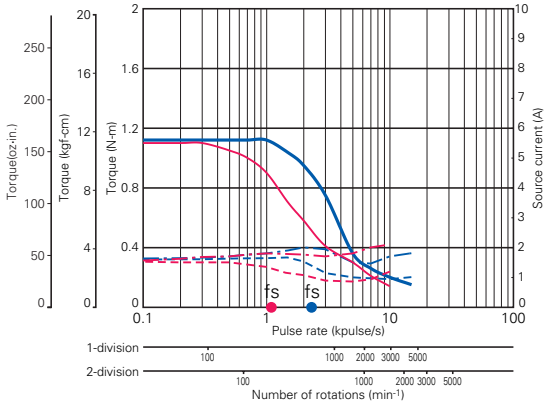
fs: No load maximum starting pulse rate. ■ 1-division is specified ■ 2-division is specified

●103H7822-04□□ : 24V



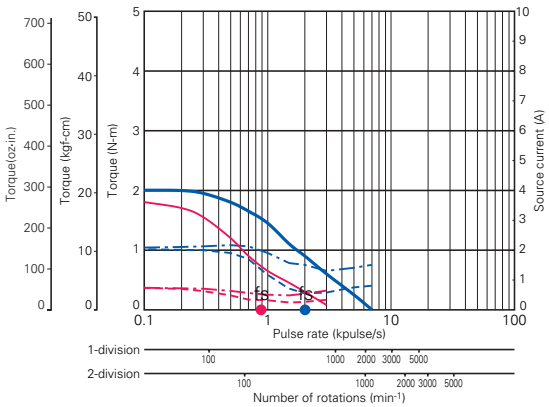
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=2.6x10^{-4}kg·m^2 (14.22 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H7822-04□□ : 36V



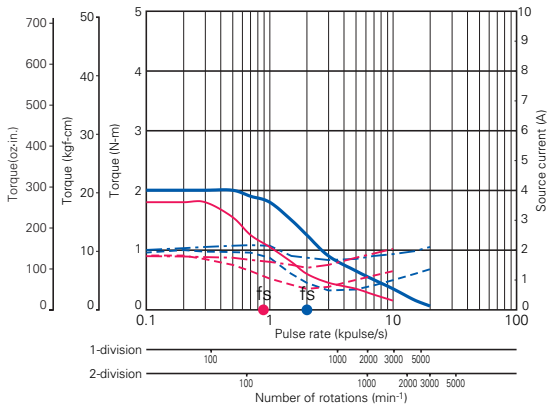
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=2.6x10^{-4}kg·m^2 (14.22 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H7823-04□□ : 24V



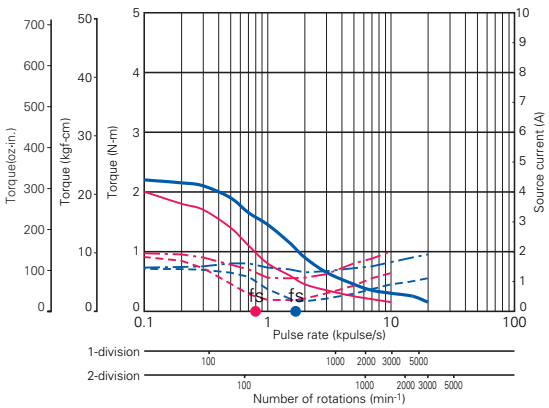
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=7.4x10^{-4}kg·m^2 (40.46 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H7823-04□□ : 36V



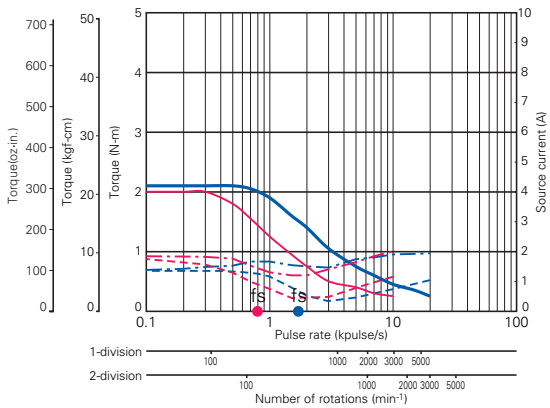
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=7.4x10^{-4}kg·m^2 (40.46 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H8221-04□□ : 24V



Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=7.4x10^{-4}kg·m^2 (40.46 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

●103H8221-04□□ : 36V

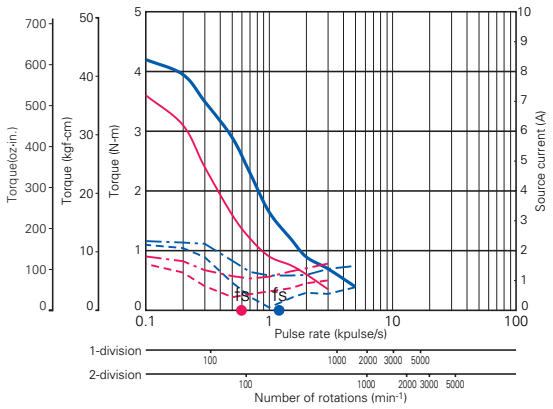


Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [J_{L1}=7.4x10^{-4}kg·m^2 (40.46 oz·in^2) Use the rubber coupling]
–·– Source current (TL=MAX), – – – Source current (TL=0)

Pulse Rate-Torque Characteristics/Pulse Rate-Power Current Characteristics

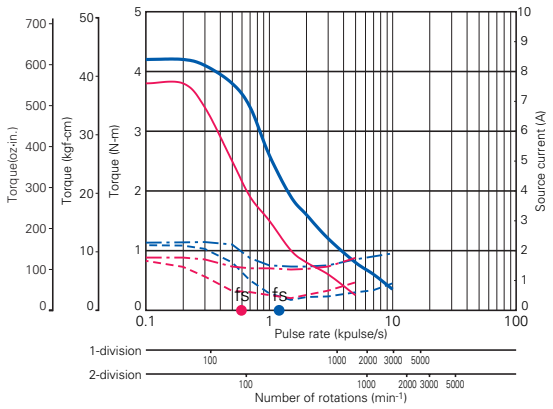
fs: No load maximum starting pulse rate. ■ 1-division is specified ■ 2-division is specified

●103H8222-04□□ : 24V



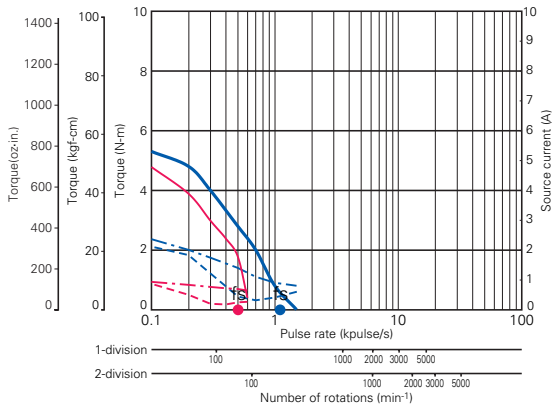
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=15.3x10-4kg·m2 (83.65 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

●103H8222-04□□ : 36V



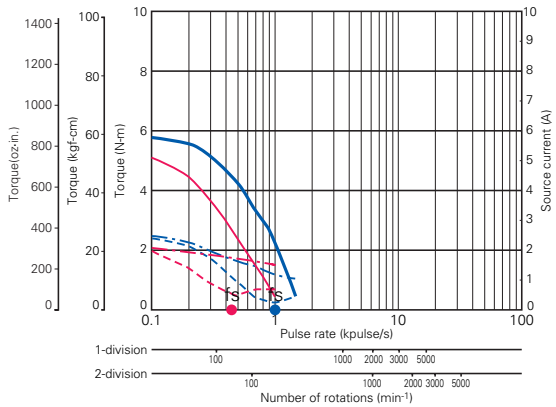
Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=15.3x10-4kg·m2 (83.65 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

●103H8223-04□□ : 24V



Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=15.3x10-4kg·m2 (83.65 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

●103H8223-04□□ : 36V



Source voltage: DC24V, Operating current : 2A/phase
—— Pull-Out torque [JL1=15.3x10-4kg·m2 (83.65 oz·in2) Use the rubber coupling]
– · – Source current (TL=MAX), – – – Source current (TL=0)

PMM-BA-4803 PMM-BA-4804
PMM-UA-4303 PMM-UA-4304
PMM-MD-23210-10/23211-10 PMM-MD-23220-21/23221-21 PMM-MD-23220-10/23221-10
PMM-MD-23120

Option

Connector set

Model	Used for	Contents of set	Quantity	Manufacturer	Applicable wire size	Crimp tool number
PM-AP-055 (H52 □□ type)	Stepping motor (CN1)	Applicable housing: VHR-6N	1	J.S.T. MFG. CO.,LTD.	AWG22	YC-160R
		Applicable contact: SVH-21T-P1.1	6			
		Applicable housing: EHR-6	1			YC-260R
		Applicable contact: SEH-001T-P0.6	6			
PM-AP-048 (H782 □ type)		Applicable housing: VHR-6N	2	J.S.T. MFG. CO.,LTD.	AWG22	YC-160R
		Applicable contact: SVH-21T-P1.1	12			
PM-AP-037 (Type other than above)		Applicable housing: VHR-6N	1	J.S.T. MFG. CO.,LTD.	AWG22	YC-160R
		Applicable contact: SVH-21T-P1.1	6			
PM-AP-036	DC power supply (CN2)	Applicable housing: VHR-2N	1	J.S.T. MFG. CO.,LTD.	AWG22	YC-160R
		Applicable contact: SVH-21T-P1.1	2			
PM-AP-038	I/O signal (CN3)	Applicable housing: IL-8S-S3L-(N)	1	Japan Aviation Electronics Industry,Ltd	AWG22~28	CT150-1-IL CT150-1B-IL CT150-1C-IL
		Applicable contact: IL-C2-1-0001	8			

Connector cable

Model No.	Use for
PM-C06M0100-□□	Stepping motor (CN1) connector cable
PM-C02P0100-03	DC power supply (CN2) connector cable
PM-C08S0100-02	I/O signal (CN3) connector cable

□□··· is 02, 04, or 07. (Refer to separate table 1.)

- The connector cable is 1-meter cable assembled with each interface connector.

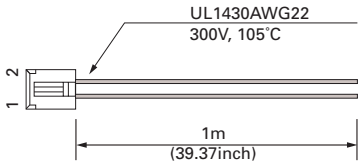
Model No. of stepping motor cable (Supplement table 1)

	Model of stepping motor
02	103H6701-04□□
	103H6703-04□□
	103H6704-04□□
	103H7121-04□□
	103H7123-04□□
	103H7124-04□□
	103H7126-04□□
	103H8221-04□□
	103H8222-04□□
	103H8223-04□□
04	103H7821-04□□
	103H7822-04□□
	103H7823-04□□
07	103H5205-04□□
	103H5208-04□□
	103H5209-04□□
	103H5210-04□□

Option

● Cable 1 (Power cable)

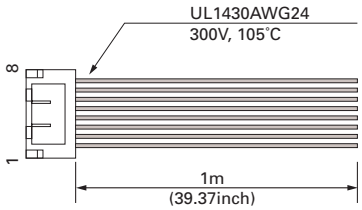
Driver side	
Pin No.	Color
1	White
2	Black



Cable model No.	Length
PM-C02P0100-03	1m(39.37inch)

● Cable 2 (Signal cable)

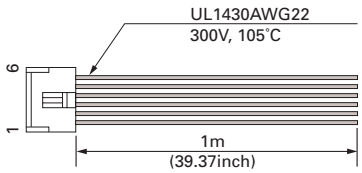
Driver side	
Pin No.	Color
1	Blue
2	Black
3	Blue
4	Black
5	Blue
6	Black
7	Blue
8	Black



Cable model No.	Length
PM-C08S0100-02	1m(39.37inch)

● Cable 3 (Stepping motor extension cable 1)

Driver side	
Pin No.	Color
1	White
2	Black
3	Orange
4	Blue
5	Red
6	Yellow

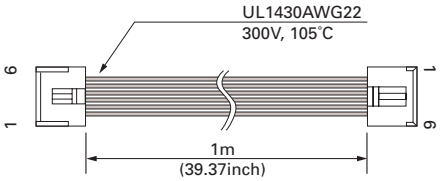


Cable model No.	Length
PM-C06M0100-02	1m(39.37inch)

Applicable stepping motor	
103H6701-04□0	103H7124-04□0
103H6703-04□0	103H7126-04□0
103H6704-04□0	103H8221-04□1
103H7121-04□0	103H8222-04□1
103H7123-04□0	103H8223-04□1

● Cable 4 (Stepping motor extension cable 2)

Driver side	
Pin No.	Color
1	White
2	Black
3	Orange
4	Blue
5	Red
6	Yellow



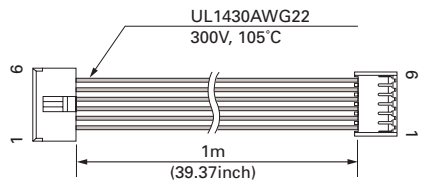
Stepping motor side	
Pin No.	Color
1	White
2	Orange
3	Blue
4	Red
5	Yellow
6	Black

Cable model No.	Length
PM-C06M0100-04	1m(39.37inch)

Applicable stepping motor
103H7821-04□0
103H7822-04□0
103H7823-04□0

● Cable 5 (Stepping motor extension cable 3)

Driver side	
Pin No.	Color
1	White
2	Black
3	Orange
4	Blue
5	Red
6	Yellow



Stepping motor side	
Pin No.	Color
1	White
2	Orange
3	Blue
4	Yellow
5	Red
6	Black

Cable model No.	Length
PM-C06M0100-07	1m(39.37inch)

Applicable stepping motor
103H5205-04□0
103H5208-04□0
103H5209-04□0
103H5210-04□0