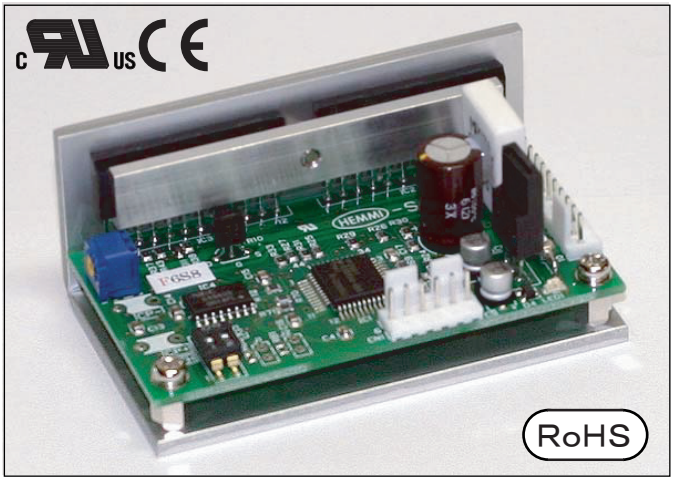
5 PHASE STEPPING MOTOR DRIVER

MC-5M



UL standard recognition , CE marking

FEATURES

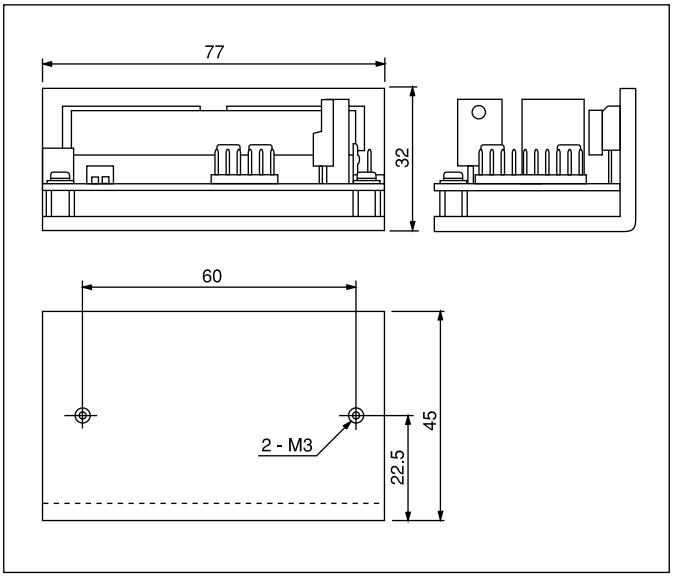
- Maximum drive current 1.4A/phase.
- Single power supply DC24–36V.
- Optical–isolator input.
- Automatic current reduction. ▪
- Compact size driver. ▪

※ Optional Parts ; Wire assembled conector.

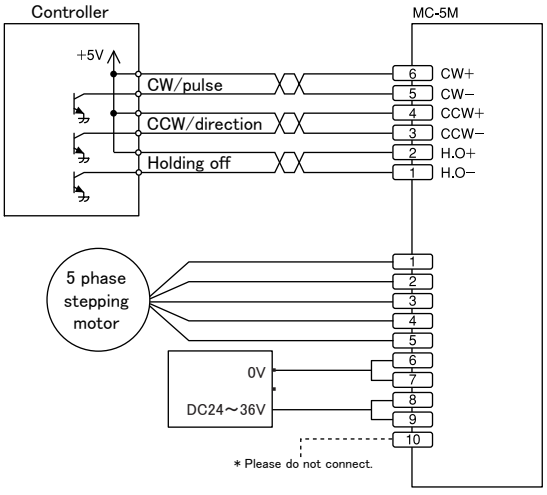
SPECIFICATION

Name	5 phase stepping motor driver
Model ▪	MC–5M
Drive method	Bipolar Pentagon
Input power	DC20～40V 3A Max.
Drive current	0.5A～1.4A/phase
Maximum frequency	70kpps
Input signal	Optical–isolator input [1] ; 4～8V , [0] ; –8～0.5V Input resistance CW, CCW, and H.O ; 390Ω
Function	Pulse input mode selector , Full/half step select , Automatic current reduction at motor standstill ▪
Operating temperature range	0～40℃ ▪
Operating humidity range	0～85%
Weight	90g

DIMENSIONS (unit ; mm)



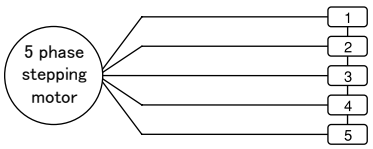
SAMPLE WIRING DIAGRAM



MOTOR

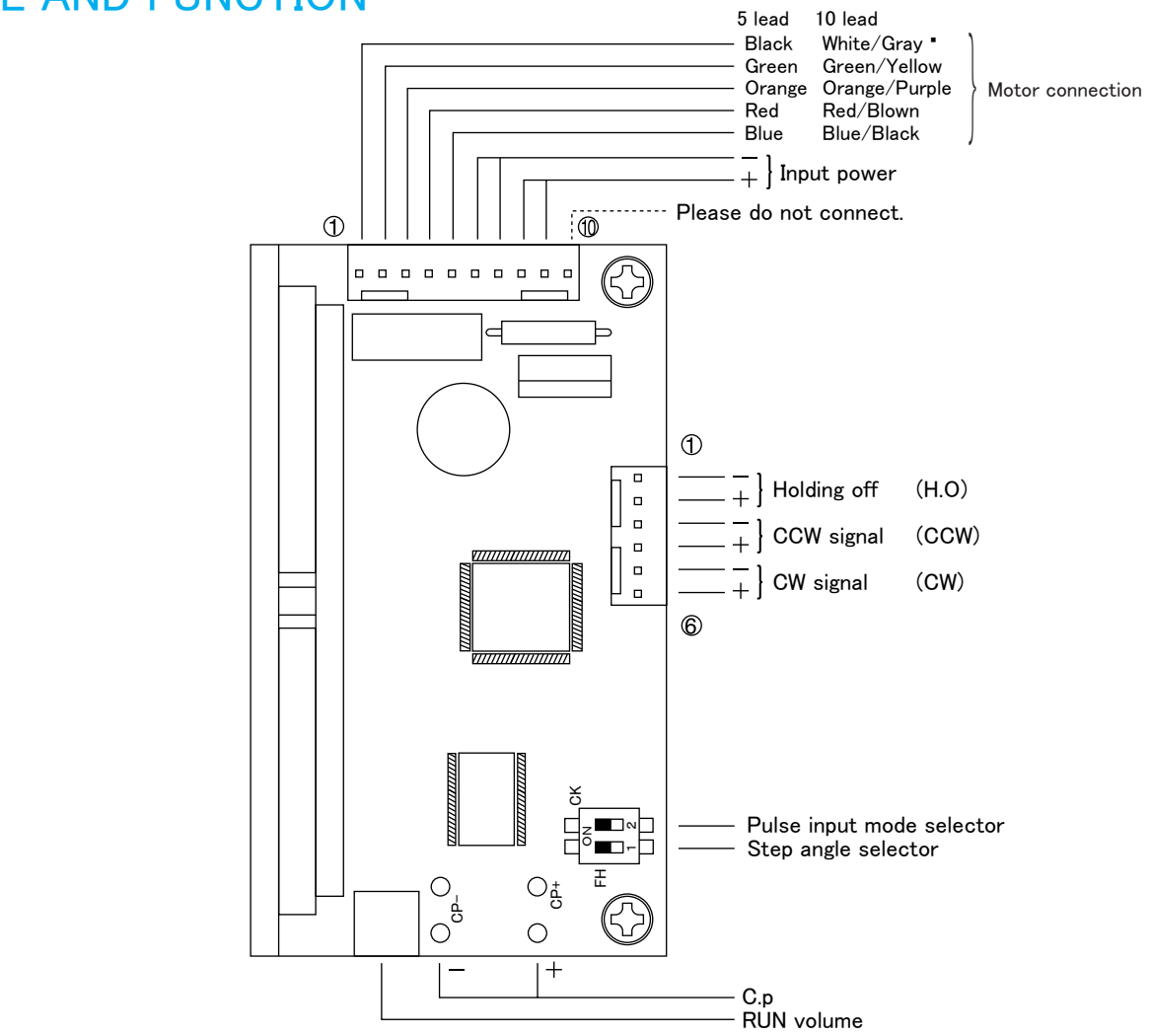
- 5/10 lead 5–Phase stepping motors such as Tamagawa–seiki or Oriental–motor.

Motor connection



Connector No.	5 lead	10 lead
1	Black	White/Gray
2	Green	Green/Yellow
3	Orange	Orange/Purple
4	Red	Red/Brown
5	Blue	Blue/Black

NAME AND FUNCTION



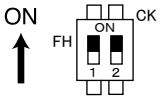
SETTING THE DRIVER OUTPUT CURRENT

To obtain the desired drive current,connect a potentiometer to CP(+,−)and use the following formula:
Potentiometer voltage(V) = Desired drive current × 2

Factory setting is 1.4A/phase.

① Turn RUN Volume Control all the way to the left before the system is powered.
② Turn On the power.
③ Input CW(or CCW) pulse signal with a frequency of 10Hz minimum.
(Caution : Motor starts to rotate once the signal is input.)
④ To set the drive current, turn RUN Volume slowly to the right untill voltage meets the value calculated bove.
⑤ At the Motor Standstill, the output current will be automatically reduced to 65% of the set current.

DIP SW FUNCTIONS



No.	Mode	ON	OFF
1	Step angle	0.72° / pulse	0.36° / pulse
2	Pulse mode	One pulse	Two pulse

INPUT CIRCUIT