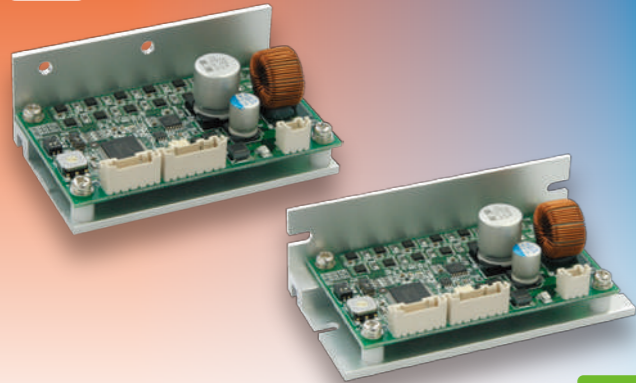


5 Phase Stepping Motor Driver

MC-S0514-L



FEATURE

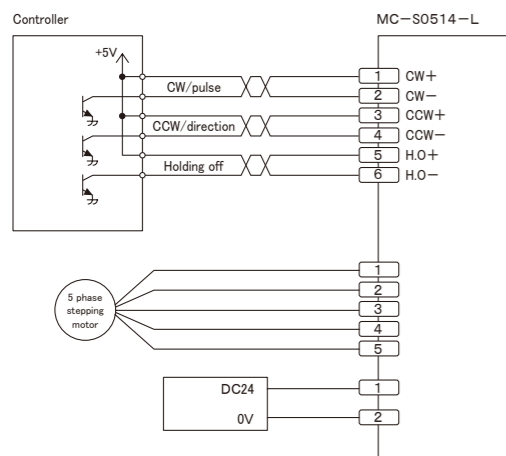
- More low-priced and compact size micro step driver.
- Drive Current : 0.35A/phase, 0.75A/phase, 1.4A/phase.
- Low vibration drive(Full or Half step).
- Optical-isolator input.
- Automatic current reduction.
- Small size.

※Optional Parts ; Wire assembled conector ▶Page 54

SPECIFICATION

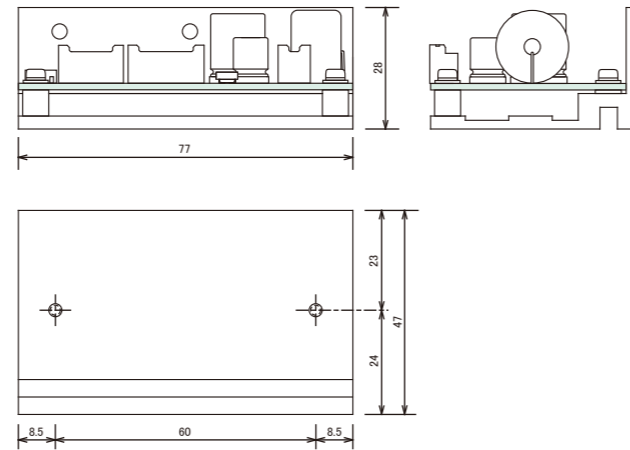
Name	5 phase stepping motor driver
Model	MC-S0514-L
Driving method	Micro step
Input power	DC24V ±5% 3A Max.
Drive current	0.35A/phase, 0.75A/phase, 1.4A/phase Switching
Division	2 series : 1, 2, 4, 5, 8, 10, 16, 20, 25, 40, 50, 80, 100, 125, 200, 250 3 series : 1, 2, 3, 6, 12, 18, 24, 32, 36, 48, 60, 72, 120, 160, 180, 240
Maximum frequency	500 kpps
Input signal	Optical-isolator input [1]:3~5V, [0]:-3~0.5V Input resistance CW, CCW:220Ω H.O.:220Ω
Function	Pulse input mode selector, Micro step angle select, Automatic current reduction
Operating temperature range	0~40°C
Operating humidity range	0~85%
Weight	81g (type 2)

SAMPLE WIRING DIAGRAM

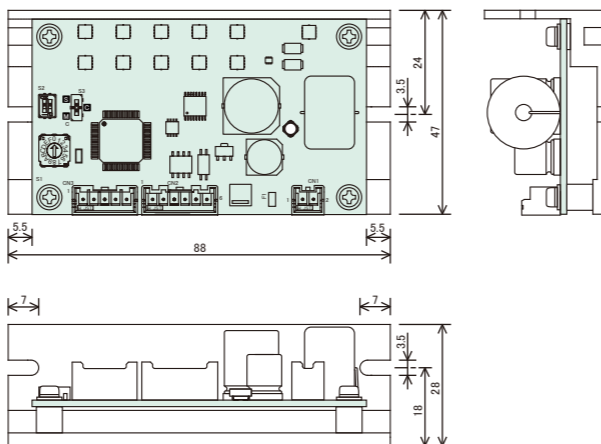


DIMENSIONS (unit:mm)

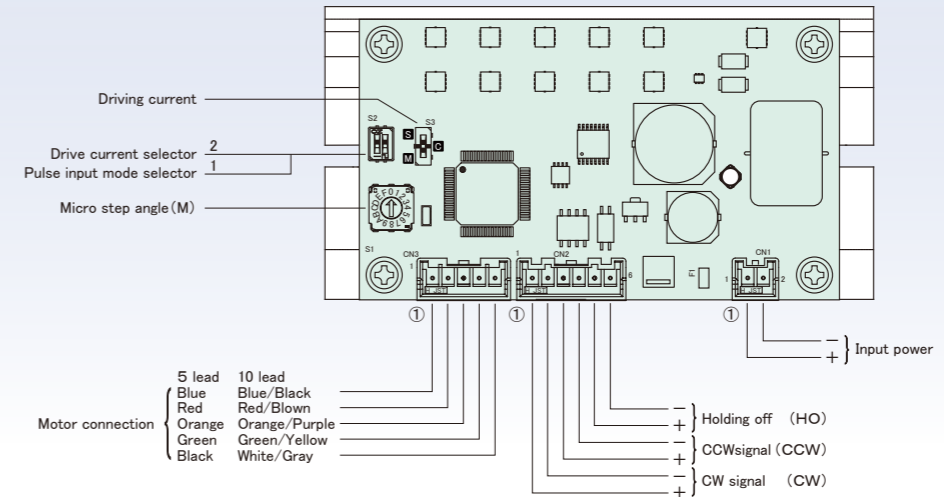
Type 1



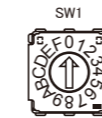
Type 2



NAME AND FUNCTION



SETTING MICROSTEP RESOLUTION



Resolution for 2 series : When DIP Switch SW1 is OFF.

SW No.	0	1	2	3	4	5	6	7	8	9
Division	1	2	4	5	8	10	20	40	80	16
	A	B	C	D	E	F				
	25	50	100	125	200	250				

$$\text{Micro Step Angle} = \frac{\text{Base Step Angle}}{\text{Division}}$$

Resolution for 3 series : When DIP Switch SW1 is ON.

SW No.	0	1	2	3	4	5	6	7	8	9
Division	1	2	3	6	12	18	24	32	36	48
	A	B	C	D	E	F				
	60	72	120	160	180	240				

SETTING DRIVE CURRENT



DIP Switch "S3"

- for 0.75A/phase : Switch to "S".
- for 0.35A/phase : Switch to "C" (Center).
- for 1.4A/phase : Switch to "M".

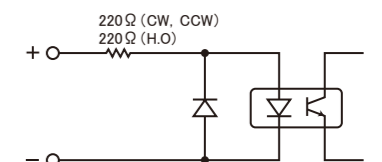
※Idle current is fixed by 50% of setting and the drive currents.

DIP SW FUNCTION



No.	Mode	ON	OFF
1	Pulse mode	One pulse	Two pulse
2	Drive current selector	3 series	2 series

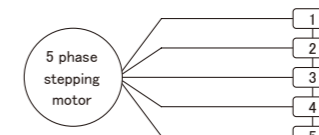
INPUT CIRCUIT



MOTOR

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

See table below for the pin no. of the connector and color of motor leads.



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