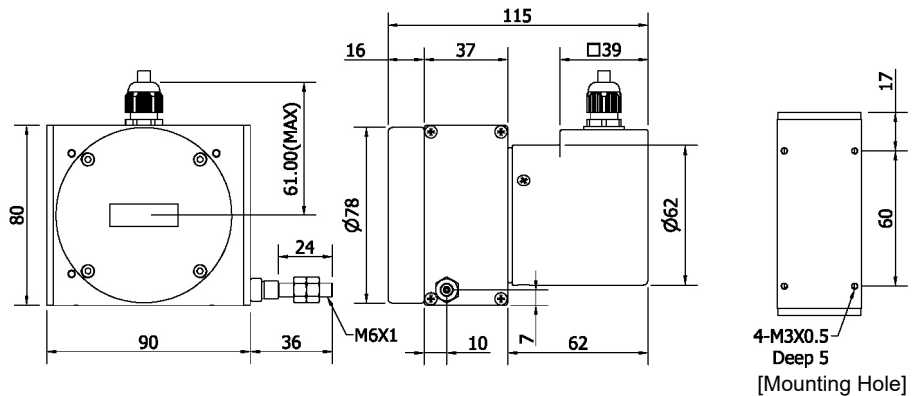


# HPS-M1-R

## LINEAR WIRE POTENTIOMETER

- PRECISION ELECTRIC RESISTANCE SIGNAL OUTPUT
- SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE



### ELECTRICAL SPEC.

Full Stroke (mm) 量測行程	500, 750, 1000, 1500, 2000, 3000, 4000, 5000
Sensor	Wire-wound and hybrid potentiometer
Output Signal Mode 輸出信號模式	Resistance (Potentiometer)
Resolution 解析	Essentially infinite
Linearity 線性度	[standard class] ±0.25% FS; [precision class] ±0.1% FS
Repeatability 重覆性	±0.05% FS
Output Resistance 輸出電阻值	[standard class] 5K ohm ± 10% FS; [precision class] 5K ohm ± 5% FS
Power Rating (watts)	[stroke 500 mm] 1 W at 40°C; [stroke ≥ 1000 mm] 2 W at 40°C
Recommended Input Voltage 輸入電壓	30V (AC/DC) max., best voltage at 5 ~ 10 VAC/VDC

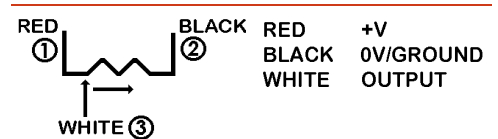
### MECHANICAL SPEC.

Wire Specification 線徑規格	Diameter: 0.7 mm SUS304 with nylon coating
Max. Travel Speed 最大往復速度	1,000 mm / sec.
Vibration 震動	10-55 Hz / 1.5 mm Vpp / 10 G (max.)
Cable 電線	Ø5.4, 100 cm long, radial cable output
Weight 重量	< 1,000 g
Starting Torque on Spring 拉力	[(Stroke ≤ 1000 mm) 600 g; [Stroke ≥ 1500 mm] 1000 g

### ENVIRONMENTAL SPEC.

Operating Temp. / Humidity 操作溫度/濕度	-20°C ~ 70°C RH35% ~ 90% (No Condensation)
Storage Temp. 儲存溫度	-20°C ~ 80°C
Protection 保護等級	IP64: Dust & Dripping Proof (only for potentiometer housing)

### Electrical Connection



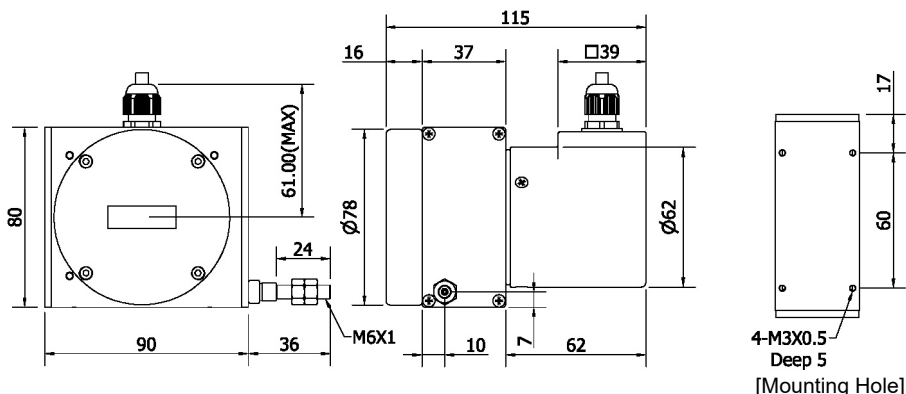
### ORDERING INFORMATION

<b>HPS - M1</b>	<b>Measuring Range 量測行程</b>	<b>Signal Mode 信號模式</b>	<b>Potentiometer Life and Linearity 壽命及線性度</b>
	<b>05</b> : 500 mm <b>20</b> : 2000 mm <b>075</b> : 750 mm <b>30</b> : 3000 mm <b>10</b> : 1000 mm <b>40</b> : 4000 mm <b>15</b> : 1500 mm <b>50</b> : 5000 mm	R: Resistance 5K ohm	<b>Blank</b> : 1 X 10 <sup>8</sup> cycles, linearity 0.25% FS *F: 5 X 10 <sup>6</sup> cycles, linearity 0.1% FS *F25: 5 X 10 <sup>6</sup> cycles, linearity 0.25% FS

# HPS-M1-V

## LINEAR WIRE POTENTIOMETER

- PRECISION ELECTRIC 0-5V and 0-10V SIGNAL OUTPUT
- SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE



### ELECTRICAL SPEC.

Full Stroke (mm) 量測行程	500, 750, 1000, 1500, 2000, 3000, 4000, 5000
Sensor	Wire-wound and hybrid potentiometer
Output Signal Mode 輸出信號模式	0-5Vdc or 0-10Vdc
Resolution 解析	Essentially infinite
Linearity 線性度	[standard class] ±0.3% FS; [precision class] ±0.15% FS
Repeatability 重覆性	±0.05% FS
Input Power 供應電壓	10-30Vdc for 0-5V output; 15-30Vdc for 0-10V output
Input Current 供應電流	10 mA max.

### MECHANICAL SPEC.

Wire Specification 線徑規格	Diameter: 0.7 mm SUS304 with nylon coating
Max. Travel Speed 最大往復速度	1,000 mm / sec.
Vibration 震動	10-55 Hz / 1.5 mm Vpp / 10 G (max.)
Cable 電線	Ø5.4, 100 cm long, radial cable output
Weight 重量	< 1,000 g
Starting Torque on Spring 拉力	[Stroke ≤ 1000 mm] 600 g; [Stroke ≥ 1500 mm] 1000 g

### ENVIRONMENTAL SPEC.

Operating Temp. / Humidity 操作溫度/濕度	0°C ~ 70°C RH35% ~ 90% (No Condensation)
Storage Temp. 儲存溫度	-20°C ~ 80°C
Protection 保護等級	IP64: Dust & Dripping Proof (only for potentiometer housing)

### Electrical Connection



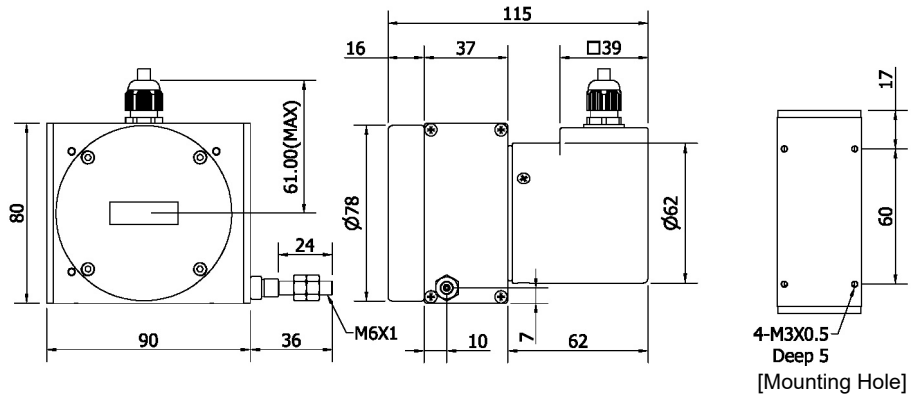
### ORDERING INFORMATION

<b>HPS - M1</b>	Measuring Range 量測行程		Signal Mode 信號模式	Life 壽命及線性度
	05 : 500 mm	20 : 2000 mm	*5V: 0-5Vdc	Blank: 1 X 10 <sup>6</sup> cycles, linearity 0.3% FS
	075 : 750 mm	30 : 3000 mm	*10V: 0-10Vdc	*F: 5 X 10 <sup>6</sup> cycles, linearity 0.15% FS
	10 : 1000 mm	40 : 4000 mm		*F25: 5 X 10 <sup>6</sup> cycles, linearity 0.3% FS
	15 : 1500 mm	50 : 5000 mm		

# HPS-M1-MA

## LINEAR WIRE POTENTIOMETER

- PRECISION ANALOG CURRENT 4-20mA SIGNAL OUTPUT
- SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE



### ELECTRICAL SPEC.

Full Stroke (mm) 量測行程	500, 750, 1000, 1500, 2000, 3000, 4000, 5000
Sensor	Wire-wound and hybrid potentiometer
Output Signal Mode 輸出信號模式	4-20 mA (2 wires)
Resolution 解析	Essentially infinite
Linearity 線性度	[standard class] ±0.3% FS; [precision class] ±0.15% FS
Repeatability 重覆性	±0.05% FS
Input Power 供應電壓	15-24Vdc±20%
Input Current 供應電流	20 mA max.
Loop Resistance (load)	(loop supply voltage -12) / 0.02 max.
Zero and Span Adjustment	±5%

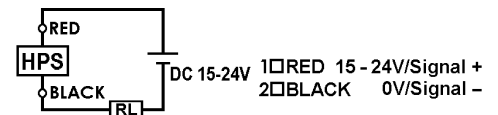
### MECHANICAL SPEC.

Wire Specification 線徑規格	Diameter: 0.7 mm SUS304 with nylon coating
Max. Travel Speed 最大往復速度	1,000 mm / sec.
Vibration 震動	10-55 Hz / 1.5 mm Vpp / 10 G (max.)
Cable 電線	Ø5.4, 100 cm long
Weight 重量	< 1,000 g
Starting Torque on Spring 拉力	[Stroke ≤ 1000 mm] 600 g; [Stroke ≥ 1500 mm] 1000 g

### ENVIRONMENTAL SPEC.

Operating Temp. / Humidity 操作溫度/濕度	0°C ~ 70°C RH35% ~ 90% (No Condensation)
Storage Temp. 儲存溫度	-20°C ~ 80°C
Protection 保護等級	IP64: Dust & Dripping Proof (only for potentiometer housing)

### Electrical Connection



### ORDERING INFORMATION

<b>HPS - M1</b>	Measuring Range 量測行程	Signal Mode 信號模式	Life 壽命及線性度							
	<table border="0"> <tr> <td>05 : 500 mm</td> <td>20 : 2000 mm</td> </tr> <tr> <td>075 : 750 mm</td> <td>30 : 3000 mm</td> </tr> <tr> <td>10 : 1000 mm</td> <td>40 : 4000 mm</td> </tr> <tr> <td>15 : 1500 mm</td> <td>50 : 5000 mm</td> </tr> </table>	05 : 500 mm	20 : 2000 mm	075 : 750 mm	30 : 3000 mm	10 : 1000 mm	40 : 4000 mm	15 : 1500 mm	50 : 5000 mm	*420: 4-20mA
05 : 500 mm	20 : 2000 mm									
075 : 750 mm	30 : 3000 mm									
10 : 1000 mm	40 : 4000 mm									
15 : 1500 mm	50 : 5000 mm									