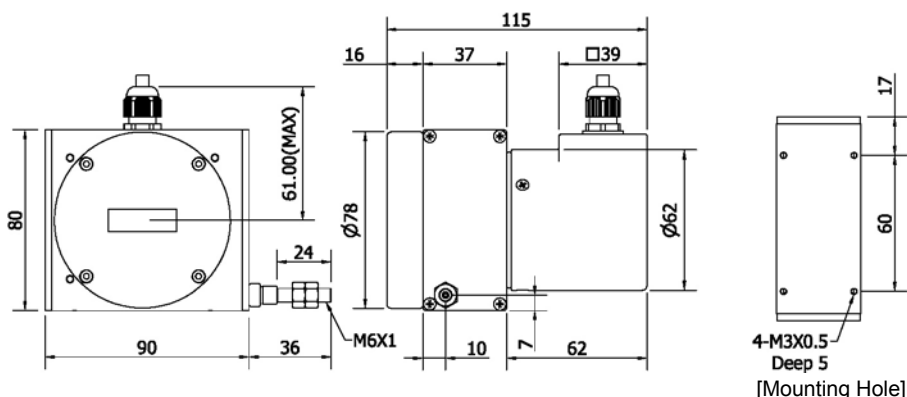


# HPS-M1-R

## 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
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] $\pm 0.25\%$ FS; [precision class] $\pm 0.1\%$ FS ( $\pm 1$ count)
Repeatability 重覆性	$\pm 0.02\%$ FS
Output Resistance 輸出電阻值	[standard class] 5K ohm $\pm 10\%$ FS; [precision class] 5K ohm $\pm 5\%$ FS
Power Rating (watts)	[stroke 500 mm] 1 W at 40°C; [stroke $\geq 1000$ 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 Hz to 2000 Hz, 10 g
Cable 電線	$\varnothing 5.4$ , 100 cm long, radial cable output
Weight 重量	< 1,000 g
Starting Torque on Spring 拉力	[(Stroke $\leq 1000$ mm) 600 g; [Stroke $\geq 1500$ 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



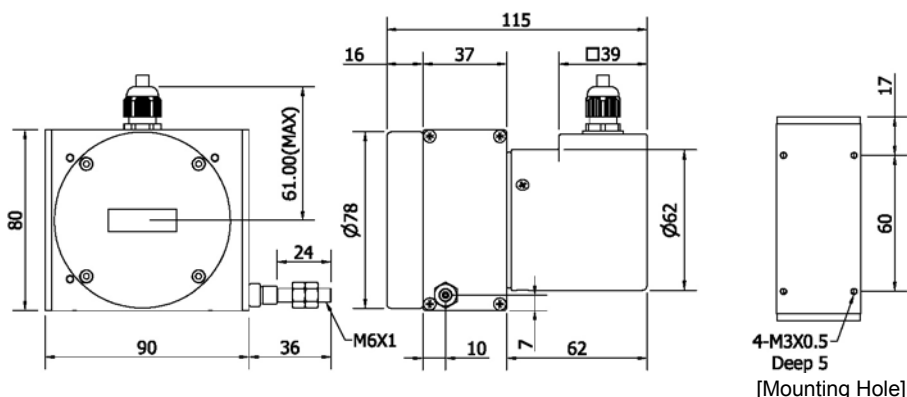
### ORDERING INFORMATION

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

# 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
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] $\pm 0.3\%$ FS; [precision class] $\pm 0.15\%$ FS ( $\pm 1$ count)
Repeatability 重覆性	$\pm 0.05\%$ 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 Hz to 2000 Hz, 10 g
Cable 電線	$\phi 5.4$ , 100 cm long, radial cable output
Weight 重量	< 1,000 g
Starting Torque on Spring 拉力	[Stroke $\leq 1000$ mm] 600 g; [Stroke $\geq 1500$ mm] 1000 g

### ENVIRONMENTAL SPEC.

Operating Temp. / Humidity 操作溫度/濕度	0°C ~ 70°C
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



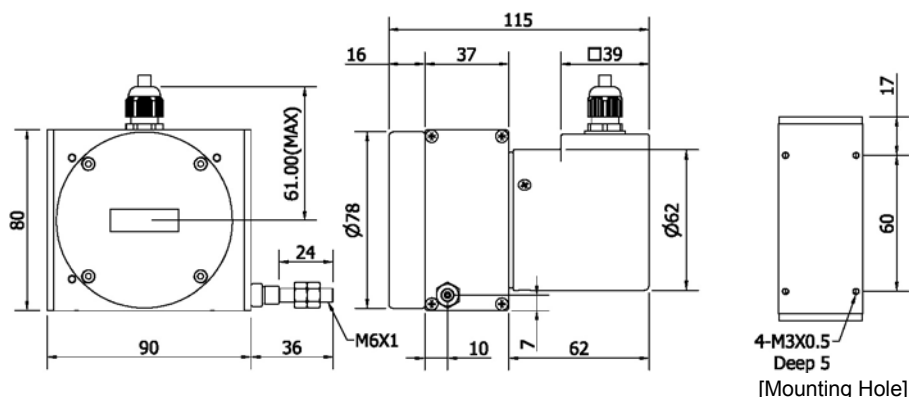
### ORDERING INFORMATION

HPS - M1	Measuring Range 量測行程	Signal Mode 信號模式	Life 壽命及線性度
	05 : 500 mm      15 : 1500 mm	*5V: 0-5Vdc	Blank: 1 X 10 <sup>6</sup> cycles, linearity 0.3% FS
	075 : 750 mm      20 : 2000 mm	*10V: 0-10Vdc	*F: 5 X 10 <sup>6</sup> cycles, linearity 0.15% FS
	10 : 1000 mm      30 : 3000 mm		*F25: 5 X 10 <sup>6</sup> cycles, linearity 0.3% FS
	40 : 4000 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
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] $\pm 0.3\%$ FS; [precision class] $\pm 0.15\%$ FS ( $\pm 1$ count)
Repeatability 重覆性	$\pm 0.05\%$ FS
Input Power 供應電壓	15-24Vdc $\pm 20\%$
Input Current 供應電流	20 mA max.
Loop Resistance (load)	(loop supply voltage -12) / 0.02 max.
Zero and Span Adjustment	$\pm 5\%$

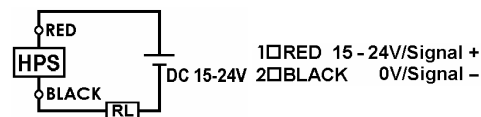
### MECHANICAL SPEC.

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 Hz to 2000 Hz, 10 g
Cable 電線	$\varnothing 5.4$ , 100 cm long
Weight 重量	< 1,000 g
Starting Torque on Spring 拉力	[Stroke $\leq 1000$ mm] 600 g; [Stroke $\geq 1500$ mm] 1000 g

### ENVIRONMENTAL SPEC.

Operating Temp. / Humidity 操作溫度/濕度	0°C ~ 70°C
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

HPS - M1 -	Measuring Range 量測行程	Signal Mode 信號模式	Life 壽命及線性度
	05 : 500 mm      15 : 1500 mm	*420: 4-20mA	Blank: 1 X 10 <sup>6</sup> cycles, linearity 0.3% FS
	075 : 750 mm      20 : 2000 mm		*F: 5 X 10 <sup>6</sup> cycles, linearity 0.15% FS
	10 : 1000 mm      30 : 3000 mm		*F25: 5 X 10 <sup>6</sup> cycles, linearity 0.3% FS
	40 : 4000 mm		