

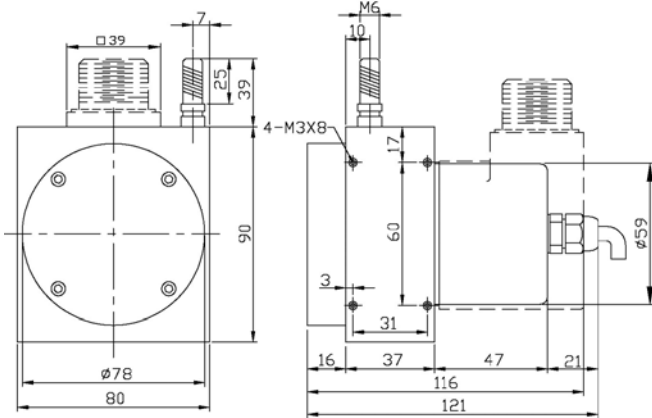
# HLS-M

## DISPLACEMENT SENSOR LINEAR WIRE ENCODER



- Measuring Range 1000~5000 mm
- Push Pull, Line Driver
- DC 5~26V

### DIMENSION



### ORDERING INFORMATION

Stroke 行程	Resolution 解析	Electronics 电路特性	Male Connector 连接器
10: 1000 mm	1: 1 mm	P: Push Pull	*R7: 7 pin
20: 2000 mm	05: 0.5 mm	*H: Line Driver	*R10: 10 pin
	02: 0.2 mm		
	01: 0.1 mm		
	005: 0.05 mm		
30: 3000 mm	1: 1 mm		
50: 5000 mm	05: 0.5 mm		
	02: 0.2 mm		
	01: 0.1 mm		

### ELECTRICAL SPEC.

Detection System	Incremental 增量型
Output Wave 输出波形	Square Wave 方波
Stroke (mm) 量测行程	1000, 2000, 3000, 5000
Standard Resolution (mm/pulse) 解析	1, 0.5, 0.2, 0.1, *0.05 mm/pulse (*0.05 mm/pulse only for stroke: 1000, 2000 mm)
Accuracy 精度	(stroke 1000 mm) $\pm 0.03\%$ FS, $\pm 1$ count; (stroke 2000 ~ 5000 mm) $\pm 0.05\%$ FS, $\pm 1$ count
Output Phase 输出相	ABZ phase
Electronics 电路特性	Push Pull or Line Driver
Power Supply 供应电源	DC 5~26V
Current Consumption 消耗电流	$\leq 60$ mA
Output Capacity 输出容量	Sync. Current: 20 mA, Residual Voltage: 0.5V or less
Max. Response 最大响应频率	10K Hz ~ 100K Hz
Phase Different 相位差	A, B phase different $90^\circ \pm 45^\circ$ (T/4 $\pm$ T/8), Z phase T $\pm$ T/2
Wave Form Rise / Fall 波形上下时间	2 $\mu$ s or less
Polarity 极性保护	Against Reverse Protection

### MECHANICAL SPEC.

Wire Specification 线径规格	Material: SUS304 with nylon coating Diameter: 0.7 mm; Breaking load: 23 Kg
Max. Travel Speed 最大往复速度	1,000 mm / sec.
Vibration 震动	10g (10 $\pm$ 1,500 Hz)
Shock 冲击	20g per 11 ms
Cable 电线	$\varnothing 5.4$ , 100 cm long
Weight 重量	< 1,000g
Starting Torque on Spring 拉力	(stroke < 2 m) Max. 600 g; (stroke $\geq$ 2 m) Max. 900 g

### ENVIRONMENTAL SPEC.

Operating Temp. / Humidity 操作温度/湿度	0°C ~ 60°C, RH 35% ~ 90% (No Condensation)
Storage Temp. 储存温度	-20°C ~ 80°C
Protection 保护等级	IP64: Dust & Dripping Proof (only for encoder housing)
Life 寿命	Typical > 1 X 10 <sup>6</sup> cycles