

HLS-DA

DISPLACEMENT SENSOR LINEAR WIRE ENCODER



- Miniature and Compact Design
- Easy and Fast Mounting
- Measuring Range 500 mm
- Up to Resolution 0.05 mm

ELECTRICAL SPEC.

Detection System	Incremental 增量型
Output Wave 輸出波形	Square Wave 方波
Stroke (mm) 量測行程	500
Standard Resolution (mm/pulse) 解析	5, 1, 0.5, 0.2, 0.1, 0.05 mm/pulse
Repeatability Error 重複性誤差	±0.025% FS, ±1 count
Output Phase 輸出相	AB phase
Electronics 電路特性	NPN Voltage 電壓型, NPN Open Collector 電流型
Power Supply 供應電源	DC 5~12V or DC 10~26V for NPN Voltage, DC 5~26V for NPN Open Collector
Current Consumption 消耗電流	≤ 50 mA
Output Capacity 輸出容量	Sync. Current: 20 mA, Residual Voltage: 0.5V or less
Max. Response 最大響應頻率	Max. 100K Hz
Phase Different 相位差	A, B phase different 90°±45° (T/4±T/8)
Wave Form Rise / Fall 波形上下時間	2 µs or less
Polarity 極性保護	Against Reverse Protection

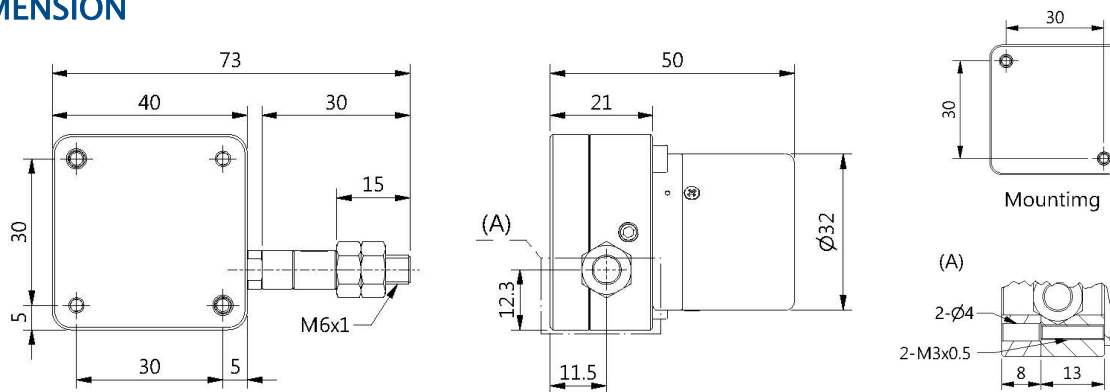
MECHANICAL SPEC.

Wire Specification 線徑規格	Material: SUS304 with nylon coating Diameter: 0.61 mm; Breaking load: 16 Kg
Max. Travel Speed 最大往復速度	1000 mm / sec.
Vibration 震動	10-55 Hz / 1.5 mm Vpp / 10 G (max.)
Shock 衝擊	20g per 11 ms
Cable 電線	Ø4.5, 50 cm long
Weight 重量	< 150g
Starting Torque on Spring 拉力	Max. 650 g

ENVIRONMENTAL SPEC.

Operating Temp. / Humidity 操作溫度/濕度	-10°C ~ 60°C, RH 35% ~ 90% (No Condensation)
Storage Temp. 儲存溫度	-20°C ~ 70°C
Protection 保護等級	IP50: Dust Proof (only for encoder housing)
Wire Life 壽命	Typical > 1 X 10 ⁶ cycles

DIMENSION



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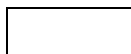
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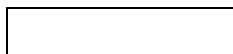
ORDERING INFORMATION

HLS-DA-05 -



Resolution
解析

5: 5 mm
1: 1 mm
05: 0.5 mm
02: 0.2 mm
01: 0.1 mm
005: 0.05 mm



Electronics
電路特性

LV: NPN Voltage 5~12V
HV: NPN Voltage 10~26V
C: NPN Open Collector 5~26V

[Option Component]

Ordering Part No. **HA-90074**

