

# 鎖模力感測儀

## Strain Ring

### Type: SML – RS



#### 說明:

#### Description:

特殊研發預壓式應變規，用於量測表面應變，其量測是瞬間量測，不需任何校正。

Specially developed Strain Gauges are pressed onto the measured surface, the measurement is instantly without any calibration needed.

被量測工件表面不需經過化學清潔或機械處理。

**The surface at the measuring area** shall be free of layers of materials other than the measured material (e.g. rust, color, scale, etc.). It has not to be chemically clean or mechanically treated.

預壓式應變規的零點偏移，感測儀在安裝後從不會在零點，這種現象不會影響它的靈敏度或訊號放大，整合放大器具有偏移歸零功能的特色。

The **Zero-offset** of the pressed-on strain-gauges is after mounting never at zero. This does not influence the sensitivity or signal amplitude. The integrated amplifier features reset function.

感測儀非常容易安裝，只需用 3 牛頓·米的扭力起子將它固定在工件表面即可。

The **mounting** is very easy with a torque screw driver. The sensor is evenly braced with two screws around the cylinder with a given 3 Nm torque.

對於機器控制，我們的感測儀整合堅固的工業用放大器，具有歸零功能。

For **machine-control**, our sensor with integrated rugged and industrial strain-gauge amplifiers with reset deliver directly a 10V output signal equaling e.g.1000 $\mu\epsilon$ .



#### 技術資料:

#### Technical Data:

應變規係數	2.0 ( $\pm 0.5\%$ )
Gauge factor	
量測範圍	0~1000 $\mu\epsilon$
Measuring range	
線性	<0.5% FS
Linearity	
遲滯	<0.2% FS
Hysteresis	
重覆性	<0.1% FS
repeatability	
2 x1/4 橋阻值	標準 350 $\Omega$
Resistance	
工作環境溫度	-20 ~ +65 $^{\circ}\text{C}$
Operating temperature	
最大供應電壓	9 V
Max. voltage	

- 軸類軸向和歌林柱的應變量測及控制非常容易。  
Very easy strain measurement and control on axils, shafts and tie-bars.
- 將應變感測環套鎖在軸上即可量測表面不需任何處理。  
Brace Strain-ring around a shaft and measure No surface treatment necessary
- 精度 0.5 % 不需校正，自動彎曲補償。  
<0.5% accuracy – without calibration, bending compensated.
- 適合模具保護和一般應變量測。  
For machine-control, Mold-and tool protection or general strain measurement.
- 應變規不需再黏貼，也不用錫焊，並且可以重覆使用。  
Strain gauges not bonded anymore – thus multiple use and no soldering!
- 理想的週期性量測如塑膠射出機壓鑄機壓床等的鎖模力量測。  
Ideal for cyclical applications like clamping force measurement on plastic, die casting machine, presses etc..

感測儀可接顯示器 SML-DM4DB 或 DM4DA 做機器調適。也可接放大器做鎖模力線上監控自動模控制。

The sensor can be used together with strain gauge amplifier or digital monitor DM4DB, DM4DA.



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