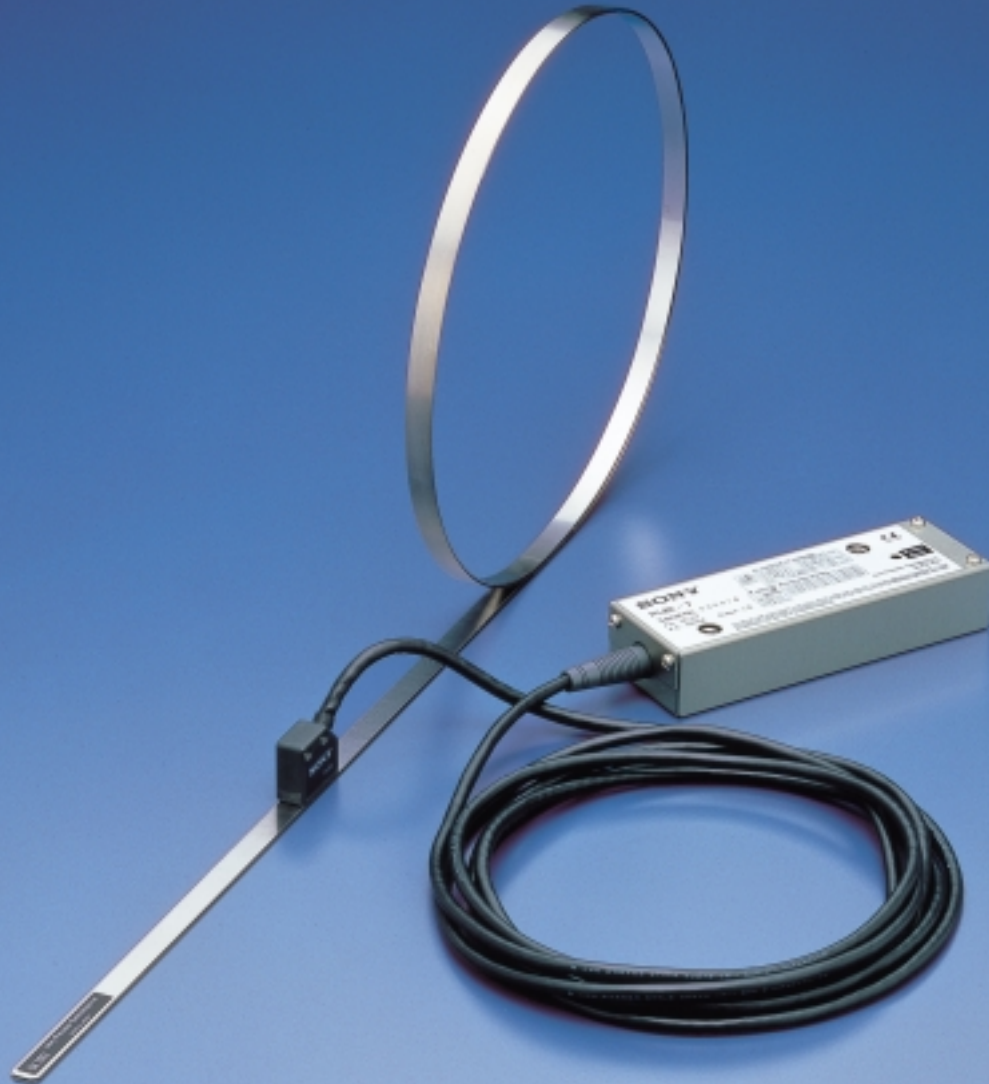


DIGIRULER®

Scale

SL130

Head and Detector

PL80 series

Sony's magnetic digital scale system, DIGIRULER, survives the worst workshop environments of oil, chips, dirt and heavy vibration.

Scale Unit SL130 Series

- Magnetic scale concept, high reliability, non-contact scale design.
- Compact and simple design.
- Available in lengths up to 30 m / 98.4'.

Head and Detector Unit PL80 Series

- Compact design.
- Detector unit for automated position control.
- High response speed: 300 m/min
- Resolution: 10 μm , 20 μm , 25 μm , 50 μm , 100 μm

Applications

Feedback system for automated position control of layout, wood working, metal fabrication and machine tools.

Specifications

SL130

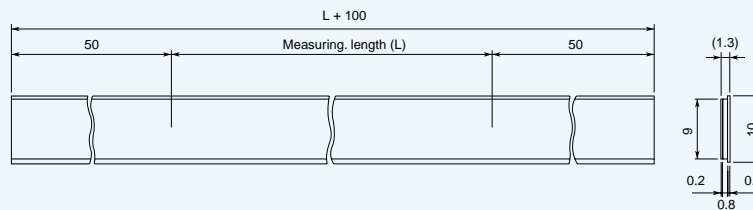
Model	SL130-20 to -700	SL130-800 to -3000
Recommended resolution	10 μm / 20 μm / 50 μm / 100 μm (with PL80 Series)	
Measuring length (L) mm (in.)	200, 300, 400, 500, 600, 700, 800, 1000, 1200, 1500, 1600, 1800, 2000, 2500, 3000, 4000, 5000, 6000, 7000 (7.8, 11.8, 15.7, 19.6, 23.6, 27.5, 31.5, 39.3, 47.2, 59.0, 62.9, 70.8, 78.7, 98.4, 118.1, 157.4, 196.8, 236.2, 275.5)	8000, 9000, 10000, 20000, 30000 (314.9, 354.3, 393.7, 787.4, 1181.1)
Overall length	L + 100 mm / 3.94"	
Accuracy (at 20 °C / 68 °F)	± (25 + 5L/1000) μm	± (25 + 5L/1000 + 10 N) μm L = 8000/9000/10000 → N = 1 L = 20000 → N = 2 L = 30000 → N = 3
Expansion coefficient	(10.4 ± 1) × 10 ⁻⁶ /°C	
Operating temperature	-5 °C to 45 °C / 23 °F to 113 °F	
Storage temperature	-10 °C to 50 °C / 14 °F to 122 °F	

PL80 Series

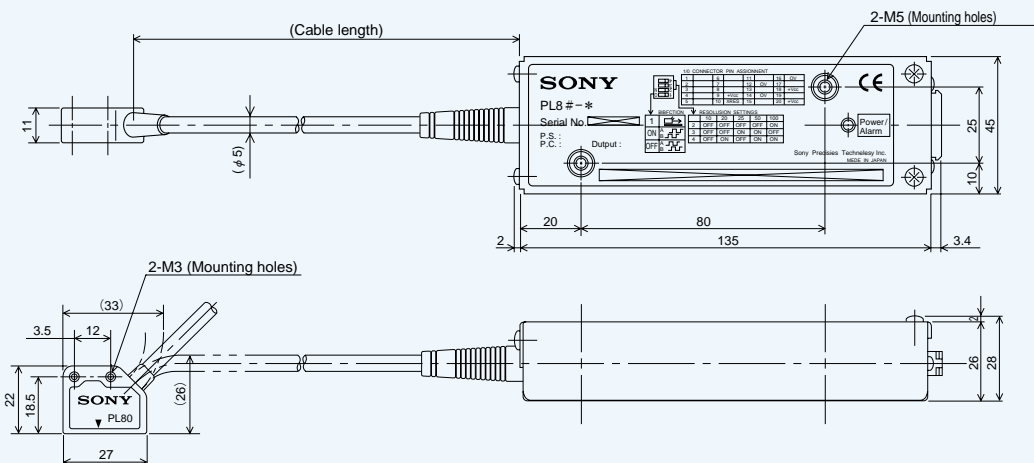
Model	PL81					PL82					PL84		
	-3	-5	-7	-A	-B	-3	-5	-7	-A	-B	-3	-5	-A
Cable Length	3 m	5 m	7 m	10 m	15 m	3m	5 m	7 m	10 m	15 m	3 m	5 m	10 m
Mass (g)	640	720	800	910	1050	640	720	800	910	1050	640	720	910
Accuracy	50 + 10L/1000 μm (L: measuring length in mm) (Varies with scale SL100/130)												
Resolution	10, 20, 25, 50, 100 μm												
Alarm Display	LED turns orange. (green for normal operation)												
Output circuit	A/B phase signal by open collector					A/B phase signal by voltage differential line driver (equivalent of MC34C87)					A/B phase signal by push-pull differential line driver (ET9600 by OPTOLAB)		
Max. response speed	300 m/min												
Clearance	max. 1.5 mm												
Power supply	DC 10~30V					DC 5V ± 5%					DC 10~30V		
Power consumption	max. 70 mA (2.1 W)					max. 300 mA (1.5 W)					max. 140 mA (4.2 W)		
Protective design grade	Equivalent to IP67												
Operating temperature	0 °C to 45°C / 32 °F to 113 °F												
Storage temperature	-20 °C to 50°C / -4 °F to 122 °F												

Dimensions

SL130



PL80 Series



• Designs and appearances are subject to change without prior notice.

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