

Analogue Mini Probe

Low Profile Transducer

Datasheet
502872
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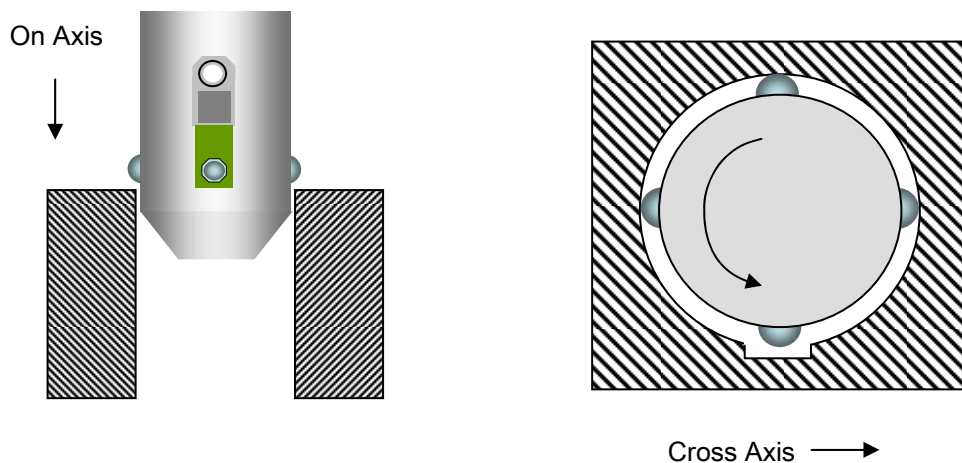


- 0.5mm Total Measuring Range
- Excellent Repeatability in both planes of operation
- Strong frame enables rotation in bores with Key slot
- Changeable contact tips
- IP 65 Protection
- Compact size
- Simple installation

Description

The Mini Probe is a compact low profile transducer that is ideal for measurements in confined places, such as bores. The transducer is based on a parallel spring structure that ensures that it provides excellent repeatability over a long working life, even when rotated in bores that have key slots or lubrication ports.

A Tungsten Carbide contact tip is fitted as standard but a selection of customer replaceable tips with an M2 thread is available for special applications.



Technical Specification AM/0.25/S (Part Number 925555)

Measurement	
Mechanical Travel	0.63 mm Maximum
Measurement range	±0.25 mm
Start of measurement range	20 µm to 30 µm from limit stop
Linearity	1% FRO

Repeatability (using standard tip)	On Axis	Cross Axis
100µm from limit stop	0.10 µm	0.10 µm
250µm from limit stop	0.25 µm	0.15 µm
500µm from limit stop	0.50 µm	0.25 µm
Resolution	Depends on signal conditioning used	
Tip Force	0.7 N ± 25% (at centre of measurement range)	
Temperature Coefficient	0.08µm/°C	

Mechanical	
Mass	15 g (,0.011lbs)
Material (Mini Probe Frame)	Chromium Steel
Gaiter	Viton®
Mounting	1 x M3 screw (supplied)

Environmental	
Storage Temperature	-20 °C to +85 °C
Operating Temperature	0° C to +60 °C
IP Rating	IP65

Electrical	
Energising Voltage	3 V RMS
Energising Current	2.5 mA/V
Energising Frequency	13 kHz
Sensitivity	75.8 mV/V/mm (± 0.5%)
Phase Angle	13 degrees

See www.solartronmetrology.com for latest information on available contact tips

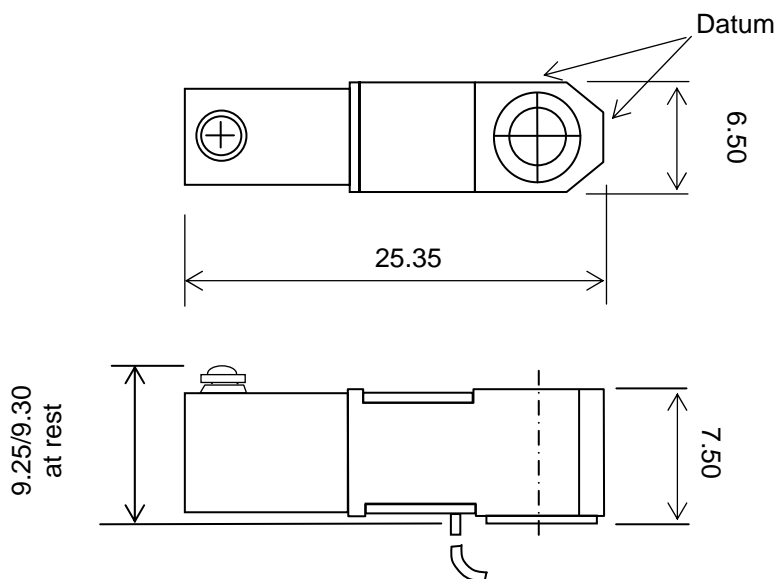


Figure showing general dimensions and datum surfaces
(please refer to the technical drawing for the complete set of dimensions)