

More Precision



capaNCDT CSE01 and CSE025

Capacitive sensors for displacement, distance & position

- CSE01: Diameter of 3 mm and a length of 15.6 mm
- CSE025: Diameter of 4 mm and a length of 16.1 mm
- Ideal for measurement tasks in restricted installation spaces
- Submicron accuracy in industrial environments
- Suitable for vacuum and clean rooms



Model		CSE01	CSE025
Measuring range	Reduced	0.05 mm	0.125 mm
	Nominal	0.1 mm	0.25 mm
	Extended	0.15 mm	0.5 mm
Resolution ¹⁾	Performance	0.08 nm	0.188 nm
	Industrial	20 nm	50 nm
Linearity ²⁾		< ±0.2 μm	< ±0.5 μm
Sensitivity ²⁾		< ±0.5 μm	< ±1.25 μm
Temperature stability ³⁾		-0.02 μm / K	-0.025 μm / K
Min. target size (flat)		ø 4 mm	
Connection		integrated cable, length 1.4 m or 2.8 m	
Mounting	Clamping	ø 4 mm	
	Storage	-50 ... +200°C	
Temperature range	Operation	-50 ... +200°C	
	Humidity ⁴⁾	0 ... 95 % r.H.	
Shock (DIN EN 60068-2-27)		30 g / 5 ms in XY axis, 1000 shocks each	
Vibration (DIN EN 60068-2-6)		20 g / 58 ... 2000 Hz in XY axis, 10 cycles each	
Protection class (DIN EN 60529)		IP40	
Material		Invar	
Weight		approx. 26 g (incl. cable)	approx. 27 g (incl. cable)
Distance from the sensor surface for the recommended mounting option		1.2 mm	
Compatibility		compatible with all capaNCDT controllers from Micro-Epsilon; sensors can be replaced as required without recalibration (sensitivity error)	

¹⁾ RMS noise referred to mid of measuring range and to nominal measuring range with standard cable CCm (1.4 m)

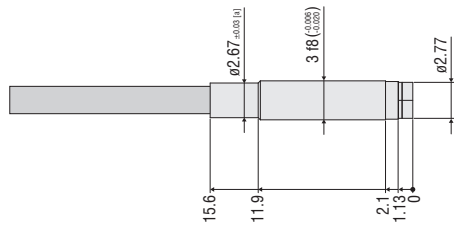
²⁾ Maximum error must be added to the controller linearity and applies to standard cable tuning 1.4 m (CCm)

³⁾ In recommended mounting position; from a temperature of +140 °C: non-linear signal drift

⁴⁾ Non-condensing

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Sensor capaNCDT CSE01



Sensor capaNCDT CSE025

