

Precise, confocal sensor with large working distance confocalDT IFS2405-28

The confocal sensors of the IFS2405 series are designed for measurement tasks where high accuracy is required. The IFS2405-28 stands out due to a large offset distance of 220mm from the target. The sensor is used when a large distance from the measurement object is required, e.g. with measurements of hot surfaces. The IFS2405 series provides high sensitivity and is used for distance measurements and one-sided thickness measurements of transparent film, layers and glass.



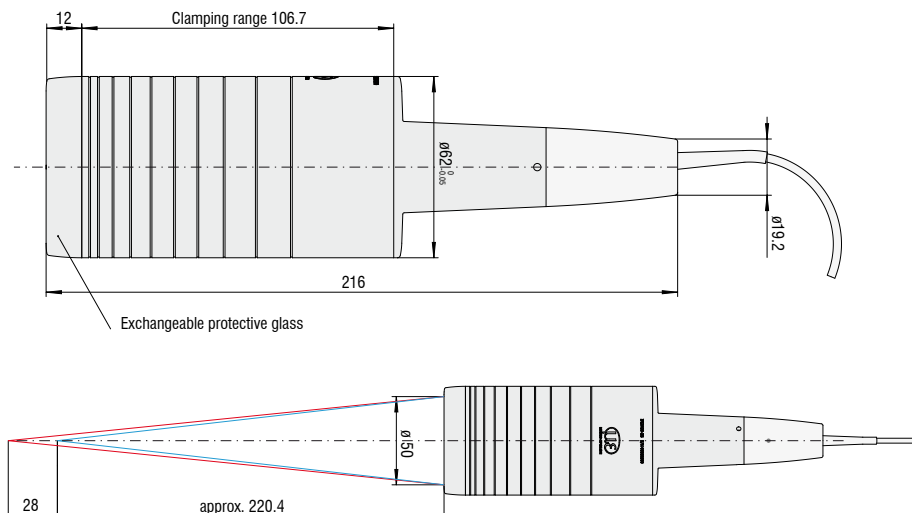
Sensor model	IFS 2405-28	
Measuring range	28mm	
Start of measuring range	approx.	220mm
Light spot diameter	60µm	
Linearity (displacement and distance measurement)	±0.025% FSO	
Linearity (thickness measurement)	0.05% FSO	
Resolution ¹⁾	250nm	
Weight (without cable)	0.75kg	
Max. tilt ²⁾	±5°	
Outer diameter	62mm	
Protection class	IP40 / IP65 (front)	
Operating temperature	+5 ... +70°C	
Storage temperature	-20 °C ... +70°C	
Sensor cable (fibre optic cable)	length: standard 3m; option up to 50m; bending radius: static 30mm; dynamic 40mm	
Shock	15g, 6ms	
Vibration	2g / 10Hz ... 500Hz	

FSO = Full Scale Output

All data at constant ambient temperature (25±2°C) against optical flat; specifications can change when measuring different materials.

¹⁾ Average from 512 values at 1kHz, near to the centre of the measuring range

²⁾ Maximum sensor tilt angle that produces a usable signal, near to the centre of the measuring range



Micro-Epsilon