

## confocalDT IFS2407-0,1 High-precision confocal chromatic sensor

- Precise distance measurements
- Measuring the thickness of transparent objects, min. thickness 5  $\mu\text{m}$
- Ideal for non-contact roughness measurements
- High numerical aperture (NA) ensures highest precision
- Compact sensor design, ideal for OEM applications

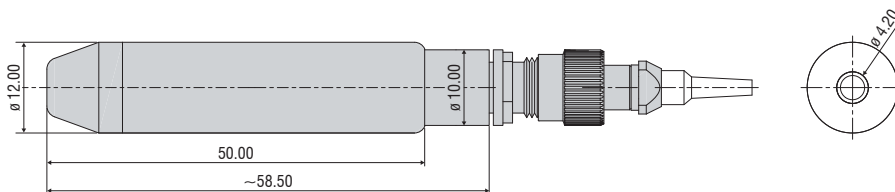


Model	IFS2407-0,1	IFS2407-0,1(001)
Measuring range	0.1 mm	
Start of measuring range	approx. 1 mm	
Resolution <sup>1)</sup>	3 nm	
Linearity	Displacement and distance	$\leq \pm 0.05 \mu\text{m}$
	Thickness	$\leq \pm 0.1 \mu\text{m}$
Light spot diameter	<3 $\mu\text{m}$	<4 $\mu\text{m}$
Max. tilt <sup>2)</sup>	$\pm 35^\circ$	
Numerical aperture (NA)	0.8	0.7
Connection	pluggable sensor cable via FC socket with a 50 $\mu\text{m}$ core	
Temperature range	Storage	-20 ... +70 °C
	Operation	+5 ... +70 °C
Shock (DIN-EN 60068-2-27)	15 g, 6 ms	
Vibration (DIN-EN 60068-2-6)	2 g / 10 Hz ... 500 Hz	
Protection class (DIN-EN 60529)	IP65, front operated	
Compatibility	compatible with all confocal controllers	
Weight	approx. 36 g	
Special feature	high NA	light-intensive model

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

<sup>1)</sup> Average from 512 values at 1 kHz, near to the midrange onto optical flat

<sup>2)</sup> Decreasing accuracy towards limit values and on reflecting surfaces



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