

More Precision.



confocalDT IFS2406-10/VAC(001)

Confocal chromatic sensors for displacement and thickness measurements



Sensor model	IFS2406-10/VAC(001)	
Measuring range	10 mm	
Start of measuring range	approx.	27 mm
Light spot diameter	15 μm	
Linearity (displacement and distance measurement)	< $\pm 2 \mu\text{m}$	
	< $\pm 0.02 \%$ FSO	
Linearity (thickness measurement)	< $\pm 4 \mu\text{m}$	
	< $\pm 0.04 \%$ FSO	
Resolution ¹⁾	38 nm	
Weight (without cable)	128 g	
Max. tilt angle ²⁾	$\pm 13.5^\circ$	
Protection class	IP40 (vacuum compatible)	
Operating temperature	+5 $^\circ\text{C}$... +70 $^\circ\text{C}$	
Storage temperature	-20 $^\circ\text{C}$... +70 $^\circ\text{C}$	
Sensor cable (optical fiber)	Length: standard 3 m; extension up to 50 m; bending radius: static 30 mm; dynamic 40 mm	
Shock	15 g / 6 ms in XY axis, 1000 shocks each	
Vibration	2 g / 20 ... 500 Hz in XY axis, 10 cycles each	

FSO= Full Scale Output

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

¹⁾ Average from 512 values at 1 kHz, in the mid of the measuring range onto optical flat

²⁾ Maximum sensor tilt angle that produces a usable signal, near to the midrange

Dimensions:

