

## confocalDT IFS2406-3 Confocal chromatic sensor

Precise displacement & thickness measurement with large offset



Sensor model		IFS2406-3
Measuring range		3mm
Start of measuring range	approx.	74mm
Spot diameter		35 $\mu$ m
Linearity (displacement and distance measurement)		$\pm 1.5\mu$ m
		$\leq \pm 0.05\%$ FSO
Linearity (thickness measurement)		$\pm 3\mu$ m
		$\pm 0.1\%$ FSO
Resolution <sup>1)</sup>		50nm
Weight (without cable)		99g
Max. tilt <sup>2)</sup>		$\pm 6.5^\circ$
Protection class		IP65 (front side)
Operation temperature		+5°C ... +70°C
Storage temperature		-20°C ... +70°C
Sensor cable (optical fiber)		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 based on measurements 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 1kHz, near to the midrange

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

