

SFS Series Chromatic Confocal Displacement Sensor*6

SFS-D2050 Product Specifications



Reference Distance*1	50 mm
Measuring Range	±1 mm
Measuring Angle*2	±14°
Spot Diameter*3	Φ20/40 μm
Repeatability*4	85 nm
Linearity Error*5	<±0.6 μm
Outer Diameter x Length	Φ34 x 90.7 mm
Weight	162 g
Min. Measurable Thickness	10% of F.S.
Temperature Characteristic	~0.1% F.S./°C
Protection Rating	IP40

*1 Based on the center of the measuring range.
*2 Tested with a standard flat mirror tilted at a 1 kHz sampling rate.
*3 A sharp glass edge was measured on a sub-micron positioning stage and verified with a laser interferometer. Values correspond to small / large / four-point spot modes.
*4 Standard silver-coated mirror; 1 kHz, no averaging; RMS deviation of 10,000 consecutive samples.
*5 Calibrated and verified with a nanometer-precision laser interferometer.
*6 Suffixes: N = near reference, F = far reference, S = compact, L = large, H = high-temperature (-10°C to 150°C). The identification ring for this series (except C2000) has been upgraded to gold. Ring color may vary by version; appearance is subject to the delivered product. Performance and quality are unaffected.

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SFS-D2050 Outline Drawing

