

SFS Series Spectral Confocal Displacement Sensor*6

SFS-D108 Specifications



Reference Distance*1	8 mm	
Measurement Range	±0.05 mm	
Measurement Angle*2	±46.5°	
Spot Diameter*3	Φ2.7/5.4 μm	
Repeatability*4	3 nm	
Linearity Error*5	<±0.03 μm	
OD * Length	Φ40*111.5 mm	
Weight	256 g	
Min. Measurable Thickness	5% of F.S.	
Temperature Characteristic	<0.03% F.S./°C	
Protection Rating	IP40	

*1 Calculated at the center of the measuring range;
*2 Tested by tilting a standard plane mirror at a 1 kHz sampling rate;
*3 Measured on a sharp glass edge and verified with a sub-micron positioning stage using a laser interferometer as the displacement reference. Spot diameters correspond to small spot / large spot / four-spot types;
*4 Measured with a standard silver-coated mirror, 1 kHz, no averaging; RMS deviation of 10,000 consecutive samples;
*5 Calibrated and verified with a nano-level high-precision laser interferometer;
*6 Suffix definitions: N = near reference distance, F = far reference distance, S = compact size, L = large size, H = high-temperature version (operating temperature: -10°C to 150°C). To improve product experience, the color ring of this series (excluding C2000) has been upgraded to gold. The product you receive may have an old or new color ring; appearance is subject to the actual product received, and performance and quality are not affected.

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SFS-D108 Product Outline Drawing

