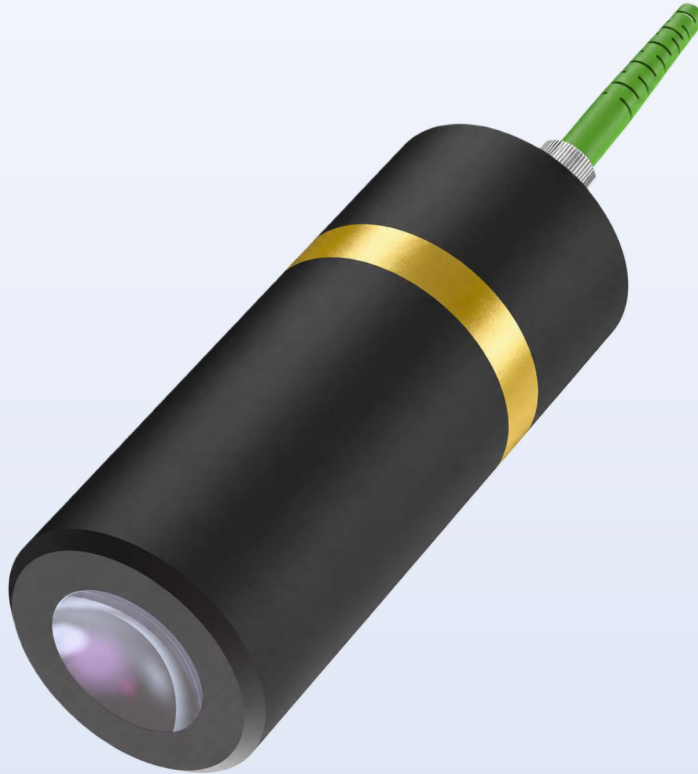


SFS Series Spectral Confocal Displacement Sensor*6

SFS-D410 Product Specifications



Reference Distance*1	10 mm
Measurement Range	± 0.2 mm
Measurement Angle*2	$\pm 43^\circ$
Spot Diameter*3	$\Phi 7/14/112$ μm
Repeatability*4	12 nm
Linearity Error*5	$< \pm 0.08$ μm
OD x Length	$\Phi 40 \times 99.4$ mm
Weight	186 g
Min. Meas. Thickness	5% off F. S.
Temp. Characteristic	$< 0.03\%$ F. S. / $^\circ\text{C}$
Protection Rating	IP40

*1 Calculated at the center of the measuring range;

*2 Tested by tilting a standard plane reflector at a 1 kHz sampling rate;

*3 Measured with a sharp glass edge. Verified using a sub-micron positioning stage and a laser interferometer as the displacement reference. Spot diameter values correspond to small spot / large spot / four-spot type;

*4 RMS deviation of 10,000 consecutive readings on a standard silver-coated reflector at 1 kHz without averaging;

*5 Calibrated and verified with a nano-level high-precision laser interferometer;

*6 Suffix definitions: N = near reference distance, F = far reference distance, S = small size, L = large size, H = high-temperature version (operating temperature: -10°C to 150°C). The color ring of this series (excluding C2000) has been upgraded to gold. The color ring may differ between old and new versions; actual delivered product prevails. Product performance and quality are unaffected.

SFS Series Spectral Confocal Displacement Sensor

SFS-D410 Product Outline Drawing

