

D-04 Displacement Sensor

Basic characteristic

- ▲ D-04 is a universal displacement sensor with a customizable measuring range from 0-100mm.
- ▲ The measuring range can be modified and extended upon the needs of the installation or measurement.
- ▲ D-04 is featuring a novel construction with an optimized compensation design.
- ▲ D-04 can be machined also from special alloys for universal and harsh environments applications (mines, subsea, sewers).



Benefits

- ▲ Direct mountable (can be equipped with spherical polymer bearings)
- ▲ Special design for harsh and demanding environments (mines, sub-sea applications)
- ▲ Customizable cable lengths

Applications

- ▲ Dilatations
- ▲ Settlement measurement
- ▲ Crack monitoring
- ▲ Strain and deformation measurement

Performance properties

Displacement range	±50mm
Displacement resolution	30µm
Displacement sensitivity	70pm/mm
Displacement accuracy ¹⁾	300µm
Displacement precision ²⁾	±120µm
Operating wavelength Range	1460-1620nm
Operating Temperature range	-20°C to +60°C
Number of FBGs	2
Occupied bandwidth	~12nm
Water ingress protection ³⁾	IP 67 ³⁾

¹⁾ Accuracy is established for each sensor under laboratory conditions and it includes hysteresis, non-linearity, and repeatability of the sensor.

²⁾ Precision is established on a batch basis and it includes hysteresis, non-linearity, repeatability, and reproducibility of the sensor.

³⁾ Can be utilized for marine application and water resistance up to 5bar.

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Physical properties

Housing material	Stainless steel 1.4404/1.4301
Dimensions (without cable) ¹⁾	~ Ø30 x 350mm
Weight (without cable)	<500g
Cable type	Dyneema reinforced cable Ø3mm
Cable length ²⁾	1mtr
Cable Bend Radius (dynamic)	40mm
Cable Bend Radius (static)	30mm
Connector type ³⁾	FC/APC
Mounting method	Application-based

¹⁾ Dimensions can vary depending on measuring range – for further details see the product drawing

²⁾ Cable length is extendable on request

³⁾ Other connector types available on request

Packaging

Cardboard box with dimensions: 370x290x45mm

Quality statement

The sensor is compliant with IEC 61757-1-1:2016/Ed1.0 and IEC 61757:2018

All sensors are 100% tested and calibrated at SYLEX

The sensor is manufactured according to ISO 9001:2008 and ISO 14001:2004

For more information contact our sales team at sales@sylex.sk

* Specifications are subject to change without notice