

## D-02 Displacement sensor

### Basic characteristic

- ▲ D-02 is 0-30mm range spring loaded linear displacement sensor.
- ▲ Displacement range is adjustable at installation, for example: -10/+20mm, -15/+15mm or similar within the 30mm range.
- ▲ D-02 sensor is supplied with integrated temperature used for compensating temperature changes during measurement.
- ▲ D-02 has ruggedized housing applicable in harsh environments.



### Benefits

- ▲ Direct mountable.
- ▲ One-body design for both displacement and temperature measurement.
- ▲ Customizable measuring ranges and cable lengths.

### Applications

- ▲ Dilatations
- ▲ Settlement measurement
- ▲ Crack monitoring
- ▲ Borehole extensometer

### Performance properties

Displacement range	0-30mm
Displacement accuracy (guaranteed) <sup>1)</sup>	150µm / <0.50% FS <sup>3)</sup>
Displacement accuracy (typical) <sup>1)</sup>	90µm / <0.30% FS <sup>3)</sup>
Displacement precision (guaranteed) <sup>2)</sup>	90µm / <0.30% FS <sup>3)</sup>
Displacement precision (typical) <sup>2)</sup>	60µm / <0.20% FS <sup>3)</sup>
Temperature compensation	Integrated
Temperature accuracy <sup>1)</sup>	<1°C
Temperature precision <sup>2)</sup>	±0.2°C
Operating Temperature range	-20°C to +60°C
Water resistance	IP 67

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

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

<sup>3)</sup> FS: full scale range

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### Physical properties

Housing material	Stainless steel SS316L
Dimensions (without cable) <sup>1)</sup>	Ø18 x 346,5mm
Weight (without cable)	430g
Cable type	3mm Dyneema reinforced cable
Cable length <sup>2)</sup>	1mtr
Cable Bend Radius (dynamic)	40mm
Cable Bend Radius (static)	30mm
Connector type <sup>3)</sup>	FC/APC
Mounting method	Application based

<sup>1)</sup> For further dimensions details see the product drawing

<sup>2)</sup> Cable length is extendable on request

<sup>3)</sup> Other connector types available on request

### Packaging

Cardboard box with dimensions: 370x290x45mm

### Quality statement

D-02 sensor is compliant with IEC 61757-1-1:2016/Ed1.0 and IEC 61757:2018

All sensors are 100% tested and calibrated at SYLEX

Sensor is manufactured according to ISO 9001:2008 and ISO 14001:2004

### Optional accessories

- ▲ **WCP-01 Watertight connector protection** – used for FC/APC connector protection during the installation against dust and water – IP67 rated.
- ▲ **LCP-03 Longer cable pigtails** – used to extend the cable lengths from 1mtr up to 20mtr.

For more information contact our sales team at [sales@sylex.sk](mailto:sales@sylex.sk)

\* Specifications are subject to change without notice