

D-01 Displacement sensor

Basic characteristic

- ▲ D-01 is a 0-80mm range spring loaded linear displacement sensor.
- ▲ Displacement range is adjustable at installation, for example: -40/+40mm, -30/+50mm or similar within the 80mm range.
- ▲ D-01 sensor is supplied with integrated temperature used for compensating temperature changes during measurement.
- ▲ D-01 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	0-80mm
Displacement accuracy (guaranteed) ¹⁾	<240µm / <0.30% FS ³⁾
Displacement accuracy (typical) ¹⁾	<160µm / <0.20% FS ³⁾
Displacement precision (guaranteed) ²⁾	<160µm / <0.20% FS ³⁾
Displacement precision (typical) ²⁾	<120µm / <0.15% FS ³⁾
Temperature compensation	Integrated
Temperature accuracy ¹⁾	<1°C
Temperature precision ²⁾	±0.2°C
Operating Temperature range	-20°C to +60°C
Ingress Protection rating	IP 67

¹⁾ Accuracy is established for each individual 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⁾ FS: full scale range

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Physical properties

Housing material	Stainless steel SS316L
Dimensions (without cable) ¹⁾	Ø18 x 395,5mm
Weight (without cable)	480g
Cable type	3mm Dyneema reinforced cable
Cable length ²⁾	1mtr
Cable Bend Radius (dynamic)	40mm
Cable Bend Radius (static)	30mm
Connector type ³⁾	FC/APC
Mounting method	Application based

¹⁾ For further dimensions 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

D-01 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

* Specifications are subject to change without notice