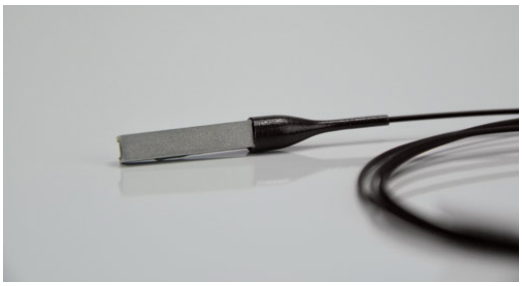
Data sheet

fos4Temp m (dyn, 1.5m, 1550nm)

Fiber optic temperature sensor



Product highlights

The features of fos4Temp m (dyn, 1.5m, 1550nm) include:

- Immune to lightning and electromagnetic interference
- Temperature range -40 ... +80°C
- Sensitivity 25 ppm/K (39 pm/K)

1 General description

The fos4Temp m (dyn, 1.5m, 1550nm) sensor is a fiber-optic temperature transducer based on a fiber Bragg grating sensor. It is designed to measure temperatures under special environmental conditions as the optical working principle makes the sensor immune to electromagnetic interference and lightning.

Also, sensing over long distances, as required in many structural monitoring or geological applications, is one of the fiber-optic sensors' advantages.

2 Product specifications

Sensor parameter	**Unit**	**fos4Temp m (dyn, 1.5m, 1550nm)**
Bragg wavelength at 23 °C (λ_0)	nm	1550 ±0.5
(k_T)	ppm/K	25.12 ±0.5
Measurement range	°C	-40 ... 80
FBG parameter	**Unit**	**fos4Temp m (dyn, 1.5m, 1550nm)**
Spectral width	nm	0.55 ±0.1
Reflectivity	%	60 ±10
Side mode suppression	dB	> 15

General specifications	**Unit**	**fos4Temp m (dyn, 1.5m, 1550nm)**
Suitable fos4X measurement device		fos4Test dyn / fos4Test nSens
Sensor type		Fiber Bragg grating
Optical connector type		LC/APC
Fiber type		SMF 28 compatible
Minimal bending radius	mm	50
Storage temperature	°C	-40 ... +80
Operating temperature	°C	-40 ... +80
Dimensions	**Unit**	**fos4Temp m (dyn, 1.5m, 1550nm)**
Mounting		glue
Height x width x length	mm	4 x 4x 20
Weight	g	2
Diameter of sensor cable	mm	1
Standard length of sensor cable	m	0.3