

Temperature Probe TP-02

Description

The fibre optic temperature probe TP-02 is a ruggedized temperature sensor which can be used in a series configuration. It detects temperature changes via the intrinsic temperature sensitivity of the FBG and via the thermal expansion of the FBG support. The sensor has two pigtails with FC/APC connectors.



Features

- Temperature sensing for serial configurations
- High accuracy because of small hysteresis and good wavelength reproducibility
- Watertight and ruggedized housing, applicable in harsh environments
- Embeddable in concrete

Applications

High accuracy temperature sensing in a fibre optic sensing network for various purposes. Applicable both indoors as well as outdoors.

Standard specifications

Parameter	Unit	Value
Temperature accuracy ¹	℃	1
Temperature sensitivity	pm/°C	23
Temperature range ²	$^{\circ}$	-10 to +85
FBG wavelength ³	nm	1510 to 1590
Sensor length	cm	11
Housing diameter	mm	6
Housing material	-	SS316
Pigtail diameter	mm	3
Pigtail length ⁴	m	1.5
Pigtail material	-	LDPE
Connector type	-	FC/APC
Water tightness ⁵	-	IP68
1		

The sensor accuracy does not contain error sources originating from the read-out equipment.

² Extended range possible on request

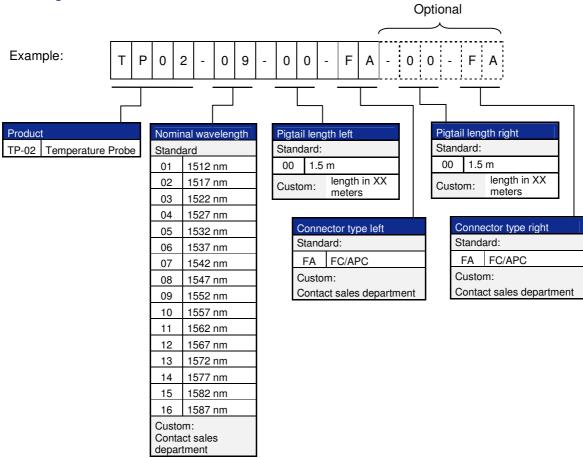
³ The FBG is in fact a Draw Tower Grating (DTG) i.e. written in the fibre while drawing it, see www.fbgs-technologies.com for further information.

Extended on request.

⁵ Watertight at 10 bar for 12 hours



Ordering information



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