

Temperature Chain TC-01

Description

The fibre optic temperature chain TC-01 makes use of the intrinsic temperature sensitivity of the Fibre Bragg Grating. The chain consists of a fibre containing several FBGs inserted into a stainless steel capillary. The cable is terminated with a pigtail with FC/APC connector. Capillary length, number of sensing points and their spatial distribution can be specified as required.



Features

- Distributed temperature sensing
- Watertight housing

Applications

Distributed temperature sensing for various purposes. Applicable both indoors as well as outdoors.

Standard specifications

Parameter	Unit	Value
Temperature accuracy ¹	°C	1
Temperature sensitivity	pm/°C	10 (typical)
Temperature range ²	°C	-10 to +85
FBG wavelength ³	nm	1510 to 1590
Capillary diameter	mm	3
Capillary length	m	On request
Capillary material	-	SS316L
Pigtail diameter	mm	3
Pigtail length ⁴	m	1.5
Number of sensors	-	On request
Distance between sensors	-	On request
Connector type	-	FC/APC
Water tightness	-	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.fbg-technologies.com for further information.

⁴ Extended on request.