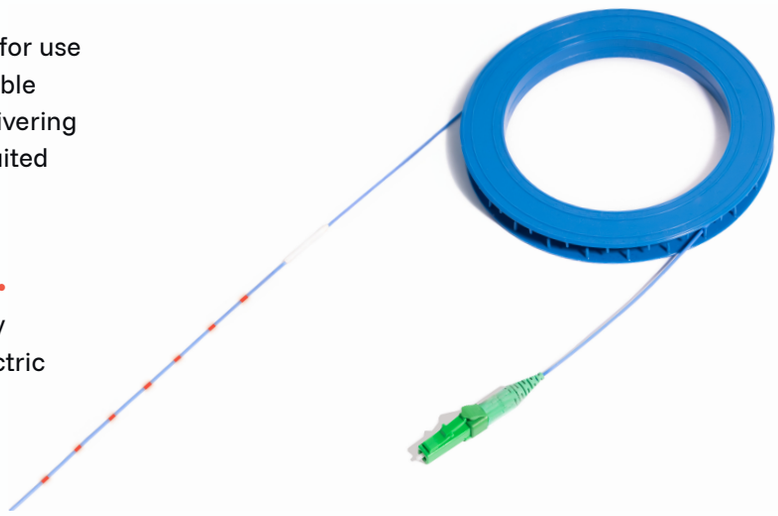
FITEMP

Datasheet Rev3 - April 2026

TPF - Multipoint Temperature Sensor

TPF is an optical fiber temperature sensor optimized for use with NEO FBG Interrogators. A single, thin sensing cable can integrate up to 25 distributed sensing points, delivering high sensitivity and accuracy while being perfectly suited for electrified environments.



Electromagnetic Immunity • Up to 25 Sensing Points • Ultra-Small Sensor Size • Easy Installation • Inherently Safe • No Galvanic Isolation required • 100% Non-electric

Performance Properties

Temperature Range	-40 … +250 °C (long-term)
Sensing Points	25 (individual)
Accuracy	±1 °C (Typical)
Response Time	~500 ms (T90)

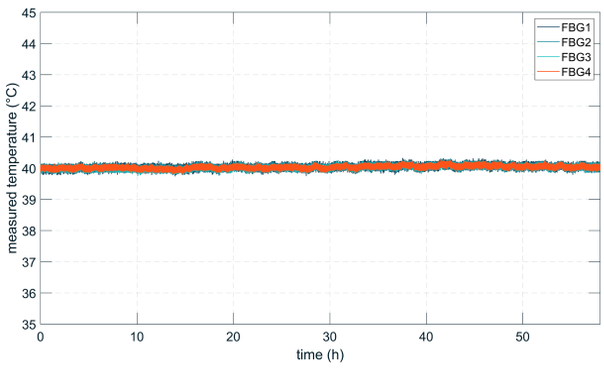
Physical Properties

Tubing Material	PTFE tubing
Connector	LC/APC (standard)
Diameter	Ø1.0 mm
Sensing Point Length	1mm
Total Length	up to 2.75 m
Critical Bending Radius	10 mm (lead-in), 300 mm (sensing area)
Ingress Protection Rating	IP 67
Pressure Rating	2 bar

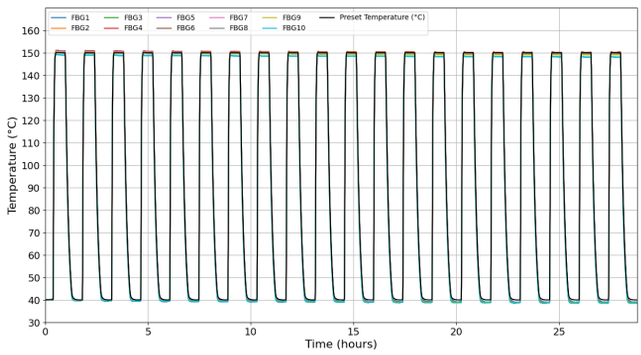
Temperature range applies to the sensing zone (fiber + PTFE tubing).
The LC/APC connector is rated to max. +85°C and must be positioned outside the high-temperature zone during installation.

For more product information please contact sales@fisens.de or visit www.fisens.com

Typ Long-Term Stability

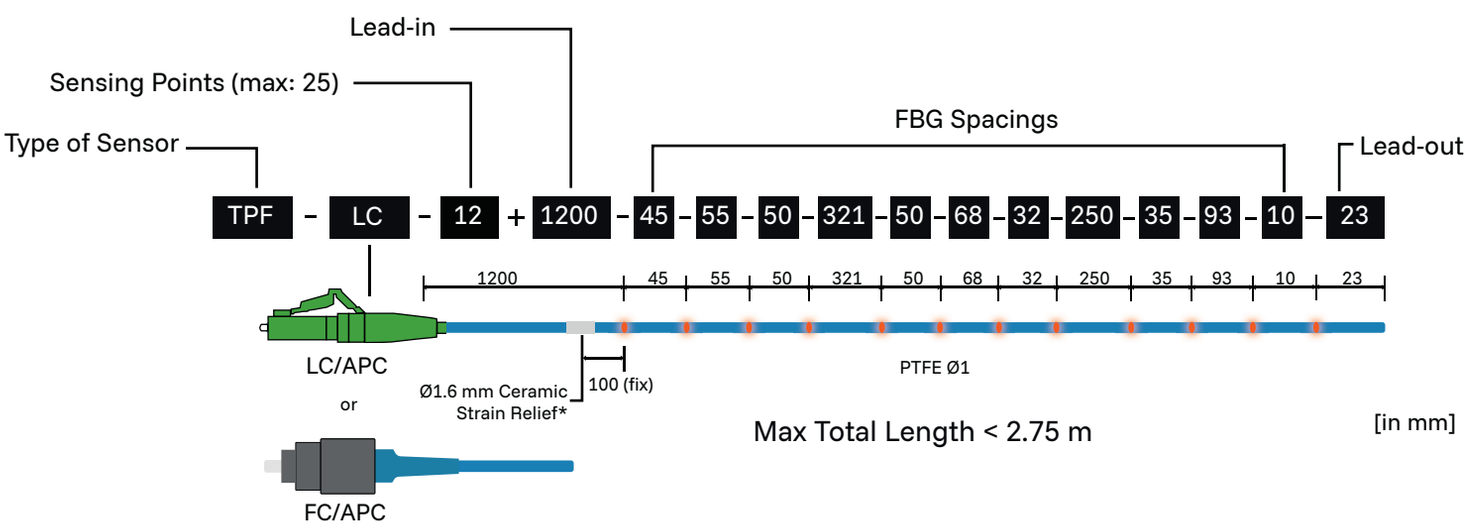


Typ Repeatability over 20 Cycles



Standard Option	Sensing Points	Lead In	Spacing	Sensing Length	Lead Out	Total Length
TPF-M-20-5	20	2645	5	95	10	2750
TPF-M-20-10	20	2550	10	190	10	2750
TPF-M-20-20	20	2360	20	380	10	2750
TPF-M-20-40	20	1980	40	760	10	2750
TPF-M-20-80	20	1210	80	1520	20	2750
	Tol:	±50	±1			[in mm]

Custom Configuration



Max Total Length < 2.75 m

[in mm]

*On request without strain relief (for short sensing lengths)

**Custom Wavelengths on request

Accessories

Extension/Adapter Cable

Up to 20 m



LC Cleaner



Laser Pen



Illuminating Sensor Positions

Fittings for Sealing



Up to 200 °C & 200 bar

FISENS reserves the right to change these specifications at any time without notice.
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