

Temperature Sensor, All-Metal Design – TF-XX Series



The TF-XX Series was developed in order to measure melt temperatures quickly and easily for all types of plastics.

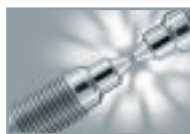
The temperature sensors are economical and versatile and impress with their robustness and reliability. The rheological characteristics of innumerable plastics were considered during the design procedure of the conical measuring tip, so that highly viscous medias can be ascertained without any greater problems. Major advantages regarding the life-span and reliability of the sensor in comparison to sword sensors are ensured due to the correct installation procedure.

- Robust metal construction
- Special material for measuring tip
- Plug connections with gold plated contacts
- Rheologically optimized sensor tip
- Applications up to 500°C (932°F) media temperature
- 100% market compatible
- Maximum melt pressure 2.000 bar (29,000 psi)

Configuration options

- Thermocouple Type J,L,K or resistance temperature detector PT 100
- ½" UNF 2A or M18 process connection
- Special materials for measuring tip (abrasive or corrosive medias)
- Amplifier for ex-areas (4-20mA) with BUZ head
- Available as transmitter with 0-10V or 4-20mA in the TF-LX version
- Measuring tip length available from 0mm (0inch) (flush) to 25mm (1inch)

Product variations (examples)



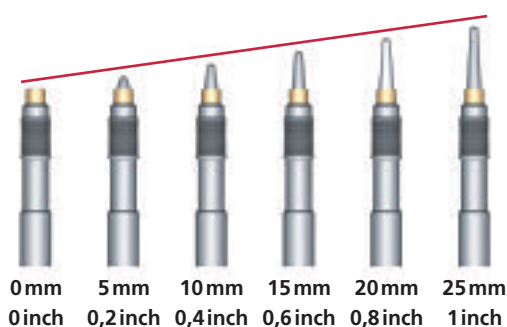
Alloy-C4 measuring tip



With cable exit and thermocouple plug in the TF-LX design



M18 x 1,5 process connection with special shaft length



Measuring tip length

The measuring tip length is selected according to the polymer melt viscosity and melt channel diameter at the point where the instrument is located. The length can be selected in 5 mm (0,2 inch) steps from 0 mm (0 inch) (flush) to 25 mm (1 inch). The standard design is suitable for melt temperatures of up to 400°C (1,000°F), the special Hastelloy design (see above) up to 500°C (932°F). All the tip lengths are available with thermocouples (Fe-CuNi type J or L, NiCr-Ni type K) or resistance sensors PT 100 (2-, 3- or 4-wire).