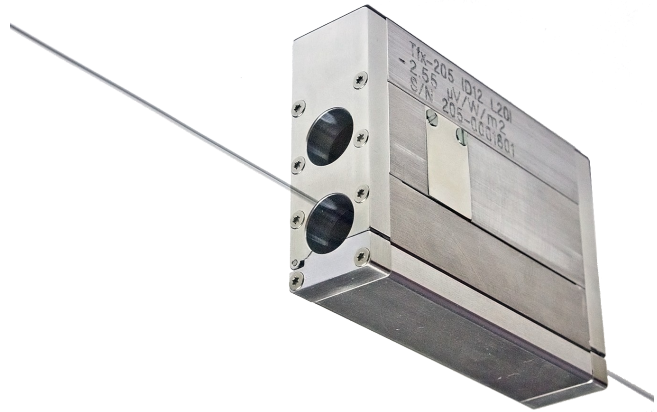


Wire temperature sensor Tfx-205

- Environment compensation
- Service temperature up to 150 °C
- Large wire gate for vibrating wires :12mm
- Inter-wire minimal space : 20mm
- M4 mounting



DESCRIPTION

Tfx-205 measures heat flux balance between two isometric chambers. This provides a greater freedom of wire vibrations without affecting the quality of the measurement.

The detector can measure radiative flux (infrared radiations in the range of 1-25 microns) emitted by the wire passing through the bottom chamber. The differential measurement with the upper room eliminates the influence of the environment (eg furnace outlet).

The sensor temperature provided by a built-in thermocouple makes possible to calculate the temperature of the moving wire in real time. This is performed in analog modules (203.AM) or aDDa digital modules (145/146). The calibration of the sensor depends on the geometry of the wire, and the emissivity of the latter. For the same materials, color has little influence on the signal.

PRODUCT NUMBER

Product Nr	Reference	Input diameter	Minimal distance between 2 wires
205	Tfx-205 wire temperature sensor	12 mm	20 mm

THERMAL SPECIFICATIONS

Name	Description	Min	Typ	Max	Unit
T _{nom}	Service Temperature	0	150	200	°C
φ	Heat flux density	±1		±1'000	W/m ²

ELECTRICAL SPECIFICATIONS

FLUX

Name	Description	Min	Typ	Max	Unité
R _{in}	Differential input impedance		50		Ω
Sensi	Typical sensitivity		-1		μV/W/m ²
BW	Band width		50		Hz
V _{isol}	Insulation voltage		500		Vac
V _{nom}	Maximal amplitude		±20		mV

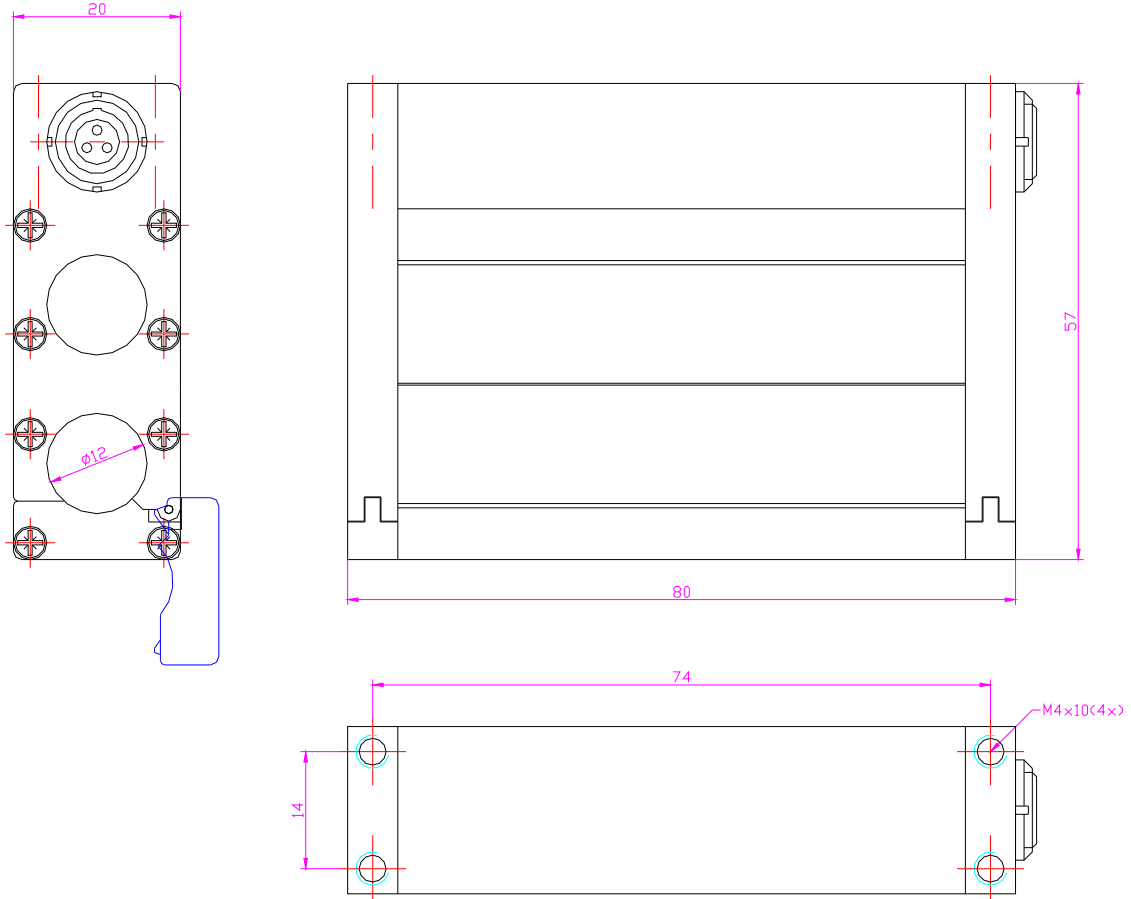
THERMOCOUPLE

Name	Description	Min	Typ	Max	Unité
Type	Thermocouple type		T		

CONNECTOR: LEMO EGG.0B.303

Pin	Nom	Description
1	F	Negative differential flux input
2	+	Common differential input
3	T	Negative differential thermocouple input
Case	SH	Shield

DIMENSIONS



CONTENT

- 1 sensor

TFX SA reserves the right to modify design and details at any time without warning.