








- **Conductive type HDF5®**
- **Operating temperature 250°C**
- **Non opening in cavity**
- **Total height 30mm**
- **Temperature measurement**
  
- Fast deployment
- Stronger



**DESCRIPTION**

The flow deviation sensors are especially well suited to the thermal events which occur within the materials which are being processed. One of their principal characteristics is that they do not need any opening in the moulding cavity: they are dismantable at room temperature. No peculiar precision is required for implementation, contrary to the traditional pressure sensors. These sensors deliver information that is proportional to the heat transfers, which occurs during exothermic or endothermic phenomena, as the material is being processed. These sensors are able to detect the structural changes of the material.

**CONNECTOR**

	C	D			
Tfx-178	 2p	 2p			
	E	F	N	P	Y
Tfx-178-T	 3p	 3p			

Technical information in product note n°TFX-002-B-e n

**PRODUCT NUMBER**

Product 178.                  

Housing	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><b>Stainless steel</b></td> <td style="width: 50%;">R</td> </tr> <tr> <td>Aluminium</td> <td>A</td> </tr> </table>	<b>Stainless steel</b>	R	Aluminium	A		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">A Fine heat flux</td> <td style="width: 50%;">Cable type</td> </tr> <tr> <td><b>E Standard sensor</b></td> <td></td> </tr> </table>	A Fine heat flux	Cable type	<b>E Standard sensor</b>						
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Mounting tool	178.00
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To order separately

**IDENTITY STICK**

Product	Front side		Rear side
	Tfx-178-F	Tfx-178-S	
Sensitivity	$\pm xx \text{ nV/W/m}^2$	$\pm xx \text{ nV/W/m}^2$	HT
Type – S/N	178-F yyyyyy	178-S yyyyyy	

### THERMAL CHARACTERISTICS

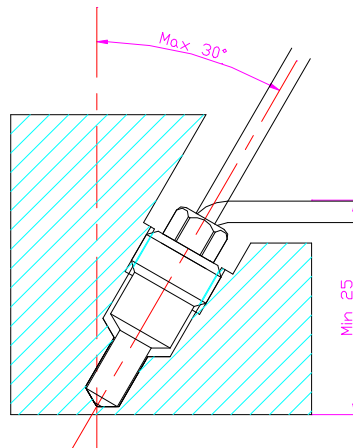
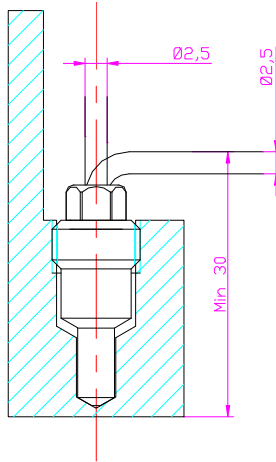
Symbol	Parameter	Min	Typ	Max	Units
T <sub>nom</sub>	Operating temperature		250		°C
T <sub>pulse</sub>	Maximum temperature		300		°C
φ	Heat flow level	±10		±100k	W/m <sup>2</sup>

### ELECTRICAL CHARACTERISTICS

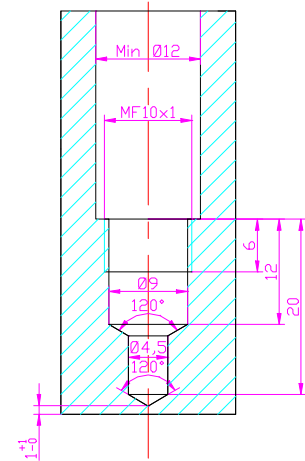
Symbol	Parameter	Min	Typ	Max	Units
R <sub>in</sub>	Differential input resistance		3		Ω
V <sub>noise</sub>	RMS measurement noise		0.1		μV <sub>RMS</sub>
Sensi	Sensitivity		+10		nV/W/m <sup>2</sup>
BW	Bandwidth		1		Hz
V <sub>isol</sub>	Output voltage		500		Vac
V <sub>nom</sub>	Breakdown voltage		±20		mV

Thermocouple type (only Tfx-178-S): T

### CROWDING



### FIXING



Fixing with a 6mm spanner, with a split.  
Sensor axle can make a maximal angle of 30° with no normal axle of cavity face.

### SENSOR CABLING

Industry, small mould	Mould	Extension cable	Electric cab
<ul style="list-style-type: none"> <li>- Sensor with straight plug</li> <li>- Extension M/F</li> </ul>			
Industry, large mould	Mould	Extension cable	Electric cab
<ul style="list-style-type: none"> <li>- Sensor with fixed socket</li> <li>- Extension M/M</li> </ul>			

- Extension length: 4m, other length on demand (max. 10m)
- Order accessories separately

### CONTENTS

- 1 sensor

TFX SA reserves the right to change the circuitry and specifications without notice at any time.