



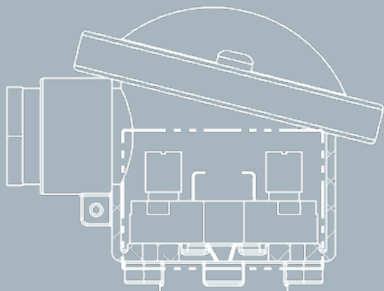
G1/2"

85

G1/2"

SENSORS CATALOGUE

TEMPERATURE MEASUREMENT IN INDUSTRIAL ENVIRONMENTS



Ø 1/2"

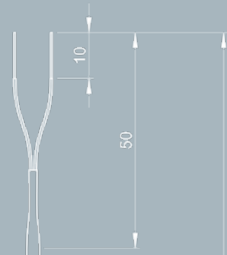
1/2

≈ 35

L3

L2

R45 ≥ Ø 1/2"
R60 ≥ Ø 3/4"



10

50

2000

PG7

Ø 18

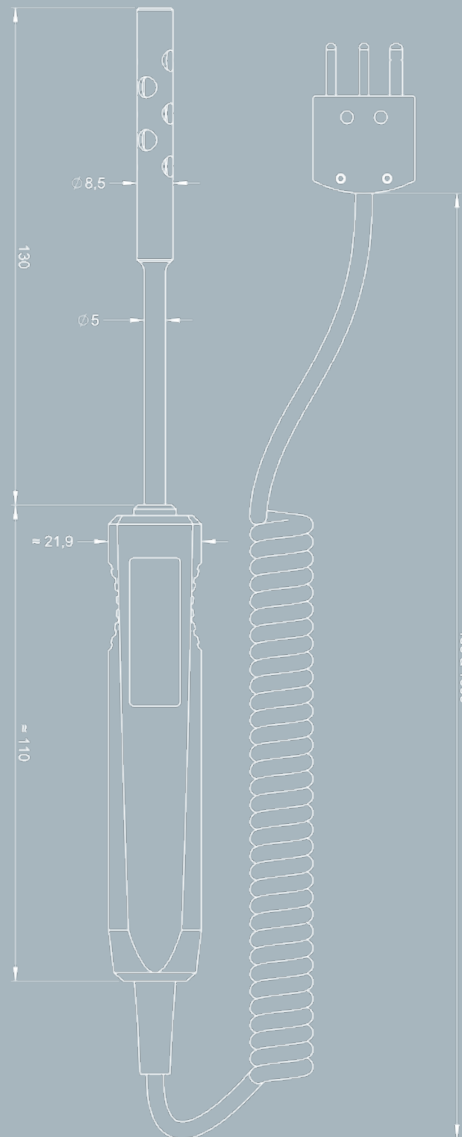
80

100

Ø 15

Ø 6,5

5



Ø 8,5

Ø 5

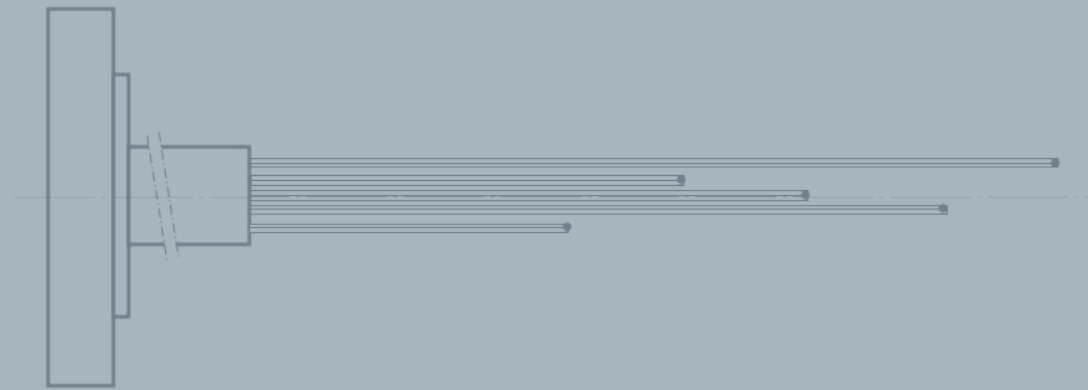
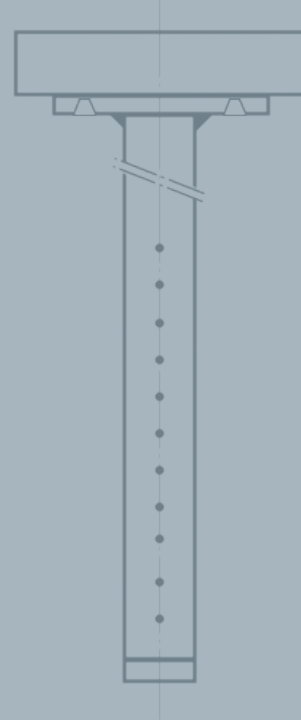
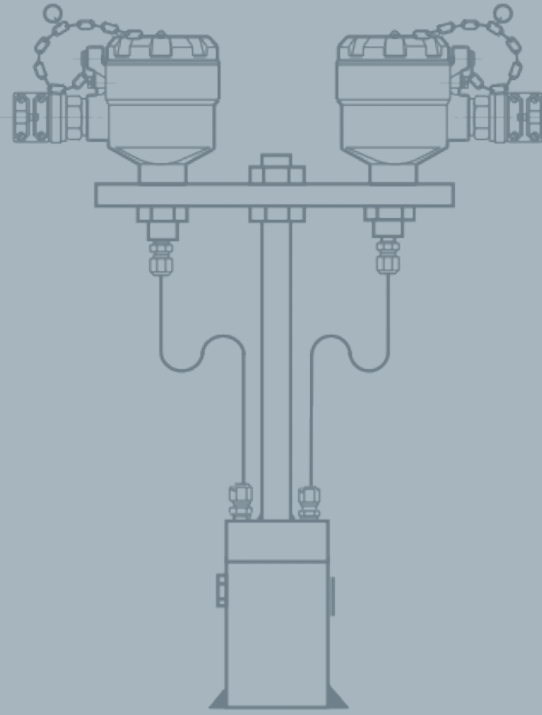
130

≈ 21,9

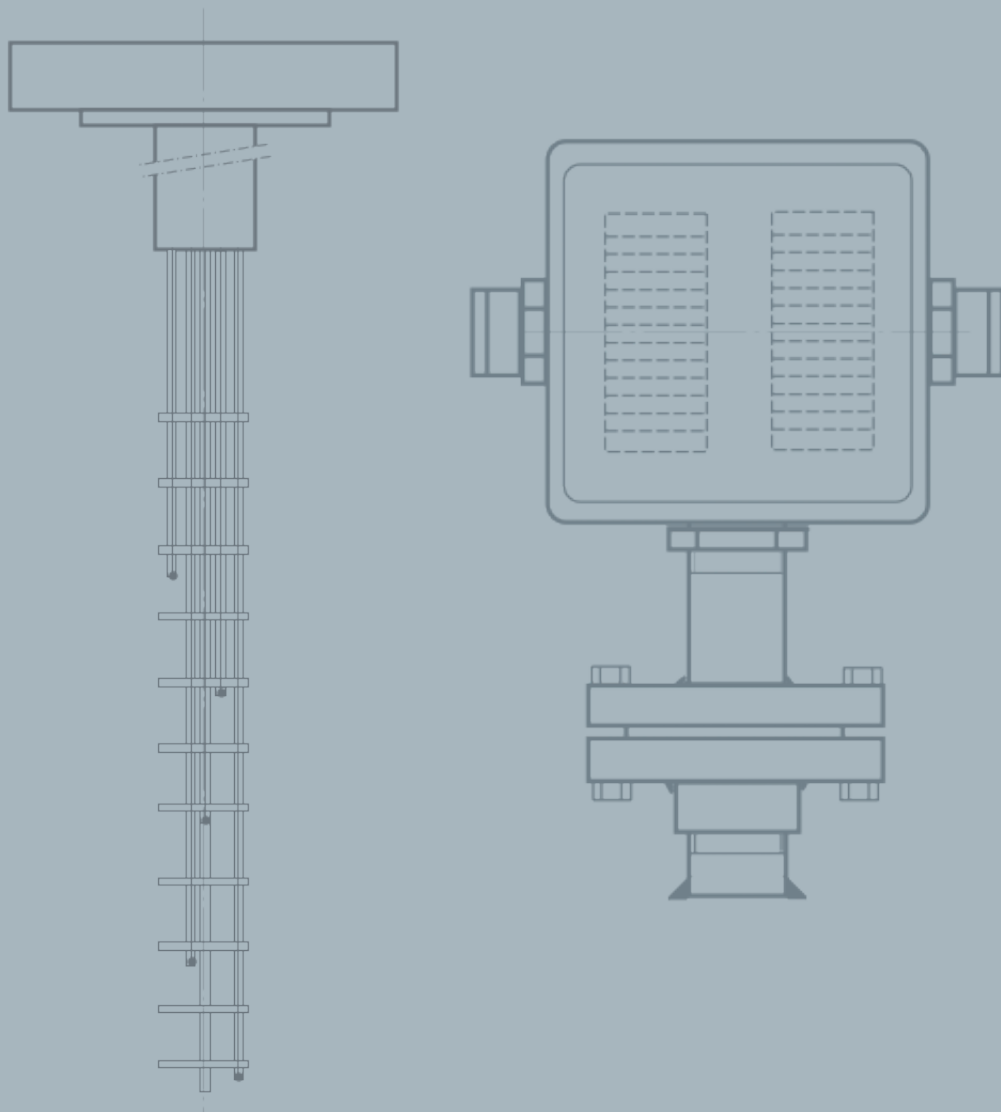
≈ 110

450 à 1000





MULTIPOINT SENSORS FOR REACTORS



The chemical and petrochemical industries make use of cutting-edge technologies and are characterized by their demanding requirements in terms of productivity, quality, efficiency and safety. Pyrocontrole proposes sensors which are reliable, accurate and safe for multipoint temperature measurement in catalysers and reactors. These sensors are often used to determine the temperature profiles of the process so as to control and optimize conversion efficiency, while reducing installation costs.

Furthermore, precise control of the reactor temperature is important for the process, as well as for safety reasons due to the possibility of exothermic reactions.

Depending on the application and the constraints specific to each installation, Pyrocontrole designs and manufactures multipoint temperature sensor versions suitable for every situation. They can be made using thermocouples or resistive sensors, ATEX-compliant or not, with or without transmitters.

There may be up to 15 points in a 6 mm diameter to be as unintrusive as possible, over a length adapted to your process, and up to 40 when the elements are unattached.

DESCRIPTION

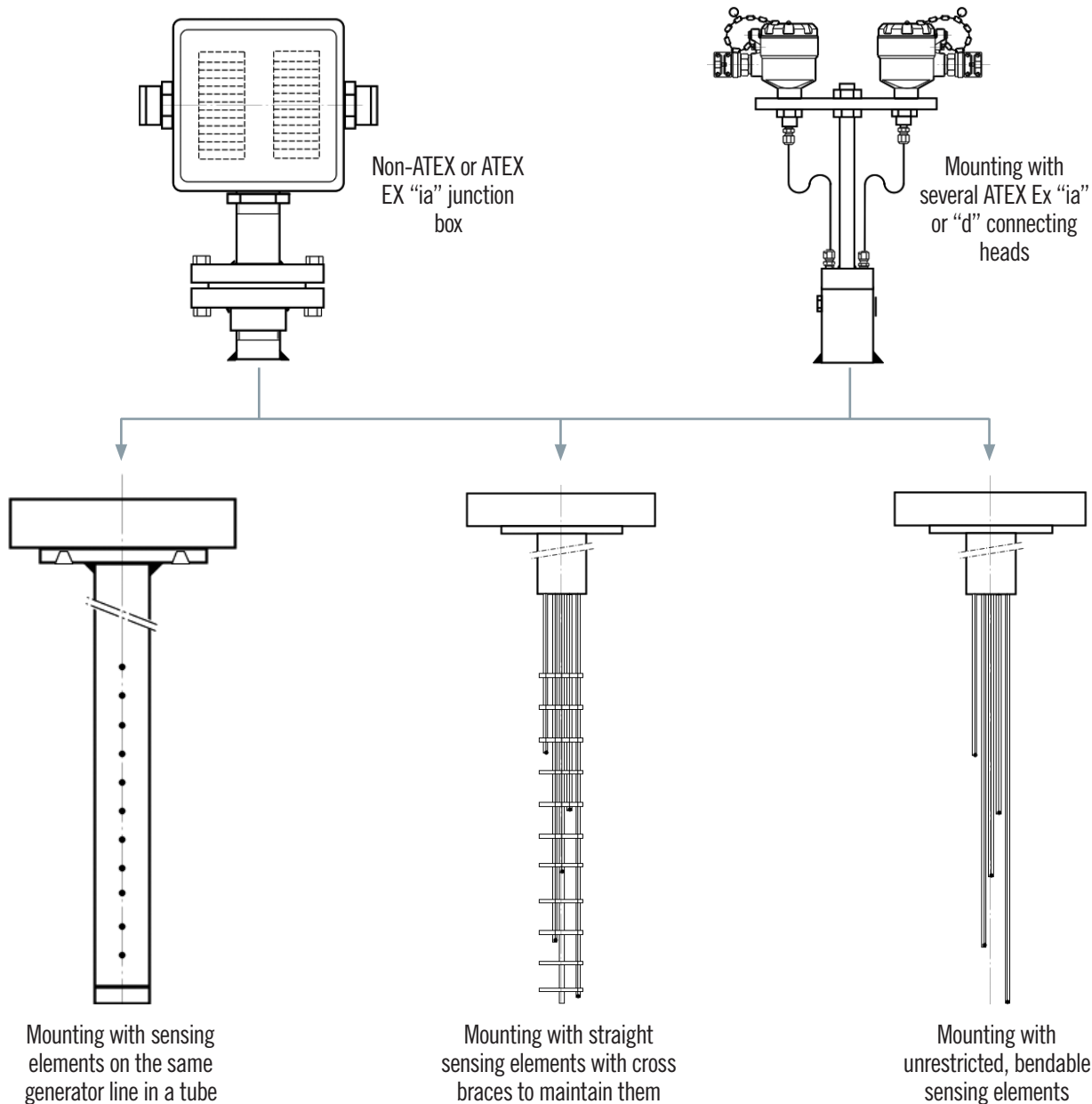
Our multipoint sensors are available in several configurations, depending on the customer's requirements. There may be from 3 to 40 measurement points depending on the sensor model.

Multipoint temperature measurement assemblies can be installed in ATEX or non-ATEX zones and are certified as benefiting from protection mode "ia" or "d" depending on the type of mounting.

Multipoint sensors comprise:

- a junction box (ATEX: Ex "ia", Ex "d" or non-ATEX) or connecting heads (ATEX Ex "d" or Ex "ia")
- an extension which may or may not be equipped with a secondary containment chamber
- a mounting flange on the customer process
- a bundle of sensors (thermocouples on the same generator line, straight, unattached and bendable thermocouples, or Pt100 sensors with straight sheathed cable)
- protection of the bundle (cross brace, tube, flexible sheath, etc.) or no protection if you want to handle the sensing elements freely.

DIAGRAM OF SENSORS

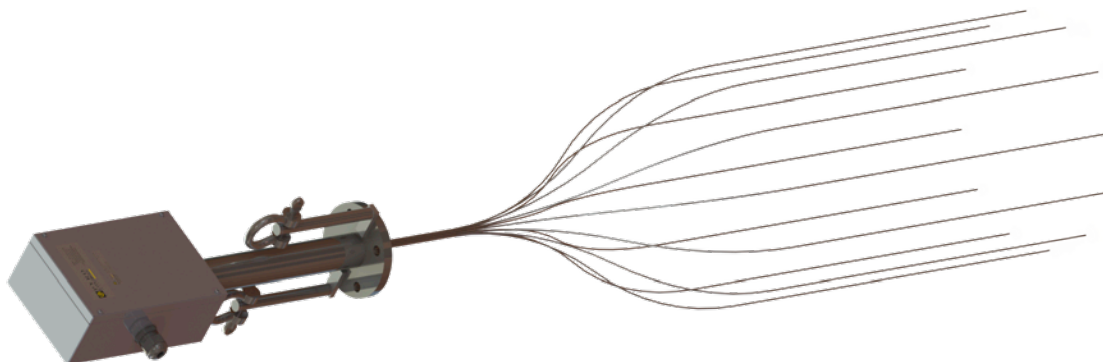


Non-contractual document - Please confirm specifications when ordering.

OUR STANDARDS

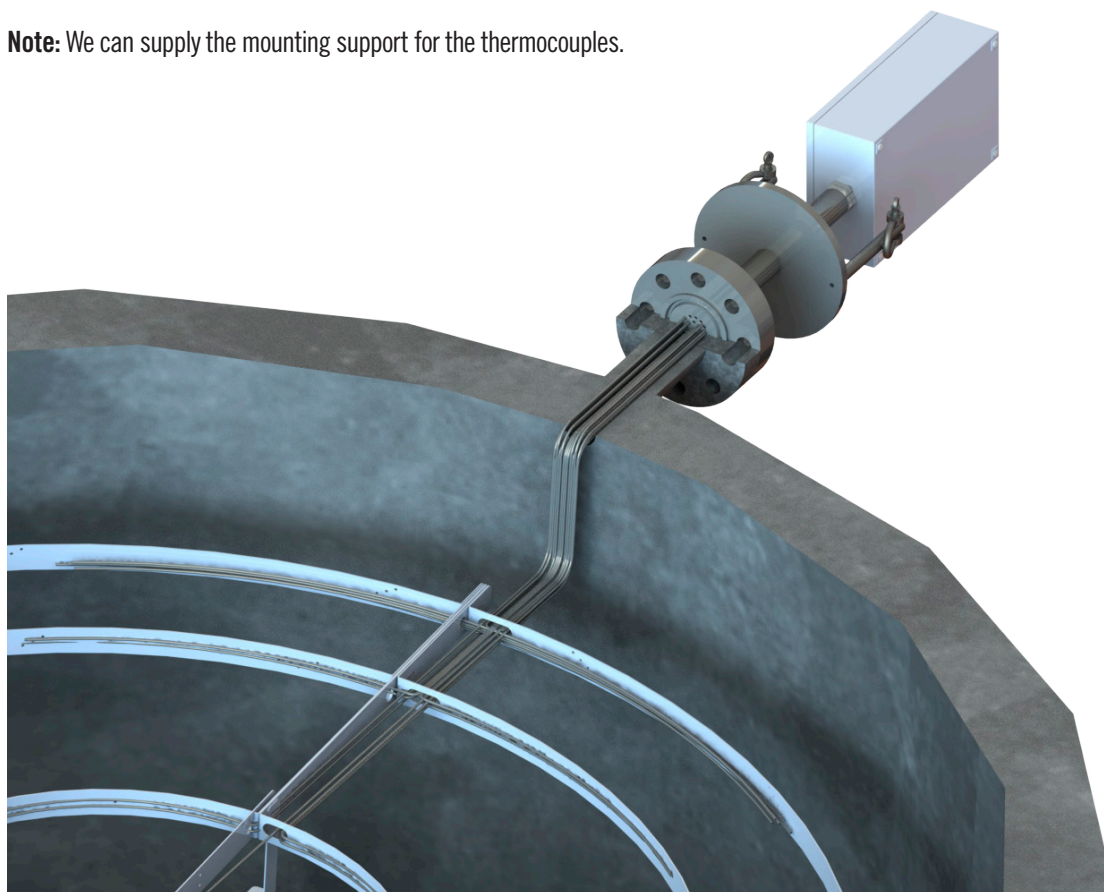
Temperature measurement assemblies with free, bendable elements:

Model: PiPD				
Thermocouple diameter (mm)	Number of measuring points	Max. length (m)	Max. temperature (C°)*	Max. pressure (b)*
1	8 to 40	36	550	550
2	8 to 28			
3	4 to 12	30		

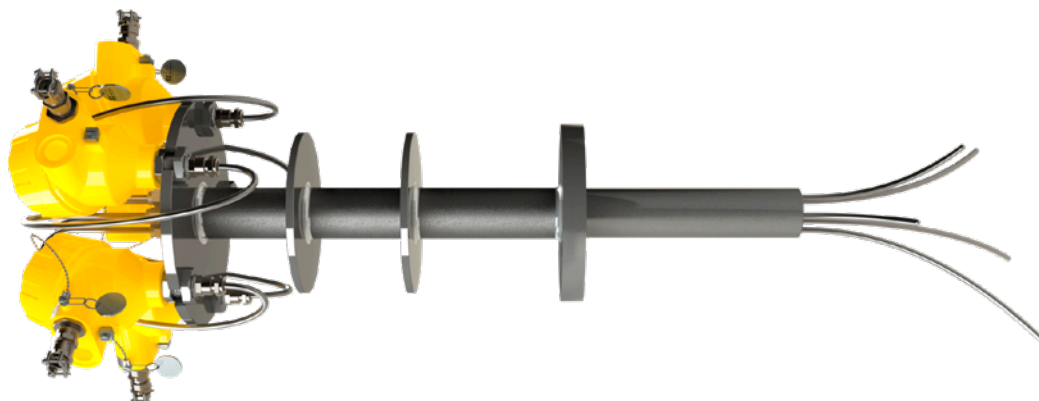


Model: PiGD				
Thermocouple diameter (mm)	Number of measuring points	Max. length (m)	Max. temperature (C°)*	Max. pressure (b)*
4.5	4 to 30	20	600	550
6				
8				

Note: We can supply the mounting support for the thermocouples.



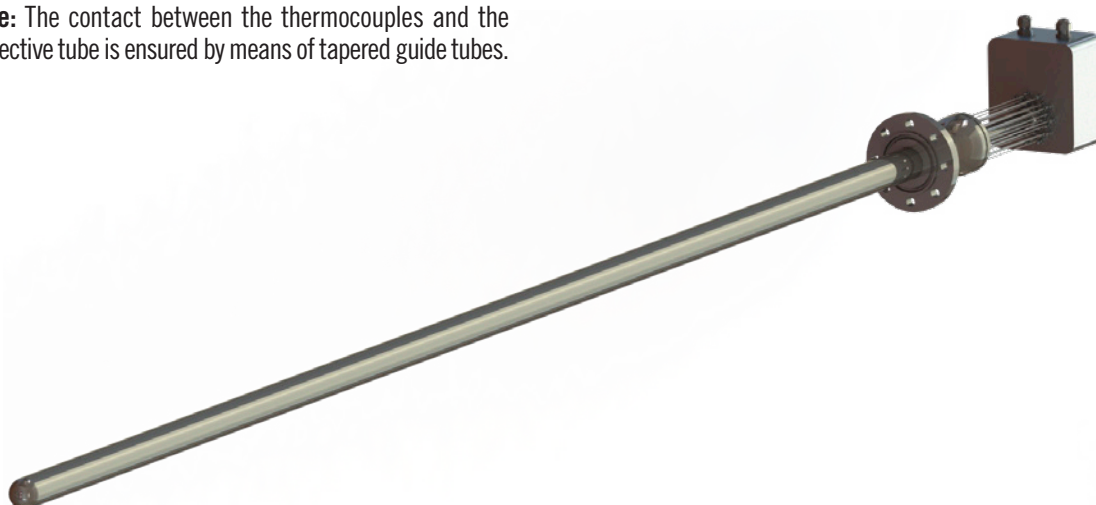
Model: PiTD				
Thermocouple diameter (mm)	Number of measuring points	Max. length (m)	Max. temperature (C°)*	Max. pressure (b)*
4.5	5	30	600	450
6				
8				



Assemblies in large-diameter protective tube:

Model: STGD					
Thermocouple diameter (mm)	Number of measuring points	Protective tube type (standard)	Max. length (m)	Max. temperature (C°)*	Max. pressure (b)*
3	5 to 35	3" Sch.80 SS 321	6	850	150

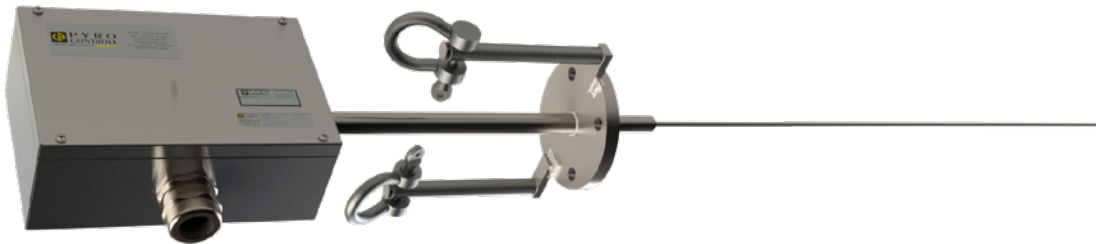
Note: The contact between the thermocouples and the protective tube is ensured by means of tapered guide tubes.



Assemblies with elements in small-diameter protective tube:

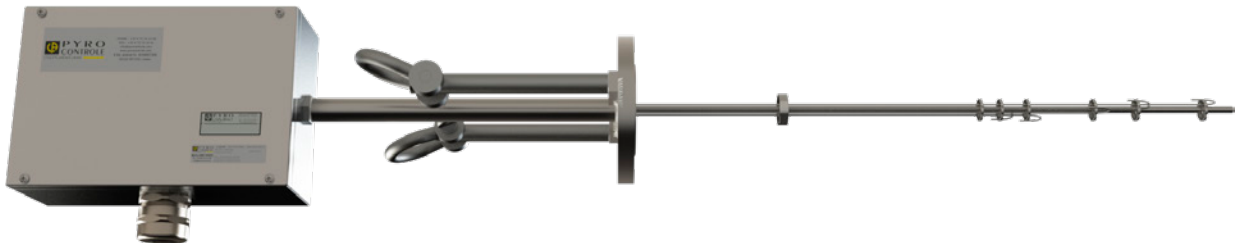
Model: STPD					
Thermocouple diameter (mm)	Number of measuring points	Protective tube type (standard)	Max. length (m)	Max. temperature (C°)*	Max. pressure (b)*
1	6 to 15	Ø6 mm SS 316L	10	800	200
1.5	6 to 8				

Note: Variant with cylindrical cover and compensation cable available.

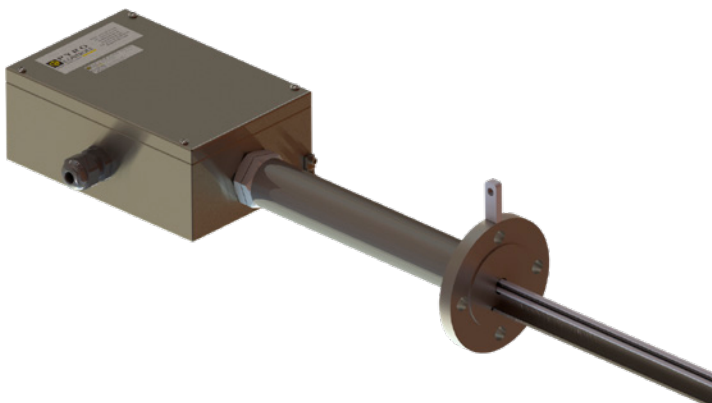
**Assemblies with positioning spacers:**

Model: EPPD				
Thermocouple diameter (mm)	Number of measuring points	Max. length (m)	Max. temperature (C°)*	Max. pressure (b)*
2	4 to 12	10	700	550

Note: Variant with cylindrical cover and compensation cable available.

**Teebar assemblies:**

Model: TTPD					
Thermocouple diameter (mm)	Number of measuring points	Protective tube type (standard)	Max. length (m)	Max. temperature (C°)*	Max. pressure (b)*
3	3 to 5	Ø6 mm SS 316L	6	700	350



* The pressure and temperature levels indicated are given as indications and may vary according to your conditions.



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