

European Thermocouple



Thermocouples and Sensors

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THERMOCOUPLES RESISTANCE SENSOR TO DIN

Thermocouples and resistance sensors are manufactured as standard sensors as per this list. We have detailed drawings for all listed sensors to make it easy for you to choose the correct type for your requirements. Standard sensors as per the list are manufactured in series and we can therefore supply these on short notice. Other types and versions to drawings and samples can be supplied.

We manufacture thermocouples according to the following standards.

Identification color code:

Thermocouples to DIN 43710 Type I FeCuNi red+/blue- N/A for USA

DIN IEC 584-1 Type J FeCuNi black/white- (USA: white+/red-) ANSI 96.1

DIN IEC 584-1 Type K NiCrNi green+/white- (USA: yellow+/red-) ANSI 96.1

on request 1/2 DIN, potential free and fast reaction. (Please specify when ordering).

Please specify color code required upon ordering.

RESISTANCE SENSORS TO DIN IEC 751 IN TOLERANCE CLASS "B"

1 x PT 100, 2 x PT 100, 2 x PT 50

Standard in 2 wire, on request 3-wire or 4-wire and also in tolerance class "A."

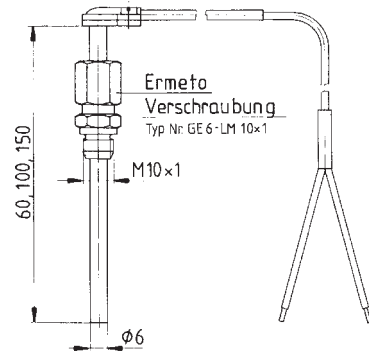
Material: For steel tips, fittings and nipple steel, chromed. On request: Stainless steel, brass

Compensating Line: 2 x 1mm fiberglass insulated with braided metal sleeving protection. On request: Special insulation in silicone or teflon, with or without braided metal sleeving or armor cable.

The demonstrated thermocouples can be used for temperatures up to 300 degree C at the sensor tip, but it should be considered that the compensating line can withstand temperatures up to 220 degree C only. For higher temperature please consult the factory.

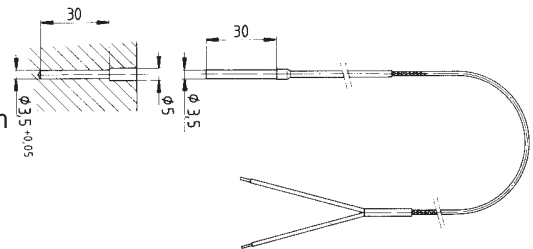
TEF 1 THERMOCOUPLE PWF 1 PT 100 Resistance Sensor

Cylindrical sensor with angle connection, diameter 6 x 60mm, 100 or 150mm long and other length upon request. With Remote connector M 10 x 1 compensating line 2 x 1.0qmm, 2,000mm long.



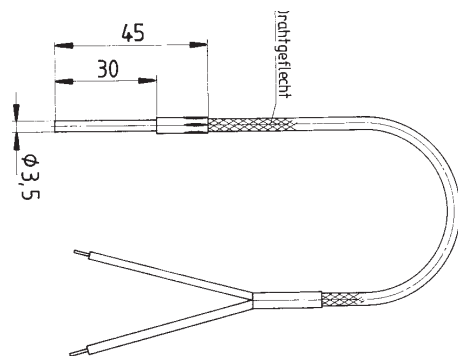
TEF 2 THERMOCOUPLE

Small cylindrical sensor type diameter 3.5 x 30mm, material: stainless steel without connector, compensating line 2 x 1.0qmm, insulated with glass silk, diameter approx 1mm without metal braided sleeving, 2,000mm long.



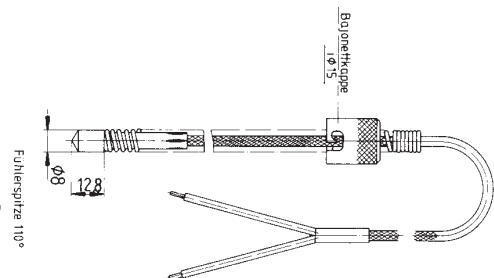
TEF 2 THERMOCOUPLE WITH DR PWF 2 PT 100 Resistance Sensor

Small cylindrical sensor tube diameter 3.5 x 30mm without connector compensating line 2 x 0.22qmm, 2,00mm long metal braided sleeving (+withDR)



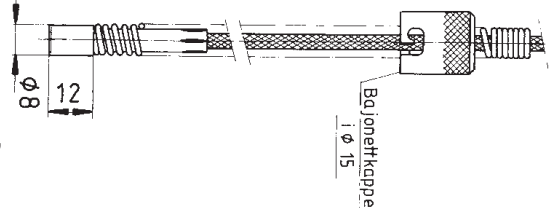
TEF 4 THERMOCOUPLE PWF PT 100 Resistance Sensor

The most used sensor diameter 8 x 12mm with sensor 110 degree (screw in nipple Type N4,) By turning the bayonet cap the fitting depth is adjustable. Compensating line 2 x 1.0qmm, 2,000mm long. Also available diameter 6mm.



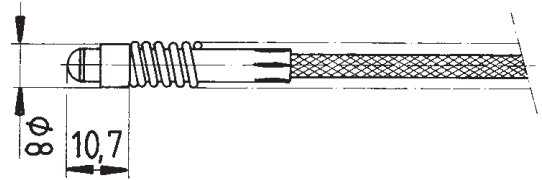
TEF 4A THERMOCOUPLE PWF 4A 100 Resistance Sensor

Diameter 8 x 12mm with flat sensor tip by turning the bayonet cap the fitting depth is adjustable for bayonet screw in nipple type N4 compensating 2 x 1.0qmm, 2,000mm long. Also available diameter 6mm.



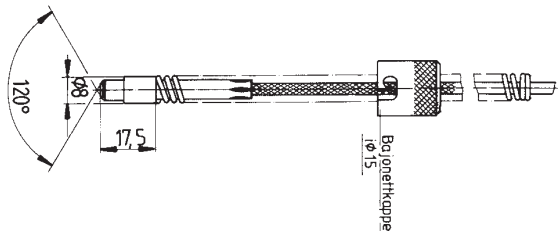
TEF 4B THERMOCOUPLE PWF 4B Resistance Sensor

Diameter 8 x 12mm with round sensor tip and ceramic insulation (fast reaction) By turning the bayonet cap the fitting depth is adjustable for bayonet screw in nipple type N4 compensating line 2 x 1.0qmm, 2,000mm long. Also available in diameter 6mm.



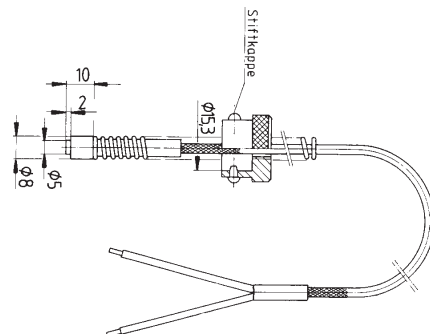
TEF 4FF THERMOCOUPLE

Particularly fast reaction. Diameter 8mm with sensor tip 120 degrees. Bayonet cap diameter 15mm; by turning the bayonet cap the fitting depth is adjustable for bayonet screw in nipple Type N4 compensations line 2 x 1.0qmm, 2,00mm long. Also available in diameter 6mm.



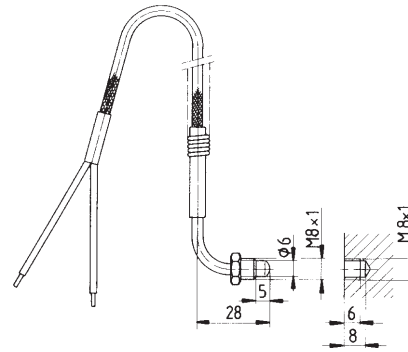
TEF 11 THERMOCOUPLE PWF 11 PT 100 Resistance Sensor

Cylindrical sensor diameter 8 x 5mm pinned cap diameter 15.3mm by turning the fitting depth is adjustable for bayonet screw nipple type N11 compensating line 2 x 1.0qmm 2,000mm long.



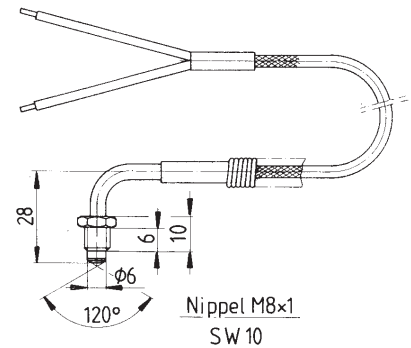
TEF 12 THERMOCOUPLE

Small cylindrical sensor in angular form 6mm diameter x 5mm long with screw in nipple M 8 x 1.
Compensating line 2 x 0.22qmm, 2,000mm long.



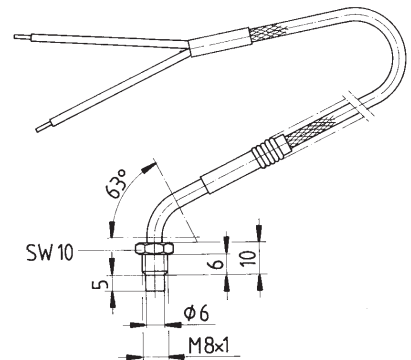
TEF 12FF THERMOCOUPLE Particularly Fast Reaction

6mm diameter x 5mm long with screw in nipple M 8 x 1.
Compensating line 2 x 0.22qmm, 2,000mm long.



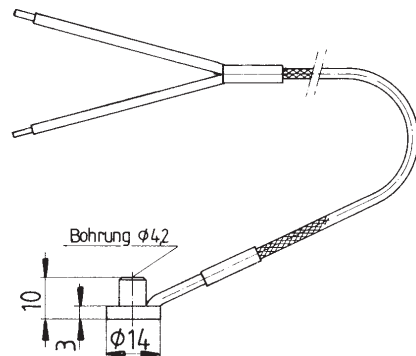
PWF 12 RESISTANCE SENSOR

Small cylindrical sensor in angular form 6mm diameter x 5mm long with screw in nipple M 8 x 1.
Compensating line 2 x 0.35qmm, 2,000mm long.



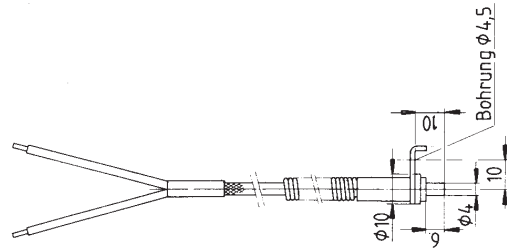
TEF 13 THERMOCOUPLE

Surface sensor diameter 14mm for fixing with a screw M4.
Compensating line 2 x 0.22qmm, 2,000mm long.



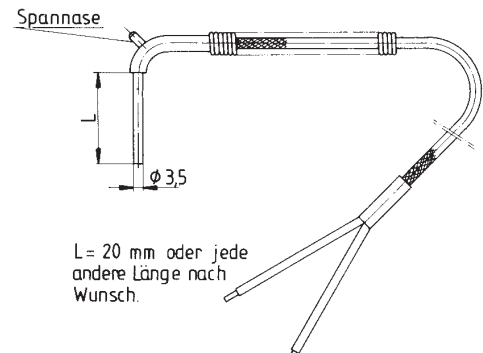
TEF 14 THERMOCOUPLE

Surface sensor diameter 10mm with spigot diameter 4 x 6mm and fixing bracket fixing by means of an M4 screw compensating line 2 x 1.0qmm, 2,000mm long.



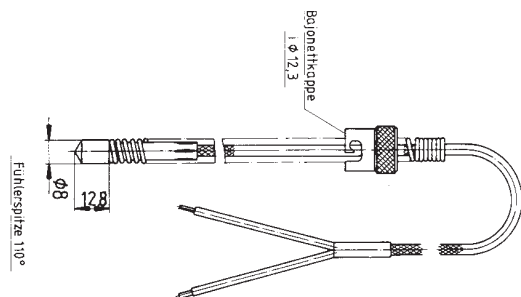
TEF 15 THERMOCOUPLE

Plug sensor diameter 3.5mm which is plugged into a bore of 3.6mm and held in place with a tension spring. Length L = 20mm and other length on request. Compensating line 2 x 1.0qmm, 2,000mm long.



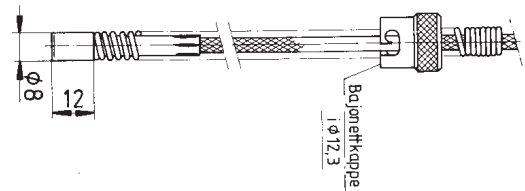
TEF 16 THERMOCOUPLE PWF 16 Resistance Sensor

Diameter 8 x 12mm with sensor tip 110 degrees bayonet - cap diameter 12.3mm by turning the bayonet can, the fitting depth is adjustable. Compensating 2 x 1.0qmm, 2,000mm long. Also available diameter 6mm.



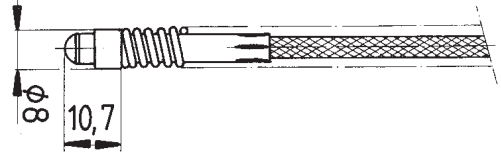
TEF 16A THERMOCOUPLE PWF 16A Resistance Sensor

Diameter 8 x 12mm, with flat sensor tip bayonet - cap diameter 12.3mm by turning the bayonet - cap the fitting depth is adjustable. Compensating line 2 x 1.0qmm, 2,000mm long. Also available diameter 6mm.



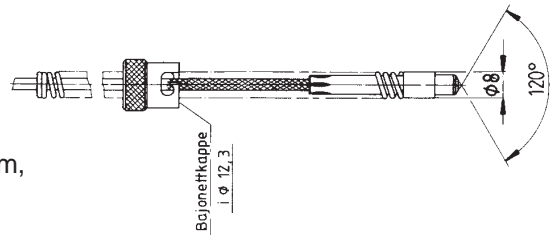
TEF 16B THERMOCOUPLE PWF 16B Resistance Sensor

Diameter 8 x 12mm with round sensor tip and ceramic insulation bayonet - cap diameter 12.3mm by turning the bayonet cap, the fitting depth is adjustable. Compensating line 2 x 1.0qmm, 2,00mm long. Also available in diameter 6mm.



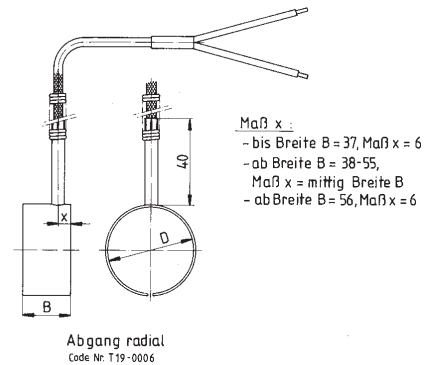
TEF 16FF THERMOCOUPLE Particularly Fast Reaction

Diameter 8mm with sensor tip 120 degree bayonet cap diameter 12.3mm, by turning the bayonet cap, the fitting depth is adjustable. Compensating line 2 x 1.0qmm, 2,000mm long. Also available in diameter 6mm.



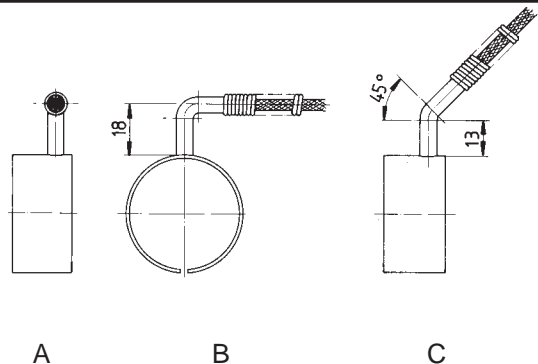
TEF 19 THERMOCOUPLE (STANDARD)

Diameter 6 x 40mm with protection feather for placing underneath small heater bands. Diameter and width of heater band should be stated. To accommodate this thermocouple the clamping gap of heater board is enlarged. Compensating line 2 x 1.0mm, 2,000mm long.



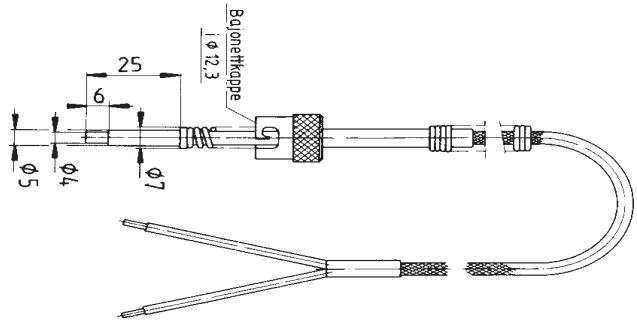
TEF 19 THERMOCOUPLE

- A. Radial 90°
- B. Tangetial
- C. Standard 45°



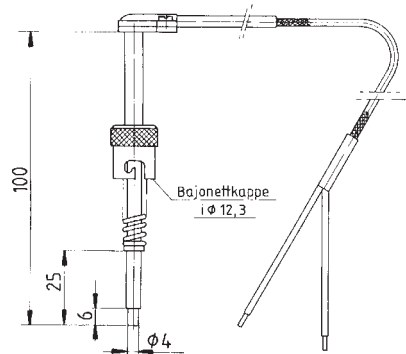
TEF 20 THERMOCOUPLE PWF 20 Resistance Sensor

Diameter 4.5 x 25mm bayonet cap diameter 12.3mm
setting depth as per sketch. Compensating line
2 x 1.0qmm, 2,000mm long.



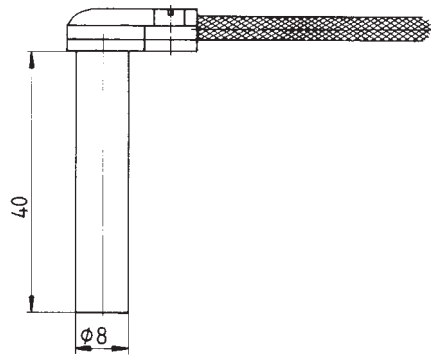
TEF 21 FeCeNi THERMOCOUPLE PWF 21 PT 100 Resistance Sensor

Sensor same as TEF 20, but angled.



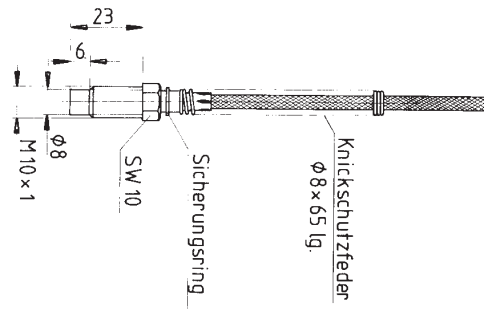
TEF 55 THERMOCOUPLE PWF 55-2 x PT 50 Resistance Sensor

Diameter 8 x 40mm compensating line 2 x 1.0qmm,
1,100mm long with plug & 3300/006 AR.



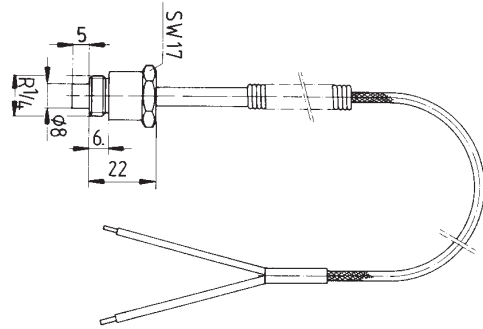
TEF 57 THERMOCOUPLE PWF 57-2 x PT 50 Resistance Sensor

Diameter 8 x 6mm with screw in nipple M 10 x 1.
Compensating line 2 x 1.0qmm, 1,100mm long
with plug T 3300/006 AR.



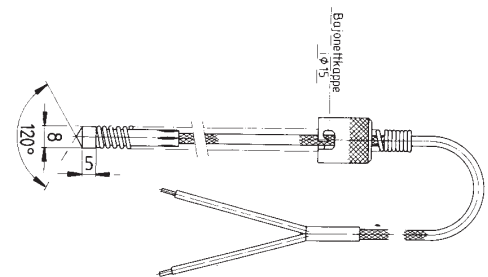
TEF 60 THERMOCOUPLE

Diameter 8 x 5mm with screw in winding R1/4".
Compensating line 2 x 1.0qmm, 2,000mm long.



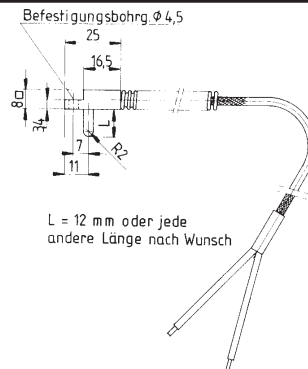
TEF 65 THERMOCOUPLE

Diameter 8 x 5mm with sensor tip 120 degree bayonet -
cap diameter 15mm, by turning the bayonet cap, the fitting
depth is adjustable. Compensating one 2 x 1.0qmm, 2,00mm long.



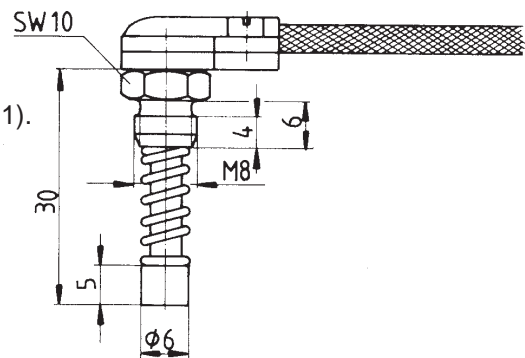
TEF 68 THERMOCOUPLE PWF 68 - PT 100 Resistance Sensor

Diameter 4 x 12mm on request diameter (as required).
Compensating line 2 x 1.0qmm, 2,000mm long.



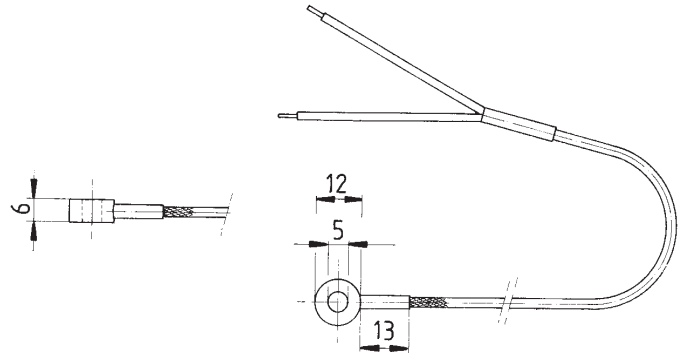
TEF 74 THERMOCOUPLE

Diameter 6 x 5/30mm with screw in nipple M8 (on request M8 x 1).
Compensating line 2 x 0.22qmm, 2,000mm long.



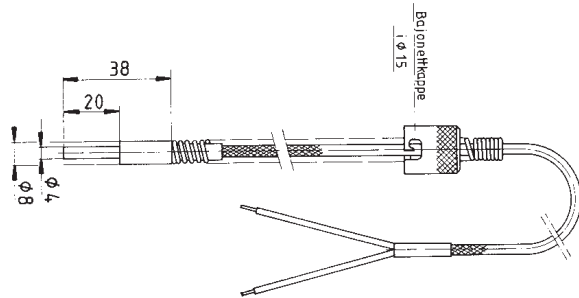
TEF 75 THERMOCOUPLE

Surface sensor diameter 12mm.
Compensating line 2 x 0.22qmm, 2,000mm long.



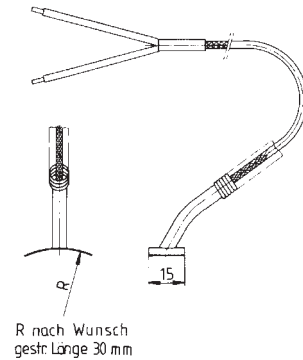
TEF 90 THERMOCOUPLE

Diameter 4 x 20mm bayonet - cap diameter 15mm.
Compensating line 2 x 1.0qmm, 2,000mm long.



TEF A THERMOCOUPLE

Diameter 6mm with stainless steel plate 15 x 30mm, 0.3mm thick for placing underneath heater bands. Heater bands should have a cut out diameter of 6 x 6mm on the edge, or if the gap in the clamping band is 6mm wide, it can also be used.
Compensating line 2 x 1.0qmm, 2,000mm long.

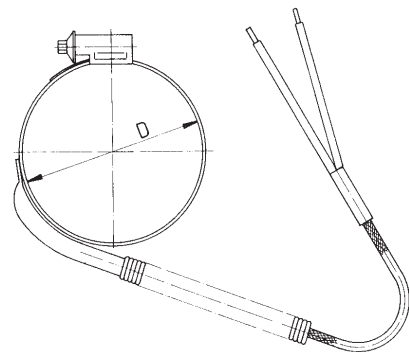


TEF SP THERMOCOUPLE

Clamping - band - sensor with 9mm band width, for clamping range see list. On the cylinder which should be measured the sensor is to be screwed on as a hose clamp.
Compensating line 2 x 1.0qmm, 2,000mm long.

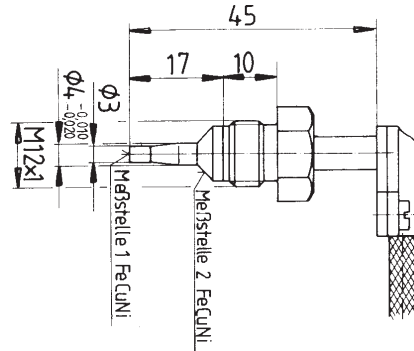
Bandbreite 9mm
D = Spannbereich

12 - 20	40 - 60	23 - 35	70 - 90
16 - 25	50 - 70	25 - 40	80 - 100
20 - 32	60 - 80	32 - 50	90 - 110



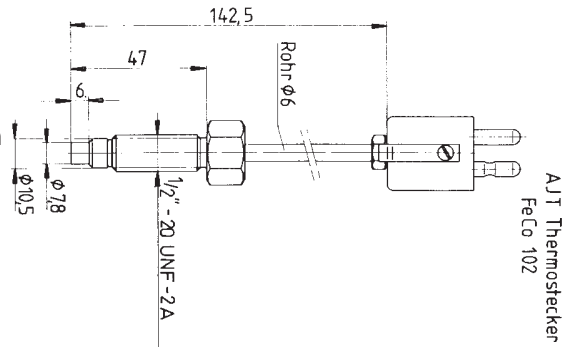
TEF 101 THERMOCOUPLE

Diameter 6 x 4.13mm with screw in nipple M 8 x 1.
Compensating line 2 x 0.22qmm, 2,000mm long, angled.



TEF 103 THERMOCOUPLE

Diameter 4mm...ED (length alternative options) with bayonet - cap diameter 12.3mm with bayonet - screw in nipple M8 x 0.75 x 43mm long. Compensating line 2 x 0.22qmm, 2,000mm long.

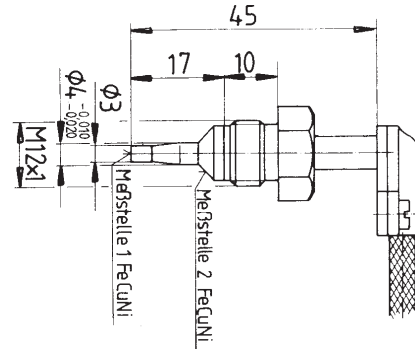


PLASTIC MELT THERMOCOUPLES FeCuNi, NiCrNi

These temperature sensors are manufactured for measurements on extruders, plastics-injection molding machines and on the machines for plastic processing. The sensors are complete stainless steel, material no. 1.4204, and can be delivered in single - and dual - elements.

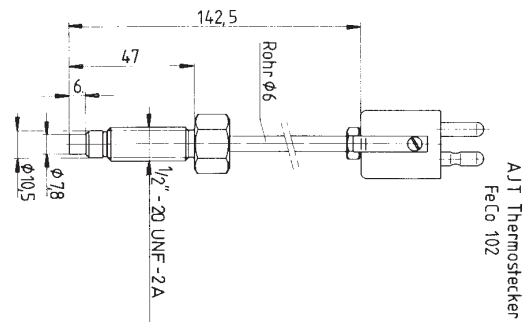
MTF 106

Thermocouple with 2 separately measuring positions.
Screw - in thread M 12 x 1. Compensating line
4 x 0.22qmm, 2,000mm long right angle exit (REX).



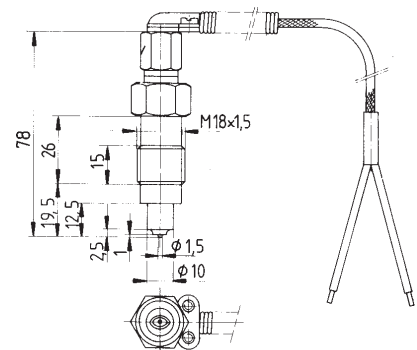
MTF 107

Thermocouple with screw-in thread 1/2" UNF 20 turn
and plug A 9.1 diameter 7.8mm diameter 10 x 6.47mm



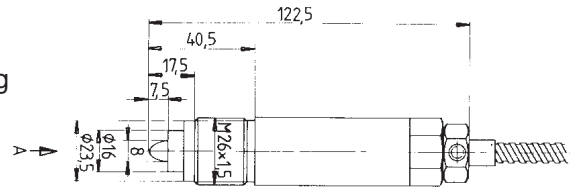
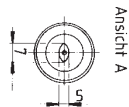
MTF 108

Thermocouple with screw-in thread M18 x 1.5 diameter
1.5 x 1/10 - 1.25. Compensating line 2 x 1.0qmm, 3,000mm
long right angle exit.



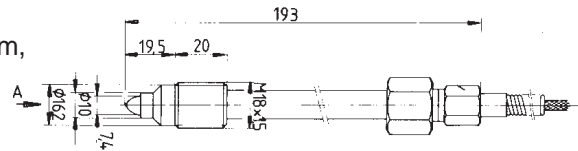
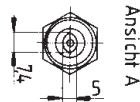
MTF 109

Thermocouple with screw-in thread M26 x 1.5 diameter 8 x 7.5mm. Compensating line 2 x 1.0qmm, 100mm long with thermoplug A 9.1.



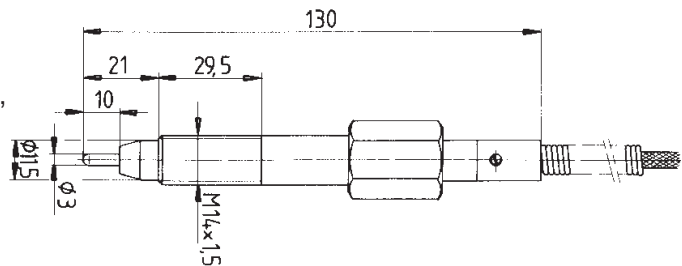
MTF 110

Dual thermocouple with screw-in thread M18 x 1.5 diameter 7.4 x 19.5mm. Compensating line 4 x 0.22qmm, 2,000mm long.



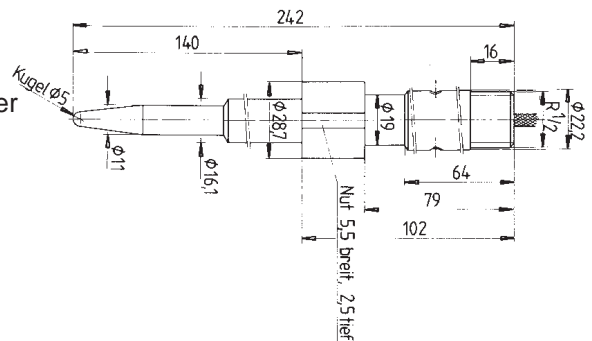
MTF 111

Thermocouple with screw-in thread M14 x 1.5. Diameter 3 x 10. Compensating line 2 x 1.0qmm, 2,000mm long.



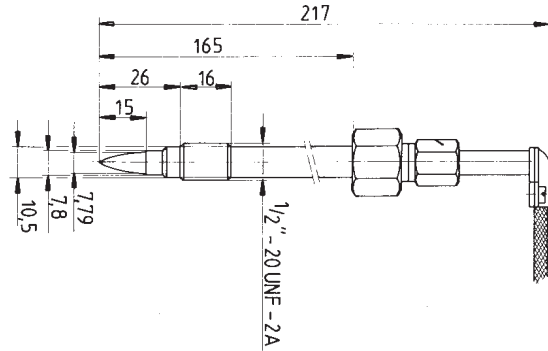
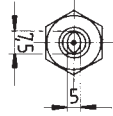
MTF 112

Thermocouple with conical sensor tip diameter 5-diameter 11mm. Compensating line 2 x 1.0qmm, 100mm long.



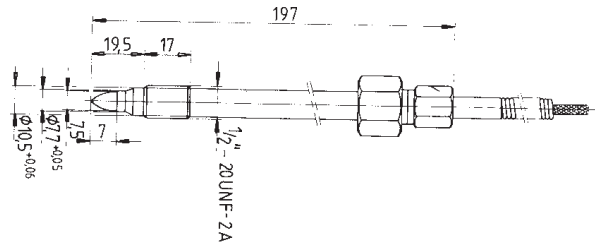
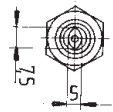
MTF 113

Thermocouple with screw-in thread 1/2" 20 UNF-2A diameter 7.8 x 1.5mm ET. Compensating line 2 x 1mm, 2,000mm long.



MTF 114

Thermocouple with screw-in thread 1/2" 20 UNF - 2A diameter 7.7/10.5 c 19.5mm ET. Compensating line 2 x 1mm, 2,000mm long.



NOTES:

Blank area for notes, consisting of ten horizontal grey bars.

hotset — in Germany, USA and 28 other countries all over the world:



- Argentina
- Australia
- Austria
- Belgium
- Brazil
- Czech Republic
- Denmark
- Finland
- France
- Great Britain
- Greece
- Hongkong
- India
- Israel
- Italy
- Japan
- Korea
- Netherlands
- New Zealand
- Philippines
- Portugal
- Singapore
- South Africa
- Spain
- Sweden
- Switzerland
- Taiwan
- Turkey



Corporation

