

## Sheath thermocouple due to DIN 43721

### Description

<b>Generally</b>	Sheathed thermocouples are used for temperature measurement in industrial plants. Due to their flexibility and small dimensions they are particularly suitable for mounting in confined places. Due to the complete filling with mineral the sheathed thermocouple is largely insensitive to shock and vibration.
<b>Construction</b>	In sheathed thermocouples, the thermocouple wires embedded in ceramic insulating powder (aluminium oxide) and pressed into a metal tube made of heat resistant steel. The robust construction allows for subsequent bending and crushing (for tube fittings), without the element suffers damage.
<b>Thermocouple</b>	Fe-CuNi NiCr-Ni PtRh-10-Pt
<b>Outer sheath</b>	Stainless Steel M-No. 1.4541 Heat resistant steel (Inconel) M-No. 2.4816
<b>Diameter of the outer sheath</b>	2-wire sheathed cable 0,5/1,00/1,50/1,60/2,00/3,00/3,20/4,50/4,8/6,00/6,40/8,00  4-wire sheathed cable 1,50/2,00/3,00/3,20/4,50/6,00/6,40/8,00
<b>Wall thickness</b>	ca. 15 % of the sheathed cable
<b>Wire gauge</b>	The thermocouple diameter is ca. 15 % of the sheathed cable diameter
<b>Bending radius</b>	The minimum possible bending radius of the mineral insulated conductor is at three times the outer diameter
<b>Version</b>	Thermocouple isolated from the bottom



Thermocouple welded to the bottom

