



PVC, silicone or glass fibre-insulated

- Available in many different designs



Product description

Application range

- The thermocouple is used to measure temperature as a part of monitoring the manufacturing process, thus the sheath material should be selected with reference to the maximum ambient temperature at its junction.
- Conductor materials (alloys):
Fe/CuNi (LX, JX)
Conductor alloys are identical to thermocouple alloys
- NiCr/Ni (KCA, KX)
KCA version: compensating alloys, not identical to thermocouple alloys
KX version - conductor alloys are identical to thermocouple alloys
- PtRh/Pt (RCB, SCB)
Compensating alloys are not identical to thermocouple alloys

Product Make-up

- Design abbreviations:
PVC: Polyvinylchloride
SIL: Silicone rubber
GL: Glass fibre
C: Copper braiding screen
ST: Aluminium foil screen
S: Steel wire braiding
- Design, for example PVC-PVC-S-PVC:

- PVC core insulation
- PVC inner sheath
- Steel wire braiding
- PVC outer sheath
- Examples shown (top to bottom):
 - Fe/CuNi DIN 2 x 1.5 PVC
 - NiCr/Ni IEC 2 x 1.5 GL-GL
 - PtRh/Pt IEC 2 x 1.5 GL-GL-S
 - NiCr/Ni DIN 2 x 1.5 SIL-GL
 - NiCr/Ni DIN 2 x 1.5 PVC-PVC
 - PtRh/Pt DIN 2 x 1.5 SIL-SIL
 - Fe/CuNi IEC 2 x 1.5 SIL-SIL-S
 - NiCr/Ni IEC 2 x 1.5 SIL
 - PtRh/Pt IEC 2 x 1.5 SIL-GL-S
 - Fe/CuNi IEC 2 x 0.22 PVC-PVC-C-PVC
 - NiCr/Ni IEC 2 x 1.5 PVC-ST-PVC
 - Fe/CuNi DIN 2 x 1.5 PVC-PVC-S-PVC

Norm references / Approvals

- Colour identity code
 - DIN 43710
 - Negative conductor and outer sheath:
 - Fe/CuNi: blue
 - NiCr/Ni: green
 - PtRh/Pt: white
 - Positive conductor: always red
 - IEC 60 584
 - Positive conductor and outer sheath:
 - Fe/CuNi: black
 - NiCr/Ni: green
 - PtRh/Pt: orange
 - Negative conductor: always white

Technical Data

Classification	ETIM 5.0 Class-ID: EC000838
Based on	ETIM 5.0 Class-Description: Thermocouple cable
Conductor stranding	Limiting deviation in accordance with DIN and IEC in accordance with class 2
	1.5 mm ² : approx. 48 x 0.20 mm
	0.75 mm ² : approx. 24 x 0.20 mm
	0.5 mm ² : approx. 16 x 0.20 mm
	0.22 mm ² : approx. 7 x 0.20 mm
Minimum bending radius	Without metal braiding: 12 x cable diameter
	With metal braiding: 15 x cable diameter
Temperature range	(referring to insulation and sheath material)
	PVC: -5°C to +70°C
	Silicone: -25°C to +180°C
	Glass fibre: -25°C to +200°C