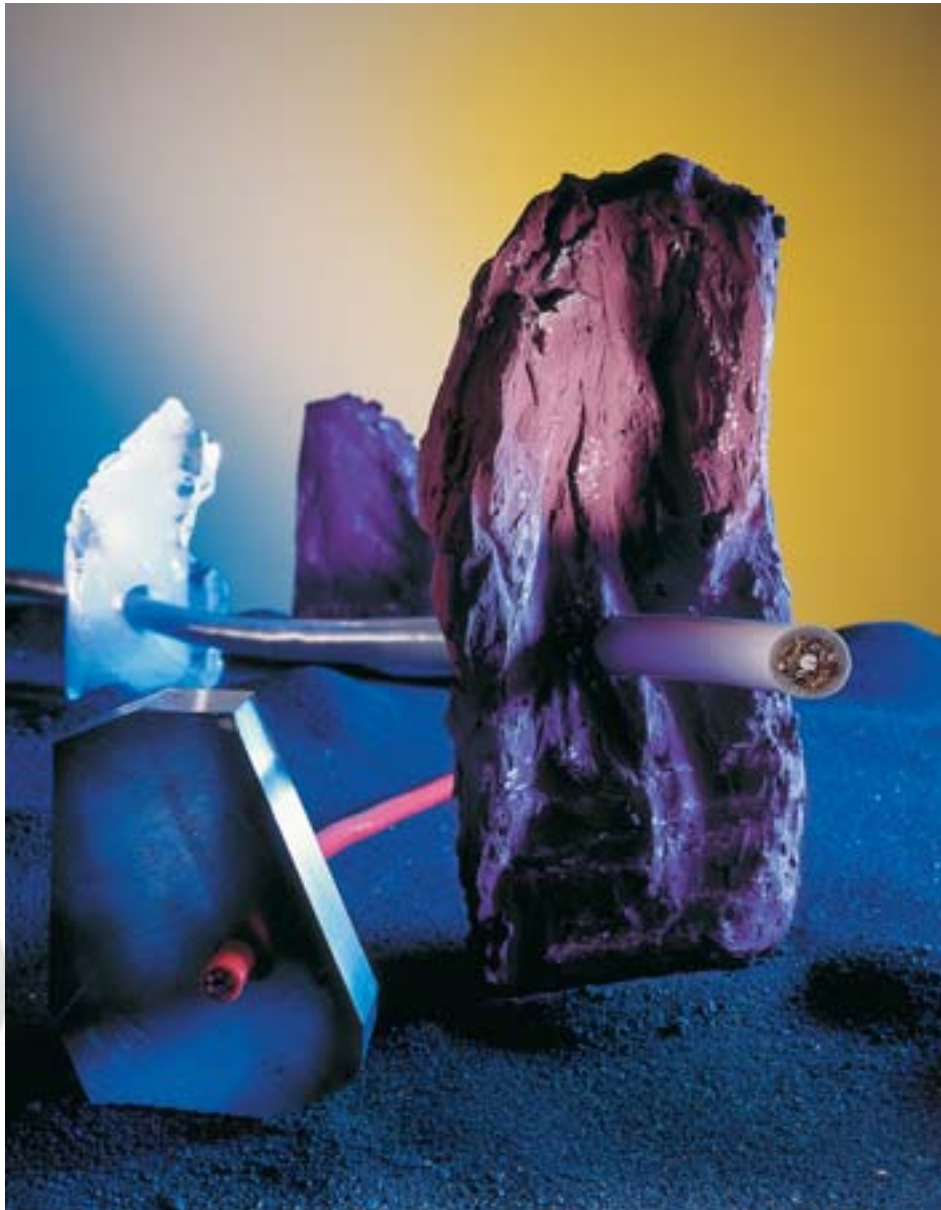


SPECIAL CABLES



SPECIAL CABLES

Products

*Special
Cables*

Special Cables



Wrappings:

- Foils: PTFE, polyester, aluminium, laminated aluminium, copper and Kapton®
- Tapes: glass fibre, mica, fleece

Screening materials:

- Cu bare, tp, sp, np, braids and servings
- Wrappings with various foil materials



Specifications:

VDE, UL, CSA, combined VDE-, UL- and CSA-approvals, MIL-W-16878, MIL-W-22759, Germanischer Lloyd, DEMKO, FIMKO, NEMKO, SEMKO, PTB, ZEG, ISSEP, KEMA, glg, SEV, FTZÜ, BWB

Applications:

Automotive, lighting, chemical industry, EMC optimized data transfer, energy transfer, domestic appliances, highest and lowest temperatures, high frequency technology, refrigeration technology, leakage monitoring, aerospace, medical equipment, petro chemistry, robotics, sensory analysis, temperature measuring technology, traffic technology, shipbuilding industry etc.

Kevlar® and Kapton® are registered trademarks of Du Pont.



Conductor materials :

Cu bare, tp, sp, np, pure nickel, thermo-couple and compensating materials as well as special alloys

Conductor cross sections:

0,08 up to 500 mm² resp. AWG 32 to AWG 0000

Twisting:

2 to 120 cores in layers resp. pair twisting

Insulation materials:

- Fluoropolymers: PTFE, FEP, ETFE, PFA, MFA, PVDF, ECTFE
- Silicone rubber: standard compounds as well as compounds acc. to customers requirements
- Elastomers: EPDM, EVM
- Thermoplastic elastomers: TPE-E, -S, -V
- Special thermoplastics: PEI, PEEK, PEI/SIR
- Thermoplastics: LDPE, HDPE, PP, PA
- Inorganic materials: glass fibre, mica, ceramic fibre
- Organic materials: Kevlar®

Inner sheath materials:

- Fluoropolymers: PTFE, FEP, ETFE, PFA, MFA, PVDF, ECTFE, Teflon®, Tefzel®
- Silicone rubber: standard compounds as well as compounds acc. to customers requirements
- Elastomers: EPDM, EVM
- Thermoplastic elastomers: TPE-E, -S, -V
- Special thermoplastics: PEI, PEEK, PEI/SIR
- Thermoplastics: LDPE, HDPE, PP, PA
- Inorganic materials: glass fibre, mica, ceramic fibre,
- Organic materials: Kevlar®

Sheath materials:

- Fluoropolymers: PTFE, FEP, ETFE, PFA, MFA, PVDF, ECTFE
- Silicone rubber: standard compounds as well as compounds for customer specific applications
- Elastomers: EPDM, EVM, ACM, HNBR, CSM, FPM, CR, CM, XVH
- Thermoplastic elastomers: TPE-E, -O, -S, -U, -V
- Thermoplastics: PVC, LDPE, HDPE, PP, PA
- Inorganic materials: glass fibre, mica, ceramic fibre
- Organic materials: Kevlar®

Armourings:

Galvanized steel wire or stainless steel wire braids

Thermo- and Compensating cables

Thermocouple- and compensating cables function as a link between the open ends of a thermocouple and the comparison control point in a temperature measuring facility. In the following illustration the position of the particular element is shown. In order to gain exact measuring values thermocouples are used in high temperature areas. The chemical composition of these alloys guarantees the maximum possible accuracy.



Thermocouple- or compensating cables are used whenever there is a great distance between the measuring point and the comparison control point.

Criteria for selecting specific thermocouple- or compensating cables are:

- a) technical requirements e.g. temperature- and corrosion resistance
- b) economical aspects

At low temperatures cables with copper conductors can be used as links between the measuring instrument and the comparison control point.

But in most cases thermocouple- or compensating cables are installed to cover the whole distance.

Materials:

Thermocouples:

Serve as measurement transducers in a temperature measuring facility. High performance materials are applied (depending on standard and/or type) up to +1250°C. Normally solid conductors are used.

Thermocables (original materials):

Form the electric connection between thermocouple and comparison control point.

These materials have the same chemical structure as the corresponding thermocouple, but are only suitable for a temperature range -25°C and +200°C.

Compensating cables (alternative materials):

As thermocables above

These materials have a different chemical structure as the corresponding thermocouple, thus they are only suitable for a temperature range 0°C up to +100/200°C.