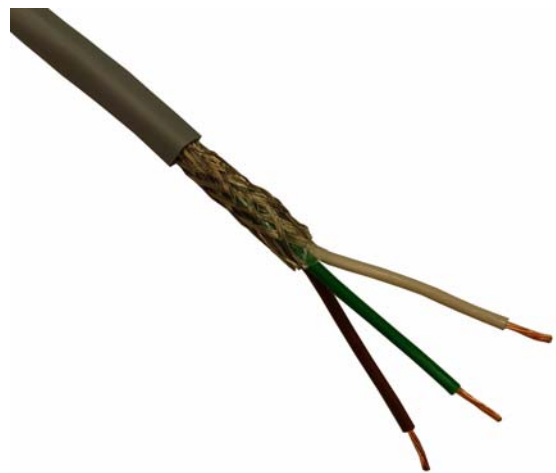




Transmission cable

FEATURES

- ▶ 3 x 0.34 mm² twisted cores
- ▶ PVC outer sheath
- ▶ Good water and weather resistance
- ▶ Low capacitance
- ▶ Temperature range : -5°C to +70°C



DESCRIPTION

The K 309 signal transmission cable is used to connect a transducer with electronics or a signal conditioner to the processing/monitoring system. It is a three-core shielded cable designed to withstand extreme ambient temperatures and hostile industrial environments. This cable is recommended for general purpose screened connections of field-mounted transducers/electronics to remote electronics, where high mechanical and environmental performances are required.

When used in VIBRAX proximity installations the K 309 cable supplies the DC power (-24 V) to operate the IQS signal conditioner and transmits the gap/vibration signal to the processor modules. Due to its low capacitance and resistance, cable lengths can be

greater than 300 metres for transmission of voltage modulated signals up to a frequency of 10 kHz without significant signal distortion.

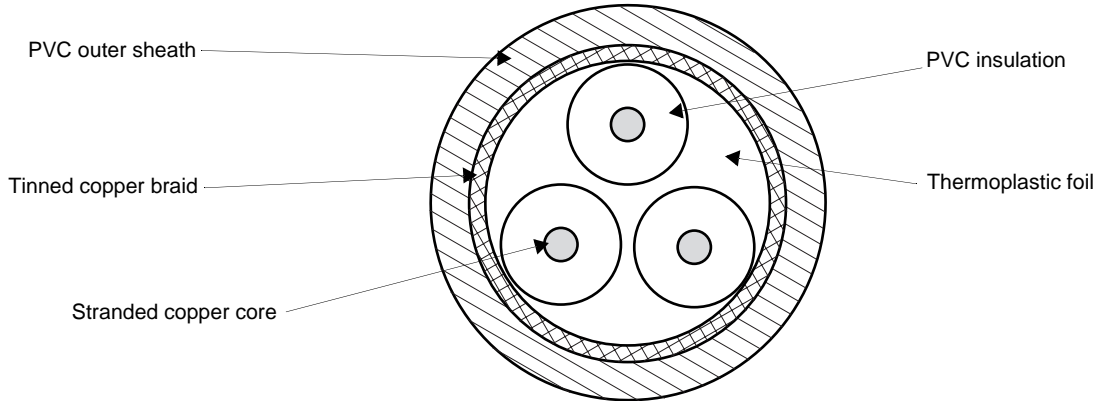
To ensure proper functioning of systems and to facilitate field installation, flexible protection tubes can be used to provide mechanical protection. It is recommended that the cable ends are terminated at a barrier terminal strip (conditioner or junction box) or with transducer or electronics matching connectors or lugs.

Cable assemblies to facilitate field installations, or to match special installation requirements, are available on request.



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MECHANICAL CONSTRUCTION



SPECIFICATIONS

PHYSICAL

Conductors	: Stranded tinned copper core : 23 x 0.15 mm; Ø 0.7 mm
Colour code	: Brown (signal), white (common) and green (power supply)
Conductor insulation	: PVC
Shield	: Tinned copper braid
Outer sheath	: Grey PVC with thickness ~ 1 mm
Cable diameter	: 5.1 ±0.3 mm
Weight	: 37 g/m
Bending radius	: 75 mm (minimum)
Operating temperature (continuous)	: -5°C to +70°C

ELECTRICAL

(at +20°C)

Voltage rating	: 300 V _{RMS}
Test voltage	: 1 200 V _{RMS}
Resistance	
• Core	: 56 Ω/km
• Shield	: 20 Ω/km
Capacitance (nominal)	
• Core to core + shield clamped	: 330 pF/m
• Core to core	: 150 pF/m
• Core to shield	: 270 pF/m
Inductance of the measuring and supply loop	: 0.7 μH/m

MECHANICAL

Notched bar impact resistance	: High
Abrasion resistance	: High
Breaking strength	: High
Impact and bending resistance	: High
Cold flexibility	: Good

CHEMICAL

Weather resistance	: Good
Water resistance at +20°C	: Good
Water resistance at +70°C	: Average
Acid resistance (limited resistance to acetic and formic acids)	: Average
Alkaline solution resistance	: Average
Oil resistance	: Poor
Gasoline resistance	: Poor

ORDERING INFORMATION

To order please specify :

Type	Designation	Ordering Number	Cable Length
K 309	Transmission cable	957.34.30.4088	XX m



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In this publication, a dot (.) is used as the decimal separator and thousands are separated by spaces. Example : 12 345.678 90.

Sales offices

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Your local agent

Head office

Vibro-Meter SA
Rte de Moncor 4
P.O. Box
CH-1701 Fribourg
Switzerland

Tel: +41 26 407 11 11
Fax: +41 26 407 13 01



www.vibro-meter.com

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