



Screened highly flexible data transmission cable with PUR outer sheath and twisted pairs - UL/CSA-listed

Wide temperature range for applications in harsh climatic environments; Optimized cable construction for power chain use; Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects); Overall braid minimises electrical interference

- Flexible at low temperatures
- Low capacitance
- Halogen-free



Product description

Application range

- In power chains or moving machine parts
- Suitable for use in measuring, control and regulating circuits
- Linear robots, automated handling equipment
- For the North American market
- Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

Benefits

- Wide temperature range for applications in harsh climatic environments
- Optimized cable construction for power chain use

- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)
- Overall braid minimises electrical interference

Product Make-up

- Extra-fine wire strand made of bare copper wires
- Core insulation: Based on Polyolefin TP structure
- Non-woven wrapping
- Tinned-copper braiding
- Outer sheath made of special PUR compound
Outer sheath colour: grey (RAL 7001)

Norm references / Approvals

- Approval: UL/CSA type CMX in accordance with UL 444 and CSA C22.2 no. 214
- For horizontal travel distances up to 100m
- For use in power chains: Please comply with the assembly guidelines listed in Appendix T3

Product features

- Halogen-free, has low capacitance and is flexible down to -40°C
- PUR outer sheath, tear and notch-resistant, resistant to mineral oils and abrasion when used in power chains
- Low-adhesive surface, resistant to hydrolysis and microbes, oil resistant
- Flame-retardant according to IEC 60332-1-2 and VW-1 acc. to UL-1581
- Designed for 5 up to 10 million bending/unbending cycles in the power chain

Technical Data

Core identification code	DIN 47100, refer to Appendix T9
Mutual capacitance	Up to 0.5 mm ² : 60 nF/km Up to 1.0 mm ² : 70 nF/km
Peak operating voltage	(not for power applications) 250 V
Classification	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Inductivity	approx. 0.65 mH/km
Conductor stranding	Stranded, extra-fine wire From 0.5 mm ² : extra-fine wire according to IEC 60228 class 6
Torsion movement in WTG	TW-0 & TW-2, refer to Appendix T0
Minimum bending radius	Flexing: 7.5 x outer diameter Fixed installation: 4 x outer diameter
Test voltage	Core/core: 1500 V rms Core/screen: 500 V
Temperature range	Flexing: -40°C to +80°C Fixed installation: -40°C to +80°C UL/CSA: up to +75°C