



Reference: 10251178

### CONTACT

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## INSTRUMENTATION, CONTROL and COMMUNICATION Cables

### STANDARDS

**Product** IEC 60228

**Installation** IEC 60092-350; IEC 60092-360; IEC 60092-376

**Test a;** IEC 60332-1; IEC 60332-3-22; IEC 60754-1; IEC 61034

### APPLICATION

TCX® (I) 150/250 V armoured individually screened twisted pair cables are used for telecommunication and instrumentation purposes. These cables provide strong protection against cross-talk in both low and high frequency runs, making them suitable for highly polluted electromagnetic surroundings. TCX®(I) cables are also selected where enhanced mechanical protection is required. Designed with halogen-free fire retardant materials, they provide optimum safety for people and maximal asset protection against all risks of fire.

### Design

- 1. Conductor**  
Stranded bare copper class 2
- 2. Insulation**  
XLPE (cross-linked polyethylene)
- 3. Individual screen**  
Alu/polyester tape with a tinned copper drain wire
- 4. Assembling**  
Polyester tape
- 5. Armour**  
Bare copper braid
- 6. Outer sheath**  
Polyolefin SHF1  
Colour : grey

Example of marking:

LYNXEO 279 TCX (I) Nber of pairs/triads & cross section 150/250V 90C IEC 60092-376  
IEC 60332-3-22 Cat. A WW YYYY \*CE\* Manufacturing n° + metric marking

Core identification

Pair: white / blue with printed pair number

Triad: white / blue / red with printed triad number



Halogen free  
IEC 60754-1



Conductor flexibility  
Stranded class 2



Rated Voltage Uo/U  
(Um)  
150 / 250 (300) V



Fire retardant  
EN IEC 60332-3-22  
(cat A)



Flame retardant  
IEC 60332-1



Smoke density  
IEC 61034



Gases corrosivity  
IEC 60754-2



Electro magnetic  
interference  
resistance  
Yes

### CHARACTERISTICS

#### Construction characteristics

Halogen free	IEC 60754-1
Conductor material	Bare copper
Conductor flexibility	Stranded class 2
Insulation	XLPE (Cross-linked Polyethylene)
Individual screen	Tinned copper drain wire + aluminium/polyester tape
Inner covering	Polyester tape(s)
Armour type	Bare copper braid
Outer sheath	Polyolefin
Sheath colour	Grey
Drain wire	-
Number of conductors	-

#### Dimensional characteristics

Number of pairs	4
Number of triples	-
Conductor cross-section	1.5 mm <sup>2</sup>
Nominal outer diameter	15.9 mm
Minimum outer diameter	14.8 mm
Maximum outer diameter	17.0 mm
Approximate weight	356 kg/km

#### Electrical characteristics

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	150 / 250 (300) V
Max. DC resistance of the conductor at 20°C	25.6 Ohm/km

#### Usage characteristics

Fire retardant	EN IEC 60332-3-22 (cat A)
Flame retardant	IEC 60332-1
Smoke density	IEC 61034
Gases corrosivity	IEC 60754-2
Electro magnetic interference resistance	Yes
Operating temperature, range	-30 ... 80 °C
Max. conductor temperature in service	90 °C

### OTHER CHARACTERISTICS

#### Test Voltage

Between cores of the same unit..... 1,5 kV AC

Minimum bending radius for fixed installations TCX® (I)..... 6 x outer diameter