



**Reference:** 10280539  
**EAN 13:** 3427580822650

#### CONTACT

Market information  
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**International Designation:** TCX® (I) 331 2P0.75

#### INSTRUMENTATION CABLES

#### STANDARDS

**Product** IEC 60228

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

**Test** a; IEC 60331-1 or 2; IEC 60332-1; IEC 60332-3-22; IEC 60754-1; IEC 61034

#### APPLICATION

TCX® (I) 331 150/250 V fire resistant armoured individually screened twisted pair cables maintain circuit integrity in case of fire by meeting performances requirements from the IEC 60331 series for 180 minutes. These telecommunication and instrumentation cables provide strong protection against cross-talk in both low and high frequency runs, making them suitable for highly polluted electromagnetic surroundings. TCX®(I) 331 cables are used for detection and warning systems 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**  
Mica tape + XLPE (cross-linked polyethylene)
- 3. Individual screen**  
Alu/polyester tape with a tinned copper drain wire
- 4. Inner covering**  
Lapped polyester tape
- 5. Armouring**  
Bare copper braid
- 6. Outer sheath**  
Polyolefin SHF1  
Colour: orange

Example of marking:

LYNXEO 279 TCX (I) 331 150/250 V "n" x 2 or 3 x "s" mm<sup>2</sup> 90°C IEC 60092-376 IEC 60332-3-22 Cat. A IEC 60331-1/2 "ww/yy" \* CE \* TCIF + metric marking

Core Identification

Pair: white / blue with printed with pair number

Triad: white / blue / red with printed with triad number



Halogen free  
IEC 60754-1



Conductor flexibility  
Stranded class 2



Rated Voltage U<sub>o</sub>/U  
(Um)  
150 / 250 (300) V



Fire resistant  
IEC 60331-1 or -2



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



Smoke density  
IEC 61034



Gases corrosivity  
IEC 60754-2



Electro magnetic  
interference  
resistance  
Yes

**CHARACTERISTICS****Construction characteristics**

Conductor material	Bare copper
Halogen free	IEC 60754-1
Sheath colour	Orange
Insulation	XLPE + Mica tape
Screen	Bare copper braid
Outer sheath	Polyolefin
Conductor flexibility	Stranded class 2
Drain wire	Bare copper
Protection	Polyester tape(s)

**Dimensional characteristics**

Number of pairs	2
Number of triples	-
Conductor cross-section	0.75 mm <sup>2</sup>
Nominal outer diameter	13.6 mm
Minimum outer diameter	12.6 mm
Maximum outer diameter	14.6 mm
Approximate weight	180 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	52 Ohm/km

**Usage characteristics**

Fire resistant	IEC 60331-1 or -2
Fire retardant	EN IEC 60332-3-22 (cat A)
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**

AC between cores of the same unit..... 1.5 kV AC

**Minimum bending radius for fixed installations**

• TCX® (I) 331..... 6 x outer diameter