

INSTRUMENTATION CABLES

DESCRIPTION

Application

TCX® (C) 331 150/250 V fire resistant armoured twisted pair cables maintain circuit integrity in case of fire by meeting performances requirements from the IEC 60331 series for 90 minutes. These telecommunication and instrumentation cables show a low transfer impedance in low frequency and an effective screening in high frequency, making them very suitable for polluted electromagnetic surroundings. TCX(C) 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

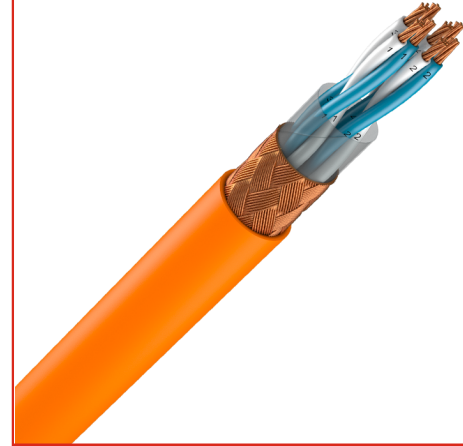
1. **Conductor:**
Stranded bare copper
Class 2
2. **Insulation:**
Mica tape + XLPE (cross-linked polyethylene)
Optional: Special fire resistant HF 90 (halogen-free compound) with INFIT™ technology
3. **Inner covering:**
Lapped polyester tape
4. **Armouring:**
Bare copper braid
5. **Outer sheath:**
Polyolefin SHF1 (SHF2 on request)
Colour: orange

Marking

I NEXANS I TCX (C) 331 150/250 V "n" 2 or 3 "s" mm² 90°C IEC 60092-376 IEC 60332-3-22 Cat. A IEC 60331-1/2 "ww/yy" * **CE** * TCF + metric marking

Core identification

- Core 1 : white
- Core 2 : blue
- Core 3: red
- Double identification: pair and conductor



STANDARDS

International IEC 60331-1 or 2;
IEC 60092-350; IEC 60092-360;
IEC 60092-376; IEC 60228;
IEC 60332-3-22; IEC 60754-1;
IEC 60754-2; IEC 61034



Halogen free
IEC 60754-1



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



Fire retardant
IEC 60332-3-22



Fire resistant
IEC 60331-21, IEC
60331-1 or 2



Gases toxicity
No



Gases corrosivity
IEC 60754-2



Smoke density
IEC 61034



Electro magnetic
interference
resistance
Yes

CHARACTERISTICS

Construction characteristics

Halogen free	IEC 60754-1
Sheath colour	Orange

Electrical characteristics

Rated Voltage U ₀ /U (Um)	150 / 250 (300) V
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Usage characteristics

Fire retardant	IEC 60332-3-22
Fire resistant	IEC 60331-21, IEC 60331-1 or 2
Gases toxicity	No
Gases corrosivity	IEC 60754-2
Smoke density	IEC 61034
Electro magnetic interference resistance	Yes
Max. conductor temperature in service	90 °C
Operating temperature, range	-30 .. 80 °C

PRODUCT LIST

Nexans ref.	nb pairs	nb triples	Cross section [mm²]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
 25405250	1		0.75	7.4	9.2	86
 25405251	2		0.75	8.4	10.5	139
 25405252	4		0.75	12.0	15.0	216
 25405253	7		0.75	15.0	18.5	346
 25405254	10		0.75	21.0	23.5	504
 25405255	14		0.75	22.5	25.0	628
 25405256	19		0.75	25.5	28.5	783
 25405257	24		0.75	30.0	34.0	981
		2	0.75	12.5	14.5	230
		4	0.75	15.5	17.5	330
		7	0.75	18.5	21.0	480
		10	0.75	20.5	26.5	670
 10132031	2		1.5	9.8	11.5	180
 10199487	4		1.5	16.0	18.5	370
	7		1.5	19.5	23.0	553
	10		1.5	25.5	27.0	764

 = Make to order,  = In stock



Halogen free
IEC 60754-1



Rated Voltage U₀/U
(Um)
150 / 250 (300) V



Fire retardant
IEC 60332-3-22



Fire resistant
IEC 60331-21, IEC
60331-1 or 2



Gases toxicity
No



Gases corrosivity
IEC 60754-2



Smoke density
IEC 61034



Electro magnetic
interference
resistance
Yes

TCX® (C) 331 150/250 (300) V

Contact

Nexans - Special cables - Marine
contact.fr@nexans.com

	Nexans ref.	nb pairs	nb triples	Cross section [mm²]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
☎		14		1.5	27.5	31.0	980
☎		19		1.5	31.0	34.5	1260
☎			1	1.5	9.8	11.5	230
☎			2	1.5	15.0	17.0	330
☎			4	1.5	18.5	21.0	490
☎			7	1.5	22.0	25.0	730

☎ = Make to order, 📦 = In stock



Halogen free
IEC 60754-1



Rated Voltage U₀/U
(Um)
150 / 250 (300) V



Fire retardant
IEC 60332-3-22



Fire resistant
IEC 60331-21, IEC
60331-1 or 2



Gases toxicity
No



Gases corrosivity
IEC 60754-2



Smoke density
IEC 61034



Electro magnetic
interference
resistance
Yes

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

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