EN 50288-7 XLPE Insulation IOS Unarmoured Fire Retardant

- Instrumentation cables 170/300 V
- Individual & Overall Screen (IOS)
- **Oil resistant**

STANDARDS

Test IEC 60332-3-22 Cat.A

APPLICATIONS

These instrumentation and communication cable are used to **transmit analogue or digital signals in measurement and process control where chemicals may be present. The individual screening of each pair limits the consequence of crosstalk.**

Design

Conductor:

Stranded bare copper class 2

Insulation:

Cross-linked polyethylene (XLPE)

Individual screen:

Polyester tape

Tinned copper drain wire,

Aluminium backed polyester tape

Polyester tape

Overall screen:

Polyester tape

Tinned copper drain wire

Aluminium backed polyester tape

Outer sheath:

Polyvinyl chloride (PVC).

Colour: black.

Other colour on request.

Core identification

Pair: white - black

White core printed with pair number

Marking

NEXANS 279 XLPE/IND +OA SCR/PVC 170/300V Nber of pairs & cross-section Cu IEC 60332-3-22(A) MM YYYY Manufacturing number - metric marking

Rated Voltage Uo/U (Um)
170/300V

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

Oil resistance
Yes

Electro magnetic interference
Yes

Operating temp.
-20+...+90°C

Max.conductor temp.in service
90 °C

Standards

EN 50288-7 (Design guide-lines)

CONTACT

Market information
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CHARACTERISTICS

Construction characteristics	
Conductor material	Bare copper
Type of conductor	Stranded, class 2
Insulation	XLPE (Cross-linked Polyethylene)
Individual screen	Tinned copper drain wire + aluminium/polyester tape
Overall screen	Tinned copper drain wire + aluminium/polyester tape
Outer sheath	PVC
Protection	no
Electrical characteristics	
Rated Voltage Uo/U (Um)	170/300V
Usage characteristics	
Fire retardant	EN IEC 60332-3-22 (cat A)
Oil resistance	Yes
Electro magnetic interference resistance	Yes
Operating temperature, range	-20 ... 60 °C
Max. conductor temperature in service	90 °C
Standard	EN

SECTION 0.5MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
2	0.9	1.38	9.0	9.9	100
5	0.9	1.38	11.0	12.1	170
10	0.9	1.38	13.9	15.3	282
20	0.9	1.38	17.8	19.6	487
30	0.9	1.38	20.8	22.9	687

SECTION 0.75MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
2	1.1	1.58	9.6	10.6	118
5	1.1	1.58	12.0	13.2	212
10	1.1	1.58	15.3	16.9	357
20	1.1	1.58	19.5	21.5	620
30	1.1	1.58	23.2	25.6	899

Rated Voltage Uo/U (Um)
170/300V

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

Oil resistance
Yes

Electro magnetic interference resistance
Yes

Operating temp.
-20 ... 60 °C

Max.conductor temp.in service
90 °C

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SECTION 1.0MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
2	1.28	1.76	10.3	11.3	134
5	1.28	1.76	12.9	14.2	245
10	1.28	1.76	16.5	18.2	420
20	1.28	1.76	21.2	23.4	742
30	1.28	1.76	25.2	27.8	1072

SECTION 1.5MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
2	1.5	2.16	11.6	12.8	172
5	1.5	2.16	14.8	16.4	327
10	1.5	2.16	19.2	21.2	568
20	1.5	2.16	24.8	27.4	1015
30	1.5	2.16	29.6	32.6	1478

SECTION 2.5MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
2	1.91	2.57	13.1	14.4	234
5	1.91	2.57	16.9	18.6	434
10	1.91	2.57	22.0	24.3	773
20	1.91	2.57	28.6	31.6	1402
30	1.91	2.57	34.4	38.0	2071

SELLING AND DELIVERY INFORMATION

Other fire performances IEC 60332-1 or IEC 60332-3-24(C) and enhanced hydrocarbon resistance on request.

Minimum bending radius:

10 x outer diameter
To be doubled during laying operations

Tinned copper conductors available on request

Rated Voltage Uo/U (Um)
170/300V

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

Oil resistance
Yes

Electro magnetic interference resistance
Yes

Operating temp.
-20 ... 60 °C

Max.conductor temp.in service
90 °C