



- Instrumentation cables 170/300 V
- Overall Screen (OS)
- **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**. They are well adapted to **underground use in industrial application where chemical and mechanical protections are needed (refinery areas, chemical plant...)**.

Design

Conductor:

Stranded bare copper class 2

Insulation:

Cross-linked polyethylene (XLPE)

Overall screen:

Polyester tape

Tinned copper drain wire,

Aluminium backed polyester tape

Inner sheath:

Polyvinyl chloride (PVC).

Colour : black

Armour:

Galvanized steel wires (SWA)

Outer sheath:

Polyvinyl chloride (PVC).

Colour: black.

Other colour on request.

Core identification

Pair: white - black

Quad: white - black - red - blue (2 pair cables assembled as a quad)

White core printed with pair number



Rated Voltage U₀/U
(Um)
170/300V



Mechanical resistance
to impacts
Good



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



Oil resistance



Electro magnetic
interference resistance
Yes



Operating temp.



Max. conductor temp.in
service
90 °C

Marking

EN IEC 60332-3-22
NEXANS 279 XLPE/OA.SCR/PVC/SWA/PVC 170/300V nber of pairs & cross-section
Cu IEC 60332-3-22(A) MM YYY Y Manufacturing number + metric marking

Standards

EN 50288-7 (design guidelines)

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

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)
Overall screen	Tinned copper drain wire + aluminium/polyester tape
Inner sheath	PVC
Armour type	Galvanized steel wires
Outer sheath	PVC
Protection	Yes

Electrical characteristics

Rated Voltage U ₀ /U (Um)	170/300V
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Mechanical characteristics

Mechanical resistance to impacts	Good
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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]	Diam. over inner sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
1	0.9	1.38	5	6.8	9.1	10.0	172
2	0.9	1.38	5.6	7.4	9.7	10.6	198
5	0.9	1.38	9.1	10.9	13.3	14.6	328
10	0.9	1.38	11.8	13.6	15.9	17.5	453
20	0.9	1.38	15.4	17.2	19.6	21.6	661
30	0.9	1.38	18.3	20.8	23.3	25.7	994



Rated Voltage U₀/U (Um)
170/300V



Mechanical resistance to impacts
Good



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

SECTION 0.75MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
1	1.1	1.58	5.4	7.2	9.5	10.5	194
2	1.1	1.58	6	7.8	10.1	11.2	227
5	1.1	1.58	10.1	11.9	14.3	15.7	384
10	1.1	1.58	13.2	15.0	17.5	19.3	562
20	1.1	1.58	17.2	19.7	22.2	24.5	961
30	1.1	1.58	20.7	23.2	25.8	28.5	1280

SECTION 1.0MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
1	1.28	1.76	5.7	7.5	9.8	10.8	208
2	1.28	1.76	6.5	8.3	10.5	11.6	251
5	1.28	1.76	11	12.8	15.1	16.7	431
10	1.28	1.76	14.5	16.3	18.7	20.7	645
20	1.28	1.76	19	21.5	24.0	26.4	1117
30	1.28	1.76	22.8	25.3	27.8	30.7	1480

SECTION 1.5MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
1	1.5	2.16	6.5	8.3	10.6	11.7	246
2	1.5	2.16	7.4	9.2	11.5	12.6	302
5	1.5	2.16	13	14.8	17.3	19.0	556
10	1.5	2.16	17.3	19.8	22.3	24.6	979
20	1.5	2.16	22.7	25.2	27.7	30.6	1500
30	1.5	2.16	27.7	30.2	33.0	36.4	2262



Rated Voltage U₀/U (Um)
170/300V



Mechanical resistance to impacts
Good



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

SECTION 2.5MM²

nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
1	1.91	2.57	7.3	9.1	11.4	12.6	293
2	1.91	2.57	8.4	10.2	12.6	13.9	373
5	1.91	2.57	15.1	16.9	19.3	21.3	706
10	1.91	2.57	20.1	22.6	25.2	27.8	1269
20	1.91	2.57	26.6	29.1	31.7	35.0	1997
30	1.91	2.57	32.5	35.7	38.5	42.5	3022

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



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(Um)
170/300V



Mechanical resistance to impacts
Good



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