



## CONTACT

Market information  
industryprojects.business@lynxéo  
ogroup.com

- Instrumentation cables 170/300 V
- Overall Screen (OS)
- **Oil resistant**

## STANDARDS

Test IEC 60331; 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...)**. They maintain circuit integrity when exposed to fire.

## Design

### Conductor:

Stranded bare copper class 2

### Insulation:

Silicone rubber (Sil)

### Overall screen:

Polyester tape

Tinned copper drain wire

Aluminium backed polyester tape

### Bedding (inner sheath):

Low Smoke Zero Halogen (LSZH)

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 U<sub>0</sub>/U  
(Um)  
**170/300V**



Mechanical  
resistance to  
impacts  
**Good**



Fire class  
**IEC 60331**



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**

## Marking

**NEXANS 279 SIL/OA.SCR/LSZH/SWA/PVC 170/300V** Nber of pairs & cross-section  
Cu IEC 60331 IEC 60332-3-22(A) MM YYYY Manufacturing number + metric marking

## Standards

All drawings, designs, specifications, plans and particulars of weights, size and dimensions  
conform to **EN 50288-7 (Design guide lines)** 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.

## CHARACTERISTICS

### Construction characteristics

Conductor material	Bare copper
Type of conductor	Stranded, class 2
Insulation	Silicone rubber
Overall screen	Tinned copper drain wire + aluminium/polyester tape
Inner sheath	Low smoke, zero halogen thermoplastic compound
Armour type	Galvanized steel wires
Outer sheath	PVC
Protection	Yes

### Electrical characteristics

Rated Voltage U <sub>0</sub> /U (Um)	170/300V
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### Mechanical characteristics

Mechanical resistance to impacts	Good
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### Usage characteristics

Fire resistant	IEC 60331
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 0.5MM<sup>2</sup>

Reference	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]
10135079	1	0.9	2.06	6.2	8.0	9.8	11.4	222
10135080	2	0.9	2.06	7	8.8	10.5	12.2	261
	5	0.9	2.06	12.5	14.3	15.9	18.5	468
	10	0.9	2.06	16.6	18.4	19.4	22.7	683
10135085	20	0.9	2.06	21.9	24.4	25.0	29.2	1178
	30	0.9	2.06	26.3	28.8	29.2	34.0	1540



Rated Voltage U<sub>0</sub>/U (Um)  
170/300V



Mechanical resistance to impacts  
Good



Fire resistant  
IEC 60331



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 0.75MM<sup>2</sup>

Reference	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]
10135087	1	1.1	2.26	6.6	8.4	10.1	11.8	237
10135088	2	1.1	2.26	7.5	9.3	11.1	13.0	286
	5	1.1	2.26	13.5	15.3	16.8	19.6	519
	10	1.1	2.26	18	20.5	21.3	24.9	895
10135093	20	1.1	2.26	23.5	26.0	26.6	31.1	1368
	30	1.1	2.26	29	32.2	32.4	37.8	2010

## SECTION 1.0MM<sup>2</sup>

Reference	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]
10135095	1	1.28	2.44	7	8.8	10.5	12.2	254
10135096	2	1.28	2.44	7.9	9.7	11.5	13.4	315
	5	1.28	2.44	14.4	16.2	17.7	20.5	575
	10	1.28	2.44	19.2	21.7	22.4	26.2	1002
10135101	20	1.28	2.44	25.2	27.7	28.2	32.9	1552
	30	1.28	2.44	31	34.2	34.2	39.9	2287

## SECTION 1.5MM<sup>2</sup>

Reference	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]
10135103	1	1.5	2.66	7.4	9.2	11.0	12.8	288
10135104	2	1.5	2.66	8.5	10.3	12.0	14.0	351
	5	1.5	2.66	15.5	17.3	18.7	21.7	670
	10	1.5	2.66	20.9	23.4	24.1	28.1	1211
10135109	20	1.5	2.66	28	31.2	31.5	36.8	2101
	30	1.5	2.66	33.6	36.8	36.7	42.8	2800



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(Um)  
170/300V



Mechanical resistance to impacts  
Good



Fire resistant  
IEC 60331



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 2.5MM<sup>2</sup>

Reference	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	3.07	8.3	10.1	11.9	13.8	337
	2	1.91	3.07	9.5	11.3	13.0	15.1	424
	5	1.91	3.07	17.6	20.1	21.4	24.9	964
	10	1.91	3.07	23.6	26.1	26.7	31.2	1510
	20	1.91	3.07	31.8	35.0	35.1	41.0	2672
	30	1.91	3.07	38.7	41.9	41.7	48.6	3678

## 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:

- 15 x outer diameter
- To be doubled during laying operations

Tinned copper conductors available on request



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Good



Fire resistant  
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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