



- 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 U₀/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 conforming to the design guide (EN 50288-7) 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
industryprojects.business@lynxéo
group.com

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 ₀ /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 0.5MM²

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 U₀/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 0.75MM²

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 1.0MM²

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 1.5MM²

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



Rated Voltage U₀/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 2.5MM²

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



Rated Voltage U₀/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