



CONTACT

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

STANDARDS

Test IEC 60331; IEC 60332-3-22 Cat.A

APPLICATIONS

These Instrumentation and communication are used to **transmit analogue or digital signals in measurement and process control** They are well adapted **tounderground use in industrial applications where chemical and mechanical protections are needed (refinery areas, chemical plant...).** The individual screening of each pair limits the consequence of crosstalk. They maintain circuit integrity when exposed to fire.

Design

Conductor:

Stranded bare copper class 2

Insulation:

Silicone rubber (Sil)

Individual screen:

Polyester tape

Tinned copper drain wire

Aluminium/polyester tape

Polyester tape

Overall screen:

Polyester tape

Tinned copper drain wire

Aluminium/polyester tape

Inner sheath:

Low Smoke Zero Halogen (LSZH)

Armour:

Galvanized steel wires (SWA)

Outer sheath:



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



Mechanical
resistance to
impacts
Good



Fire resistance
IEC 60331
**EN IEC 60332-3-22
(cat A)**



Polyvinyl chloride (PVC)
Colour: black
Other colour on request.



Oil resistance
Yes



Electro magnetic
interference
resistance
Yes



Operating temp.
-20 ... 60 °C



Max. conductor
temp.in service
90 °C

Core identification

Pair: white - black

White core printed with pair number

All drawings, designs, specifications, plans 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.

Marking

NEXANS 279 SIL/IND.+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

CHARACTERISTICS

Construction characteristics

Conductor material	Bare copper
Type of conductor	Stranded, class 2
Insulation	Silicone rubber
Individual screen	Tinned copper drain wire + aluminium/polyester tape
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 _o /U (U _m)	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]
10135111	2	0.9	2.06	10	11.8	13.4	15.6	348
	5	0.9	2.06	13.2	15.0	16.6	19.3	524
	10	0.9	2.06	17.5	19.3	20.3	23.6	779
10135116	20	0.9	2.06	23.2	25.7	26.2	30.6	1363
	30	0.9	2.06	28.2	30.7	30.9	36.0	1840



Rated Voltage U_o/U (U_m)
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]
10135118	2	1.1	2.26	10.7	12.5	14.1	16.4	381
	5	1.1	2.26	14.2	16.0	17.5	20.3	577
	10	1.1	2.26	18.9	21.4	22.1	25.8	1005
10135123	20	1.1	2.26	24.8	27.3	27.8	32.5	1573
	30	1.1	2.26	30.6	33.8	33.8	39.5	2290

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]
10135125	2	1.28	2.44	11.3	13.1	14.6	17.0	413
	5	1.28	2.44	15.1	16.9	18.3	21.3	637
	10	1.28	2.44	20.2	22.7	23.3	27.2	1123
10135130	20	1.28	2.44	26.5	29.0	29.3	34.2	1768
	30	1.28	2.44	32.6	35.8	35.6	41.6	2597

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]
10135132	2	1.5	2.66	12.1	13.9	15.4	17.9	455
	5	1.5	2.66	16.2	18.0	19.3	22.5	734
	10	1.5	2.66	21.8	24.3	24.9	29.1	1322
10135137	20	1.5	2.66	29.3	32.5	32.7	38.1	2329
	30	1.5	2.66	35.1	38.3	38.1	44.4	3099

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]
	2	1.91	3.07	13.7	15.5	17.0	19.8	560
	5	1.91	3.07	18.3	20.8	22.1	25.7	1027
	10	1.91	3.07	24.6	27.1	27.6	32.2	1622



Rated Voltage U₀/U
(Um)
170/300V



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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

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]
	20	1.91	3.07	33.1	36.3	36.3	42.3	2883
	30	1.91	3.07	40.3	43.5	43.1	50.3	3953

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
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