



CONTACT

Market information
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- Instrumentation cables 170/300 V
- With lead cover (LC)
- Individual & Overall Screen (IOS)
- **Aliphatic and aromatic hydrocarbons resistant**

STANDARDS

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

APPLICATIONS

These instrumentation and communication cables are used to **transmit analogue or digital signals in measurement and process control**. They are well adapted to **underground use** in industrial applications, in moist areas, where **hydrocarbon and mechanical protection are needed**. The **lead cover brings an enhanced resistance to aromatics hydrocarbons**. 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 backed polyester tape

Polyester tape

Overall screen:

Polyester tape

Tinned copper drain wire

Aluminium backed polyester tape

Inner sheath:

Low Smoke Zero Halogen (LSZH)

Colour: black

Lead sheath:

Bedding (intermediate sheath):

Polyvinyl chloride (PVC)

Colour: black

Fire resistant
IEC 60331

Armour:

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

Chemical
resistance
Aliphatic and
aromatic
hydrocarbons
resistant

Electro magnetic
interference
resistance
Yes

Operating temp.
-20 ... 60 °C

Max. conductor
temp. in service
90 °C

Galvanized steel wires (SWA)

Outer sheath:

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Lynx^{eo} is indicative only and shall not be binding on Lynx^{eo} or be treated as constituting a representation on the part of Lynx^{eo}.
Colour: black

Other colour on request.



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)



Chemical
resistance
Aliphatic and
aromatic
hydrocarbons
resistant



Electro magnetic
interference
resistance
Yes



Operating temp.
-20 ... 60 °C



Max. conductor
temp. in service
90 °C

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
Lead Sheath	Yes
Intermediate 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 resistant	IEC 60331
Fire retardant	EN IEC 60332-3-22 (cat A)
Chemical resistance	Aliphatic and aromatic hydrocarbons resistant
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]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10135231	2	0.9	2.06	10.1	12.1	14.1	15.9	17.4	20.2	895
	5	0.9	2.06	13.2	15.2	17.2	19.7	21.1	24.5	1320
	10	0.9	2.06	17.5	19.7	21.7	24.2	24.8	29.0	1861
10135236	20	0.9	2.06	23.2	25.8	28.2	30.7	31.1	36.2	2810
	30	0.9	2.06	28.2	31	33.4	36.6	36.5	42.6	3916



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)



Chemical resistance
Aliphatic and aromatic hydrocarbons resistant



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]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10135238	2	1.1	2.26	10.8	12.8	14.8	16.6	18.0	21.0	956
	5	1.1	2.26	14.2	16.4	18.4	20.9	22.2	25.8	1481
	10	1.1	2.26	18.9	21.3	23.3	25.8	26.3	30.7	2130
10135243	20	1.1	2.26	24.8	27.4	29.8	33.0	33.1	38.6	3256
	30	1.1	2.26	30.6	33.6	36	39.2	39.1	45.6	4417

SECTION 1.0MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10135245	2	1.28	2.44	11.3	13.3	15.3	17.1	18.5	21.5	1001
	5	1.28	2.44	15.1	17.3	19.3	21.8	23.0	26.8	1595
	10	1.28	2.44	20.2	22.6	24.6	27.1	27.6	32.2	2290
10135250	20	1.28	2.44	26.6	29.4	31.8	35.0	35.1	41.0	3689
	30	1.28	2.44	32.6	35.6	38.4	41.6	41.2	48.1	4870

SECTION 1.5MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10135252	2	1.5	2.66	12.2	14.2	16.2	18.0	19.5	22.7	1102
	5	1.5	2.66	16.2	18.4	20.4	22.9	24.2	28.1	1749
	10	1.5	2.66	21.8	24.4	26.4	28.9	29.3	34.1	2643
10135257	20	1.5	2.66	29.3	32.3	34.7	37.9	37.9	44.2	4373
	30	1.5	2.66	35.1	38.3	41.1	45.1	44.6	52.0	6033



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)



Chemical resistance
Aliphatic and aromatic hydrocarbons resistant



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]	Diameter over lead sheath [mm]	Diam. intermediate 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	15.9	17.9	20.4	21.7	25.3	1443
	5	1.91	3.07	18.3	20.7	22.7	25.2	26.3	30.6	2092
	10	1.91	3.07	24.6	27.2	29.6	32.8	32.9	38.4	3336
	20	1.91	3.07	33.1	36.3	39.1	42.3	42.0	49.0	5335
	30	1.91	3.07	40.3	43.9	46.7	50.7	50.0	58.3	7579

SELLING AND DELIVERY INFORMATION

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

Minimum bending radius:

10 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)



Chemical resistance
Aliphatic and aromatic hydrocarbons resistant



Electro magnetic interference resistance
Yes



Operating temp.
-20 ... 60 °C



Max. conductor temp. in service
90 °C