



- Instrumentation cables 170/300 V
- Individual & Overall Screen (IOS)
- Lead free
- Aliphatic and aromatic hydrocarbons 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 in moist areas and where aliphatic and aromatic hydrocarbons may be present.** They are well adapted to **underground 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. Hypron® offers an alternative to conventional lead sheathed cable and is an environmental friendly solution.

Design

Conductor:

Stranded bare copper class 2

Insulation:

Cross-linked polyethylene (XLPE)

Individual screen:

Binder tape

Tinned copper drain wire

Aluminium/polyester tape

Binder tape

Binder tape:

Bedding:

Inner sheath:

Polyvinyl chloride (PVC)

Colour: black.

Overall screen/sealing barrier:

Tinned copper drain wire

Aluminium backed polyethylene tape



Lead free
Yes



Rated Voltage U₀/U_m
(Um)
170/300V



Bedding:
High density polyethylene (PE)



Colour: black
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

Special sheath (intermediate sheath):
Polyamide

Armour:

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. It is to be treated as constituting a representation on the part of Lynxéo.

Outer sheath:

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)
Individual screen	Tinned copper drain wire + aluminium/polyester tape
Inner sheath	PVC
Overall screen	Tinned copper drain wire + aluminium/polyethylene tape
Material of bedding	High-density polyethylene (PE)
Intermediate sheath	Polyamide
Armour type	Galvanized steel wires
Outer sheath	PVC
Lead free	Yes
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)
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]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
	2	0.9	1.38	7.9	11.3	13.1	18.5	20.4	527
10187587	5	0.9	1.38	10.1	13.5	15.3	20.7	22.8	675
10164900	10	0.9	1.38	13	16.6	18.4	23.7	26.1	861
	20	0.9	1.38	16.9	20.6	23.1	28.2	31.1	1381
	30	0.9	1.38	20.1	23.8	26.3	31.3	34.6	1717



Lead free
Yes



Rated Voltage U₀/U (Um)
170/300V



Mechanical resistance to impacts
Good



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]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
	2	1.1	1.58	8.6	12	13.8	19.2	21.2	574
10187835	5	1.1	1.58	11.1	14.5	16.3	21.6	23.9	752
10187838	10	1.1	1.58	14.5	18.1	20.6	25.8	28.5	1148
	20	1.1	1.58	18.8	22.5	25.0	30.1	33.2	1601
	30	1.1	1.58	22.5	26.2	28.7	33.7	37.1	2017

SECTION 1.0MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
	2	1.28	1.76	9.3	12.7	14.5	19.9	21.9	612
10187844	5	1.28	1.76	12	15.4	17.2	22.5	24.8	812
10187847	10	1.28	1.76	15.7	19.2	21.7	26.9	29.6	1256
	20	1.28	1.76	20.5	24.2	26.7	31.7	35.0	1781
	30	1.28	1.76	24.6	28.3	30.8	35.7	39.4	2275

SECTION 1.5MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
	2	1.5	2.16	10.7	14.1	15.9	21.2	23.4	695
10187852	5	1.5	2.16	14	17.3	19.8	25.0	27.6	1078
10187855	10	1.5	2.16	18.5	22	24.5	29.6	32.6	1520
	20	1.5	2.16	24.3	28	30.5	35.4	39.1	2406
	30	1.5	2.16	29.2	32.9	36.1	40.8	45.0	3128



Lead free
Yes



Rated Voltage U₀/U_i
(Um)
170/300V



Mechanical
resistance to
impacts
Good



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



Chemical
resistance
Aliphatic and
aromatic
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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]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10187860	2	1.91	2.57	12.2	15.6	17.4	22.7	25.0	803
10187863	5	1.91	2.57	16.1	19.4	21.9	27.1	29.9	1277
10187867	10	1.91	2.57	21.4	25	27.5	32.5	35.8	1850
10187873	20	1.91	2.57	28.2	31.9	35.1	39.9	44.0	2993
	30	1.91	2.57	34	37.7	40.9	45.5	50.2	3926

SELLING AND DELIVERY INFORMATION

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

Minimum bending radius:

15 x outer diameter
To be doubled during laying operations

Tinned copper conductors available on request



Lead free
Yes



Rated Voltage U₀/U
(Um)
170/300V



Mechanical
resistance to
impacts
Good



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



Chemical
resistance
Aliphatic and
aromatic
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resistant



Electro magnetic
interference
resistance
Yes



Operating temp.
-20 ... 60 °C



Max. conductor
temp. in service
90 °C