



- Instrumentation cables 170/300 V
- Overall Screen (OS)
- Lead free
- Aliphatic and aromatic hydrocarbons resistant

## STANDARDS

Test 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 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...).** 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)

### Binder tape

### Bedding

### Inner sheath:

Polyvinyl chloride (PVC)

Colour: black

### Overall screen/sealing barrier:

Tinned copper drain wire

Aluminium backed polyethylene tape

### Bedding:

High density polyethylene (PE)

Colour: black

### Special sheath(intermediate sheath):

Polyamide

### Armour:

Galvanized steel wires (SWA)

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



Lead free  
Yes



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



Mechanical resistance to impacts  
Good

Inner sheath  
Polyvinyl chloride (PVC)

Colour: black

Other colour on request.

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. This document is constituting a representation on the part of Lynxéo.

## Core identification

Pair: white - black

## 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)
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 <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 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 0.5MM<sup>2</sup>

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]
	1	0.9	1.38	6	9.2	11.0	16.5	18.2	467
	2	0.9	1.38	6	9.2	11.0	16.5	18.2	473
10187666	5	0.9	1.38	9.4	12.8	14.6	20.0	22.0	613
10164894	10	0.9	1.38	12.1	15.7	17.5	22.8	25.1	786
	20	0.9	1.38	15.6	19.3	21.8	27.0	29.7	1182
	30	0.9	1.38	18.6	22.3	24.8	29.9	33.0	1433



Lead free  
Yes



Rated Voltage U<sub>0</sub>/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 0.75MM<sup>2</sup>

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]
	1	1.1	1.58	6	9.2	11.0	16.5	18.2	472
	2	1.1	1.58	6.3	9.5	11.3	16.8	18.5	497
10187674	5	1.1	1.58	10.4	13.8	15.6	21.0	23.1	687
10187677	10	1.1	1.58	13.5	17	19.5	24.7	27.3	1031
	20	1.1	1.58	17.5	21.2	23.7	28.8	31.8	1387
	30	1.1	1.58	20.9	24.6	27.1	32.1	35.4	1731

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

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]
	1	1.28	1.76	6	9.2	11.0	16.5	18.2	475
	2	1.28	1.76	6.8	10	11.8	17.2	19.0	530
10187683	5	1.28	1.76	11.3	14.7	16.5	21.8	24.1	742
10187686	10	1.28	1.76	14.8	18.4	20.9	26.1	28.8	1137
	20	1.28	1.76	19.2	23	25.5	30.6	33.7	1564
	30	1.28	1.76	23	26.7	29.2	34.1	37.7	1959

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

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]
	1	1.5	2.16	6.8	10	11.8	17.3	19.0	529
	2	1.5	2.16	7.7	10.9	12.7	18.1	20.0	597
10187691	5	1.5	2.16	13.3	16.6	19.1	24.3	26.9	1012
10187694	10	1.5	2.16	17.6	21.2	23.7	28.8	31.8	1402
	20	1.5	2.16	23	26.7	29.2	34.1	37.7	2168
	30	1.5	2.16	27.6	31.3	34.5	39.3	43.3	2783



Lead free  
Yes



Rated Voltage U<sub>0</sub>/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 2.5MM<sup>2</sup>

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]
10187699	1	1.91	2.57	7.6	10.8	12.6	18.0	19.9	585
10187700	2	1.91	2.57	11.7	15.1	16.9	22.2	24.5	769
10187703	5	1.91	2.57	15.4	18.7	21.2	26.4	29.1	1196
10187707	10	1.91	2.57	20.4	23.9	26.4	31.4	34.7	1702
10187712	20	1.91	2.57	26.9	30.6	33.8	38.6	42.6	2732
	30	1.91	2.57	32.4	36.1	39.3	43.9	48.5	3564

## 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 U<sub>0</sub>/U<sub>i</sub>  
(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