



- 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 U<sub>0</sub>/U<sub>m</sub>  
(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 shall be treated as constituting a representation on the part of Lynxéo.

### Outer sheath:

Galvanized steel wires (SWA)

## CONTACT

Market information  
industryprojects.business@lynxéo  
ogroup.com

## 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 <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]
	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 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]
	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 1.0MM<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]
	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 1.5MM<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]
	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 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

## 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]
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 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