



- Instrumentation cables 300 V
- Individual & Overall Screen (IOS)
- **Low smoke, low halogen (LSLH)**
- **Oil resistant**

## STANDARDS

**Product** IEC 60228

**Test** IEC 60332-3-22 Cat.A; IEC 60754; IEC 61034

## APPLICATIONS

These cables are intended for transmission of analogue and digital signals. They allow transmission over long distances at high pulse rates. The individual screening of each pair limits the consequences of crosstalk. These cables are used in industrial installations such as refineries, chemical plants etc...

## Design

### Conductor:

Stranded bare copper (class 2)

### Insulation:

Polyethylene (PE)

### Individual screen:

Tinned copper drain wire

Aluminium/polyester tape

### Overall screen:

Tinned copper drain wire

Aluminium/polyester tape

### Outer sheath:

Polyvinyl chloride (PVC)

Special low smoke, low halogen (LSLH)

Colour: black or blue

Fire retardant: IEC 60332-3-22(A), limiting oxygen index > 30 as par ASTM D 2863

Low smoke: IEC 61034-2, transmittance > 40 %

Low halogen: IEC 60754-1 HCL < 6 %

## Core identification

Pair: Black/white  
For multipair: White core printed with pair number



Conductor flexibility  
Stranded class 2



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



Oil resistance  
IEC 60754-1



Smoke density  
Low



Operating temp.  
-20 ... 60 °C



Max. conductor temp. in service  
70 °C

## Marking

GORSE YYYY RE - 2Y(St)Y - fl PiMF LSLH 300V Nber of pairs & cross-section IEC 60332-3-22(A) + metric marking

## Désignation

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. The drawings are constituting a representation on the part of Lynxéo.

RE: Instrumentation cables  
2Y: Polyethylene insulation  
(St): Collective screen

## CONTACT

Market information  
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## CHARACTERISTICS

### Construction characteristics

|                       |   |
|-----------------------|---|
| Conductor material    | Bare copper   |
| Conductor flexibility | Stranded class 2                                    |
| Insulation            | PE  |
| Individual screen     | Tinned copper drain wire + aluminium/polyester tape |
| Overall screen        | Tinned copper drain wire + aluminium/polyester tape |
| Outer sheath          | PVC   |

### Electrical characteristics

|                   |       |
|-------------------|-------|
| Operating voltage | 300 V |
|-------------------|-------|

### Usage characteristics

|                                       |                           |
|---------------------------------------|---------------------------|
| Fire retardant                        | EN IEC 60332-3-22 (cat A) |
| Oil resistance                        | ASTM D 1047               |
| Smoke density                         | Low                       |
| Operating temperature, range          | -20 ... 60 °C             |
| Max. conductor temperature in service | 70 °C                     |
| Standard                              | EN                        |

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

| Reference | nb pairs | Min. outer diam. [mm] | Max. outer diam. [mm] | Approx. weight [kg/km] | Sheath colour |
|-----------|----------|-----------------------|-----------------------|------------------------|---------------|
| 10098146  | 2        | 9.7                   | 10.7                  | 117                    | Black         |
| 10098147  | 4        | 10.2                  | 11.3                  | 162                    | Black         |
| 10101845  | 4        | 11.2                  | 12.3                  | 166                    | Blue          |
| 10098148  | 8        | 13.8                  | 15.2                  | 269                    | Black         |
| 10098149  | 12       | 14.6                  | 16.1                  | 351                    | Black         |
| 10098150  | 16       | 18.4                  | 20.3                  | 474                    | Black         |
| 10098151  | 20       | 19.8                  | 21.8                  | 565                    | Black         |
| 10098152  | 24       | 21.2                  | 23.4                  | 658                    | Black         |

## SECTION 0.75 MM<sup>2</sup>

| Reference | nb pairs | Min. outer diam. [mm] | Max. outer diam. [mm] | Approx. weight [kg/km] | Sheath colour |
|-----------|----------|-----------------------|-----------------------|------------------------|---------------|
| 10098153  | 2        | 9.6                   | 10.6                  | 135                    | Black         |
| 10101846  | 2        | 9.6                   | 10.6                  | 135                    | Blue          |
| 10098154  | 4        | 11.1                  | 12.2                  | 196                    | Black         |



Conductor flexibility  
Stranded class 2



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



Oil resistance  
ASTM D 1047



Smoke density  
Low



Operating temp.  
-20 ... 60 °C



Max. conductor temp. in service  
70 °C

| Reference | nb pairs | Min. outer diam. [mm] | Max. outer diam. [mm] | Approx. weight [kg/km] | Sheath colour |
|-----------|----------|-----------------------|-----------------------|------------------------|---------------|
| 10098155  | 8        | 15.3                  | 16.9                  | 341                    | Black         |
| 10098156  | 12       | 17.9                  | 19.8                  | 474                    | Black         |
| 10101847  | 12       | 17.9                  | 19.8                  | 474                    | Blue          |
| 10098157  | 16       | 18.2                  | 20.1                  | 568                    | Black         |
| 10098158  | 20       | 22.1                  | 24.4                  | 728                    | Black         |
| 10098159  | 24       | 21.0                  | 23.2                  | 786                    | Black         |

## SECTION 1.34 MM<sup>2</sup>

| Reference | nb pairs | Min. outer diam. [mm] | Max. outer diam. [mm] | Approx. weight [kg/km] | Sheath colour |
|-----------|----------|-----------------------|-----------------------|------------------------|---------------|
| 10098160  | 2        | 11.5                  | 12.7                  | 185                    | Black         |
| 10101848  | 2        | 11.6                  | 12.8                  | 185                    | Blue          |
| 10098161  | 4        | 13.4                  | 14.8                  | 277                    | Black         |
| 10098162  | 8        | 16.8                  | 18.5                  | 461                    | Black         |
| 10098163  | 12       | 18.7                  | 21.9                  | 609                    | Black         |
| 10098164  | 16       | 21.5                  | 23.8                  | 788                    | Black         |
| 10098165  | 20       | 27.0                  | 29.7                  | 1088                   | Black         |
| 10098166  | 24       | 26.4                  | 29.1                  | 1175                   | Black         |

## ELECTRICAL CHARACTERISTICS

### Electrical data AT 20°C

| Cables (mm <sup>2</sup> ) | Conductor Resistance max. (Ohm / km) | Insulation Resistance min. (Mohm.km) | Mutual Capacitance at 800 Hz maximum (nF / km) | L/R ratio max (µH / ohm) | Test Voltage (core/core) (V) |
|---------------------------|--------------------------------------|--------------------------------------|--|--------------------------|------------------------------|
| 0.5                       | 36.7                                 | 5 000                                | 115  | 25                       | 2 000                        |
| 0.75                      | 24.9                                 | 5 000                                | 115  | 25                       | 2 000                        |
| 1.34                      | 14.2                                 | 5 000                                | 115  | 40                       | 2 000                        |

## SELLING AND DELIVERY INFORMATION

Minimum bending radius:



Conductor flexibility  
Stranded class 2



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



Oil resistance  
ASTM D 1047



Smoke density  
Low



Operating temp.  
-20 ... 60 °C



Max. conductor temp. in service  
70 °C

10 x outer diameter  
To be doubled during laying operations



Conductor flexibility  
Stranded class 2



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



Oil resistance  
ASTM D 1047



Smoke density  
Low



Operating temp.  
-20 ... 60 °C



Max. conductor temp. in service  
70 °C