

# EN 50288-7 XLPE Insulation IOS Armoured Fire Retardant

EN 50288-7 XLPE IOS Armoured 30x2x0,75

## Contact

Market information  
industryprojects.business@nexans.com

- Instrumentation cables 170/300 V
- Individual & Overall Screen (IOS)
- Oil resistant

## DESCRIPTION

### Applications

These Instrumentation and communication are used to **transmit analogue or digital signals in measurement and process control**. They are well adapted **for 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.

### Design

#### Conductor:

Stranded bare copper class 2

#### Insulation:

Cross-linked polyethylene (XLPE)

#### 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:

Polyvinyl chloride (PVC)

#### Armour:

Galvanized steel wires (SWA)



## STANDARDS

**International**  
IEC 60332-3-22 Cat.A



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



Mechanical resistance  
to impacts  
Good



Fire retardant  
IEC 60332-3-22



Oil resistance  
Yes



Electro magnetic  
interference resistance  
Yes



Operating temp.  
-20 - 60 °C



Max. conductor temp. in  
service  
90 °C

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

Generated 1/17/22 www.nexans.fr Page 1 / 3

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### Outer sheath:

Polyvinyl chloride (PVC)

Colour: black

Other colour on request

### Core identification

Pair: white - black

White core printed with pair number

### Marking

NEXANS 279 XLPE/IND.+OA.SCR/PVC/SWA/PVC 170/300V Nber of pairs & cross-section Cu IEC 60332-3-22(A) MM YYYY Manufacturing number + metric marking

### Standards

EN 50288-7 (design guide-lines)

## 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
Overall screen	Tinned copper drain wire + aluminium/polyester tape
Inner sheath	PVC
Armour type	Galvanized steel wires
Outer sheath	PVC
Protection	Yes

### Dimensional characteristics

Number of pairs	30
Conductor cross-section	0.75 mm <sup>2</sup>
Conductor diameter	1.1 mm
Diameter over insulation	1.58 mm
Diameter over inner sheath	22.3 mm



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



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Generated 1/17/22 www.nexans.fr Page 2 / 3

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### Dimensional characteristics

Diameter over armour	24.8 mm
Minimum outer diameter	27.4 mm
Maximum outer diameter	30.2 mm
Approximate weight	1551 kg/km

### Electrical characteristics

Rated Voltage U <sub>o</sub> /U (Um)	170/300V
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### Mechanical characteristics

Mechanical resistance to impacts	Good
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### Usage characteristics

Fire retardant	IEC 60332-3-22
Oil resistance	Yes
Electro magnetic interference resistance	Yes
Operating temperature, range	-20 - 60 °C
Max. conductor temperature in service	90 °C
Standard	EN

## SELLING AND DELIVERY INFORMATION

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

Minimum bending radius:

- 10 x outer diameter
- To be doubled during laying operations

Tinned copper conductors available on request



Rated Voltage U<sub>o</sub>/U (Um)  
170/300V



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Good



Fire retardant  
IEC 60332-3-22



Oil resistance  
Yes



Electro magnetic interference resistance  
Yes



Operating temp.  
-20 - 60 °C



Max. conductor temp. in service  
90 °C

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Generated 1/17/22 www.nexans.fr Page 3 / 3