

EN 50288-7 XLPE Insulation IOS Armoured Fire Retardant

EN 50288-7 XLPE IOS Armoured 5x2x0,5

Contact

Market information
industryprojects.business@nexans.com

Nexans Ref.: 10168665
EAN 13: 3427580414138

- 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 **tounderground 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)



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

EN 50288-7 XLPE Insulation IOS Armoured Fire Retardant

EN 50288-7 XLPE IOS Armoured 5x2x0,5

Contact

Market information
industryprojects.business@nexans.com

Armour:

Galvanized steel wires (SWA)

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	5
Conductor cross-section	0.5 mm ²



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 2 / 3

EN 50288-7 XLPE Insulation IOS Armoured Fire Retardant

EN 50288-7 XLPE IOS Armoured 5x2x0,5

Contact

Market information
industryprojects.business@nexans.com

Dimensional characteristics

Conductor diameter	0.9 mm
Diameter over insulation	1.38 mm
Diameter over inner sheath	9.8 mm
Diameter over armour	11.6 mm
Minimum outer diameter	13.9 mm
Maximum outer diameter	15.4 mm
Approximate weight	380 kg/km

Electrical characteristics

Rated Voltage U ₀ /U (Um)	170/300V
--------------------------------------	----------

Mechanical characteristics

Mechanical resistance to impacts	Good
----------------------------------	------

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 U₀/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 3 / 3