EN 50288-7 XLPE Insulation OS Armoured LC Fire Retardant

- Instrumentation cables 170/300 V
- With lead cover (LC)
- Overall Screen (OS)
- **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**. They are well adapted to **underground use** in industrial applications, in moist areas, where **hydrocarbon and mechanical protection are needed. The lead cover brings an enhanced resistance to aromatics hydrocarbons.**

Design

Conductor:

Stranded bare copper class 2

Insulation:

Cross-linked polyethylene (XLPE)

Overall screen:

Polyester tape

Tinned copper drain wire,

Aluminium backed polyester tape

Inner sheath:

Polyvinyl chloride (PVC)

Colour: black

Lead sheath:

Bedding (intermediate sheath):

Polyvinyl chloride (PVC)

Colour: black

Armour:

Galvanized steel wires (SWA)

Outer sheath:

Polyvinyl chloride (PVC)

Colour: black

Other colour on request.

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

Mechanical resistance to impacts
Good

Flame 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

Core identification

Pair: white - black

Quad: white - black - red - blue (2 pair cables assembled as a quad)

Wires or pairs printed with pair number

Marking

NEXANS 279 XLPE/OA.SCR/PVC//LC/PVC/SWA/PVC 170/300V Nber of pairs & cross-

CONTACT

Market information
industryprojects.business@lynxeogroup.com

EN 50288-7 XLPE Insulation OS Armoured LC Fire Retardant

CHARACTERISTICS

Construction characteristics	
Conductor material	Bare copper
Type of conductor	Stranded, class 2
Insulation	XLPE (Cross-linked Polyethylene)
Overall screen	Tinned copper drain wire + aluminium/polyester tape
Inner sheath	PVC
Lead Sheath	Yes
Intermediate sheath	PVC
Armour type	Galvanized steel wires
Outer sheath	PVC
Protection	Yes
Electrical characteristics	
Rated Voltage Uo/U (Um)	170/300V
Mechanical characteristics	
Mechanical resistance to impacts	Good
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 0.5MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10134899	1	0.9	1.38	5	6.6	8.6	10.4	12.8	14.1	470
10134900	2	0.9	1.38	5	6.6	8.6	10.4	12.8	14.1	475
10186672	5	0.9	1.38	9.1	10.9	12.9	14.7	17.2	18.9	790
10186685	10	0.9	1.38	11.8	13.8	15.8	17.6	20.2	22.3	1080
10134905	20	0.9	1.38	15.4	17.6	19.6	22.1	24.7	27.3	1643
	30	0.9	1.38	18.3	20.7	22.7	25.2	27.7	30.6	2063

Rated Voltage Uo/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

EN 50288-7 XLPE Insulation OS Armoured LC Fire Retardant

SECTION 0.75MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10134907	1	1.1	1.58	5	6.6	8.6	10.4	12.8	14.1	474
10134908	2	1.1	1.58	6	7.8	9.8	11.6	14.0	15.5	589
10186691	5	1.1	1.58	10.1	12.1	14.1	15.9	18.3	20.2	933
10186704	10	1.1	1.58	13.2	15.4	17.4	19.9	22.4	24.7	1428
10134913	20	1.1	1.58	17.2	19.6	21.6	24.1	26.7	29.4	1981
	30	1.1	1.58	20.7	23.1	25.1	27.6	30.3	33.4	2465

SECTION 1.0MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10134915	1	1.28	1.76	5	6.6	8.6	10.4	12.8	14.1	476
10134916	2	1.28	1.76	6.5	8.3	10.3	12.1	14.5	15.9	629
10186710	5	1.28	1.76	11	13	15	16.8	19.2	21.2	1017
10186713	10	1.28	1.76	14.5	16.7	18.7	21.2	23.7	26.1	1571
10134921	20	1.28	1.76	19	21.4	23.4	25.9	28.4	31.4	2223
	30	1.28	1.76	22.8	25.4	27.8	30.3	33.1	36.5	3113

SECTION 1.5MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10134923	1	1.5	2.16	6.5	8.3	10.3	12.1	14.5	15.9	627
10134924	2	1.5	2.16	7.4	9.2	11.2	13.0	15.5	17.1	724
10186718	5	1.5	2.16	13	15.2	17.2	19.7	22.2	24.5	1407
10186721	10	1.5	2.16	17.3	19.7	21.7	24.2	26.8	29.5	2013
	20	1.5	2.16	22.7	25.3	27.7	30.9	33.7	37.1	3120
	30	1.5	2.16	27.7	30.5	32.9	36.1	38.9	42.9	4115

Rated Voltage Uo/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

EN 50288-7 XLPE Insulation OS Armoured LC Fire Retardant

SECTION 2.5MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diameter over lead sheath [mm]	Diam. intermediate sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10186726	1	1.91	2.57	7.3	9.1	11.1	12.9	15.4	17.0	712
10186727	2	1.91	2.57	8.4	10.2	12.2	14.0	16.5	18.2	830
10186730	5	1.91	2.57	15.1	17.3	19.3	21.8	24.4	27.0	1678
10186734	10	1.91	2.57	20.1	22.5	24.5	27.0	29.7	32.7	2428
10186740	20	1.91	2.57	26.6	29.4	31.8	35.0	37.8	41.7	3963
	30	1.91	2.57	32.5	35.7	38.5	42.5	45.5	50.2	5747

SELLING AND DELIVERY INFORMATION

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

Minimum bending radius:

10 x outer diameter
To be doubled during laying operations

Tinned copper conductors available on request


Rated Voltage Uo/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