EN 50288-7 Silicone Insulation OS Armoured LC Fire resistant

- Instrumentation cables 170/300 V
- With lead cover (LC)
- Overall Screen (OS)
- **Aliphatic and aromatic hydrocarbons resistant**

STANDARDS

Test IEC 60331; 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. They maintain circuit integrity when exposed to fire.**

Design

Conductor:

Stranded bare copper class 2

Insulation:

Silicone rubber (Sil)

Overall screen:

Polyester tape

Tinned copper drain wire,

Aluminium backed polyester tape

Inner sheath:

Low Smoke Zero Halogen (LSZH)

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

Fire resistant
IEC 60331

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

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 SIL/OA SCR/LSZH//LC/PVC/SWA/PVC 170/300V Nber of pairs & cross-

CONTACT

Market information
industryprojects.business@lynxeogroup.com

EN 50288-7 Silicone Insulation OS Armoured LC Fire resistant

CHARACTERISTICS

Construction characteristics	
Conductor material	Bare copper
Type of conductor	Stranded, class 2
Insulation	Silicone rubber
Overall screen	Tinned copper drain wire + aluminium/polyester tape
Inner sheath	Low smoke, zero halogen thermoplastic compound
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 resistant	IEC 60331
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]
10135199	1	0.9	2.06	6.3	8.1	10.1	11.9	13.5	15.7	595
10135200	2	0.9	2.06	7.2	9	11	12.8	14.4	16.7	665
	5	0.9	2.06	12.5	14.5	16.5	19.0	20.4	23.8	1226
	10	0.9	2.06	16.6	18.8	20.8	23.3	24.0	28.0	1712
10135205	20	0.9	2.06	21.9	24.5	26.5	29.0	29.5	34.4	2526
	30	0.9	2.06	26.3	29.1	31.5	34.7	34.8	40.6	3491


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


Mechanical resistance to impacts
Good

Fire resistant
IEC 60331


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 Silicone Insulation OS Armoured LC Fire resistant

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]
10135207	1	1.1	2.26	6.7	8.5	10.5	12.3	13.9	16.2	630
10135208	2	1.1	2.26	7.6	9.4	11.4	13.2	14.9	17.3	714
	5	1.1	2.26	13.5	15.7	17.7	20.2	21.5	25.0	1389
	10	1.1	2.26	18	20.4	22.4	24.9	25.5	29.7	1968
10135213	20	1.1	2.26	23.7	26.3	28.7	31.9	32.1	37.5	2992
	30	1.1	2.26	29	32	34.4	37.6	37.6	43.9	4057

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]
10135215	1	1.28	2.44	7.1	8.9	10.9	12.7	14.3	16.6	661
10135216	2	1.28	2.44	8	9.8	11.8	13.6	15.3	17.8	753
	5	1.28	2.44	14.4	16.6	18.6	21.1	22.4	26.0	1498
	10	1.28	2.44	19.2	21.6	23.6	26.1	26.7	31.2	2122
10135221	20	1.28	2.44	25.4	28.2	30.6	33.8	34.0	39.7	3409
	30	1.28	2.44	31	34	36.4	39.6	39.4	46.0	4420

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]
10135223	1	1.5	2.66	7.5	9.3	11.3	13.1	14.8	17.2	708
10135224	2	1.5	2.66	8.6	10.4	12.4	14.2	15.8	18.4	815
	5	1.5	2.66	15.5	17.7	19.7	22.2	23.6	27.4	1661
	10	1.5	2.66	20.9	23.5	25.5	28.0	28.4	33.2	2486
10135229	20	1.5	2.66	28	31	33.4	36.6	36.7	42.8	4088
	30	1.5	2.66	33.6	36.8	39.6	43.6	43.2	50.4	5602

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

Mechanical resistance to impacts
Good

Fire resistant
IEC 60331

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 Silicone Insulation OS Armoured LC Fire resistant

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]
	1	1.91	3.07	8.3	10.1	12.1	13.9	15.5	18.1	784
	2	1.91	3.07	9.5	11.5	13.5	15.3	16.8	19.6	964
	5	1.91	3.07	17.6	20	22	24.5	25.7	29.8	1996
	10	1.91	3.07	23.6	26.2	28.6	31.8	32.0	37.4	3169
	20	1.91	3.07	31.8	35	37.4	40.6	40.5	47.2	4996
	30	1.91	3.07	38.7	42.3	45.1	49.1	48.5	56.6	7190

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 resistant
IEC 60331


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