EN 50288-7 Silicone Insulation OS Armoured Fire resistant

- Instrumentation cables 170/300 V
- Overall Screen (OS)
- **Oil resistant**

STANDARDS

Test IEC 60331; IEC 60332-3-22 Cat.A

APPLICATIONS

These instrumentation and communication cable are used to **transmit analogue or digital signals in measurement and process control** .They are well adapted to **underground use in industrial application where chemical and mechanical protections are needed (refinery areas, chemical plant…). 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

Bedding (inner sheath):

Low Smoke Zero Halogen (LSZH)

Colour: black

Armour:

Galvanized steel wires (SWA)

Outer sheath:

Polyvinyl chloride (PVC)

Colour: black

Other colour on request.

Core identification

Pair: white - black

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

White core printed with pair number

Marking

NEXANS 279 SIL/OA.SCR/LSZH/SWA/PVC 170/300V Nber of pairs & cross-section Cu IEC 60331 IEC 60332-3-22(A) MM YYYY Manufacturing number + metric marking

Standards

EN 50288-7 (Design guidelines)

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)

Oil resistance
Yes

Electro magnetic interference resistance
Yes

Operating temp.
-20 ... 60 °C

Max.conductor temp.in service
90 °C

CONTACT

Market information
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EN 50288-7 Silicone Insulation OS Armoured 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
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)
Oil resistance	Yes
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]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10135079	1	0.9	2.06	6.2	8.0	9.8	11.4	222
10135080	2	0.9	2.06	7	8.8	10.5	12.2	261
	5	0.9	2.06	12.5	14.3	15.9	18.5	468
	10	0.9	2.06	16.6	18.4	19.4	22.7	683
10135085	20	0.9	2.06	21.9	24.4	25.0	29.2	1178
	30	0.9	2.06	26.3	28.8	29.2	34.0	1540


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)


Oil resistance
Yes


Electro magnetic interference resistance
Yes


Operating temp.
-20 ... 60 °C


Max.conductor temp.in service
90 °C

EN 50288-7 Silicone Insulation OS Armoured Fire resistant

SECTION 0.75MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10135087	1	1.1	2.26	6.6	8.4	10.1	11.8	237
10135088	2	1.1	2.26	7.5	9.3	11.1	13.0	286
	5	1.1	2.26	13.5	15.3	16.8	19.6	519
	10	1.1	2.26	18	20.5	21.3	24.9	895
10135093	20	1.1	2.26	23.5	26.0	26.6	31.1	1368
	30	1.1	2.26	29	32.2	32.4	37.8	2010

SECTION 1.0MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10135095	1	1.28	2.44	7	8.8	10.5	12.2	254
10135096	2	1.28	2.44	7.9	9.7	11.5	13.4	315
	5	1.28	2.44	14.4	16.2	17.7	20.5	575
	10	1.28	2.44	19.2	21.7	22.4	26.2	1002
10135101	20	1.28	2.44	25.2	27.7	28.2	32.9	1552
	30	1.28	2.44	31	34.2	34.2	39.9	2287

SECTION 1.5MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner sheath [mm]	Diam. over armour [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10135103	1	1.5	2.66	7.4	9.2	11.0	12.8	288
10135104	2	1.5	2.66	8.5	10.3	12.0	14.0	351
	5	1.5	2.66	15.5	17.3	18.7	21.7	670
	10	1.5	2.66	20.9	23.4	24.1	28.1	1211
10135109	20	1.5	2.66	28	31.2	31.5	36.8	2101
	30	1.5	2.66	33.6	36.8	36.7	42.8	2800

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)

Oil resistance
Yes

Electro magnetic interference resistance
Yes

Operating temp.
-20 ... 60 °C

Max.conductor temp.in service
90 °C

EN 50288-7 Silicone Insulation OS Armoured Fire resistant

SECTION 2.5MM²

Reference	nb pairs	Conductor diam. [mm]	Diam. over insulation [mm]	Diam. over inner 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	11.9	13.8	337
	2	1.91	3.07	9.5	11.3	13.0	15.1	424
	5	1.91	3.07	17.6	20.1	21.4	24.9	964
	10	1.91	3.07	23.6	26.1	26.7	31.2	1510
	20	1.91	3.07	31.8	35.0	35.1	41.0	2672
	30	1.91	3.07	38.7	41.9	41.7	48.6	3678

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:

15 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)


Oil resistance
Yes


Electro magnetic interference resistance
Yes


Operating temp.
-20 ... 60 °C


Max.conductor temp.in service
90 °C