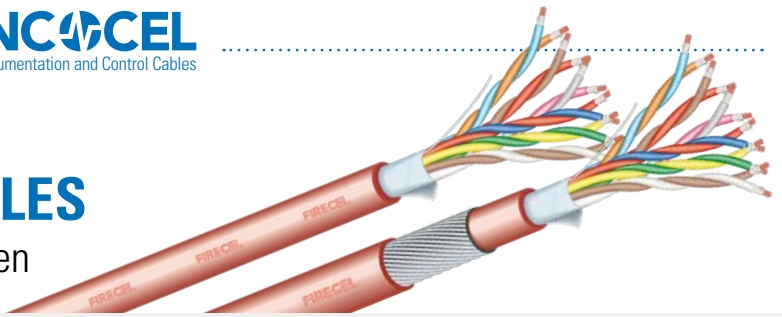


FIRE RESISTANT INSTRUMENTATION CABLES

Firecel SR 225 Multipair Overall Screen



NOT ARMoured
mXLPE/OS/LSZH

ARMoured
mXLPE/OS/LSZH/SWA/LSZH

APPLICATIONS

Firecel SR 225 are designed, manufactured and tested as data transmission cables for emergency services. These are used for data, voice and signal transmission when high frequency signal has to be assured also in the event of a fire.

OPERATING TEMPERATURE

-20 °C to +80 °C (for general use); -40 °C to +90 °C (on request).

MINIMUM BENDING RADIUS

Not armoured type

12 times the outer diameter.

Armoured type

15 times the outer diameter.

CABLE CONSTRUCTION

Conductors Plain annealed electrolytic copper wire according to EN 60228 class 2 (R) stranded.

Insulation Mica/Glass tape plus XLPE.

Twisting The insulated cores shall be twisted in pairs for a good reduction of the electromagnetic noise.

Cabling The pairs are cabled with suitable non hygroscopic fillers (when necessary) and wrapped with polyester tape if required.

Overall screen Aluminium/polyester tape, coverage >100%, aluminium in contact with tinned copper drain wire.

Armoured

Inner sheath: PE, PVC or LSZH thermoplastic material.

Armour: Single layer of galvanized steel wires (SWA).

Outer sheath LSZH thermoplastic material.

APPLICABLE STANDARDS

Basic design EN 50288-7

Fire resistant IEC 60331-23

Flame retardant IEC 60332-1

Fire retardant (cat. C or A according to requirements) IEC 60332-3

Halogen free properties IEC 60754-1

Low smoke emission IEC 61034-2

SR 225 (300/500 V)

Cross section (mm ²)	UNARMoured		ARMoured		
	Outer diameter (mm)	Weight (kg/km)	Diameter under armour (mm)	Outer diameter (mm)	Weight (kg/km)
0,75 mm ² stranded	R-mXLPE/OS/LSZH		R-mXLPE/OS/LSZH/SWA/LSZH		
1x2x0,75	7,8	64	7,8	12,3	292
2x2x0,75	10,7	118	10,7	15,5	504
5x2x0,75	14,8	218	14,8	22,2	703
10x2x0,75	20,1	380	20,1	25,8	1005
15x2x0,75	24,9	535	24,9	31,0	1434
20x2x0,75	28,2	680	28,2	34,6	1715
1 mm ² stranded	R-mXLPE/OS/LSZH		R-mXLPE/OS/LSZH/SWA/LSZH		
1x2x1	8,4	73	8,4	12,7	316
2x2x1	11,5	136	11,5	18,3	549
5x2x1	15,7	266	15,7	23,7	798
10x2x1	21,3	455	21,3	28,8	1279
15x2x1	26,5	646	26,5	32,9	1622
20x2x1	30,2	839	30,2	36,9	1971
1,5 mm ² stranded	R-mXLPE/OS/LSZH		R-mXLPE/OS/LSZH/SWA/LSZH		
1x2x1,5	9,3	87	9,3	13,7	346
2x2x1,5	13,0	165	13,0	19,6	622
5x2x1,5	18,1	342	18,1	25,5	927
10x2x1,5	24,8	606	24,8	31,3	1535
15x2x1,5	30,8	862	30,8	35,8	1954
20x2x1,5	34,9	1121	34,9	40,8	2631

Electrical Characteristics

Cross section (mm ²)	0,75	1	1,5
Capacitance (pF/m)	150	150	150
L/R (µH/Ohm)	25	25	40

approximate values