



FIRE RESISTANT INSTRUMENTATION CABLES

Firecel SR 125H Multipair Overall Screen

NOT ARMoured

SR/OS/LSZH

ARMoured

SR/OS/LSZH/SWA/LSZH

APPLICATIONS

Firecel SR 125H are designed, manufactured and tested as data transmission cables for emergency services. These are used for data and voice 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 1(U) solid or class 2 (R) stranded.

Insulation High performance fire resistant silicone rubber.

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 BS 7629

Fire resistant BS 6387 - CWZ

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 125H (300/500 V)

| Cross section (mm ²) | UNARMoured | | ARMoured | | | ELECTRICAL CHARACTERISTICS | |
|----------------------------------|---------------------|----------------|----------------------------|---------------------|----------------|----------------------------|--------------|
| | Outer diameter (mm) | Weight (kg/km) | Diameter under armour (mm) | Outer diameter (mm) | Weight (kg/km) | Capacitance (pF/m) | L/R (µH/Ohm) |
| 0,5 mm ² solid | U-SR/OS/LSZH | | U-SR/OS/LSZH/SWA/LSZH | | | | |
| 1x2x0,5 | 6,5 | 56 | 6,5 | 10,7 | 235 | 90 | 25 |
| 2x2x0,5 | 9,5 | 94 | 9,5 | 14,5 | 381 | 90 | 25 |
| 3x2x0,5 | 10,5 | 118 | 10,5 | 15,2 | 472 | 80 | 25 |
| 5x2x0,5 | 12,0 | 167 | 12,0 | 18,4 | 550 | 80 | 25 |
| 6x2x0,5 | 13,0 | 197 | 13,0 | 18,5 | 574 | 80 | 25 |
| 10x2x0,5 | 16,5 | 273 | 16,5 | 22,3 | 760 | 80 | 25 |
| 15x2x0,5 | 20,5 | 410 | 20,5 | 24,2 | 941 | 80 | 25 |
| 20x2x0,5 | 22,6 | 520 | 22,6 | 27,1 | 1146 | 80 | 25 |
| 1 mm ² stranded | R-SR/OS/LSZH | | R-SR/OS/LSZH/SWA/LSZH | | | | |
| 1x2x1 | 7,4 | 77 | 7,4 | 11,3 | 265 | 100 | 25 |
| 2x2x1 | 10,6 | 130 | 10,6 | 15,9 | 452 | 100 | 25 |
| 3x2x1 | 11,2 | 196 | 11,2 | 16,2 | 528 | 90 | 25 |
| 5x2x1 | 13,7 | 245 | 13,7 | 20,1 | 665 | 90 | 25 |
| 6x2x1 | 14,8 | 300 | 14,8 | 20,3 | 695 | 90 | 25 |
| 10x2x1 | 18,9 | 378 | 18,9 | 23,8 | 937 | 90 | 25 |
| 15x2x1 | 23,2 | 567 | 23,2 | 27,8 | 1368 | 90 | 25 |
| 20x2x1 | 26,2 | 831 | 26,2 | 30,9 | 1650 | 90 | 25 |
| 1,5 mm ² stranded | R-SR/OS/LSZH | | R-SR/OS/LSZH/SWA/LSZH | | | | |
| 1x2x1,5 | 8,7 | 100 | 8,7 | 12,1 | 305 | 110 | 40 |
| 2x2x1,5 | 10,2 | 188 | 10,2 | 17,2 | 525 | 110 | 40 |
| 3x2x1,5 | 12,9 | 223 | 12,9 | 16,2 | 614 | 100 | 40 |
| 5x2x1,5 | 16,7 | 346 | 16,7 | 22,1 | 794 | 100 | 40 |
| 6x2x1,5 | 17,5 | 426 | 17,5 | 22,3 | 845 | 100 | 40 |
| 10x2x1,5 | 23,4 | 541 | 23,4 | 27,0 | 1315 | 100 | 40 |
| 15x2x1,5 | 28,9 | 892 | 28,9 | 30,7 | 1691 | 100 | 40 |
| 20x2x1,5 | 32,5 | 1182 | 32,5 | 34,4 | 2075 | 100 | 40 |

approximate values