

SENSITHERM S.r.l.

Electrical Cables for Instrumentation ENI 0181.00
Fire Retardant Multipaires cables for Safe installations



Type

PVC/PVC - PVC/OS/PVC - PVC/IS/OS/PVC
FR2XOR - FR2XOHR - FR2XHOHR

Conductor

Plain annealed copper conductor according to CEI 20-29 class 5

- 0,50 mm² (16/0,2) - 1,5 mm² (28/0,25) - 6,0 mm² (81/0,3)
- 0,75 mm² (24/0,2) - 2,5 mm² (48/0,25) - 10 mm² (77/0,4)
- 1,0 mm² (32/0,2)

Insulation

PVC type R2 according to CEI 20-11

Identification paires : Each pair has one blue and one black core, numbered

Laying up

Core twisted to pairs ; Pairs twisted in concentric layers

Individual screen

Each pair shall have a laminated screening tape of aluminium bonded to polyester, white copper tinned drain wire in electrical contact with the metallic side tape. Over the screening tape shall be applied a binder of PET tape.

Overall screen

Over the pair layer will be shielded with aluminium/mylar tape, with copper drain wire 20 AWG placed between the aluminium/mylar tape and further mylar tape. The drain wire is layed up with the other conductors.

Outer sheath

PVC type RZ according to CEI 20-11, Hydrocarbon Resistant, black

Marking

On the outer sheath " manufacturer's name, year , description cable, CEI 20-22 II, ENI Code " with ink-jet printer.

Performance

- Reaction to fire - Flame propagation : a) Test of single cable acc. to CEI 20-35/1-1
- b) Test on bunched cable acc. to CEI 20-22/3-2

Minimum bending radius

6 times overall diameter

Technical data & Electrical properties

Temperature rating : - during operation - 40 + 70°C
- during installation - 5 + 50°C

Conductor resistance : acc. to CEI 20-29

Insulation resistance : > 100 Mohm x Km

Mutual capacitance : < 0,14 µF/Km

Inductance : < 1,25 mH/Km

Rated voltage : U/U ₀ = 300/300 V (Insulation degree 1,5)	Test voltage - core/core : 1.500 V
Rated voltage : U/U ₀ = 450/750 V (Insulation degree 3)	Test voltage - core/core : 3.000 V
Rated voltage : U/U ₀ = 0,6/1 KV (Insulation degree 4)	Test voltage - core/core : 4.000 V
	Test voltage - core/shield : 1.000 V
	Test voltage - adjacent shield : 125 V