



## CABLE STRUCTURE

<b>Conductor</b>	Electrolytic, stranded, annealed plain copper wires to IEC 60228 Class 2 (Class 1 or Class 5 and / or tinned on request)
<b>Insulation</b>	Mica tape + XLPE compound to EN50290-2-29 Black / White / Red twisted triads with numbered cores
<b>Binder Tape</b>	Polyester foil on each twisted triad
<b>Individual Screen</b>	Aluminum/polyester foil with a tinned copper drain wire in direct contact with the metallic side of the foil
<b>Binder Tape</b>	Polyester foil on overall cable core formed by stranded triples
<b>Collective Screen</b>	Aluminum/polyester foil with a tinned copper drain wire in direct contact with the metallic side of the foil
<b>Outer Sheath</b>	Halogen free flame retardant LSZH compound to EN50290-2-27 Orange or Red for circuit integrity Blue for intrinsically safe cable Black for UV resistant and/or non-intrinsically safe cable

## STANDARDS & MAIN CHARACTERISTICS

<b>Rated Voltage</b>	500 V a.c.
<b>AC Test Voltage</b>	2000 V (core:core / core: screen)
<b>Working Temperature</b>	-40°C / + 90°C (during operation) - 5 °C / + 50°C (during installation)
<b>Min Bending Radius (Fixed)</b>	7,5 x D
<b>Construction</b>	EN 50288-7
<b>Material Types &amp; Tests</b>	EN 50290-2 series
<b>Electrical &amp; Mechanical Tests</b>	EN 50289 series
<b>Flame Retardant</b>	IEC 60332 / 1-2, IEC 60332 / 3-24 Cat C
<b>Fire Resistance</b>	IEC 60331 / 21, IEC 60331 / 1-2
<b>Halogen Content</b>	IEC 60754 / 1-2
<b>Smoke Emission</b>	IEC 61034 / 1-2

### Available Features on Request

- 300 V version
- Hydrocarbon resistant
- Oil resistant
- Hv type reinforced sheath
- Anti termit / anti rodent
- UV resistant

### Application

These cables used for connecting instruments and control systems for analogue or digital signal transmission for indoor applications. These cables shall not be connected directly to mains electricity supply or other low impedance sources, since they are not designed to be used for power supply. Recommended for use where circuit integrity is required in case of fire.

## ELECTRICAL CHARACTERISTICS(\*)

Conductor size (Class 2)	nom.	mm <sup>2</sup>	0,5	0,75	1	1,3	1,5	2,5
Conductor resistance	max.	Ω/km	36,7	25,0	18,5	14,2	12,3	7,6
Insulation resistance	min.	MΩxkm	5000					
Mutual Capacitance	max.	nF/km	150					
Inductance	max.	mH/km	1					
L/R ratio	max.	μH/Ω	25	25	25	40	40	60

(\*) At 20 °C

## PHYSICAL CHARACTERISTICS

Cross Sections (mm <sup>2</sup> )	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x3x0,5	13,1	148
4x3x0,5	15,5	237
5x3x0,5	16,9	280
6x3x0,5	18,7	334
8x3x0,5	21,2	430
10x3x0,5	24,2	530
12x3x0,5	25,1	605
16x3x0,5	28,0	776
20x3x0,5	31,7	972
24x3x0,5	35,4	1158
2x3x0,75	14,0	170
4x3x0,75	16,6	278
5x3x0,75	18,4	340
6x3x0,75	20,1	395
8x3x0,75	22,8	508
10x3x0,75	26,3	642
12x3x0,75	27,2	734
16x3x0,75	30,5	945
20x3x0,75	34,4	1180
24x3x0,75	38,4	1405
2x3x1	14,4	188
4x3x1	17,1	310
5x3x1	18,9	378
6x3x1	20,8	450
8x3x1	23,7	580
10x3x1	27,1	718
12x3x1	28,0	823
16x3x1	31,5	1076
20x3x1	35,4	1325
24x3x1	39,7	1600

Cross Sections (mm <sup>2</sup> )	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x3x1,3	15,4	220
4x3x1,3	18,2	367
5x3x1,3	19,9	438
6x3x1,3	22,0	523
8x3x1,3	25,0	676
10x3x1,3	28,8	850
12x3x1,3	29,8	980
16x3x1,3	33,3	1264
20x3x1,3	37,6	1577
24x3x1,3	42,2	1902
2x3x1,5	15,7	234
4x3x1,5	18,6	392
5x3x1,5	20,6	480
6x3x1,5	22,5	560
8x3x1,5	25,6	726
10x3x1,5	29,5	914
12x3x1,5	30,5	1053
16x3x1,5	34,4	1380
20x3x1,5	38,6	1700
24x3x1,5	43,3	2050
2x3x2,5	18,8	330
4x3x2,5	22,2	560
5x3x2,5	24,6	688
6x3x2,5	27,2	820
8x3x2,5	30,9	1062
10x3x2,5	35,6	1334
12x3x2,5	37,0	1560
16x3x2,5	41,4	2020
20x3x2,5	46,7	2514
24x3x2,5	52,4	3023