



CABLE STRUCTURE

Conductor	Electrolytic, stranded, annealed plain copper wires to IEC 60228 Class 2 (Class 1 or Class 5 and / or tinned on request)
Insulation	PVC compound to EN50290-2-21 Black / White / Red twisted triads with numbered cores
Binder Tape	Polyester foil on each twisted triad
Individual Screen	Aluminum/polyester foil with a tinned copper drain wire in direct contact with the metallic side of the foil
Binder Tape	Polyester foil on overall cable core formed by stranded pairs
Collective Screen	Aluminum/polyester foil with a tinned copper drain wire in direct contact with the metallic side of the foil
Inner Sheath	PVC compound to EN50290-2-22
Armour	Round galvanised steel wires to EN 10257-1
Outer Sheath	Flame retardant PVC compound to EN50290-2-22 Blue for intrinsically safe cable Black for UV resistant and/or non-intrinsically safe cable Other colours on request

STANDARDS & MAIN CHARACTERISTICS

Rated Voltage	500 V a.c.
AC Test Voltage	2000 V x 1 min. (core:core / core: screen)
Working Temperature	-30°C / + 70°C (during operation) - 5 °C / + 50°C (during installation)
Min Bending Radius (Fixed)	10 x D
Construction	EN 50288-7
Material Types & Tests	EN 50290-2 series
Electrical & Mechanical Tests	EN 50289 series
Flame Retardant	IEC 60332 / 1-2, IEC 60332 / 3-24 Cat C

Available Features on Request

- 300 V version
- Hydrocarbon resistant
- Oil resistant
- UV resistant
- Yw 105°C version
- Yv type reinforced sheath
- Anti termit / anti rodent
- LSF (Low Smoke) version

Application

These cables used for connecting instruments and control systems for analogue or digital signal transmission for indoor and outdoor 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.

ELECTRICAL CHARACTERISTICS(*)

Conductor size (Class 2)	nom.	mm ²	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	100					
Mutual Capacitance	max.	nF/km	250					
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 ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x3x0,5	15,6	410
4x3x0,5	17,6	530
5x3x0,5	18,8	600
6x3x0,5	20,7	780
8x3x0,5	22,8	824
10x3x0,5	25,4	1080
12x3x0,5	26,0	1160
16x3x0,5	28,3	1374
20x3x0,5	31,2	1610
24x3x0,5	35,3	2092
2x3x0,75	16,7	465
4x3x0,75	19,0	613
5x3x0,75	21,0	810
6x3x0,75	22,6	910
8x3x0,75	24,8	1070
10x3x0,75	27,6	1260
12x3x0,75	28,4	1374
16x3x0,75	31,2	1650
20x3x0,75	35,5	2175
24x3x0,75	38,9	2506
2x3x1	17,1	488
4x3x1	19,4	655
5x3x1	21,7	870
6x3x1	23,2	968
8x3x1	25,6	1155
10x3x1	28,4	1360
12x3x1	29,4	1500
16x3x1	33,0	1990
20x3x1	36,7	2375
24x3x1	40,2	2736

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x3x1,3	18,1	540
4x3x1,3	21,0	842
5x3x1,3	22,7	960
6x3x1,3	24,3	1080
8x3x1,3	26,9	1295
10x3x1,3	30,1	1538
12x3x1,3	31,0	1686
16x3x1,3	35,1	2294
20x3x1,3	38,7	2698
24x3x1,3	42,5	3110
2x3x1,5	18,6	568
4x3x1,5	21,9	904
5x3x1,5	23,5	1020
6x3x1,5	25,4	1160
8x3x1,5	27,9	1383
10x3x1,5	31,2	1640
12x3x1,5	33,0	2004
16x3x1,5	36,7	2456
20x3x1,5	40,4	2890
24x3x1,5	45,2	3645
2x3x2,5	22,0	842
4x3x2,5	25,1	1150
5x3x2,5	27,0	1323
6x3x2,5	29,2	1502
8x3x2,5	33,2	2015
10x3x2,5	37,6	2448
12x3x2,5	38,7	2695
16x3x2,5	43,4	3560
20x3x2,5	48,5	4268
24x3x2,5	53,3	4948