

EN 50288-7 (500 V)



## 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 twisted pairs with numbered cores
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
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)	7,5 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
- Multi core / Multi triple / Multi quad
- 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 <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	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 <sup>2</sup> )	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
1x2x0,5	6,0	47
2x2x0,5	8,8	81
4x2x0,5	10,3	126
5x2x0,5	11,2	148
6x2x0,5	12,1	170
8x2x0,5	13,7	218
10x2x0,5	15,6	269
12x2x0,5	16,1	305
16x2x0,5	17,8	382
20x2x0,5	20,0	471
24x2x0,5	22,2	562
1x2x0,75	6,7	58
2x2x0,75	10,0	105
4x2x0,75	11,5	160
5x2x0,75	12,7	195
6x2x0,75	13,8	226
8x2x0,75	15,6	289
10x2x0,75	17,6	349
12x2x0,75	18,4	408
16x2x0,75	20,3	514
20x2x0,75	22,8	634
24x2x0,75	25,4	757
1x2x1	6,9	63
2x2x1	10,3	116
4x2x1	11,9	180
5x2x1	13,1	220
6x2x1	14,3	255
8x2x1	16,2	329
10x2x1	18,4	406
12x2x1	19,0	465
16x2x1	21,3	601
20x2x1	23,9	740
24x2x1	26,6	884

Cross Sections (mm <sup>2</sup> )	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
1x2x1,3	7,5	76
2x2x1,3	10,9	134
4x2x1,3	12,9	221
5x2x1,3	14,0	263
6x2x1,3	15,4	313
8x2x1,3	17,3	396
10x2x1,3	19,7	491
12x2x1,3	20,4	565
16x2x1,3	22,8	731
20x2x1,3	25,6	903
24x2x1,3	28,5	1079
1x2x1,5	7,7	81
2x2x1,5	11,3	144
4x2x1,5	13,3	239
5x2x1,5	14,5	285
6x2x1,5	15,9	339
8x2x1,5	18,1	439
10x2x1,5	20,4	533
12x2x1,5	21,3	625
16x2x1,5	23,8	809
20x2x1,5	26,7	998
24x2x1,5	29,7	1191
1x2x2,5	8,9	110
2x2x2,5	13,4	206
4x2x2,5	15,9	350
5x2x2,5	17,3	420
6x2x2,5	19,1	501
8x2x2,5	21,7	650
10x2x2,5	24,7	805
12x2x2,5	25,6	933
16x2x2,5	28,6	1211
20x2x2,5	32,3	1513
24x2x2,5	36,0	1806