



XLPE Insulation, Al/PET Individual & Overall Screen, PVC Inner Sheath, Galvanized Steel Wire Armoring, PVC Sheath Instrumentation Cable

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.

Construction

CONDUCTOR :Electrolytic, stranded, annealed plain copper wires to IEC 60228 Class 2 (Class 1 or Class 5 and / or tinned on request)

INSULATION :XLPE compound to EN50290-2-29 Black / White twisted pairs with numbered cores or Black / White / Red twisted triads with numbered cores

BINDER TAPE :Polyester foil on each twisted pair

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

Electrical Properties

RATED VOLTAGE :500 V a.c.

AC TEST VOLTAGE :2000 V x 1 min. (core:core / core: screen)

WORKING TEMPERATURE :-40°C / + 90°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

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	18.5	14.2	12.3	7.6
Insulation resistance	min.	MΩxkm	5000					

Conductor size (Class 2)	nom.	mm ²	0.5	0.75	1	1.3	1.5	2.5
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								

Parameter
RE-2X(St)YSWAY-fi PIMF Cable

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x2x0,5	14.7	361
4x2x0,5	16.3	447
5x2x0,5	17.5	508
6x2x0,5	18.7	560
8x2x0,5	21.3	775
10x2x0,5	23.3	890
12x2x0,5	23.9	950
16x2x0,5	26.2	1118
20x2x0,5	28.6	1281
24x2x0,5	32	1660
2x2x0,75	15.8	408
4x2x0,75	17.8	521
5x2x0,75	19	578
6x2x0,75	21	761
8x2x0,75	23.2	890
10x2x0,75	25.7	1043
12x2x0,75	26.4	1115
16x2x0,75	29	1325
20x2x0,75	32.6	1723
24x2x0,75	35.9	1998
2x2x1	16.2	425
4x2x1	18.3	550
5x2x1	19.5	616
6x2x1	21.8	815
8x2x1	23.8	951
10x2x1	26.5	1108
12x2x1	27.2	1197
16x2x1	29.8	1415
20x2x1	33.6	1856
24x2x1	37.2	2170
2x2x1,3	16.9	460
4x2x1,3	19.1	604
5x2x1,3	21.4	805
6x2x1,3	22.9	902
8x2x1,3	25.3	1068
10x2x1,3	28	1240

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
12x2x1,3	28.9	1347
16x2x1,3	32.3	1785
20x2x1,3	35.9	2123
24x2x1,3	39.4	2441
2x2x1,5	17.5	490
4x2x1,5	19.6	630
5x2x1,5	21.9	850
6x2x1,5	23.4	940
8x2x1,5	25.9	1114
10x2x1,5	28.9	1308
12x2x1,5	29.7	1421
16x2x1,5	33.3	1885
20x2x1,5	37.1	2260
24x2x1,5	40.7	2595
2x2x2,5	19.7	594
4x2x2,5	23.2	926
5x2x2,5	25.1	1062
6x2x2,5	26.9	1188
8x2x2,5	29.9	1432
10x2x2,5	34.6	1935
12x2x2,5	35.6	2105
16x2x2,5	39.1	2502
20x2x2,5	44.2	3270
24x2x2,5	48.9	3804

RE-2X(St)YSWAY-fi TIMF Cable

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x3x0,5	15.6	402
4x3x0,5	17.6	517
5x3x0,5	18.8	580
6x3x0,5	20.7	752
8x3x0,5	22.8	814
10x3x0,5	25.4	1038
12x3x0,5	26	1109
16x3x0,5	28.3	1308
20x3x0,5	31.2	1526
24x3x0,5	35.3	1992
2x3x0,75	16.7	454
4x3x0,75	19	591
5x3x0,75	21	784
6x3x0,75	22.6	878
8x3x0,75	24.8	1028
10x3x0,75	27.6	1207

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
12x3x0,75	28.4	1309
16x3x0,75	31.2	1563
20x3x0,75	35.5	2067
24x3x0,75	38.9	2378
2x3x1	17.1	477
4x3x1	19.4	632
5x3x1	21.7	843
6x3x1	23.2	935
8x3x1	25.6	1110
10x3x1	28.4	1302
12x3x1	29.4	1432
16x3x1	33	1900
20x3x1	36.7	2262
24x3x1	40.2	2600
2x3x1,3	18.1	527
4x3x1,3	21	816
5x3x1,3	22.7	930
6x3x1,3	24.3	1043
8x3x1,3	26.9	1243
10x3x1,3	30.1	1473
12x3x1,3	31	1610
16x3x1,3	35.1	2190
20x3x1,3	38.7	2571
24x3x1,3	42.5	2958
2x3x1,5	18.6	554
4x3x1,5	21.9	877
5x3x1,5	23.5	986
6x3x1,5	25.4	1118
8x3x1,5	27.9	1328
10x3x1,5	31.2	1572
12x3x1,5	33	1923
16x3x1,5	36.7	2348
20x3x1,5	40.4	2753
24x3x1,5	45.2	3482
2x3x2,5	22	822
4x3x2,5	25.1	1109
5x3x2,5	27	1273
6x3x2,5	29.2	1442
8x3x2,5	33.2	1935
10x3x2,5	37.6	2348
12x3x2,5	38.7	2575
16x3x2,5	43.4	3401
20x3x2,5	48.5	4067

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
24x3x2,5	53.3	4708