



PE Insulation, Al/PET Individual & Overall Screen, PVC Inner Sheath, Galvanized Steel Wire Armoring, LSZH 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 :PE-Polyethylene compound to EN50290-2-23 Black / White twisted pairs with numbered cores or Black / White / Red twisted triads with numbered cores

BINDER TAPE :Polyester foil on each twisted pair or 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 :LSZH compound to EN50290-2-27

ARMOUR :Round galvanised steel wires to EN 10257-1

OUTER SHEATH :Halogen free flame retardant LSZH compound to EN50290-2-27 Blue for intrinsically safe cable Black for UV resistant and/or non-intrinsically safe cable Gray for indoor applications 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 : -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

HALOGEN CONTENT :IEC 60754 / 1-2

SMOKE EMISSION :IEC 61034 / 1-2

Electrical Characteristics

Conductor size (Class 2)	nom.	mm ²	0.5	0.75	1	1.3	1.5	2.5
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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					
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-2Y(St)HSWAH 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

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
8x2x1,3	25.3	1068
10x2x1,3	28	1240
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-2Y(St)HSWAH TIMF Cable

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x3x0,5	11	115
4x3x0,5	13	186
5x3x0,5	14.2	220
6x3x0,5	15.6	262
8x3x0,5	17.5	328
10x3x0,5	20.1	408
12x3x0,5	20.9	476
16x3x0,5	23.4	612
20x3x0,5	26.3	754
24x3x0,5	29.3	900
2x3x0,75	12.1	140
4x3x0,75	14.4	230
5x3x0,75	15.9	282
6x3x0,75	17.3	327

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
8x3x0,75	19.7	423
10x3x0,75	22.5	524
12x3x0,75	23.5	613
16x3x0,75	26.3	790
20x3x0,75	29.5	973
24x3x0,75	32.9	1160
2x3x1	12.7	160
4x3x1	14.8	258
5x3x1	16.4	317
6x3x1	18.1	378
8x3x1	20.3	478
10x3x1	23.5	606
12x3x1	24.3	696
16x3x1	27.2	900
20x3x1	30.5	1110
24x3x1	34.2	1342
2x3x1,3	13.5	187
4x3x1,3	15.9	314
5x3x1,3	17.4	377
6x3x1,3	19.2	450
8x3x1,3	21.8	583
10x3x1,3	25	724
12x3x1,3	26	848
16x3x1,3	29.1	1100
20x3x1,3	32.7	1356
24x3x1,3	36.5	1620
2x3x1,5	14	200
4x3x1,5	16.6	340
5x3x1,5	18.4	418
6x3x1,5	20.1	488
8x3x1,5	22.8	633
10x3x1,5	26.3	798
12x3x1,5	27.2	922
16x3x1,5	30.5	1196
20x3x1,5	34.4	1493
24x3x1,5	38.4	1782
2x3x2,5	16.7	285
4x3x2,5	19.8	490
5x3x2,5	21.9	603
6x3x2,5	24.1	718
8x3x2,5	27.4	933
10x3x2,5	31.6	1172
12x3x2,5	32.7	1360

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
16x3x2,5	36.8	1783
20x3x2,5	41.3	2200
24x3x2,5	46.3	2650