



PE Insulation, Al/PET 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

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 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 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
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 Cable

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
1x2x0,5	10.7	218
2x2x0,5	13.4	314
4x2x0,5	14.9	384
5x2x0,5	15.8	425

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
6x2x0,5	16.7	465
8x2x0,5	18.3	540
10x2x0,5	20.7	728
12x2x0,5	21.4	782
16x2x0,5	23.1	900
20x2x0,5	25.3	1041
24x2x0,5	27.3	1163
1x2x0,75	11.5	252
2x2x0,75	14.6	360
4x2x0,75	16.1	443
5x2x0,75	17.1	490
6x2x0,75	18.4	548
8x2x0,75	20.7	748
10x2x0,75	22.9	873
12x2x0,75	23.5	930
16x2x0,75	25.6	1084
20x2x0,75	27.9	1253
24x2x0,75	30.5	1428
1x2x1	11.7	264
2x2x1	14.9	377
4x2x1	16.5	470
5x2x1	17.7	530
6x2x1	18.9	590
8x2x1	21.5	820
10x2x1	23.5	833
12x2x1	24.1	998
16x2x1	26.4	1183
20x2x1	29	1384
24x2x1	32.2	1753
1x2x1,3	12.1	281
2x2x1,3	15.5	409
4x2x1,3	17.5	532
5x2x1,3	18.6	592
6x2x1,3	19.8	660
8x2x1,3	22.6	910
10x2x1,3	24.8	1050
12x2x1,3	25.7	1152
16x2x1,3	27.9	1354
20x2x1,3	30.7	1587
24x2x1,3	34.7	2060
1x2x1,5	12.3	291
2x2x1,5	15.9	426
4x2x1,5	17.9	556

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
5x2x1,5	19.1	626
6x2x1,5	21	811
8x2x1,5	23.2	955
10x2x1,5	25.7	1126
12x2x1,5	26.4	1213
16x2x1,5	28.9	1444
20x2x1,5	32.3	1868
24x2x1,5	35.7	2190
1x2x2,5	13.5	342
2x2x2,5	18	530
4x2x2,5	21	822
5x2x2,5	22.6	934
6x2x2,5	24.2	1049
8x2x2,5	26.8	1251
10x2x2,5	29.8	1470
12x2x2,5	30.7	1621
16x2x2,5	34.8	2187
20x2x2,5	38.3	2570
24x2x2,5	42	2960