



Mica tape + XLPE Insulation, Al/PET Overall Screen, LSZH 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. Recommended for use where circuit integrity is required in case of fire.

Construction

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

INSULATION :Mica tape + XLPE compound to EN50290-2-29 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 Orange or Red for circuit integrity Blue for intrinsically safe cable Black for UV resistant and/or non-intrinsically safe cable

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

FIRE RESISTANCE :IEC 60331 / 21, IEC 60331 / 1-2

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-2X(St)HSWAH..CI Cable

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
1x2x0,5	11.7	256

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x2x0,5	15	363
4x2x0,5	16.6	443
5x2x0,5	17.9	502
6x2x0,5	19.1	555
8x2x0,5	21.8	768
10x2x0,5	23.9	880
12x2x0,5	24.6	942
16x2x0,5	26.9	1090
20x2x0,5	29.6	1267
24x2x0,5	33.1	1634
1x2x0,75	12.1	270
2x2x0,75	15.6	390
4x2x0,75	17.6	497
5x2x0,75	18.8	555
6x2x0,75	20.8	724
8x2x0,75	22.9	854
10x2x0,75	25.5	992
12x2x0,75	26.1	1064
16x2x0,75	28.4	1235
20x2x0,75	32	1625
24x2x0,75	35.5	1884
1x2x1	12.3	283
2x2x1	16	415
4x2x1	18	525
5x2x1	19.3	590
6x2x1	21	824
8x2x1	21.5	787
10x2x1	23.5	906
12x2x1	26.1	1063
16x2x1	29.4	1350
20x2x1	33.1	1757
24x2x1	36.7	2054
1x2x1,3	12.8	300
2x2x1,3	16.8	450
4x2x1,3	19	580
5x2x1,3	21.3	782
6x2x1,3	22.7	863
8x2x1,3	25.1	1021
10x2x1,3	27.8	1184
12x2x1,3	28.5	1280
16x2x1,3	32	1714
20x2x1,3	35.7	2036
24x2x1,3	39.1	2320

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
1x2x1,5	12.9	305
2x2x1,5	16.9	457
4x2x1,5	19.2	602
5x2x1,5	21.5	812
6x2x1,5	23	898
8x2x1,5	25.4	1063
10x2x1,5	28.1	1234
12x2x1,5	29.1	1352
16x2x1,5	32.6	1792
20x2x1,5	36.1	2114
24x2x1,5	39.6	2429
1x2x2,5	14.5	376
2x2x2,5	19.4	578
4x2x2,5	22.9	907
5x2x2,5	24.6	1027
6x2x2,5	26.6	1160
8x2x2,5	29.5	1388
10x2x2,5	33.8	1830
12x2x2,5	35.1	2038
16x2x2,5	38.6	2421
20x2x2,5	43.4	3143
24x2x2,5	48.3	3683