



Mica tape + XLPE Insulation, Al/PET Individual & Overall Screen, LSZH Sheath Instrumentation Cable

Application

These cables used for connecting instruments and control systems for analogue or digital signal transmission for indoor 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 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

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) : 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

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

Conductor size (Class 2)	nom.	mm ²	0.5	0.75	1	1.3	1.5	2.5
(*) At 20 °C								

Parameter

RE-2X(St)H-PIMF..CI Cable

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x2x0,5	11.9	118
4x2x0,5	14.1	186
5x2x0,5	15.6	227
6x2x0,5	17	260
8x2x0,5	19.3	334
10x2x0,5	22.1	414
12x2x0,5	22.9	470
16x2x0,5	25.6	600
20x2x0,5	29	755
24x2x0,5	32.3	896
2x2x0,75	12.9	140
4x2x0,75	15.2	220
5x2x0,75	16.6	260
6x2x0,75	18.3	310
8x2x0,75	20.8	400
10x2x0,75	23.8	493
12x2x0,75	24.6	560
16x2x0,75	27.5	717
20x2x0,75	30.9	882
24x2x0,75	34.7	1070
2x2x1	13.2	150
4x2x1	15.6	243
5x2x1	17.1	288
6x2x1	18.9	343
8x2x1	21.4	440
10x2x1	24.5	545
12x2x1	25.4	622
16x2x1	28.4	798
20x2x1	32.1	998
24x2x1	35.8	1190
2x2x1,3	14.2	172
4x2x1,3	16.8	280
5x2x1,3	18.6	342
6x2x1,3	20.3	397
8x2x1,3	23	510
10x2x1,3	26.6	646
12x2x1,3	27.5	738
16x2x1,3	30.8	948
20x2x1,3	34.8	1184

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
24x2x1,3	38.8	1410
2x2x1,5	14.3	180
4x2x1,5	17	296
5x2x1,5	18.8	362
6x2x1,5	20.7	430
8x2x1,5	23.5	554
10x2x1,5	26.9	687
12x2x1,5	27.9	787
16x2x1,5	31.4	1030
20x2x1,5	35.2	1265
24x2x1,5	39.5	1525
2x2x2,5	17.1	250
4x2x2,5	20.3	418
5x2x2,5	22.5	510
6x2x2,5	24.8	608
8x2x2,5	28.2	784
10x2x2,5	32.5	987
12x2x2,5	33.6	1134
16x2x2,5	37.8	1480
20x2x2,5	42.7	1843
24x2x2,5	47.9	2220

RE-2X(St)H-TIMF..CI Cable

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x3x0,5	13.1	148
4x3x0,5	15.5	237
5x3x0,5	16.9	280
6x3x0,5	18.7	334
8x3x0,5	21.2	430
10x3x0,5	24.2	530
12x3x0,5	25.1	605
16x3x0,5	28	776
20x3x0,5	31.7	972
24x3x0,5	35.4	1158
2x3x0,75	14	170
4x3x0,75	16.6	278
5x3x0,75	18.4	340
6x3x0,75	20.1	395
8x3x0,75	22.8	508
10x3x0,75	26.3	642
12x3x0,75	27.2	734
16x3x0,75	30.5	945
20x3x0,75	34.4	1180
24x3x0,75	38.4	1405

Cross Sections (mm ²)	Nominal Overall Diameter (mm)	Approximate Weight (kg/km)
2x3x1	14.4	188
4x3x1	17.1	310
5x3x1	18.9	378
6x3x1	20.8	450
8x3x1	23.7	580
10x3x1	27.1	718
12x3x1	28	823
16x3x1	31.5	1076
20x3x1	35.4	1325
24x3x1	39.7	1600
2x3x1,3	15.4	220
4x3x1,3	18.2	367
5x3x1,3	19.9	438
6x3x1,3	22	523
8x3x1,3	25	676
10x3x1,3	28.8	850
12x3x1,3	29.8	980
16x3x1,3	33.3	1264
20x3x1,3	37.6	1577
24x3x1,3	42.2	1902
2x3x1,5	15.7	234
4x3x1,5	18.6	392
5x3x1,5	20.6	480
6x3x1,5	22.5	560
8x3x1,5	25.6	726
10x3x1,5	29.5	914
12x3x1,5	30.5	1053
16x3x1,5	34.4	1380
20x3x1,5	38.6	1700
24x3x1,5	43.3	2050
2x3x2,5	18.8	330
4x3x2,5	22.2	560
5x3x2,5	24.6	688
6x3x2,5	27.2	820
8x3x2,5	30.9	1062
10x3x2,5	35.6	1334
12x3x2,5	37	1560
16x3x2,5	41.4	2020
20x3x2,5	46.7	2514
24x3x2,5	52.4	3023