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Evolucable Industria de Cabos Especiais
Av. Minasa, 25 - Galpão B1 - Condomínio Industrial
Business Park -Sumaré/SP - Cep 13.180-400
Sumaré/SP (Fábrica): +55 19 3090-3350
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INNOVCABLE LiHC11Y

– Conductor material: bare copper wires –
Conductor class: according to DIN VDE 0295 class 5 and IEC 60228 cl. 5

– Core insulation: Special halogen-free compound (LSZH), mixed halogen-free HI2 polymers according to DIN VDE 0819-106
Nominal voltage: 300/500 V for cross sections up
to 0.75mm² 600/1000 V for cross sections larger than 1.00mm² -HD 604
S1 (DIN VDE 0276-604) and according to IEC 60502-1 Ozone resistant according to IEC 60811-403 (DIN EN 60811-403)

Halogen-free according to EN 50267-2-1 (DIN EN 50267-2-1), IEC 60754-2 Flame retardant
according to IEC 60332-1-2 (DIN VDE 0482-332-1-2)
Smoke gas density according to IEC 61034-2 (DIN VDE 0482-1034-2)
– White or black veins identified by sequential numerical engraving, with optional green earth vein (G) in accordance with EN 50334 (DIN EN 50334)
– Twisted in layers.

– Tinned copper mesh shielding, coverage of approx. 85%.
– External cover PUR/polyether base in Gray RAL 7001.
PUR/polyether base, microbe-resistant according to HD 22.10 S2 (DIN VDE 0207-363-2)
Ozone resistant according to IEC 60811-403 (DIN EN 60811-403)
Halogen-free according to EN 50267-2-1 (DIN EN 50267-2-1), IEC 60754-1, IEC 60754-2 UV-resistant according to ISO 4892-2 (DIN EN ISO 4892-2)
Resistant to oil, grease, gasoline (in permanent contact it is necessary to check the resistance)

Identification

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External identification recording:
INNOVCABLE LSZH JZ/OZ H n (x) or (G) mm² XXXXX V OF: XXXX/YEAR
According to HD 604 S1 Part 1 Section 3 (DIN VDE 0276-604)

Applicable Specifications

DIN VDE 0295 CLASS 5

IEC 60228 CLASS 5

DIN VDE 0819-106

IEC 60811-403 (DIN EN 60811-403)

EN 50267-2-1 (DIN EN 50267-2-1), IEC 60754-2

EN 50334 (DIN EN 50334)

HD 22.10 S2 (DIN VDE 0207-363-2)

ISO 4892-2 (DIN EN ISO 4892-2)

EN 50267-2-1 (DIN EN 50267-2-1, IEC 60754-2

HD 604 S1 (DIN VDE 0276-604)

(DIN VDE 0276-605)

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IEC 61442, IEC 60230 and VDE 0276 T620

EN IEC 60230: 2002

RAL 7001

HD 604 S1 (DIN VDE 0276-604

IEC 60502-1

IEC 60332-1-2 (DIN VDE 0482-332-1-2)

IEC 61034-2 (DIN VDE 0482-1034-2)

IEC 60811-403 (DIN EN 60811-403)

HD 605 S2 (DIN VDE 0276-605)

EC Directive 73/23/EEC

RoHS. (2002/95EG)

DIN EN 50395 (VDE 0481-395)

IEC 60060-2 and IEC 60060-2 AMD 1 (DIN-EN 60060-2-)

IEC 60230: 1966

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VDE 0481-230: 2003

Applications

The cables are intended for signaling control circuits, control circuits in industrial applications, in measuring technology, for transmission of analogue and digital signals in electronic industrial and automatic control engineering systems, for fixed installation and mobile/portable devices. A common screen of tinned copper wire braid ensures very good protection against external electromagnetic fields (approx. 50 dB).

Suitable for indoor use in both dry and damp rooms. The LiHC11Y cable can also be installed outdoors – the special outer sheath compound (PUR) ensures UV resistance and increased mechanical protection. Cables classified according to EN 50575 (CPR)

Maximum Conductor Temperature

Fixed: min -50°C to +80°C

Mobile: min (not for use on cable drag chains) -40°C to +80°C – Cold winding resistance according to HD 605 S2 (DIN VDE 0276-605)
– The cable can be installed at the place of use, observing the bending radii in the temperature range from –40°C to +80°C.

Notes

G = with 1 green conductor for earth; PETP
Polyester Tape may be used in the construction of the cable. If filling is necessary,
halogen-free according to EN 50267-2-1 (DIN EN 50267-2-1, IEC 60754-2 Declaration of conformity: Cable in accordance
with EC Directive 73/23/EEC for Low Voltage Equipment.

Wires are RoHS compliant. (2002/95EG)

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Bending radius for cable and individual core:
– Single bend 7.5 x cable diameter – 6.0 x cable
diameter (acceptable)
– Multiple bend 20 x cable diameter

– AC voltage test: 4 kV 50 Hz, 5 min according to HD 604 S1 (DIN VDE 0276-604)
– Insulation resistance min. 20 MOhm x km according to HD 605 S2 (DIN VDE 0276-605)- – Maximum
conductor
resistance according to IEC 60228 and IEC 60228 (DIN VDE 0295)
– DC dielectric strength of 8.5 kV is guaranteed The tests
were carried out according to the following standards: DIN EN 50395 (VDE
0481-395)
IEC 60060-2 and IEC 60060-2 AMD 1 (DIN-EN 60060-2-)
Based on IEC 61442, IEC 60230 and VDE 0276 T620 The cables
tolerate a surge of 1.2/50ÿs with a peak voltage of 5kV The surge test followed the standards:
IEC 60230: 1966 EN IEC 60230: 2002

VDE 0481-230: 2003

-Cable outer diameter tolerance: +/-8%

– We can produce several other cable options and configurations upon request. Innovcable reserves the right
to change this catalogue without prior notice.

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n x mm²	Outer diameter* [mm]	Approximate cable weight [kg/km]
2x0,5	5,4	43
3x0,5	5,7	48
4x0,5	6,1	57
5x0,5	6,8	72
6x0,5	7,4	84
7x0,5	7,4	88
8x0,5	8,1	101
10x0,5	9,8	136
12x0,5	9,8	144
14x0,5	10,2	162
16x0,5	10,7	182
18x0,5	11,5	207
19x0,5	11,5	211
21x0,5	12,0	231
25x0,5	13,9	295
27x0,5	13,9	300
30x0,5	14,3	325
34x0,5	15,4	375
37x0,5	15,4	385
40x0,5	16,3	430
42x0,5	17,5	460
50x0,5	18,2	530
56x0,5	18,9	575
61x0,5	19,5	615

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n x mm²	Outer diameter* [mm]	Approximate cable weight [kg/km]
2x0,75	5,8	50
3x0,75	6,1	57
4x0,75	6,8	73
5x0,75	7,4	88
6x0,75	8,0	104
7x0,75	8,0	109
8x0,75	9,1	133
10x0,75	10,6	170
12x0,75	10,6	181
14x0,75	11,3	209
16x0,75	11,9	235
18x0,75	12,5	260
19x0,75	12,5	265
21x0,75	13,2	305
25x0,75	15,1	370
27x0,75	15,1	380
30x0,75	16,0	425
34x0,75	17,2	490
37x0,75	17,2	505
40x0,75	17,7	545
42x0,75	19,3	590
50x0,75	20,1	675
56x0,75	20,7	735
61x0,75	21,5	795

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n x mm²	Outer diameter* [mm]	Approximate cable weight [kg/km]
2x1,0	6,1	56
3x1,0	6,4	66
4x1,0	7,2	85
5x1,0	7,8	103
6x1,0	8,4	122
7x1,0	8,4	129
8x1,0	9,6	156
10x1,0	11,4	205
12x1,0	11,4	219
14x1,0	11,9	247
16x1,0	12,8	290
18x1,0	13,6	325
19x1,0	13,6	335
21x1,0	14,2	365
25x1,0	16,4	450
27x1,0	16,4	465
30x1,0	17,0	510
34x1,0	18,4	590
37x1,0	18,4	610
40x1,0	19,0	660
42x1,0	20,5	705
50x1,0	21,5	820
56x1,0	22,2	890
61x1,0	22,8	955
2x1,5	7,1	76
3x1,5	7,5	91
4x1,5	8,2	115
5x1,5	9,3	145
6x1,5	10,0	172
7x1,5	10,0	182
8x1,5	11,0	212
10x1,5	13,3	290
12x1,5	13,3	310
14x1,5	14,1	355
16x1,5	14,9	400
18x1,5	16,0	460

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n x mm²	Outer diameter* [mm]	Approximate cable weight [kg/km]
19x1,5	16,0	470
21x1,5	16,8	515
25x1,5	19,1	625
27x1,5	19,1	645
30x1,5	19,7	705
34x1,5	21,4	820
37x1,5	21,4	850
40x1,5	22,2	915
42x1,5	23,9	980
50x1,5	25,3	1150
56x1,5	26,1	1255
61x1,5	26,8	1345
2x2,5	8,2	104
3x2,5	9,1	134
4x2,5	9,9	169
5x2,5	10,7	206
6x2,5	11,9	252
7x2,5	11,9	265
10x2,5	16,2	430
12x2,5	16,2	465
14x2,5	16,9	525
16x2,5	17,8	595
18x2,5	19,0	670
21x2,5	19,9	755
25x2,5	22,7	920
30x2,5	23,5	1040
34x2,5	25,7	1220
37x2,5	25,7	1270
42x2,5	28,7	1465
50x2,5	29,9	1695
2x4,0	9,9	159
3x4,0	10,5	197
4x4,0	11,7	255
5x4,0	12,9	325
7x4,0	14,2	420
10x4,0	19,1	645
12x4,0	19,1	705

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n x 2 x mm²	Outer diameter* [mm]	Approximate cable weight [kg/km]
2x2x0,5	7,7	77
3x2x0,5	9,2	104
4x2x0,5	9,9	124
5x2x0,5	10,6	151
6x2x0,5	10,9	161
7x2x0,5	12,4	191
8x2x0,5	12,9	211
10x2x0,5	14,0	253
12x2x0,5	14,8	285
14x2x0,5	16,1	335
16x2x0,5	17,2	385
18x2x0,5	17,9	410
20x2x0,5	18,6	455
24x2x0,5	19,1	515
2x2x0,75	8,5	90
3x2x0,75	9,9	125
4x2x0,75	10,7	151
5x2x0,75	11,7	191
6x2x0,75	12,1	206
7x2x0,75	13,6	242
8x2x0,75	14,2	265
10x2x0,75	15,2	310
12x2x0,75	16,6	375
14x2x0,75	17,5	420
16x2x0,75	18,9	480
18x2x0,75	19,7	535
20x2x0,75	20,3	570
24x2x0,75	20,9	655
2x2x1,0	9,4	126
3x2x1,0	10,5	144
4x2x1,0	11,5	181
5x2x1,0	12,4	221
6x2x1,0	12,8	240
7x2x1,0	14,4	280

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n x 2 x mm²	Outer diameter* [mm]	Approximate cable weight [kg/km]
8x2x1,0	15,1	310
10x2x1,0	16,5	380
12x2x1,0	17,6	440
14x2x1,0	18,8	505
16x2x1,0	20,1	575
18x2x1,0	20,9	625
20x2x1,0	21,8	690
24x2x1,0	22,4	795
2x2x1,5	10,7	161
3x2x1,5	12,2	195
4x2x1,5	13,2	239
5x2x1,5	14,4	300
6x2x1,5	14,9	325
7x2x1,5	17,0	390
8x2x1,5	17,8	430
10x2x1,5	19,2	520
12x2x1,5	20,5	605
14x2x1,5	21,9	700
16x2x1,5	23,4	795
18x2x1,5	24,8	885
20x2x1,5	25,6	965
24x2x1,5	26,3	1110
2x2x2,5	12,7	229
3x2x2,5	14,4	275
4x2x2,5	16,0	350
5x2x2,5	17,2	435
6x2x2,5	17,8	480
7x2x2,5	20,2	560
8x2x2,5	21,1	625
10x2x2,5	22,8	760
12x2x2,5	24,3	885
14x2x2,5	26,3	1030
16x2x2,5	28,1	1180