

# LiYY-BL / LiYCY-BL

Cables for hazardous areas, without green-yellow core, EMC\*



## Cable structure LiYY-BL

- Stranded bare copper conductor according to DIN VDE 0295, IEC 60228 cl. 5
- Core insulation of special PVC according to DIN VDE 0207 part 4
- Black cores with repeated white numbering according to DIN VDE 0293 without earth core
- Cores stranded in layers with optimal lay-length
- Outer sheath of special PVC according to DIN VDE 0207 part 5
- Outer sheath color blue for hazardous areas -i- (= intrinsically safe)
- PVC self-extinguishing and flame retardant, according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1

## Cable structure LiYCY-BL

- Cable structure as per LiYY + screening
- Twisted cores wrapped with plastic foil
- Tinned copper braided screening, approx. 85% coverage

## Cable structure PAAR-LiYCY-BL

- Cable structure as per LiYCY-BL
- Cores twisted to pairs with optimal lay-length
- Cores color coded according to DIN 47100
- Outer sheath of special PVC, color blue

## Technical data

- Control cable with special PVC blue sheath for hazardous areas with the possibility of explosion or fire -i- (= intrinsically safe)
- For intrinsically safe installation, marking according to DIN VDE 0165 par 1, EN 60079-14 and IEC 60079-14 area 12.2.2.6.
- **Temperature range** flexing from -5 °C to +70 °C  
fixed from -40 °C to +80 °C
- **Nominal voltage**  $U_0/U$  300/500 V
- **Test voltage a.c.** 3000 V
- **Insulation resistance** min. 20 M $\Omega$  × km
- **Mutual capacitance** unscreened: core/core approx. 120 nF/km  
screened: core/core approx. 140 nF/km;  
core/screen approx. 187 nF/km
- **Inductance** for CY type approx. 0,68 mH/km
- **Coupling resistance** for CY type max. 250  $\Omega$ /km
- **Minimum bending radius**  
LiYY-BL approx. 7,5× cable diameter  
LiYCY 10× cable diameter
- **Radiation resistance** up to 80×10<sup>6</sup> cJ/kg (up to 80 Mrad)

## Application

The cables have special blue outer sheath (-i- for hazardous areas). They are used as flexible control and measuring cables meeting requirements for installation in electrical appliances. These installations are not earthed and require separate power circuits. The cables are not suitable for direct burial into earth. The copper braided screening ensures transmission of data signals and free of interferences.

## Note:

\* EMC = Electromagnetic compatibility – recommended type.

To optimise EMC features we recommend large round contacts of the copper braiding on both ends.

These cables are intended for use within <50 V AC resp. <75 V DC voltage and are not included in the EC Low-Voltage Directive 73/23/EEC.

Conforms to RoHS.

Part No.	Number of cores x core cross-section [mm <sup>2</sup> ]	Approx. outer $\varnothing$ [mm]	Copper weight [kg/km]	Approx. cable weight [kg/km]
<b>LiYY - BL</b>				
0314001	2 × 0,75	5,2	14,4	46
0314002	3 × 0,75	5,5	21,6	54
0314003	4 × 0,75	6,2	29	66
0314004	5 × 0,75	6,8	36	80
0314075	7 × 0,75	8,1	52	110
0314005	8 × 0,75	8,9	58	130
0314076	12 × 0,75	9,9	88	179
0314006	18 × 0,75	11,9	130	257
0314007	25 × 0,75	14,5	180	365
0314008	30 × 0,75	15,8	215	448
0314009	34 × 0,75	16,4	245	510
0314010	41 × 0,75	17,6	298	607
0314011	2 × 1	5,5	19	60
0314012	3 × 1	6,0	29	72

Part No.	Number of cores x core cross-section [mm <sup>2</sup> ]	Approx. outer $\varnothing$ [mm]	Copper weight [kg/km]	Approx. cable weight [kg/km]
0314013	4 × 1	6,6	38	86
0314014	5 × 1	7,2	48	104
0314015	7 × 1	8,6	67	141
0314016	12 × 1	10,7	115	230
0314017	18 × 1	12,7	173	343
0314018	25 × 1	15,6	240	485
0314019	2 × 1,5	6,3	29	70
0314020	3 × 1,5	6,7	43	90
0314021	4 × 1,5	7,3	58	109
0314022	5 × 1,5	8,2	72	131
0314023	7 × 1,5	9,8	101	184
0314024	12 × 1,5	12,1	173	309
0314025	18 × 1,5	14,5	259	440
0314026	25 × 1,5	17,8	360	620
0314027	30 × 1,5	20,0	440	842

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Part No.	Number of cores x core cross-section [mm²]	Approx. outer Ø [mm]	Copper weight [kg/km]	Approx. cable weight [kg/km]
<b>LiYCY - BL</b>				
0314028	2 × 0,75	5,7	39	59
0314029	3 × 0,75	6,2	49	66
0314030	4 × 0,75	6,7	57	77
0314031	5 × 0,75	7,2	69	93
0314088	7 × 0,75	8,6	86	130
0314032	8 × 0,75	9,4	88	145
0314033	10 × 0,75	10,2	140	180
0314034	12 × 0,75	10,4	151	202
0314035	18 × 0,75	12,4	207	292
0314036	20 × 0,75	12,9	220	362
0314037	25 × 0,75	15,1	257	415
0314038	30 × 0,75	15,6	297	486
0314039	34 × 0,75	16,9	340	523
0314040	41 × 0,75	18,3	397	680
0314041	2 × 1	6,0	46	65
0314042	3 × 1	6,5	56	81
0314043	4 × 1	7,1	69	98
0314044	5 × 1	7,6	85	127
0314045	7 × 1	9,1	107	158
0314046	12 × 1	11,2	186	260
0314047	18 × 1	13,2	240	380
0314048	25 × 1	16,2	342	534
0314049	34 × 1	18,0	440	741
0314050	2 × 1,5	6,8	63	88
0314051	3 × 1,5	7,3	76	100
0314052	4 × 1,5	8,1	96	126
0314053	5 × 1,5	8,9	111	160
0314054	7 × 1,5	10,5	147	208
0314055	12 × 1,5	12,8	254	338
0314056	18 × 1,5	15,2	367	479
0314057	25 × 1,5	18,5	492	705
0314058	30 × 1,5	19,0	550	830
0314059	34 × 1,5	20,8	640	900

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# PAAR-LiYCY-BL

## Cables for hazardous areas, color coded cores according to DIN 47100, EMC\*

Part No.	Number of cores x core cross-section [mm²]	Approx. outer Ø [mm]	Copper weight [kg/km]	Approx. cable weight [kg/km]
<b>PAAR-LiYCY-BL</b>				
0314077	2×2×0,5	8,0	46	89
0314078	3×2×0,5	8,4	63	104
0314079	4×2×0,5	9,1	81	126
0314080	6×2×0,5	10,7	111	171
0314081	8×2×0,5	13,0	137	251
0314082	10×2×0,5	14,2	162	282
0314083	12×2×0,5	14,4	185	261
0314084	16×2×0,5	17,7	240	445
0314085	20×2×0,5	19,2	291	525
0314086	24×2×0,5	20,7	346	590
0314087	25×2×0,5	20,9	358	622
0314089	2×2×0,75	8,7	59	105
0314090	3×2×0,75	9,2	87	128
0314091	4×2×0,75	10,0	108	156
0314092	6×2×0,75	11,1	146	216
0314093	8×2×0,75	14,6	180	309
0314094	10×2×0,75	16,0	220	355
0314095	12×2×0,75	16,4	267	405
0314096	16×2×0,75	20,0	330	560
0314097	20×2×0,75	21,6	425	671
0314098	24×2×0,75	24,3	488	795
0314099	25×2×0,75	24,4	530	803