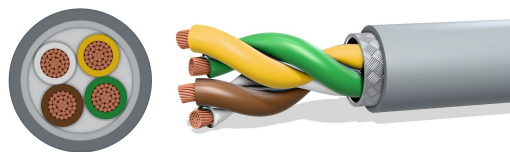


Application

LiYCY-TP is a flexible, screened data and signal cable in which the fine-stranded bare copper conductors are twisted in pairs, insulated with PVC, stranded in layers and covered by an overall braid of tinned copper wires under a grey PVC outer sheath. The pair twisting reduces crosstalk between circuits, while the braid screen limits the influence of external electrical interference on the transmitted signal and reduces the emission of the cable itself. The cable is intended for the transmission of low-voltage data, measuring and control signals in dry and damp indoor locations, for fixed installation or occasional flexing without tensile load. It is not intended for outdoor use, direct burial or power distribution.



CONSTRUCTION

Conductor	Fine-stranded bare copper.
Insulation	PVC.
Stranding	Two cores twisted to a pair; pairs stranded in layers.
Screen	Braid of tinned copper wires over the stranded pairs, optical coverage approx. 70 %.
Sheath	PVC, grey.
Core identification	Colour code acc. to DIN 47100, paired.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage	250 V (peak operating voltage, not for power applications).
Test voltage	800 V (0.14 mm ²); 1200 V (0.25 mm ² and above).
Standard	Manufacturer specification based on DIN VDE 0812; conductor acc. to IEC 60228; core colours acc. to DIN 47100.
Flame-retardant	Acc. to IEC/EN 60332-1-2.
Max. conductor temperature	+70 °C.
Permitted outer cable temperature, fixed	-30 °C to +70 °C.
Permitted outer cable temperature, moved	-5 °C to +70 °C.
Min. bending radius, fixed	10 × outer diameter.
Min. bending radius, moved	15 × outer diameter (20 × for an outer diameter above 20 mm).
Reaction to fire (CPR)	Eca (EN 50575); as a flexible cable it falls outside CPR scope when used only for the connection of mobile equipment.

DIMENSIONS & TECHNICAL DATA

Pairs × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1 × 0.14	138	3.8	34
2 × 0.14	138	5.2	40
3 × 0.14	138	5.5	49
4 × 0.14	138	5.9	55
5 × 0.14	138	6.6	66
6 × 0.14	138	7.1	86
7 × 0.14	138	7.1	91
8 × 0.14	138	8.1	97
10 × 0.14	138	9	109
12 × 0.14	138	9.3	141
14 × 0.14	138	9.7	148
15 × 0.14	138	10.2	152
16 × 0.14	138	10.2	155
18 × 0.14	138	10.9	171
20 × 0.14	138	11.4	183
22 × 0.14	138	13	205
24 × 0.14	138	13	228
25 × 0.14	138	13.3	239
26 × 0.14	138	13.3	245
27 × 0.14	138	13.3	251
28 × 0.14	138	13.3	258
30 × 0.14	138	13.7	270
32 × 0.14	138	13.9	284
34 × 0.14	138	14.4	300
36 × 0.14	138	14.4	316
38 × 0.14	138	14.9	350
40 × 0.14	138	14.9	370
44 × 0.14	138	16.3	390
46 × 0.14	138	16.6	430
50 × 0.14	138	17	440
52 × 0.14	138	16.8	460
55 × 0.14	138	17.5	480
1 × 0.25	79	4.4	45
2 × 0.25	79	6.4	53
3 × 0.25	79	6.8	65
4 × 0.25	79	7.4	80
5 × 0.25	79	8	98
6 × 0.25	79	8.9	114
7 × 0.25	79	8.9	121
8 × 0.25	79	10.2	129
10 × 0.25	79	11.3	157
12 × 0.25	79	11.6	189
14 × 0.25	79	12.2	213
15 × 0.25	79	13.2	225
16 × 0.25	79	13.2	237

Pairs × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
18 × 0.25	79	13.9	248
20 × 0.25	79	14.5	275
22 × 0.25	79	16.3	303
24 × 0.25	79	16.3	330
25 × 0.25	79	16.6	343
26 × 0.25	79	16.6	345
27 × 0.25	79	16.6	350
28 × 0.25	79	16.6	360
30 × 0.25	79	17.2	375
32 × 0.25	79	17.7	400
34 × 0.25	79	18.5	410
36 × 0.25	79	18.5	420
38 × 0.25	79	19.2	450
40 × 0.25	79	19.2	485
44 × 0.25	79	20.9	500
46 × 0.25	79	21.2	540
50 × 0.25	79	22	550
52 × 0.25	79	21.6	580
55 × 0.25	79	22.4	630
1 × 0.34	57	4.6	58
2 × 0.34	57	6.8	65
3 × 0.34	57	7.1	78
4 × 0.34	57	7.8	90
5 × 0.34	57	8.7	110
6 × 0.34	57	9.4	130
7 × 0.34	57	9.4	145
8 × 0.34	57	11	150
9 × 0.34	57	11.9	170
10 × 0.34	57	11.9	190
12 × 0.34	57	12.3	220
14 × 0.34	57	13.3	245
16 × 0.34	57	14	250
18 × 0.34	57	14.7	275
21 × 0.34	57	16.3	300
25 × 0.34	57	17.9	400
27 × 0.34	57	17.9	410
30 × 0.34	57	18.7	440
34 × 0.34	57	19.9	510
37 × 0.34	57	19.9	550
40 × 0.34	57	20.6	590
44 × 0.34	57	22.4	600
50 × 0.34	57	23.4	650
52 × 0.34	57	23.1	680
56 × 0.34	57	24.2	750
61 × 0.34	57	24.9	840
1 × 0.5	39	5.2	60
2 × 0.5	39	7.8	89

Pairs × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
3 × 0.5	39	8.2	104
4 × 0.5	39	9.2	126
5 × 0.5	39	10	148
6 × 0.5	39	11.1	171
8 × 0.5	39	13.2	290
10 × 0.5	39	14.4	320
12 × 0.5	39	14.8	361
16 × 0.5	39	16.6	421
20 × 0.5	39	18.8	580
25 × 0.5	39	21.4	740
1 × 0.75	26	5.7	71
2 × 0.75	26	8.9	105
3 × 0.75	26	9.4	128
4 × 0.75	26	10.2	156
5 × 0.75	26	11.4	189
6 × 0.75	26	12.6	216
8 × 0.75	26	14.8	309
10 × 0.75	26	16.3	355
12 × 0.75	26	16.8	405
16 × 0.75	26	19	565
20 × 0.75	26	21.2	700
25 × 0.75	26	24.6	950
1 × 1	19.5	6	75
2 × 1	19.5	9.4	116
3 × 1	19.5	9.9	140
4 × 1	19.5	11	191
1 × 1.5	13.3	7.2	84
2 × 1.5	13.3	11.3	n/a
3 × 1.5	13.3	11.9	194
4 × 1.5	13.3	13.5	240

The first column gives the number of pairs ($n \times 2 \times \text{mm}^2$); outer diameters, weights and conductor resistance are the nominal manufacturer values of the leading reference source and are indicative and non-binding.