



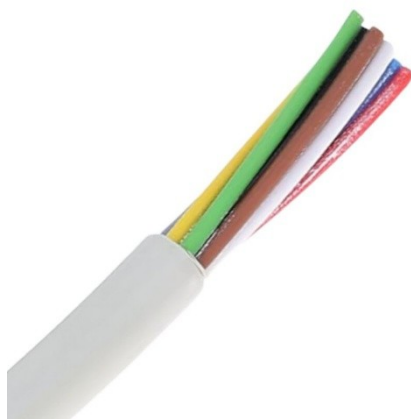
LiYY Multi-conductor

Multi-pair ,Low-Voltage Communication
and Control Cable



IEC 60228 ; EN 50290-2-22 ; IEC 60332-1-2

RoHS , REACH & CE Directives



Ambient installation T°
C range
0 + 50 °C



Operating temp.
-20 + 60 °C



Storage temperature
range
-20 + 70 °C



Flame retardant
IEC 60332-1



Smoke density

Application

LiYY is an unshielded flexible PVC control and data cable designed for low-voltage signal transmission and control applications in indoor environments. It is intended for fixed installation or occasional flexible movement where there is no significant mechanical stress. It is used in: Industrial control and automation systems, PLC wiring and control panels, machine tools and production equipment, instrumentation and measurement devices, electronic control systems, computer and data communication equipment, office machines and business equipment, audio and communication systems, security, alarm and access control systems, indoor signal and control wiring in dry or damp environments.

Also is suitable for: fixed installation, occasional flexing without tensile load, installation inside control cabinets, cable ducts and conduits, indoor use in dry and humid rooms. **LiYY** is not suitable for:

outdoor installation, direct burial, continuous flexing in drag chains, applications with high mechanical stress, exposure to UV radiation, oils, aggressive chemicals or severe weather conditions (unless a special version is used).

LiYY Construction:

Conductor material:

Insulation material:

Core stranding

Jacket / sheath material:

Sheath colour:

Class 5 Fine stranded bare copper

PVC compound YI2 (Polyvinyl chloride)

Pairs twisted in layers,

Wrapping by Polyester plastic foil

PVC YM2 (Polyvinyl chloride)

Pebble gray (RAL 7032)

Core identification:

2 Core:  White  Brown

3 Core:  White  Brown  Green

4 Core:  White  Brown  Green  Yellow

5 Core:  White  Brown  Green  Yellow  Grey

6 Core:  White  Brown  Green  Yellow  Grey  Pink

Larger sizes: 6 Core colours + following colours in addition

7 Core :  Blue

8 Core:  Red

10 Core:  Black  Violet

12 Core:  Grey/Pink  Red/Blue

Technical Data:

Mutual capacitance (core to core) Nom.
(core to screen) Nom.

Inductivity;

Insulation resistance

Rated voltage

nF/km 120

nF/km 160

approx.. Mh/km 0.65

MΩ x km ≥ 20

Uo/U 300/300 V (up to 0.34 mm²)

300/500 V (0.5 mm² and above)

Test voltage at 0.14 mm²
at ≥ 0.25 mm²

V 1200

V 1500

Oil resistant

EN 50290-2-22 (TM54)

Temperature range (for flexible use)
(for stationary use)

-5°C to +70 °C

-40°C to +80 °C

Bending radius Ocassional movement)
(Fixed installation)

10 x OD (overall diameter)

4 x OD (overall diameter)

Other properties

Good UV resistance, chemical resistance
& flexibility

LiYY

Dimensions:

Cable Description	No. of Cores	Nominal Conductor Size (mm ²)	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)
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26 AWG (0.14 mm²)				
2 x 0.14	2	0.14	3.2	13
3 x 0.14	3	0.14	3.4	15
4 x 0.14	4	0.14	3.6	17
5 x 0.14	5	0.14	3.9	21
7 x 0.14	7	0.14	4.2	25
8 x 0.14	8	0.14	4.9	33
10 x 0.14	10	0.14	5.2	34
12 x 0.14	12	0.14	5.6	39
24 AWG (0.25 mm²)				
2 x 0.25	2	0.25	3.8	16
3 x 0.25	3	0.25	4.0	20
4 x 0.25	4	0.25	4.3	24
5 x 0.25	5	0.25	4.7	29
6 x 0.25	6	0.25	5.1	34
7 x 0.25	7	0.25	5.2	35
8 x 0.25	8	0.25	6.2	45
10 x 0.25	10	0.25	6.8	51
12 x 0.25	12	0.25	7.0	58
22 AWG (0.34 mm²)				
2 x 0.34	2	0.34	4.2	23
3 x 0.34	3	0.34	4.4	27
4 x 0.34	4	0.34	4.8	33
5 x 0.34	5	0.34	5.5	41
6 x 0.34	6	0.34	5.9	49
7 x 0.34	7	0.34	6.0	51
8 x 0.34	8	0.34	7.1	67
10 x 0.34	10	0.34	7.6	72
12 x 0.34	12	0.34	7.9	83
20 AWG (0.5 mm²)				
2 x 0.5	2	0.5	4.7	27
3 x 0.5	3	0.5	5.0	33
4 x 0.5	4	0.5	5.6	40
5 x 0.5	5	0.5	6.1	50
7 x 0.5	7	0.5	6.9	65
8 x 0.5	8	0.5	8.0	83
10 x 0.5	10	0.5	8.6	92
12 x 0.5	12	0.5	8.9	106
18 AWG (0.75 mm²)				
2 x 0.75	2	0.75	4.9	37
3 x 0.75	3	0.75	5.2	45
4 x 0.75	4	0.75	5.9	58
5 x 0.75	5	0.75	6.4	71
6 x 0.75	6	0.75	7.0	84
7 x 0.75	7	0.75	7.1	89
8 x 0.75	8	0.75	8.2	116
10 x 0.75	10	0.75	9.1	127
12 x 0.75	12	0.75	9.5	146
17 AWG (1 mm²)				
2 x 1	2	1	5.1	43
3 x 1	3	1	5.4	54

4 x 1	4	1	6.1	70
5 x 1	5	1	6.7	87
6 x 1	6	1	7.3	103
7 x 1	7	1	7.4	110
16 AWG (1.5 mm²)				
2 x 1.5	2	1.5	5.6	54
3 x 1.5	3	1.5	6.1	70
4 x 1.5	4	1.5	6.7	87
5 x 1.5	5	1.5	7.7	115
6 x 1.5	6	1.5	8.4	136
7 x 1.5	7	1.5	8.5	146



The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.