



## Li2YCY PiMF

### Application and Description

---

Li2YCY PiMF is particularly suitable for wiring data systems and controls in large industrial plants, for the transmission of sensitive signals and high bit rates for enhanced requirements in near-end cross-talk attenuation and high electrical interference in the circuits. For measurement value transmission and serial 2-wire interfaces, Cables of this type are intended for limited flexible use, and for fixed installation in dry and damp interiors

---

### Standard and Approval

---

CE Low Voltage Directive 73/23/EEC and 93/68/EEC, ROHS compliant

---

### Cable Construction

---

- Plain copper conductor
  - Stranded to DIN VDE 0295 cl. 5, IEC 60228 cl.5
  - PE core insulation type 2Y11 to DIN VDE 0207 part 2
  - Yellow and red core colours, pairs numbered as per DIN 47100
  - Two cores twisted into a pair
  - Plastic foil separator
  - Screening of pairs with plastic laminated metal foil with multi-wire tinned copper drain wire
  - Pairs (PiMF) twisted in layers
  - Plastic foil separator
  - 85% tinned copper braid
  - PVC outer jacket type YM2 grey to DIN VDE 0207 part 5, black color for Yv version
- 

### Technical Characteristics

---

- Working voltage: 250 volts



# Addison Industrial Cables

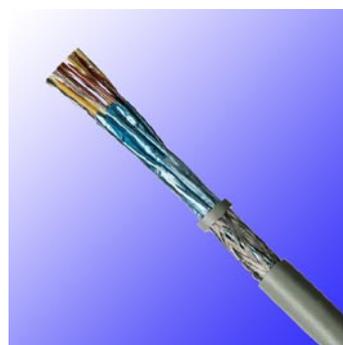
## German Standard (VDE)

- Test voltage:
  - Conductor to conductor 1200V
  - Conductor to shield 500V
  - Shield to shield 500V
- Minimum bending radius: 10 x Ø
- Flexing temperature: -5° C to +70° C
- Static temperature: -30° C to +70° C
- Flame retardant: IEC 60332.1-2
- Insulation resistance: 5GΩ x km
- Short-range crosstalk attenuation up to 1 MHz min. 75 dB
- Impedence at 1 MHz:
 

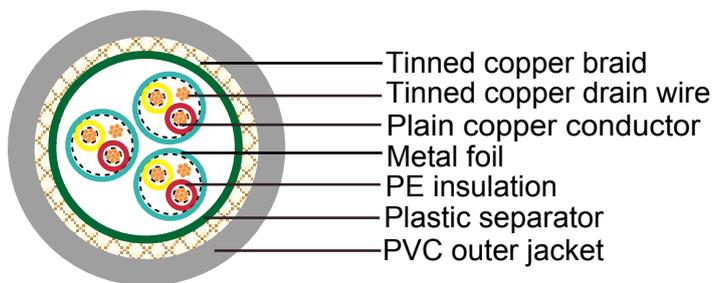
|                     |               |
|---------------------|---------------|
| 0.22mm <sup>2</sup> | approx. 80Ohm |
| 0.34mm <sup>2</sup> | approx. 85Ohm |
| 0.5mm <sup>2</sup>  | approx. 80Ohm |
| 1.0mm <sup>2</sup>  | approx. 75Ohm |
- Mutual capacitance at 800 Hz:
 

|                     |             |
|---------------------|-------------|
| 0.22mm <sup>2</sup> | max.70nF/km |
| 0.34mm <sup>2</sup> | max.70nF/km |
| 0.5mm <sup>2</sup>  | max.75nF/km |
| 1.0mm <sup>2</sup>  | max.85nF/km |
- Loop resistance:
 

|                     |                |
|---------------------|----------------|
| 0.22mm <sup>2</sup> | max.186Ohm/km  |
| 0.34mm <sup>2</sup> | max.115Ohm/km  |
| 0.5mm <sup>2</sup>  | max.78.4Ohm/km |
| 1.0mm <sup>2</sup>  | max.39Ohm/km   |



Li2YCY PiMF



Li2YCY PiMF

## Cable Parameter

| AWG      | No. of Cores x Nominal Cross Sectional Area # x mm <sup>2</sup> | Nominal Overall Diameter mm | Copper Weight kg / km | Cable Weight kg / km |
|----------|-----------------------------------------------------------------|-----------------------------|-----------------------|----------------------|
| 24(7/32) | 2 x 2 x 0.22                                                    | 7.7                         | 33                    | 38                   |
| 24(7/32) | 3 x 2 x 0.22                                                    | 7.8                         | 42                    | 57                   |
| 24(7/32) | 4 x 2 x 0.22                                                    | 9.3                         | 50                    | 83                   |
| 24(7/32) | 8 x 2 x 0.22                                                    | 10.8                        | 85                    | 133                  |
| 24(7/32) | 10 x 2 x 0.22                                                   | 11.6                        | 100                   | 164                  |
| 22(7/30) | 2 x 2 x 0.34                                                    | 9.0                         | 43                    | 70                   |
| 22(7/30) | 3 x 2 x 0.34                                                    | 9.1                         | 55                    | 85                   |



## German Standard (VDE)

| AWG       | No. of Cores x<br>Nominal Cross<br>Sectional Area<br># x mm <sup>2</sup> | Nominal Overall<br>Diameter<br>mm | Copper<br>Weight<br>kg / km | Cable<br>Weight<br>kg / km |
|-----------|--------------------------------------------------------------------------|-----------------------------------|-----------------------------|----------------------------|
| 22(7/30)  | 4 x 2 x 0.34                                                             | 9.4                               | 64                          | 103                        |
| 22(7/30)  | 8 x 2 x 0.34                                                             | 13.4                              | 127                         | 191                        |
| 22(7/30)  | 10 x 2 x 0.34                                                            | 14.3                              | 150                         | 230                        |
| 20(7/28)  | 2 x 2 x 0.5                                                              | 9.1                               | 50                          | 101                        |
| 20(7/28)  | 3 x 2 x 0.5                                                              | 10.0                              | 66                          | 120                        |
| 20(7/28)  | 4 x 2 x 0.5                                                              | 12.0                              | 108                         | 172                        |
| 20(7/28)  | 5 x 2 x 0.5                                                              | 13.1                              | 120                         | 201                        |
| 20(7/28)  | 6 x 2 x 0.5                                                              | 14.4                              | 148                         | 260                        |
| 20(7/28)  | 8 x 2 x 0.5                                                              | 15.0                              | 180                         | 310                        |
| 20(7/28)  | 10 x 2 x 0.5                                                             | 17.6                              | 236                         | 398                        |
| 20(7/28)  | 16 x 2 x 0.5                                                             | 21.2                              | 338                         | 515                        |
| 20(7/28)  | 20 x 2 x 0.5                                                             | 22.9                              | 394                         | 688                        |
| 20(7/28)  | 30 x 2 x 0.5                                                             | 27.9                              | 577                         | 980                        |
| 20(7/28)  | 40 x 2 x 0.5                                                             | 38.3                              | 684                         | 1390                       |
| 20(7/28)  | 50 x 2 x 0.5                                                             | 43.2                              | 834                         | 1860                       |
| 18(24/32) | 2 x 2 x 0.75                                                             | 10.4                              | 61                          | 117                        |
| 18(24/32) | 3 x 2 x 0.75                                                             | 11.3                              | 97                          | 142                        |
| 18(24/32) | 4 x 2 x 0.75                                                             | 14.0                              | 141                         | 240                        |
| 18(24/32) | 5 x 2 x 0.75                                                             | 15.1                              | 163                         | 304                        |
| 18(24/32) | 6 x 2 x 0.75                                                             | 16.8                              | 198                         | 352                        |
| 18(24/32) | 8 x 2 x 0.75                                                             | 17.2                              | 246                         | 415                        |
| 18(24/32) | 10 x 2 x 0.75                                                            | 19.8                              | 305                         | 505                        |
| 18(24/32) | 16 x 2 x 0.75                                                            | 24.0                              | 446                         | 732                        |
| 18(24/32) | 20 x 2 x 0.75                                                            | 25.6                              | 530                         | 860                        |
| 18(24/32) | 30 x 2 x 0.75                                                            | 30.9                              | 765                         | 1210                       |
| 17(32/32) | 2 x 2 x 1.0                                                              | 11.9                              | 72                          | 130                        |
| 17(32/32) | 3 x 2 x 1.0                                                              | 12.2                              | 104                         | 161                        |
| 17(32/32) | 4 x 2 x 1.0                                                              | 16.2                              | 186                         | 360                        |
| 17(32/32) | 5 x 2 x 1.0                                                              | 17.4                              | 231                         | 412                        |
| 17(32/32) | 6 x 2 x 1.0                                                              | 18.7                              | 260                         | 472                        |
| 17(32/32) | 8 x 2 x 1.0                                                              | 19.2                              | 322                         | 540                        |
| 17(32/32) | 10 x 2 x 1.0                                                             | 22.2                              | 382                         | 670                        |
| 17(32/32) | 16 x 2 x 1.0                                                             | 26.9                              | 578                         | 982                        |
| 17(32/32) | 20 x 2 x 1.0                                                             | 29.4                              | 710                         | 1240                       |
| 17(32/32) | 30 x 2 x 1.0                                                             | 35.4                              | 1050                        | 1720                       |
| 18(24/32) | 2 x 2 x 1.5                                                              | 12.8                              | 81                          | 164                        |
| 18(24/32) | 3 x 2 x 1.5                                                              | 14.1                              | 141                         | 197                        |
| 18(24/32) | 4 x 2 x 1.5                                                              | 17.4                              | 261                         | 480                        |
| 16(30/30) | 5 x 2 x 1.5                                                              | 18.4                              | 284                         | 516                        |
| 16(30/30) | 6 x 2 x 1.5                                                              | 20.1                              | 355                         | 590                        |
| 16(30/30) | 8 x 2 x 1.5                                                              | 20.7                              | 448                         | 696                        |
| 16(30/30) | 10 x 2 x 1.5                                                             | 23.9                              | 551                         | 874                        |
| 16(30/30) | 16 x 2 x 1.5                                                             | 29.7                              | 838                         | 1340                       |
| 16(30/30) | 20 x 2 x 1.5                                                             | 31.7                              | 1030                        | 1620                       |