



## Design

### Shielded quad LIY(ST) 4X0.35/1.25

- Stranded bare copper wire (22 AWG)
- Insulation of Polyvinylchloride (PVC)
- 4 wires twisted
- Alulaminare foil overlapped
- max. data transfer rate

ø 0.76 mm (0.030 in dia)  
ø 1.25 mm (0.049 in dia)

1 Mbit/s @ 40m  
125 kbit/s @ 100m

### Triple LIY 3X1.5/2.5

- Stranded bare copper wire (16 AWG)
- Insulation of Polyvinylchloride (PVC)
- 3 wires twisted
- Sequence of colors: BN-BU-GNYE
- Plastic tape overlapped
- Nominal voltage / current

ø 1.55 mm (0.061 in dia)  
ø 2.30 mm (0.091 in dia)

240 V / 10 A

### Coaxial element 02YSTKCY 1.12/3.1-50

- Inner conductor: Bare copper wire (17 AWG)
- Insulation of foamed Polyethylene (PE) with skin
- Copper foil overlapped, applied longitudinally
- Shield braiding of bare copper wires
- Coverage about 70%
- Jacket: Polyvinylchloride (PVC) BK

ø 1.12 mm (0.044 in dia)  
ø 3.1 mm (0.122 in dia)

ø 3.7 mm (0.146 in dia)  
ø (5.0 ±0.2) mm (0.197 ±0.008 in dia)

## Core

- 1 coaxial element
- 1 triple LIY 3X1.5/2.5 BN/BU/GNYE
- 2 quads LIY(ST) 4X0.35/1.25 WH/GN/BU/GY, YE/RD/BN/OG
- Plastic tape overlapped

ø 10.5 mm (0.413 in dia)

## Jacket

- Polyvinylchloride (PVC) BK

ø (12.5 ±0.6) mm (0.492 ±0.024 in dia)

## Electrical data at 20°C

- Conductor resistance (16AWG)
- Conductor resistance (22AWG)
- Insulation resistance
- Operating voltage (peak)
- Test voltage (wire/wire rms 50Hz 1min)
- Test voltage (wire/screen rms 50Hz 1min)

≤ 14 Ohm/km  
≤ 56 Ohm/km  
≥ 20 MOhm\*km  
≤ 100 V  
1000 V  
500 V





## Coaxial element 02YSTKCY 1.12/3.1-50

|  |               |
|--|---------------|
| • Conductor resistance   | ≤ 20.5 Ohm/km |
| • Insulation resistance  | ≥ 10 GOhm*km  |
| • Characteristic impedance   | (50 ±2) Ohm   |
| • Capacitance (1 kHz)  | 78 nF/km      |
| • Screening attenuation 1 GHz (DIN EN 50289-1-6 / triaxial method) | ≥ 90 dB       |
| • Relative velocity of propagation                                 | 85 %          |
| • Test voltage (wire/screen rms 50Hz 1min)                         | 1000 V        |

| Frequency (MHz)            | 10   | 100 | 500  | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 |
|----------------------------|------|-----|------|------|------|------|------|------|------|
| Attenuation typ. (dB/100m) | 2,93 | 9,4 | 21,6 | 31,1 | 45,1 | 56,4 | 66,2 | 75,1 | 83   |
| Mean. Power (W) at 40°C    | 1885 | 587 | 256  | 178  | 122  | 98   | 83   | 74   | 66   |

## Mechanical and thermal characteristics

- Insulating material acc. to DIN EN 50290-2-23 (VDE 0819), table 2/A (HD 624.3) (02Y)
- Insulating material acc. to DIN EN 50290-2-21 (VDE 0819), compound type TI52 (HD 624.1)
- Jacket material acc. to DIN EN 50290-2-22 (VDE 0819), compound type TM52 (HD 624.2)

## Other characteristics

RoHS compliant (Directive 2011/65/EC)

Permissible temperature range

- Transport and fixed installation
- Installation and flexible use

-30 °C (-22 °F) up to 80 °C (176 °F)  
-20 °C (-4 °F) up to 80 °C (176 °F)

- Min. bending radius allowed
- Weight about

repeated 8X ø, single 4X ø  
169 kg/km (114 lb/1000ft)

