

Category 5e Shielded Cable

4 Pair, 24 AWG, TIA/EIA 568-C.2 Patch

Product Construction:

Conductor:

- 4 pair, 24 AWG 7/32 tinned copper: Diameter: .024"

Insulation:

- Polyolefin: Diameter: .047"

Pairs:

- Two conductors twisted together (each pair twisted with a different lay length)
- Color code:
 - P1: White/Blue, Blue
 - P3: White/Green, Green
 - P2: White/Orange, Orange
 - P4: White/Brown, Brown

Binding:

- Polyester tape, 25% min. lap.

Inner Shield:

- Aluminum/polyester tape, 100% coverage

Outer Shield:

- Tinned copper braid, 80% coverage

Jacket:

- Polyrad® XT flame-retardant, low-smoke, irradiated Cross-linked Polyolefin (XLPO), .025" wall, Dark Gray: Diameter: .300"

Print (Including but not limited to):

- GENERAL CABLE® (F) LO24P0045664-5E 4PR/24 AWG SFTP CAT5E PATCH AAAAA* MO/YR** XXXXXX FT***
- *Order number
- **Date
- ***Footage markings every 2 ft

Applications:

- For high-speed data transmission. Tested to 100 MHz
- Category 5e construction is suitable for use in transit applications with flexible stranding, overall shield and a Polyrad® XT jacket

Features:

- Meets Category 5e electricals

Compliances:

Industry:

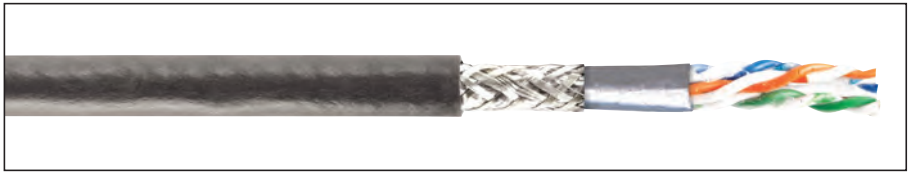
- TIA/EIA 568-C.2 Patch

Flame Test:

- 49 CFR Part 238 Appendix B for low-voltage wire and cable
- NYCT Type TX Test 11 per ICEA S-95-658-1999
- Type B per AAR RP-585 Paragraph 5.9.6

Other:

- BSS 7239
- ASTM E662



TRANSIT, 4 PAIR/24 AWG, SHIELDED FOIL TWISTED PAIR (SFTP) CAT 5e, LOW SMOKE

| CATALOG NUMBER | # OF PAIRS | COND. SIZE | NOMINAL INSULATION O.D. | NOMINAL JACKET THICKNESS | NOMINAL CABLE DIAMETER |
|-----------------|------------|-------------|-------------------------|--------------------------|------------------------|
| | | AWG | INCHES | INCHES | INCHES |
| LO24P0045664-5e | 4 | 24 AWG 7/32 | 0.047 | 0.025 | 0.300 |

ELECTRICAL CHARACTERISTICS

| FREQUENCY | INSERTION LOSS | NEXT | ACRF | RL |
|-----------|----------------|------|------|------|
| (MHz) | (dB/100 m) | (dB) | (dB) | (dB) |
| | max. | min. | min. | min. |
| 1 | 2.4 | 65.3 | 63.8 | 20.0 |
| 4 | 4.9 | 56.3 | 51.8 | 23.0 |
| 8 | 6.9 | 51.8 | 45.7 | 24.5 |
| 10 | 7.8 | 50.3 | 43.8 | 25.0 |
| 16 | 9.9 | 47.2 | 39.7 | 25.0 |
| 20 | 11.1 | 45.8 | 37.8 | 25.0 |
| 25 | 12.5 | 44.3 | 35.8 | 24.2 |
| 31.25 | 14.1 | 42.9 | 33.9 | 23.3 |
| 62.5 | 20.4 | 38.4 | 27.9 | 20.7 |
| 100 | 26.4 | 35.3 | 23.8 | 19.0 |

DC Resistance: 9.38 Ω /100 m (28.6 Ω/kft) Max.
DCR Unbalanced: 5% Max.
Mutual Capacitance: 55.8 pF/m (17 pF/ft) Max.
Capacitance Unbalanced: 330 pF/100 m (1 pF/ft) Max.
Characteristic Impedance: 100 Ω +/- 15 Ω (1-100 MHz)
Prop Delay (Skew): 45 ns/100 m Max.
Velocity of Propagation: 72% Nom.
Temp. & Voltage Rating: -55°C to +75°C / 600 V Max.



Phone: 866.248.7060
 www.generalcable.com

Category 5e Quad Shielded Cable

4 Conductor, 22 AWG, TIA/EIA 568-C.2 Patch



TRANSIT, 4 CONDUCTOR/22 AWG, SHIELDED FOIL CAT 5e, LOW-SMOKE

| CATALOG NUMBER | # OF COND. | COND. SIZE | NOMINAL INSULATION O.D. | NOMINAL JACKET THICKNESS | NOMINAL CABLE DIAMETER |
|----------------|------------|-------------|-------------------------|--------------------------|------------------------|
| | | AWG | INCHES | INCHES | INCHES |
| LO22C0045664 | 4 | 22 AWG 7/30 | 0.076 | 0.035 | 0.275 |

ELECTRICAL CHARACTERISTICS

| FREQUENCY (MHz) | INSERTION LOSS (dB/100 m) max. | NEXT (dB) min. | ACRF (dB) min. | RL (dB) min. |
|-----------------|--------------------------------|----------------|----------------|--------------|
| 1 | 2.4 | 65.3 | 63.8 | 20.0 |
| 4 | 4.9 | 56.3 | 51.8 | 23.0 |
| 8 | 6.9 | 51.8 | 45.7 | 24.5 |
| 10 | 7.8 | 50.3 | 43.8 | 25.0 |
| 16 | 9.9 | 47.2 | 39.7 | 25.0 |
| 20 | 11.1 | 45.8 | 37.8 | 25.0 |
| 25 | 12.5 | 44.3 | 35.8 | 24.2 |
| 31.25 | 14.1 | 42.9 | 33.9 | 23.3 |
| 62.5 | 20.4 | 38.4 | 27.9 | 20.7 |
| 100 | 26.4 | 35.3 | 23.8 | 19.0 |

DC Resistance: 9,38 Ω /100 m (28,6 Ω/kft) Max.
DCR Unbalanced: 5% Max.
Mutual Capacitance: 55,8 pF/m (17 pF/ft) Max.
Capacitance Unbalanced: 330 pF/100 m (1 pF/ft) Max.
Characteristic Impedance: 100 Ω +/- 15 Ω (1-100 MHz)
Prop Delay (Skew): 45 ns/100 m Max.
Velocity of Propagation: 72% Nom.
Temp. & Voltage Rating: -55°C to +75°C / 600 V Max.

Product Construction:

Conductor:

- 4 conductor, 22 AWG 7/30 tinned copper: Diameter: .030"

Insulation:

- Polyolefin: Diameter: .047"

Color Code:

- Conductor 1: White
- Conductor 2: Blue
- Conductor 3: Yellow
- Conductor 4: Orange

Inner Shield:

- Aluminum/polyester tape, 100% coverage

Outer Shield:

- Tinned copper braid, 95% coverage

Jacket:

- Flame-retardant, low-smoke, irradiated Cross-linked Polyolefin (XLPO), .035" wall, Dark Gray: Diameter: .275"

Print (Including but not limited to):

- GENERAL CABLE LO22C0045664 4 CDR 22 AWG CAT 5E 100MHZ DATA CABLE NFPA130 2010 600 V XXXX FEET MO/YR

Applications:

- For high-speed data transmission. Tested to 100 MHz
- Category 5e construction is suitable for use in transit applications with flexible stranding, overall shield and a low-smoke, irradiated Cross-linked Polyolefin jacket

Features:

- Meets Category 5e electricals

Compliances:

Industry:

- TIA/EIA 568-C.2 Patch

Flame Test:

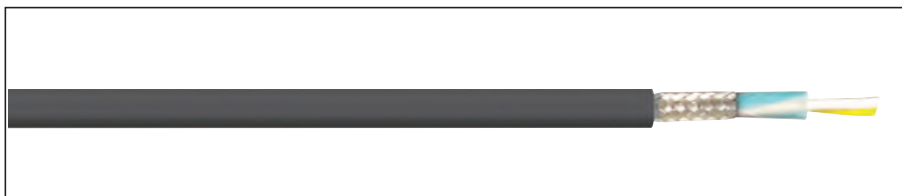
- 49 CFR Part 238 Appendix B for low-voltage wire and cable

Other:

- NFPA 130 STD 2010
- ASTM E662
- BSS 7239

Polyrad® XT Transit Data Communications Cables

General Cable offers a wide variety of transit data communications cables that meet UL 1581 VW-1 flammability requirements, ASTM E662 smoke density, and Boeing BSS 7239 and Bombardier SMP 800-C toxicity standards. Transit data communications cables are produced in multi-conductors, coaxial, and shielded twisted pairs. Our high-quality products are engineered with outstanding thermal stability at elevated temperatures as well as excellent performance in sub-zero conditions. An extra-tough irradiated thermoset jacket provides resistance to most oils, chemicals, and moisture but still allows for flexibility and free stripping. General Cable also has the ability to design products specifically catered to individual customer needs and requirements.



Product Construction:

Conductor:

- 20 AWG thru 12 AWG soft annealed tinned copper per ASTM B33, B8 and B172

Insulation:

- Low-smoke irradiated Cross-linked Polyolefin (XLPO)

Jacket

- Polyrad® XT flame-retardant, low-smoke irradiated Cross-linked Polyolefin (XLPO)

Print (Including but not limited to):

- GENERAL CABLE® (WC) POLYRAD® XT XX/COND XXAWG SHIELDED XXX OHM 110°C 600 V YEAR/MONTH

Options:

- Other data communications cables available upon request

Applications:

- Ideally suited for use where specific and stable electrical values are required
- Engineered and manufactured for both original equipment and retrofit use in electronic equipment

Features:

- Excellent flexibility and free stripping
- Outstanding thermal stability at elevated temperatures
- Excellent low-temperature performance; suitable for installation in sub-zero conditions
- Extra-tough, mechanically rugged irradiated thermoset jacket
- Resistant to most oils and chemicals

Compliances:

- Industry:**
 - RoHS Compliant
- Flame Test:**
 - VW-1
- Other:**
 - BSS 7239
 - SMP 800-C
 - ASTM E662

Packaging:

- Standard reel put-up

The data communications cables shown in the following tables are merely a sampling of General Cable's wide range of products. Other conductor sizes, designs and/or specific installation requirements are available to meet virtually all the cabling needs of the transit and locomotive industry. For more information, contact General Cable's Transit inside sales at info@generalcable.com.

100 OHM SHIELDED DATA CABLE

| CATALOG NUMBER | AWG | | NUMBER OF CONDUCTORS | INSULATED DIAMETER | | JACKET THICKNESS | | CABLE DIAMETER | | NET CABLE WEIGHT | |
|---|------|-----------|----------------------|--------------------|------|------------------|------|----------------|------|------------------|-------|
| | SIZE | STRANDING | | INCHES | mm | MILS | mm | INCHES | mm | LBS./1000' | kg/km |
| 387090 | 20 | 19/32 | 2 | 0,092 | 2,34 | 45 | 1,14 | 0,305 | 8,0 | 55 | 82 |
| Shield: 36 AWG Tinned Copper Braid - 95% Minimum Coverage | | | | | | | | | | | |
| Color Code: Yellow, White | | | | | | | | | | | |
| 387550 | 16 | 19/29 | 2 | 0,154 | 3,91 | 45 | 1,14 | 0,425 | 10,8 | 63 | 150 |
| Shield: 36 AWG Tinned Copper Braid - 95% Minimum Coverage + Aluminum/Mylar Tape | | | | | | | | | | | |
| Color Code: Yellow, White | | | | | | | | | | | |

120 OHM SHIELDED DATA CABLE

| | | | | | | | | | | | |
|---|----|-------|--------|-------|------|----|------|-------|------|-----|-----|
| 329960 | 20 | 19/32 | 2 | 0,114 | 2,90 | 45 | 1,14 | 0,342 | 8,7 | 62 | 92 |
| Shield: 36 AWG Tinned Copper Braid - 90% Minimum Coverage | | | | | | | | | | | |
| Color Code: Black, White | | | | | | | | | | | |
| 387540 | 18 | 19/30 | 2 | 0,173 | 4,40 | 45 | 1,14 | 0,460 | 11,7 | 99 | 147 |
| Shield: 36 AWG Tinned Copper Braid - 95% Minimum Coverage + Aluminum/Mylar Tape | | | | | | | | | | | |
| Color Code: Yellow, White | | | | | | | | | | | |
| 388500 | 18 | 19/30 | 3 | 0,173 | 4,40 | 45 | 1,14 | 0,470 | 11,9 | 83 | 124 |
| Shield: Aluminum/Mylar Tape + 22 AWG 7/30 Tinned Copper Drain Wire | | | | | | | | | | | |
| Color Code: White, Red, Green | | | | | | | | | | | |
| 329950 | 16 | 19/29 | 2 | 0,164 | 4,17 | 45 | 1,14 | 0,446 | 11,3 | 92 | 137 |
| Shield: 36 AWG Tinned Copper Braid - 95% Minimum Coverage + Aluminum/Mylar Tape | | | | | | | | | | | |
| Color Code: Yellow, White | | | | | | | | | | | |
| 388610 | 20 | 19/32 | 2/Pair | 0,108 | 2,74 | 45 | 1,14 | 0,510 | 13,0 | 111 | 165 |
| Shield: 36 AWG Tinned Copper Braid - 90% Minimum Coverage + Aluminum/Mylar Tape | | | | | | | | | | | |
| Color Code: White, Blue + Red, Black | | | | | | | | | | | |