

PRODUCT HIGHLIGHTS

- REACH & RoHS 2 compliant
- Made in U.S.A.
- UL Verified to ANSI/TIA 568.2-D
- Low Smoke Plenum construction
- Guaranteed minimum performance
- Enhanced performance beyond TIA Standard
- Tested from 1 to 555 MHz

TEMPERATURE RANGE

- Storage Temperature**
-40°C to +60°C
(-40°F to +140°F)
- Installation Temperature**
0°C to +60°C
(+32°F to +140°F)
- Operation Temperature**
-20°C to +75°C
(-4°F to +167°F)

APPLICATIONS

- HDBase-T A & B
- 5 Gigabit Ethernet (IEEE 802.3bz)
- 2.5 Gigabit Ethernet (IEEE 802.3bz)
- Gigabit Ethernet (IEEE 802.3ab)
- 100 Mbps Ethernet (IEEE 802.3u)
- 1000 Mbps ATM
- 622 Mbps ATM
- 15W PoE (IEEE 802.3af)
- 30W PoE+ (IEEE 802.3at)
- 60W PoE++ (IEEE 802.3bt Type 3)
- 100W PoE++ (IEEE 802.3bt Type 4)
- 100W PoE++ (IEEE 802.3bt Type 4)
- 60W PoE++ (IEEE 802.3bt Type 3)
- 100W PoE++ (IEEE 802.3bt Type 4)

PACKAGING

- 1,000 feet (305 m)
- Reverse sequential footage markings standard on each 1,000 foot package
- Unit/pallet: 32 Reels
CMP Carton Weight (lbs): 29.04
CMP Product Weight (lbs): 25.74

*weight may vary, call for CMR information

| TIA Parameter | Guaranteed Headroom |
|---------------|---------------------|
| PSANEXT loss | +3 dB |
| PSACRF | +3 dB |
| NEXT loss | +3 dB |
| ACRF | +3 dB |

Plenum

Primary Insulation: Plenum-rated fluoropolymer
Overall Jacket: Low-smoke, flame-retardant thermoplastic
Star Filler: Plenum-rated polymer

Riser

Primary Insulation: Polyolefin
Overall Jacket: Flame-retardant Thermoplastic
Star Filler: Flame-retardant Thermoplastic

Cat 6 Plus Parts Specifications

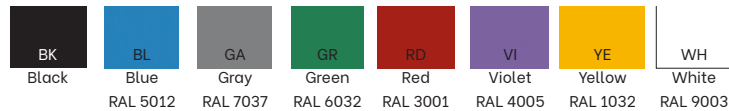
| | Part Number | # of Pairs | Calculated Cable O.D. | | Cable Weight | | c(UL) us Listed Type |
|---------------|-------------|------------|-----------------------|-----|--------------|----------|------------------------------|
| | | | inches | mm | lbs/1000ft | kg/305 m | |
| PLENUM | 30025-8-XXY | 4 | 0.20 | 5.1 | 25.74 | 11.67 | CMP (NFPA 262), CSA Type FT6 |

| | Part Number | # of Pairs | Calculated Cable O.D. | | Cable Weight | | c(UL) us Listed Type |
|--------------|-------------|------------|-----------------------|------|--------------|----------|-----------------------------|
| | | | inches | mm | lbs/1000ft | kg/305 m | |
| RISER | 30024-8-XXY | 4 | 0.23 | 5.84 | 22.87 | 10.37 | CMR (UL 1666), CSA Type FT4 |

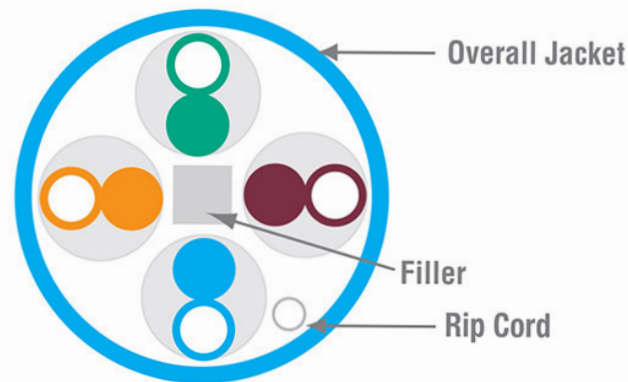
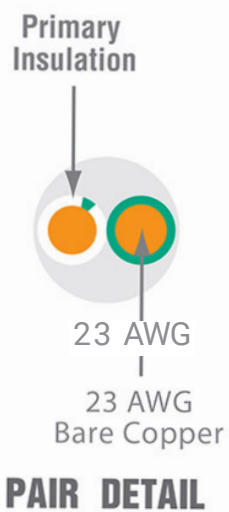
Building a Part Number

| Base Part Number Ex. | No. of Conductors | Jacket Color | Reel Type |
|----------------------|-------------------|--------------|-----------|
| 30025 | 8 | XX | Y |

Jacket Colors (XX):



Reel Type (Y):



Cat 6 Plus Transmission Specifications

ANSI/TIA-568.2-D Category 6 Verified
ISO/IEC 11801, 2nd ed. Class EA Compliant

| Freq. (MHz) | Ins. Loss | | NEXT | | PSNEXT | | ACR | | PSACR | | ACRF | | PSACRF | | Return Loss | |
|-------------|-----------|------|------|------|--------|------|------|------|-------|------|------|------|--------|------|-------------|------|
| | Std. | Max. | Std. | Min. | Std. | Min. | Cal. | Min. | Cal. | Min. | Std. | Min. | Std. | Min. | Std. | Min. |
| 1 | 2.0 | 2.0 | 74.3 | 77.3 | 72.3 | 75.3 | 72.3 | 75.3 | 70.3 | 73.3 | 67.8 | 70.8 | 64.8 | 67.8 | 20.0 | 20.0 |
| 4 | 3.8 | 3.8 | 65.3 | 68.3 | 63.3 | 66.3 | 61.5 | 64.5 | 59.5 | 62.5 | 55.8 | 58.8 | 52.8 | 55.8 | 23.0 | 23.0 |
| 8 | 5.3 | 5.3 | 60.8 | 63.8 | 58.8 | 61.8 | 55.4 | 58.4 | 53.4 | 56.4 | 49.7 | 52.7 | 46.7 | 49.7 | 24.5 | 24.5 |
| 10 | 6.0 | 6.0 | 59.3 | 62.3 | 57.3 | 60.3 | 53.3 | 56.3 | 51.3 | 54.3 | 47.8 | 50.8 | 44.8 | 47.8 | 25.0 | 25.0 |
| 16 | 7.6 | 7.6 | 56.2 | 59.2 | 54.2 | 57.2 | 48.7 | 51.7 | 46.7 | 49.7 | 43.7 | 46.7 | 40.7 | 43.7 | 25.0 | 25.0 |
| 31.25 | 10.7 | 10.7 | 51.9 | 54.9 | 49.9 | 52.9 | 41.2 | 44.2 | 39.2 | 42.2 | 37.9 | 40.9 | 34.9 | 37.9 | 23.6 | 23.6 |
| 62.5 | 15.4 | 15.4 | 47.4 | 50.4 | 45.4 | 48.4 | 32.0 | 35.0 | 30.0 | 33.0 | 31.9 | 34.9 | 28.9 | 31.9 | 21.5 | 21.5 |
| 100 | 19.8 | 19.8 | 44.3 | 47.3 | 42.3 | 45.3 | 24.5 | 27.5 | 22.5 | 25.5 | 27.8 | 30.8 | 24.8 | 27.8 | 20.1 | 20.1 |
| 200 | 29.0 | 29.0 | 39.8 | 42.8 | 37.8 | 40.8 | 10.8 | 13.8 | 8.8 | 11.8 | 21.8 | 24.8 | 18.8 | 21.8 | 18.0 | 18.0 |
| 250 | 32.8 | 32.8 | 38.3 | 41.3 | 36.3 | 39.3 | 5.5 | 8.5 | 3.5 | 6.5 | 19.8 | 22.8 | 16.8 | 19.8 | 17.3 | 17.3 |
| 300* | - | 36.4 | - | 40.1 | - | 38.1 | - | 3.7 | - | 1.7 | - | 21.3 | - | 18.3 | - | 16.8 |
| 350* | - | 39.8 | - | 39.1 | - | 37.1 | - | - | - | - | - | 19.9 | - | 16.9 | - | 16.3 |
| 400* | - | 43.0 | - | 39.3 | - | 36.3 | - | - | - | - | - | 18.8 | - | 15.8 | - | 15.9 |
| 500* | - | 48.9 | - | 36.8 | - | 34.8 | - | - | - | - | - | 16.8 | - | 13.8 | - | 15.2 |
| 555* | - | 52.0 | - | 36.1 | - | 34.1 | - | - | - | - | - | 15.9 | - | 12.9 | - | 14.9 |

*Frequencies beyond the TIA and ISO requirements are for information only. All values are dB/100m.

ELECTRICAL CHARACTERISTICS

| | |
|--|----------------------------|
| Input Impedance: | 100 ± 15Ω (1.0 to 250 MHz) |
| Maximum Conductor Resistance: | 9.38 Ω/100 meters @ 20°C |
| Maximum Resistance Unbalance: | 5% |
| Maximum Capacitance Unbalance: | 330 pF/100 meters |
| Maximum Delay Skew: | 45 ns/100 meters |
| Nominal Velocity Of Propagation (Nvp): | 70%, Plenum 68%, Riser |
| Voltage Rating: | 300 Volts |

CABLE AMPACITY CHART

| Bundle Size | 1 | 2-7 | 8-19 | 20-37 | 38-61 | 62-91 | 92-192 |
|-------------|------|------|------|-------|-------|-------|--------|
| Cable Temp | 75°C | 75°C | 75°C | 75°C | 75°C | 75°C | 75°C |
| 23 AWG | 2.5 | 1.5 | 1.1 | 0.8 | 0.7 | 0.7 | 0.5 |

The table above is derived from the one approved by the National Fire Protection Agency and used in the National Electrical Code, NFPA-70. The complete table can be found in sections 725.144 and 800 Communication Circuits of the code. The table identifies the ampacity of each conductor (in amperes) in a 4-pair Class 2 or Class 3 data cable. Ambient temperature used for development of the table is 30°C (86°F) with all conductors in all cables carrying current. The table is based on 60°C (140°F), 75°C (167°F) and 90°C (194°F) rated cables. All cable temps are operational temp ratings. Cables with temp ratings above 90°C would deliver additional power handling capacity.

Proterial Cable America, Inc. is continuously improving the performance of our products and the accuracy of the information provided. Due to this, we reserve the right to modify, revise, correct, or change products without notice. Thank you for your understanding.

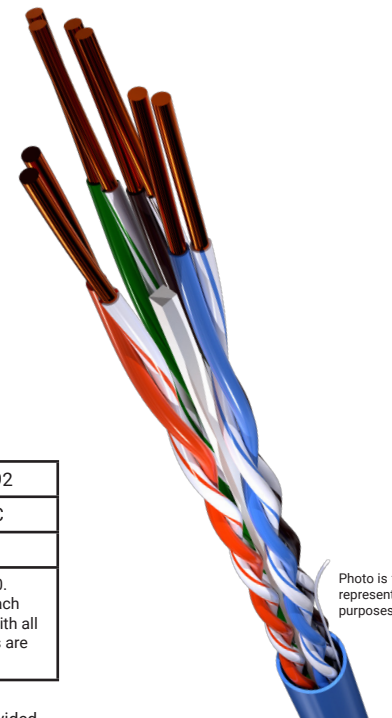


Photo is for representation purposes only.

