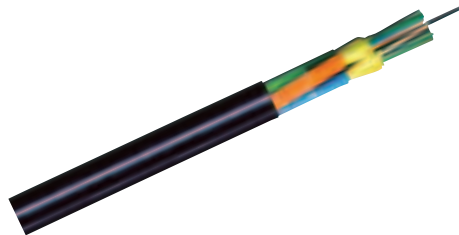
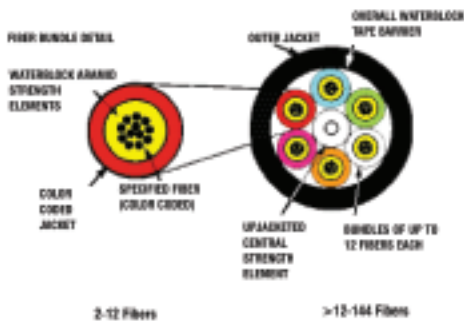


Indoor/Outdoor Tight Buffer Distribution Cable



**Indoor/Outdoor
Tight Buffer Distribution Cable**



Fiber Bundle Detail

Indoor/outdoor 900 µm tight buffered fiber optic cable which is fully compliant with industry standard specification: ICEA S-104-696 "Standard for Indoor/Outdoor Optical Fiber Cable". The cable consists of 900 µm color coded buffered fibers which are surrounded by water-swappable aramid strength members, with a ripcord, under an overall UV-resistant, flame-retardant black jacket. For cables with fiber counts over 24, bundles of 6 or 12 fibers are utilized. An overall water-swappable tape barrier protects the interstices from axial moisture migration. These cables are suitable for duct and aerial installations with no need for costly transition points at the building entrance.

Features & Benefits

- > 900 µm tight buffered 2 to 144 fiber cables
- > Fibers and sub-units are color coded for ease of identification
- > Fully water-blocked for outdoor applications
- > No breakout kits required for terminations
- > Durable flame-retardant and UV-resistant black outer jacket
- > UL Riser & Plenum rated OFNR/OFNP for versatile use
- > Meets ICEA S-104-696 test criteria
- > Also available in Breakout constructions.

Options

- > Mine safety and health administration (MSHA) approved cables
- > Available in 50 µm, 62.5 µm, single-mode hybrid constructions
- > LSZH Riser rated constructions
- > Available in UV-resistant colored jackets
- > Available with aluminum or steel interlock armor

Technical Specifications

| | | |
|------------------------|---------------------------|---|
| Crush Resistance | (EIA-455-41) | 220 N/cm |
| Impact Resistance | (EIA-455-25) | 2000 impacts w/1.6 N-m |
| Flexure | (EIA-455-104) | 2000 cycles min. |
| Water Penetration Test | (EIA-455-82) | Passed |
| Min. Bend Radius | Long term-no load | 10x cable diameter |
| Min. Bend Radius | Short term-load | 15x cable diameter |
| Operating Temp. | - | -40°c to +70°c |
| Installation Temp. | - | -10°c to +60°c (Riser) 0°c to +60°c (Plenum) |
| Storage Temp. | - | -40°c to +80°c |
| UL/cUL Rated | Type OFNR/OFN FT4 (Riser) | Type OFNP/OFN FT6 (Plenum) |
| Flame Resistance | UL 1666 (Riser) passed | UL 910 (Plenum) passed |



DATA Sheet

Indoor/Outdoor Tight Buffer Distribution Cable

Optical Specification

| Grade | OM1 2 | OM1 3 | OM2 4 | OM3 5 | OM3 6 | SM2 |
|--|-------------|-------------|-----------|------------------------|------------------------|-----------------------------------|
| Glass Type | 62.5/125 MM | 62.5/125 MM | 50/125 MM | 50/125 MM | 50/125 MM | Single-Mode Enhanced ⁵ |
| Part Number Code (X) | B | D | A | C | E | W |
| Operating Wavelength (nm) | 850/1300 | 850/1300 | 850/1300 | 850/1300 | 850/1300 | 1310/1550 |
| Min. OFL ¹ Bandwidth (MHz-km) | 200/500 | 200/500 | 500/500 | 1500/500 | 3000/500 | – |
| Min. Laser ² Bandwidth (MHz-km) | 220/500 | 385/500 | 510/500 | 2000/500 | 4700/500 | – |
| Max. Attenuation | | | | | | |
| Tight Buffered (dB/km) | 3.50/1.25 | 3.50/1.25 | 3.50/1.25 | 3.50/1.25 | 3.50/1.25 | 0.80/0.50 |
| 100 Mbit Fast Ethernet | | | | | | |
| Min. Link Length | | | | | | |
| (meters S/L/E ³) | 300/2000 | 300/2000 | 300/2000 | 300/2000 | 300/2000 | 5000/– |
| 1 Gigabit Ethernet | | | | | | |
| Min. Link Length | | | | | | |
| (meters S/L/E ³) | 300/550 | 500/1000 | 600/600 | 1000 ⁴ /600 | 1000 ⁴ /600 | 5000/– |
| 10 Gigabit Ethernet | | | | | | |
| Min. Link Length | | | | | | |
| (meters S/L/E ³) | 33/300 | 33/300 | 82/300 | 300/300 | 550/300 | 10,000/40,000 |

1 OFL – Overfilled Launch

2 Effective Modal Bandwidth, determined by RML or DMD performance specifications

3 S/L/E – Short wavelength (850 nm) / Long wavelength (1310 nm) / Extra long wavelength (1550 nm)

4 >2000 meters for engineered links

5 Low water peak Single-Mode suitable for CWDM use complies with ITU G.652.c/d

Ordering Information

| ORDERING NUMBER | FIBER COUNT | OUTSIDE DIAMETER | | WEIGHT | | MIN. BEND RADIUS | | | | MAX. LOAD (INST.) | |
|-----------------|-------------|------------------|------|--------|---------|------------------|-----|-----------------|-----|-------------------|------|
| | | MM | IN | KG/ KM | LBS/ M' | SHORT TERM CM | IN. | LONG TERM CM | IN. | NEWTONS | LBS. |
| M9X039T | 6 | 5.59 | .220 | 28 | 19 | 8.4 | 3.3 | 5.6 | 2.2 | 1335 | 300 |
| M9X045T | 6 | 4.83 | .190 | 24 | 16 | 7.6 | 3.0 | 5.1 | 2.0 | 1335 | 300 |
| M9X042T | 12 | 6.48 | .255 | 40 | 27 | 9.6 | 3.8 | 6.6 | 2.6 | 1335 | 300 |
| M9X048T | 12 | 5.72 | .225 | 33 | 22 | 8.6 | 3.4 | 5.8 | 2.3 | 1335 | 300 |
| M9X602T | 24 | 8.26 | .325 | 63 | 42 | 12.4 | 4.9 | 8.4 | 3.3 | 2700 | 600 |
| M9X612T | 24 | 8.38 | .330 | 60 | 40 | 12.4 | 4.9 | 8.4 | 3.3 | 2700 | 600 |
| M9X604T | 36 | 16.64 | .655 | 210 | 141 | 25.0 | 9.8 | 16.6 | 6.6 | 2700 | 600 |
| M9X614T | 36 | 15.37 | .605 | 201 | 135 | 23.1 | 9.1 | 15.4 | 6.1 | 2700 | 600 |
| M9X606T | 48 | 16.21 | .638 | 195 | 131 | 24.3 | 9.6 | 16.2 | 6.4 | 2700 | 600 |
| M9X616T | 48 | 15.49 | .610 | 195 | 132 | 23.2 | 9.2 | 15.5 | 6.1 | 2700 | 600 |

Also available in Breakout constructions. For "X" in part number see optical characteristics above. Other fiber counts are also available.

Shaded parts are plenum; non-shaded parts are non-plenum.

For More Information

For any other product information call: 1-800-BELDEN-1 or visit us at www.Belden.com

All information is subject to change without notice, since Belden reserves the right to change its products as progress in engineering and manufacturing methods or other circumstances may warrant.