

FIBER IN CONDUIT (FIC)

OCC's durable DX-Series and TL-Series construction fiber can now be combined with smoothwall High Density Polyethylene (HDPE) Conduit. OCC's Fiber In Conduit (FIC) is a durable highquality product for direct burial and horizontal directional drilling applications. OCC's Fiber in Conduit protects the cable from effects of soil, chemical and rodent damage during installation and backfill - all in one product.

CONDUIT CHARACTERISTICS

| CONDUIT Type | SIZE | MIN I.D | NOMINAL O.D | MEAN WALL | WEIGHT (LBS/FT) |
|-----------------|-------|------------|----------------|-----------|--------------------|
| SDR 13.5 | 1.00" | 1.080 | 1.315 | 0.107 | 0.1672 |
| SDR 11 | 1.00" | 1.036 | 1.315 | 0.130 | 0.1993 |
| SDR 13.5 | 1.25" | 1.374 | 1.660 | 0.133 | 0.2628 |
| SDR 11 | 1.25" | 1.318 | 1.660 | 0.161 | 0.3123 |

FIBER IN CONDUIT FEATURES

- > Available with 1.00" and 1.25" smoothwall SDR 13.5 & 11 HDPE conduit
- > Easy to install from a reel to accommodate long cable length requirements (up to 10,000 feet per reel)
- > Chemical, water, crush, crack and gopher resistant (1.25") – making it ideal for lowtemperature installations

- > OCC's DX-Series inner cable is suitable for direct field termination
- > 50% labor savings when FIC is used in an installation
- > Available in singlemode and multimode fibers
- > Fiber optic cable available in a PVC (D-Jacket) or Polyethylene (A-Jacket) option
- > Other conduit options available, please contact OCC Sales Rep

ORDERING INFORMATION

TL-SERIES HIGH-DENSITY CABLE CHARACTERISTICS

| FIDED | DIAMETER | WEIGHT | TENSIL | E LOAD | MINIMUM BEND RADIUS | | | |
|----------------|---------------------|------------------------|-------------------------|------------------------|-------------------------|----------------------|--|--|
| FIBER COUNT | DIAMETER MM (IN) | KG/KM (LBS/1,000FT) | INSTALLATION N (LBS) | OPERATIONAL N (LBS) | INSTALLATION CM (IN) | LONG-TERM CM (IN) | | |
| 12-48 | 10.2 (0.40) | 63 (42) | 2700 (600) | 800 (180) | 15.3 (6.0) | 10.2 (4.0) | | |
| 72 | 10.5 (0.43) | 70 (47) | 2700 (600) | 800 (180) | 15.8 (6.2) | 10.5 (4.1) | | |
| 96 | 12.0 (0.47) | 90 (61) | 2700 (600) | 800 (180) | 18.0 (7.1) | 12.0 (4.7) | | |
| 144 | 15.7 (0.62) | 154 (104) | 2700 (600) | 800 (180) | 23.6 (9.3) | 15.7 (6.2) | | |
| 288 | 18.2 (0.72) | 177 (119) | 2700 (600) | 800 (180) | 27.3 (10.8) | 18.2 (7.2) | | |

| SER | RIES | S FIBER COUNT | | IT | JACKET FIBER CODE TYPE | | ÞΕ | 245µm JACKE FIBER COLO | | RATING | REINFORCEMENT | | |
|-----|------|---------------|---|----|------------------------|---|----|---------------------------|----|--------|---------------|----|----|
| | : | | | | | | | : | | | | : | : |
| Т | L | | | | Α | S | L | Α | J | | Α | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |



3-5 Fiber Count: **012-288**

6 Polyethylene = A

7-9 Fiber Type: Single-Mode, SLA (G657.A1)

10 Loose Tube with 245µm Fiber = **J**

HDPE Jacket Color: Orange = 0; 11

Black = K

12 Rating: None/Outdoor = A

13-14 SDR 13.5 HDPE Duct: X1 = 1 inch;

X3 = 1 inch; **X4** = 1.25 inch

X2 = 1.25 inch; SDR 11 HDPE Duct



24 Fiber TL-Series Cable with Polyethylene Jacket, Single-Mode Fiber Bend Insensitive (G657.A1) with Example: SDR 13.5 1.25" HDPE Orange Duct

L A J O A X 2





DX-SERIES CABLE CHARACTERISTICS (D-JACKET)

| FIDED | DIAMETER | WEIGHT | TENSIL | E LOAD | MINIMUM BEND RADIUS | | | |
|----------------|---------------------|------------------------|-------------------------|------------------------|-------------------------|----------------------|--|--|
| FIBER COUNT | DIAMETER MM (IN) | KG/KM (LBS/1,000FT) | INSTALLATION N (LBS) | OPERATIONAL N (LBS) | INSTALLATION CM (IN) | LONG-TERM CM (IN) | | |
| 6 | 5.7 (0.22) | 31 (21) | 1,400 (310) | 450 (100) | 8.6 (3.4) | 5.7 (2.2) | | |
| 12 | 6.5 (0.26) | 38 (25) | 2,700 (600) | 600 (135) | 9.8 (3.9) | 6.5 (2.6) | | |
| 24 | 8.9 (0.35) | 66 (44) | 3,000 (670) | 1,000 (220) | 13.4 (5.3) | 8.9 (3.5) | | |

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FIBER IN CONDUIT APPLICATIONS

- Ideal for wind and solar SCADA network systems
- > Underground utility networks
- > Offers real-time data communication to monitor wind-turbine operations
- Installation in underground duct for data transmission between nodes or hubs
- Ideal for direct burial applications requiring an all-dielectric solution

ORDERING INFORMATION

| SERIES FIBER COUN | | т | JACKET TYPE | | FIBER TYPE | | FIBER UNIT | JACKET COLOR | RATING | REINFOR | CEMENT | | |
|-------------------|---|-----|----------------|---|---------------|---|---------------|-----------------|--------|---------|--------|----|-----|
| | | . : | | | | | | | 1 1 | 1 1 | 1 1 | : | - 1 |
| D | X | | | | | | | | 9 | | Α | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

Digit No:

- 1 2 Distribution Series Laser Ultra-Fox = **DX**
- 3 5 Fiber Count = **006-024**
- 6 Jacket Type: Polyethylene = **A**; PVC = **D**
- 7 9 Fiber Type:

Single-Mode = SLA (G657.A1);

Multimode = WLS (62.5μm OM1), ALT (50μm OM3), ALE (50μm OM4)

- 10 Ultra-Fox Fiber with 900μm Tight-Buffer = **9**
- 11 HDPE Jacket Color: Orange = 0, Black = K
- 12 Rating: None/Outdoor = A
- 13 14 SDR 13.5 HDPE Duct: 1.00 inch = **X1**; 1.25 inch = **X2**; SDR 11 HDPE Duct: 1.00 inch = **X3**; 1.25 inch = **X4**



Example: 24-Fiber DX-Series Distribution Cable with PVC Jacket, Single-Mode Fiber Bend Insensitive (G657.A1), with 1.25" SDR 13.5 HDPE Orange Conduit

D X 0 2 4 D S L A 9 0 A X 2

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