

OCC's durable DX-Series and HC-Series construction fiber can now be combined with smoothwall High Density Polyethylene (HDPE) Conduit. OCC's Fiber In Conduit (FIC) is a durable high-quality 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. By combining OCC fiber optic cable and conduit in one product (FIC) during the manufacturing process, we can help installers and end-users save time and money on any project.

## 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

## ORDERING INFORMATION

### HC-SERIES HIGH-DENSITY CABLE CHARACTERISTICS

JACKET TYPE	FIBER COUNT	DIAMETER MM (IN)	WEIGHT KG/KM (LBS/1,000FT)	TENSILE LOAD		MINIMUM BEND RADIUS	
				INSTALLATION N (LBS)	OPERATIONAL N (LBS)	INSTALLATION CM (IN)	LONG-TERM CM (IN)
A	24-48	7.6 (0.30)	75 (50)	2,700 (600)	600 (135)	11.4 (4.5)	7.6 (3.0)
D	12-48	7.6 (0.30)	72 (48)	2,700 (600)	600 (135)	11.4 (4.5)	7.6 (3.0)

SERIES	FIBER COUNT	JACKET TYPE	FIBER TYPE	FIBER UNIT	JACKET COLOR	RATING	REINFORCEMENT
H	C				C	A	
1	2	3	4	5	6	7	8
9	10	11	12	13	14		

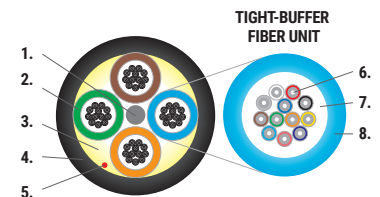
**Digit No:** 1 – 2 High Count Series with 12-Fiber Bundled Fiber Units 2.0mm in Diameter = **HC**  
 3 – 5 Fiber Count: **12-48**  
 6 Inner Jacket Types: Polyethylene = **A**, Indoor/Outdoor PVC = **D** (A-Jacket not available in 12-Fiber)  
 7 – 9 Fiber type: Single-Mode **SLA** (G657.A1); Multimode **WLS** (62.5µm OM1), **ALT** (50µm OM3), **ALE** (50µm OM4)  
 10 Jacketed Fiber Unit: No Direct MTP Terminations = **C**  
 11 HDPE Jacket Color: Orange = **O**, 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:** 48-Fiber HC-Series Cable with Polyethylene Jacket, Single-Mode Fiber Bend Insensitive (G657.A1), with 1.25" HDPE Orange Conduit

H	C	0	4	8	A	S	L	A	C	O	A	X	2
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## 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 low-temperature 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 single-mode and multimode fibers
- > Fiber optic cable available in a PVC (D-Jacket) or Polyethylene (A-Jacket) option



1. Central Filler/Strength Member
2. Tight-Buffer Fiber Unit
3. Aramid Strength Member
4. Outer Jacket
5. Ripcord

### TIGHT-BUFFER FIBER UNIT

6. 250µm Acrylate Fiber
7. Fiber Unit
8. Tight-Buffer Fiber Unit



## DX-SERIES CABLE CHARACTERISTICS (D-JACKET)

FIBER COUNT	DIAMETER MM (IN)	WEIGHT KG/KM (LBS/1,000FT)	TENSILE LOAD		MINIMUM BEND RADIUS	
			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)

## DX-SERIES CABLE CHARACTERISTICS (A-JACKET)

FIBER COUNT	DIAMETER MM (IN)	WEIGHT KG/KM (LBS/1,000FT)	TENSILE LOAD		MINIMUM BEND RADIUS	
			INSTALLATION N (LBS)	OPERATIONAL N (LBS)	INSTALLATION CM (IN)	LONG-TERM CM (IN)
6	6.3 (0.25)	29 (20)	2,670 (600)	890 (200)	12.6 (5.0)	6.3 (2.5)
12	7.9 (0.31)	53 (36)	2,800 (630)	900 (202)	15.8 (6.2)	7.9 (3.1)
24	9.5 (0.37)	77 (52)	3,000 (670)	1,000 (220)	19.0 (7.5)	9.5 (3.7)

## 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

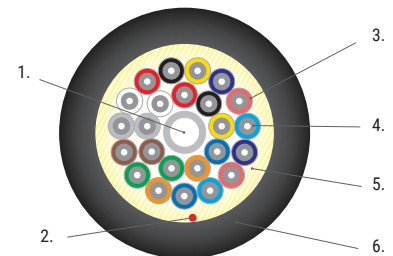
## ORDERING INFORMATION

SERIES	FIBER COUNT	JACKET TYPE	FIBER TYPE	FIBER UNIT	JACKET COLOR	RATING	REINFORCEMENT
D	X			9		A	
1	2	3	4	5	6	7	8

- 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 = **O**, 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	O	A	X	2
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1. Central Strength Member
2. Ripcord
3. 900µm Tight-Buffered Optical Fiber
4. Acrylate Fiber Coating
5. Water Blocking Aramid Yarn Strength Members
6. Indoor/Outdoor Low-Smoke PVC Jacket

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