



Description

HCS DataLight series includes a complete line of fiberoptic cables for high transmission rates including voice, data and video. All HCS DataLight cables are produced and rigorously tested to conform to most international standards.

HCS DataLight Indoor/Outdoor Multi-Loose Tube (MLT) cable series provides outstanding all-dielectric design for indoor and outdoor installations in harsh conditions.

These cables consist of 4-288 color-coded bare fibers (250 microns) in up to 24 jell-filled loose tubes.

The loose tubes are cabled concentrically around an all dielectric central strength member and jacketed with black, UV resistant PE or LSOH compound.

HCS DataLight cables fully conform to and provide a substantial margin above all relevant TIA and IEC standards.

Optional fibers available: Multimode 50/125 microns (OM2, OM3, OM4 & OM5), 62.5/125 microns and Singlemode fibers.

Applications

HCS DataLight cables can be used for various application including the following:

- Long haul outside plant telephone, CATV and data-transmission cable
- Direct burial and duct installation cable
- Campus distribution cable

HCS DataLight cables support all presently available LAN applications, including the IEEE802.3z protocols for Gigabit Ethernet, 1000BASE-SX (Short wavelength Gigabit Ethernet) 1000BASE-LX (Long wavelength Gigabit Ethernet) & IEEE 802.3ae 10GBASE-SR/SW 10GBASE-LX4 (10 Gigabit Ethernet).

Qualifications and Approvals

HCS DataLight Cables are tested and verified for full compliance with the following standards:

- ANSI/TIA-568.3-E
- ISO/IEC 11801 (2nd Edition)
- CENELEC EN50173
- TIA-455
- IEC 60332-1
- IEC 60754
- IEC 60793
- IEC 60794

Benefits & Features

- Exceptional material properties and cable design - Providing a unique Century™ Lifetime Warranty.
- UV and water resistant construction - Providing a single cable suitable for many outdoor locations.
- All-dielectric construction - Providing perfect EMC (Electro Magnetic Compatibility) and total noise immunity.
- Crisp and clear color coding - Providing positive fiber identification and ease of termination.
- Descending sequential meter mark - Providing easy stock and left-over handling.
- Batch number printed every meter - Providing fast retrieval of test results from data-base.
- A comprehensive product range - Providing all state-of-the-art cable constructions.
- Unique DoubleSafe™ Quality Assurance Program - Providing lowest rejection rate available.

Indoor/Outdoor Dielectric Multi-Loose Tube Fiber Optic Cables

DataLight MLT

OPTIONAL CONSTRUCTIONS

HCS DataLight Outdoor MLT Cables contain up to 288 color-coded, 250 micron bare optical fibers. 4-12 color-coded bare fibers are contained in each jell-filled loose tube. All loose tubes are cabled (with fillers as needed to preserve the cable geometry) around a solid, all dielectric central strength member and the interstices are filled with water-blocking gel. The cable core is tape-wrapped and jacketed with black, UV resistant PE or LSOH compound. The cables fully comply with the EIA/TIA FOTP 82C and IEC 60794-1-22 F5 longitudinal water-blocking tests.

Basic Fiber	As selected from the FIBER OPTIONS Section
Buffer Type	None. (Bare, color-coded fibers)
Fibers OD	250 microns nom
Loose Tubes	1-24, filled with a Thixotropic gel
Central Strength Member	Rigid, all-dielectric FRP
Number of Fibers	4-288
Color Code Inside Each Tube	Color Table No. 4: TIA-598-C Color Code
Color Code of Loose Tubes	Per request
Core Filling	Water blocking compound
Core Wrap	Polyester tape, providing 100% coverage
Outer Jacket	Heavy duty, UV Resistant PE or LSOH compound
Standard Outer Jacket Color	Black RAL 9005. Other colors available upon request
Standard Surface Marking	Includes HCS P/N, Cable Description, Meter Mark and Batch Number
Max. Vertical Rise	150 m

*Detailed cable description is available in the relevant technical specification.

ORDERING INFORMATION

HCS P/N	Description	Tubes	Fiber/Tube	OD mm ±10%	Weight kg/km ±10%
QFO-00401-DR7-Fx	4 Fibers All Dielectric Indoor/Outdoor MLT PE Black	1	4	12	140
QFO-00601-DR7-Fx	6 Fibers All Dielectric Indoor/Outdoor MLT PE Black	2	3	12	140
QFO-00801-DR7-Fx	8 Fibers All Dielectric Indoor/Outdoor MLT PE Black	3	4	12	140
QFO-01201-DR7-Fx	12 Fibers All Dielectric Indoor/Outdoor MLT PE Black	4	4	12	140
QFO-01601-DR7-Fx	16 Fibers All Dielectric Indoor/Outdoor MLT PE Black	4	4	12	140
QFO-02001-DR7-Fx	20 Fibers All Dielectric Indoor/Outdoor MLT PE Black	5	4	12	140
QFO-02401-DR7-Fx	24 Fibers All Dielectric Indoor/Outdoor MLT PE Black	6	4	12	140
QFO-03601-DR7-Fx	36 Fibers All Dielectric Indoor/Outdoor MLT PE Black	6	6	12	140
QFO-04801-DR7-Fx	48 Fibers All Dielectric Indoor/Outdoor MLT PE Black	6	8	12	140
QFO-06001-DR7-Fx	60 Fibers All Dielectric Indoor/Outdoor MLT PE Black	5	12	12	140
QFO-07201-DR7-Fx	72 Fibers All Dielectric Indoor/Outdoor MLT PE Black	6	12	12	150
QFO-09601-DR7-Fx	96 Fibers All Dielectric Indoor/Outdoor MLT PE Black	8	12	13	170
QFO-12001-DR7-Fx	120 Fibers All Dielectric Indoor/Outdoor MLT PE Black	10	12	14	240
QFO-14401-DR7-Fx	144 Fibers All Dielectric Indoor/Outdoor MLT PE Black	12	12	16	260
QFO-28801-DR7-Fx	288 Fibers All Dielectric Indoor/Outdoor MLT PE Black	24	12	19	340
QFO-00402-DR7-Fx	4 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	1	4	12	140
QFO-00602-DR7-Fx	6 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	2	3	12	140
QFO-00802-DR7-Fx	8 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	3	4	12	140
QFO-01202-DR7-Fx	12 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	4	4	12	140
QFO-01602-DR7-Fx	16 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	4	4	12	140
QFO-02002-DR7-Fx	20 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	5	4	12	140
QFO-02402-DR7-Fx	24 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	6	4	12	140
QFO-03602-DR7-Fx	36 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	6	6	12	140
QFO-04802-DR7-Fx	48 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	6	8	12	140
QFO-06002-DR7-Fx	60 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	5	12	12	140
QFO-07202-DR7-Fx	72 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	6	12	12	150
QFO-09602-DR7-Fx	96 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	8	12	13	170
QFO-12002-DR7-Fx	120 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	10	12	14	240
QFO-14402-DR7-Fx	144 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	12	12	16	260
QFO-28802-DR7-Fx	288 Fibers All Dielectric Indoor/Outdoor MLT LSOH Black	24	12	19	340

Notes:

1. Detailed P/N breakdown is provided [HERE](#).
2. "FO" in the P/N is replaced by the fiber designation selected from the **FIBER OPTIONS** Table.
3. The default packaging is 2000m reels. Other packaging options to be discussed with HCS Customer Service.
4. The default jacket color of HCS standard cables is Black RAL 9005. Other colors available.
5. CPR options available upon request, to be discussed with HCS Customer Service.
6. "x" shall be replaced by a letter (A to Z) in the cable part number indicated in the detailed technical specification.