



Description

HCS DataLight series includes a complete line of Local Area Network (LAN) 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 Armored Multi-Loose Tube (MLT) Single Jacket (SJ) cable series provides outstanding armored design for outdoor installations in harsh conditions. These cables consist of 4-144 color-coded bare fibers (250 microns) in up to 12 jell-filled loose tubes. The loose tubes are cabled concentrically around an all dielectric central strength member and tape-wrapped. A layer of corrugated steel armor covered with a black, UV resistant PE or UV resistant LSOH outer jacket render the cable suitable for harsh environments and rodent-infested areas. HCS DataLight cables fully conform to and provide a substantial margin above all relevant TIA, IEC, ITU-T and ISO/IEC standards.

Optional fibers available: Multimode 50/125 microns (OM2, OM3, OM4 & OM5), 62.5/125 microns (OM1) and a wide range of 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
- ✓ Outdoor installations in rodent-infested areas.

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) and more.

Qualifications and Approvals

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

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

Benefits & Features

- ➔ Exceptional material properties and cable design - Providing a unique Century™ Lifetime Warranty.
- ➔ UV, rodent and water resistant construction - Providing a single cable suitable for a wide range of outdoor locations.
- ➔ Corrugated steel armor with a rip-cord - Providing easy and comfortable cable handling and jacket removal.
- ➔ 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.

CABLES OPTIONAL CONSTRUCTIONS

HCS DataLight Outdoor MLT Cables contain up to 144 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 UV resistant LSOH compound.

The cables fully comply with 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	4-144.
Color Code Inside Each Tube	Color Table No. 4: ANSI/TIA-598-A Color Code)
Color Code of Loose Tubes	Color Table No. 4: ANSI/TIA-598-A Color Code)
Core Filling	Water blocking compound.
Core Wrap	Polyester tape, providing 100% coverage.
Outer Jacket	Heavy duty, UV Resistant PE or UV Resistant 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.
Max. Tensile Strength - Short Term	1900 N.
Max. Tensile Strength - Long Term	950 N.
Min. Bending Radius - Short Term	20xD
Min. Bending Radius - Long Term	10xD
Repeated Bending	100 Cycles min.
Crush Resistance	3000 N
Storage Temperature	-50 to +70C
Temperature Operating Range	-40 to +70C

ORDERING INFORMATION

HCS P/N	Description	Tubes	Fibers Per Tube	OD mm	Weight kg/km	Notes
UFO-00441	4 Fibers Armored Outdoor MLT Black PE	1	4	11.7	129	
UFO-00641	6 Fibers Armored Outdoor MLT Black PE	3	2	11.7	131	
UFO-00841	8 Fibers Armored Outdoor MLT Black PE	4	4	11.7	130	
UFO-01241	12 Fibers Armored Outdoor MLT Black PE	3	4	11.7	131	
UFO-01641	16 Fibers Armored Outdoor MLT Black PE	4	4	11.7	132	
UFO-02441	24 Fibers Armored Outdoor MLT Black PE	6	4	11.7	133	
UFO-03641	36 Fibers Armored Outdoor MLT Black PE	6	6	12.8	161	
UFO-04841	48 Fibers Armored Outdoor MLT Black PE	6	8	12.8	162	
UFO-06041	60 Fibers Armored Outdoor MLT Black PE	5	12	13.4	176	
UFO-07241	72 Fibers Armored Outdoor MLT Black PE	6	12	13.4	178	
UFO-09641	96 Fibers Armored Outdoor MLT Black PE	8	12	15.2	221	
UFO-14441	144 Fibers Armored Outdoor MLT Black PE	12	12	18.7	322	
UFO-00442	4 Fibers Armored Outdoor MLT Black LSOH	1	4	11.7	129	
UFO-00642	6 Fibers Armored Outdoor MLT Black LSOH	3	2	11.7	130	
UFO-00842	8 Fibers Armored Outdoor MLT Black LSOH	2	4	11.7	130	
UFO-01242	12 Fibers Armored Outdoor MLT Black LSOH	3	4	11.7	131	
UFO-01642	16 Fibers Armored Outdoor MLT Black LSOH	4	4	11.7	132	
UFO-02442	24 Fibers Armored Outdoor MLT Black LSOH	6	4	11.7	133	
UFO-03642	36 Fibers Armored Outdoor MLT Black LSOH	6	6	12.8	161	
UFO-04842	48 Fibers Armored Outdoor MLT Black LSOH	6	8	12.8	162	
UFO-06042	60 Fibers Armored Outdoor MLT Black LSOH	5	12	13.4	176	
UFO-07242	72 Fibers Armored Outdoor MLT Black LSOH	6	12	13.4	178	
UFO-09642	96 Fibers Armored Outdoor MLT Black LSOH	8	12	15.2	221	
UFO-14442	144 Fibers Armored Outdoor MLT Black LSOH	12	12	18.7	322	

Notes:

The "FO" in the P/N is replaced by the fiber designation selected from the **FIBER OPTIONS** Table.

Packaging options to be discussed with HCS Customer Service.

The standard jacket color of HCS standard cables is Black RAL 9005. Other colors available upon request.