Armored Multi-Loose Tube Fiber Optic Cables

HCS HES Cabling Systems
Connecting Networks™

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 Armored Multi-Loose Tube (MLT) cable series provides outstanding armored design for 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 compound.
A layer of corrugated steel armor covered with a UV resistant PE outer jacket render the cable suitable for harsh environments and rodent-infestedareas.
HCS DataLight cables fully conform to and provide a substantial margin above all relevant TIA and IEC standards.
Optional constructions, jacketed with Orange RAL 2008 color are available with full conformance & official verification to Turkish Telecom TRFO 10 spec.
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
- ☑ 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).

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
- ☑ CENELEC EN50173
- ☑ TIA-455
- ☑ IEC 60332-1 (for LS0H constructions)
- ☑ IEC 60754
- ☑ 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 many 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.
- ➜ 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.

OPTIONAL CONSTRUCTIONS

HCS DataLight Armored MLT Cables contain up to 288 color-coded, 250 micron bare optical fibers.

Up to 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 inner jacketed with black UV resistant PE compound.

A layer of corrugated steel-tape armor covered with a black or orange UV resistant PE outer jacket render the cable suitable for harsh environments and rodent-infested areas.

The cables fully comply with the EIA/TIA FOTP 82C and IEC 60794-1-22 F5 longitudinal water-blocking tests.

Selected constructions are available with full conformance to Turkish Telecon TRFO 10 spec.

Item	HCS Standard Cables	Cables conforming to TRFO 10
Basic Fiber	As selected from the FIBER OPTIONS Section	As selected from the FIBER OPTIONS Section
Buffer Type	None. (Bare, color-coded fibers)	None. (Bare, color-coded fibers)
Fibers OD	250 microns nom	250 microns nom
Loose Tubes	1-24, filled with a Thixotropic gel	1-24, filled with a Thixotropic gel
Central Strength Member	Rigid, all-dielectric FRP	Rigid, all-dielectric FRP
Number of Fibers	4-288	4-288
Color Code Inside Each Tube	Color Table No. 4: TIA-598-C Color Code	Color Table No. 5: Turk Telecom TRFO-10 Color Code
Color Code of Loose Tubes	Per request	Color Table No. 5: Turk Telecom TRFO-10 Color Code
Core Filling	Water blocking compound	Water blocking compound
Core Wrap	Polyester tape, providing 100% coverage	None
Inner Jacket	Heavy duty, UV Resistant PE compound	Heavy duty, UV Resistant PE compound
Armor	150 microns rodent resistant corrugated steel tape	150 microns rodent resistant corrugated steel tape
Rip Cord	Laid under the armor	Laid under the armor
Outer Jacket	Heavy duty, UV Resistant PE compound	Heavy duty, UV Resistant PE compound
Standard Outer Jacket Color	Black RAL 9005. Other colors available upon request	Orange RAL 2008
Standard Surface Marking	Includes HCS P/N, Cable Description, Meter Mark and Batch Number	Includes HCS P/N, Cable Description, Meter Mark and Batch Number
Max. Vertical Rise	150 m	150 m

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

ORDERING INFORMATION

HCS P/N	Description	Tubes	Fiber/Tube	OD mm ±10%	Weight kg/km ±10%	TRFO P/N
UFO-00401-DR7-Fx	4 Fibers Armored Outdoor MLT Black	1	4	15	210	NA
UFO-00421-DR2-Fx	4 Fibers Armored Outdoor TRFO 10 MLT Orange	2	2	15	200	4FO-Y
UFO-00621-DR2-Fx	6 Fibers Armored Outdoor TRFO 10 MLT Orange	3	2	15	200	6FO-Y
UFO-00801-DR7-Fx	8 Fibers Armored Outdoor MLT Black	2	4	15	205	NA
UFO-01221-DR2-Fx	12 Fibers Armored Outdoor TRFO 10 MLT Orange	6	2	15	205	12FO-Y
UFO-02401-DR7-Fx	24 Fibers Armored Outdoor MLT Black	6	4	15	205	NA
UFO-02421-DR2-Fx	24 Fibers Armored Outdoor TRFO 10 MLT Orange	6	4	15	205	24FO-Y
UFO-03621-DR2-Fx	36 Fibers Armored Outdoor TRFO 10 MLT Orange	6	6	17	240	36FO-Y
UFO-04821-DR2-Fx	48 Fibers Armored Outdoor TRFO 10 MLT Orange	6	8	17	240	48FO-Y
UFO-06001-DR7-Fx	60 Fibers Armored Outdoor MLT Black	5	12	15	210	NA
UFO-06021-DR2-Fx	60 Fibers Armored Outdoor TRFO 10 MLT Orange	5	12	17	250	60FO-Y
UFO-07201-DR7-Fx	72 Fibers Armored Outdoor MLT Black	6	12	17	260	NA
UFO-09601-DR7-Fx	96 Fibers Armored Outdoor MLT Black	8	12	18	320	NA
UFO-09621-DR2-Fx	96 Fibers Armored Outdoor TRFO 10 MLT Orange	8	12	18	310	96FO-Y
UFO-12001-DR7-Fx	120 Fibers Armored Outdoor MLT Black	10	12	20	390	NA
UFO-14401-DR7-Fx	144 Fibers Armored Outdoor MLT Black	12	12	22	450	NA
UFO-14421-DR2-Fx	144 Fibers Armored Outdoor TRFO 10 MLT Orange	12	12	22	440	144FO-Y
UFO-19221-DR2-Fx	192 Fibers Armored Outdoor TRFO 10 MLT Orange	16	12	22	450	192FO-Y
UFO-28801-DR7-Fx	288 Fibers Armored Outdoor MLT Black	24	12	24	480	NA

Notes:

1. Detailed P/N breakdown is provided **HERE**.
2. The "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. Cables having P/Ns UFO-xxx21 are officially verified according to Turkish Telecom Spec TRFO 10.
6. LS0H jackets available upon request, to be discussed with HCS Customer Service.
7. CPR options available upon request, to be discussed with HCS Customer Service.
8. "x" shall be replaced by a letter (A to Z) in the cable part number indicated in the detailed technical specification.