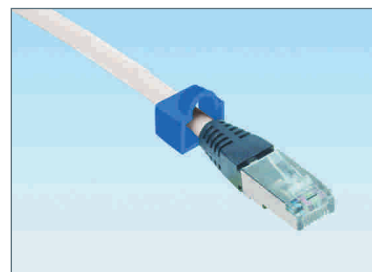


### Category 5e F/UTP 100 Ohm Modular Cords



#### Description

HCS DataLink 100e modular cord series consists of 100 Ohm impedance, 4-pair overall foil (F/UTP) shielded terminated cords for work area, jumper and patching in local area networks (LANs).

HCS DataLink 100e modular cords feature a unique termination method, combining strength relief injection molding into the RJ-45 plug with a removable boot. This design provides the advantages of both molded and non-molded terminations.

HCS DataLink 100e modular cords exceed all TIA/EIA-568-B.2 Category 5e and ISO/IEC-11801 (2nd Edition) requirements requirements in shielded cabling systems, and are specially designed to be backward compatible with all Category 5 jacks.

The HCS DataLink 100e modular cords can be used with either T568A or T568B modular jacks.

The standard color is Grey RAL 7035, but they are available in 10 different jacket colors and supplied with boots that match the color of the cord.

#### Applications

HCS DataLink 100e modular cords can be used for connections in telecommunications outlet, MUTO, consolidation point, patch panel and terminal equipment. HCS DataLink 100e modular cords support all presently available LAN applications, including the following protocols:

- 100BASE-T Gigabit Ethernet
- ATM 155
- TP-PMD
- 100BASE-T Fast Ethernet
- 100BASE-T2
- 100BASE-T4
- 100BASE-TX
- Token Ring 100 Mbps
- ATM 52
- ATM 25
- 10BASE-T Ethernet
- Token Ring 4 Mbps and 16 Mbps
- Broadband and Baseband Video
- ISDN Basic and Primary Access
- 1BASE-5 Starlan
- ISALAN
- ITU V.21 and X.11

#### Qualifications and Approvals

HCS DataLink 100e modular cords are tested and verified for full compliance with the following standards:

- Category 5e according to ANSI/TIA/EIA-568-B.2
- Category 5e according to ISO/IEC-11801 (2nd Edition)

#### Benefits & Features

- ✓ Testing every cord prior to shipment - providing the highest degree of quality assurance.
- ✓ Unique double termination method - providing the advantages of both molded and non-molded terminations.
- ✓ Exceptional material properties and cable design - providing the highest degree of reliability.
- ✓ High Return Loss and NEXT Loss values - providing low BER (Bit-Error-Rate) in all applications.
- ✓ Extremely high pair-balance - providing excellent EMC (Electro Magnetic Compatibility), minimizing radiation and maximizing noise immunity.
- ✓ End-to-end shield continuity - Providing a low transfer impedance, a high coupling-attenuation and improved EMC.
- ✓ Revolutionary pair lay scheme - providing an extremely low delay skew.
- ✓ Smooth and limp jacket - proving comfortable cord handling.
- ✓ Unique DoubleSafe™ Quality Assurance Program providing lowest rejection rate available.

#### Physical and Mechanical Properties

4 color-coded, unshielded twisted pairs cabled together, overall taped-wrapped with a polyester tape and an aluminum foil and overall jacketed. Both cable ends terminated with fully shielded modular plug connectors conforming to IEC 60603-7-3.

Basic Cable Conductor □	Stranded, 26 AWG, 7x0.16 mm, bare annealed copper
Wire Insulation □	Polyolefin
Number of insulated conductors □	8, twisted in 4 pairs.
Color Code of Pairs □	Blue x White/Blue, Orange x White/Orange, Green x White/Green, Brown x White/Brown.
Overall Tape Wrap □	Polyester tape, providing 100% coverage.
Overall shield □	Polyester-aluminum foil (foil face in), providing 100% coverage.
Drain wire □	Stranded, 26 AWG, 7x0.16 mm, tinned-copper laid under the aluminum foil.
Outer Jacket and boots□	LSOH Halogen free flame retardant or PVC compound.
Standard Jacket and boot Color □	Light Gray RAL 7035. Other colors available upon request.
Standard Surface Marking □	Includes HCS P/N, cable description, Meter mark and Batch Number.
Cable to plug tensile strength□	9 Kgf (90N) min.
Pulling force □	1 Kgf (10N) max.
Storage Temperature □	-20 to +80C
Durability □	750 mating cycles
Cable OD□	5.5 mm nom.
Bend radius□	22 mm min.
Plug housing material□	Polycarbonate.
Plug contact material□	50 micro-inches gold plating over 100 micro-inches nickel plated copper alloy.
Temperature operating range □	-20 to +60C
Flame Test □	IEC 60332-1.
Halogen content in LSOH cables□	Null.

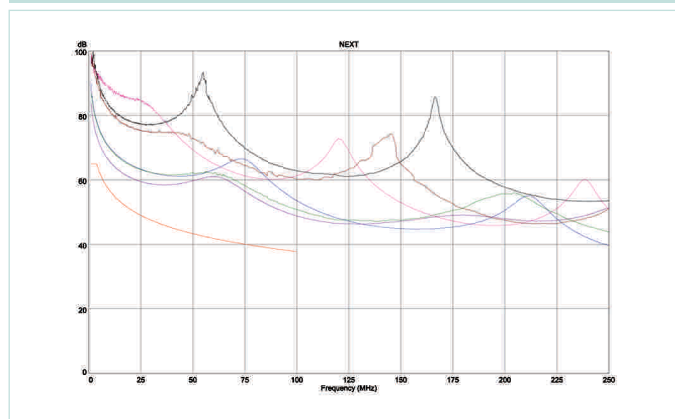
## Category 5e F/UTP 100 Ohm Modular Cords

### Transmission Properties and Electrical Specifications

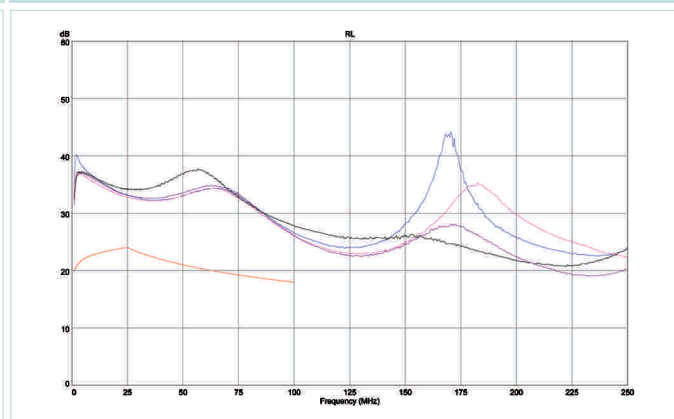
Frequency MHz	NEXT			RL
	dB			dB
	Min			Min
	2 m Cord	5 m Cord	10 m Cord	
0.00	65.0	65.0	65.0	19.8
4.00	62.3	61.5	60.4	21.6
8.00	56.4	55.6	54.7	22.5
10.00	54.5	53.7	52.8	22.8
16.00	50.4	49.8	48.9	23.4
20.00	48.6	47.9	47.1	23.7
25.00	46.7	46.0	45.3	24.0
31.25	44.8	44.2	43.6	23.0
62.50	39.0	38.5	38.1	20.0
100.00	35.1	34.8	34.6	18.0

Characteristic Impedance	100±6 Ohm @ 1-100 MHz
Contact Resistance	20 mOhm max.
Resistance unbalance	2% max.
Voltage rating	72 Vdc max.
Dielectric strength	1000 Volts/1 minute min rms
Ampacity	0.5 Amps max.
Insulation Resistance	500 MOhm min. @ 500 Vdc
Coupling attenuation	55 dB min @ 30-100 MHz

Typical NEXT Loss (Measured from both ends)



Typical Return Loss (Measured from both ends)



### Ordering Information

HCS P/N	Description	Length (m)	Notes
T5E-00430-05	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	0.5	
T5E-00440-05	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	0.5	
T5E-00430-10	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	1.0	
T5E-00440-10	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	1.0	
T5E-00430-20	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	2.0	
T5E-00440-20	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	2.0	
T5E-00430-30	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	3.0	
T5E-00440-30	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	3.0	
T5E-00430-50	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	5.0	
T5E-00440-50	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	5.0	
T5E-00430-70	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	7.0	
T5E-00440-70	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	7.0	
T5E-00430-00	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	10	
T5E-00440-00	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	10	

Standard color: Light Gray RAL 7035. Other colors available for selection from Color Table No. 6.