



OptiTap® Hardened Connector



DLX Hardened Connector

## Hardened Drop Cable and Connector Solutions

TE Connectivity's hardened drop cables and connectors are environmentally robust to provide a reliable interface in the outside plant environment. Using hardened connectors simplifies installation and maintenance by reducing splicing requirements in the distribution portion of the network. The rugged optical connectors are hardened to protect against extreme temperature, moisture, UV, chemical exposure and other harsh conditions typically found in the outside plant.

TE offers two sizes of hardened connectors: miniaturized DLX and full-sized hardened OptiTap®-compatible. These hardened connectors are available with a variety of cable options.

TE's hardened products provide the ultimate "plug-and-play" solution for durable and reliable service connection in distribution and access networks.

### BENEFITS OF HARDENED CONNECTORS

- Robust environmental performance: withstands extremes in temperature and weather conditions
- Designed for use in all environmental categories: Aerial (Category A), ground (Category G) and subterranean (Category S) as defined in IEC 61753-1
- Technician-friendly: Intuitive and easy connection to hardened adapters on terminals or closures
- Decreased installation and maintenance hours by minimizing splicing required in outside plant networks
- Significant cost savings and increased speed of deployment
- Compatibility: Interoperability with industry standard hardened connectors
- Facilitates easy troubleshooting: Maintenance can be done by simply plugging a

connector rather than breaking a splice or going directly to the side of a home

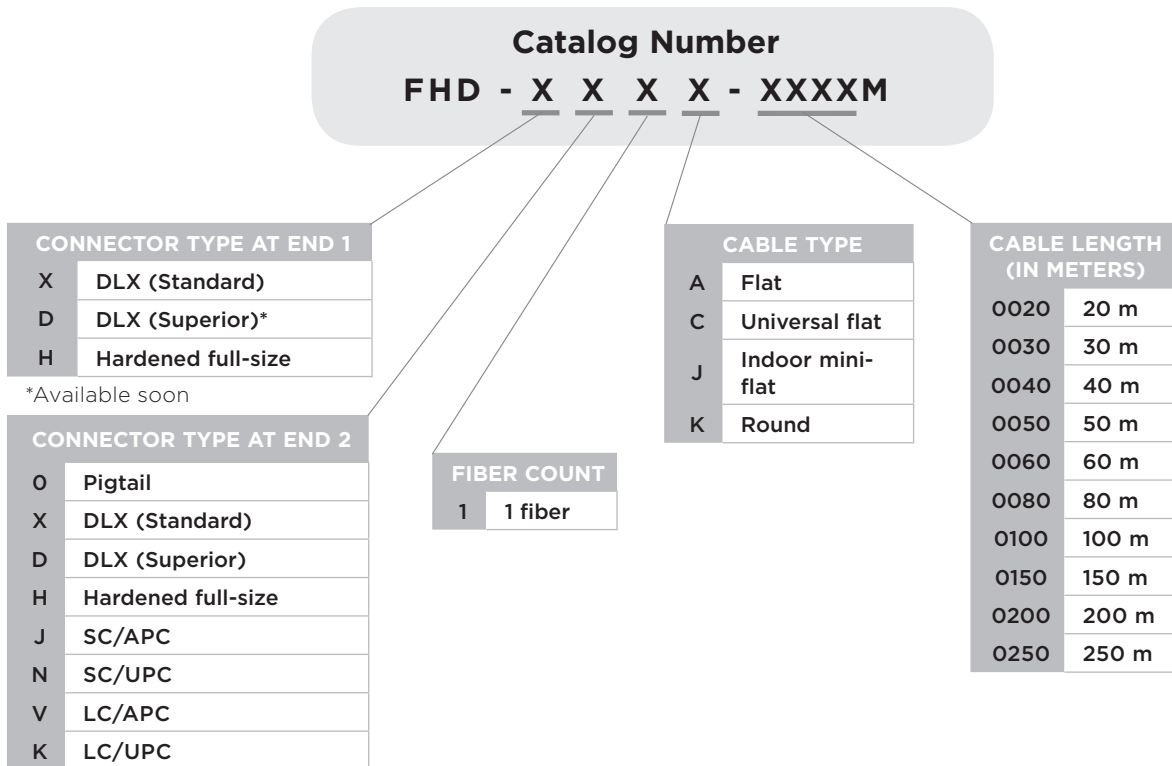
- Constructed to IEC 61755 optical interface standards to guarantee optical intermateability

### ADDITIONAL BENEFITS OF DLX CONNECTORS

- 30% smaller in size: Connector can be pulled through tighter duct space and requires smaller, less intrusive holes in buildings
- Superior quality: Lower attenuation (insertion loss) according to IEC 61755 Grade B
- Compatible with SC/APC adapters for testing; designed to Mechanical Interface Standards Type SC, according to IEC 61754-4
- Compatible with full-size hardened connectors (with use of a converter)

# Hardened Drop Cable and Connector Solutions

## ORDERING INFORMATION



## ADDITIONAL ORDERING INFORMATION

Converters (quantity: 25)	Catalog Number
from DLX to full-size hardened	DLX-OPT-CONV-25
from DLX to SC/APC with snap fit	DLX-SC-CONV-25
from SC to DLX	SC-DLX-CONV-25



DLX Connector to Full-Sized



DLX Connector to SC/APC with Snap Fit



SC Connector to DLX

Accessories	Catalog Number
Jacket stripping tool	FTX-7098 2 003-00
Cable clamp for flat or universal flat cable	FHD-ACC-CLAMP910



Jacket Stripping Tool



Cable Clamp

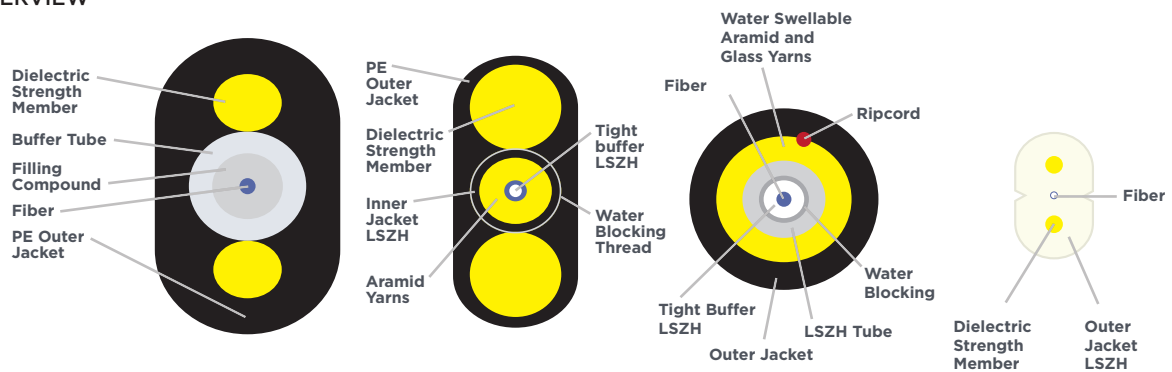
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## CONNECTOR OVERVIEW

Connector type	DLX	Hardened full-size
Min hole size for connector	16mm	22mm
Attenuation (against reference connector)	Standard: max. 0.35 dB Superior: max. 0.25 dB (Grade B)*	max 0.35 dB
Return loss	min 60 dB	min 60 dB
Sealing	IP68 + 2m waterhead	IP68 + 2m waterhead
Latching in adapter	Push to detent and twist to lock	Twist to lock
Compatibility	Fit in SC/APC adapter	

\*Available soon

## CABLE OVERVIEW



	A: Flat	C: Universal Flat	K: Round	J: Indoor mini-flat
<b>Installation</b>	In ducts	In ducts	In ducts	Indoor
	Direct buried	Direct buried	Aerial short span**	
	Aerial long span**	Aerial long span**	Indoor	
<b>Outer dimensions</b>	4.5 x 8.1mm	4.4 x 7.4mm (3mm inner)	5mm	2 x 3mm
<b>Max tensile strength of cable</b>	1300N	1300N	1000N	80N
<b>Retention (cable/connector/adapter)</b>	450N	450N	300N	80N
<b>Operating temperature</b>	-40°C to +70°C	-40°C to +70°C	-30°C to +70°C	-20°C to +60°C
<b>Crush resistance</b>	2200N/dm	4400N/dm	800N/dm	1000N/dm
<b>Dielectric</b>	Metal-free	Metal-free	Metal-free	Metal-free
<b>Fiber type</b>	G652.D	G657. A2	G657. A1	G657. A1
<b>Coated fiber diameter</b>	250µm	900µm tight buffer	900µm tight buffer	250µm
<b>Min bend radius (static)</b>	45mm	40mm	15mm	15mm
<b>Jacket color</b>	Black	Black (White inner)	Black	White
<b>Jacket material</b>	PE	PE (LSZH inner)	LSZH	LSZH
	UV-resistant	UV-resistant	UV-resistant	Low-friction

\*\*Cable span distances are subject to customer environmental loading and sag specifications

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