

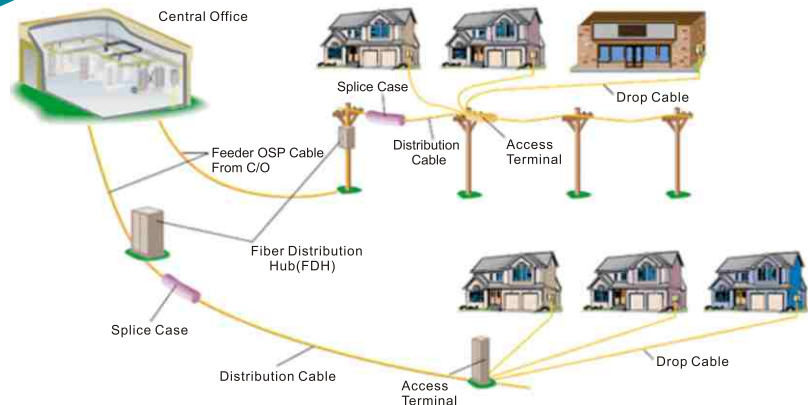


DatoLink

Connectivity solution

# Datolink Ltd

— Fiber optical connectivity solution



[www.datolink.com](http://www.datolink.com)



# COMPANY PROFILE

Datolink Ltd was founded in the January of 2007 by several engineers, who have had many years working experience in the area of telecommunication specialized in the fiber optical sector. Datolink is a high-technology oriented company with fiber optical passive products. We are dedicated to the design, manufacture and sales, meanwhile, we can provide customers with complete cabling solutions in installation and maintenance.

The company has a strict and comprehensive system of quality control approved by the standard ISO9001: 2000. Is well connected with the raw materials providers and factories worldwide, to offer customers a broad line of products with competitive prices and very soon time of delivery.

Our products have been exported to over 20 countries and regions such as Europe, Middle East, Southeast Asia, Latin America, etc. Datolink Ltd is committed to offer the partners high quality products and professional services, we look forward for the successful development with mutual-benefits,for casting the future of fiber optical and telecommunication!



# Fiber optical connectors

## Applications:

Local Area Networks (LANs) and Wide Area Networks (WANs)  
 Fiber Optical CATV, FTTH, FTTB, FTTP etc  
 Fiber Optical telecommunication systems  
 Transmission Mode (ATM)  
 Fiber Optical Backbone  
 Military Instrumentation



**SANA**  
Fiber Interferometer



**BINNA**  
Auto Focus Interferometer



**LCAPC Connector**



**STPC SM Connector**



**FCPC SM Connector**



**FCAPC SM Connector**



**SCPC SM Connector**



**LCPC SM Connector**



**SCAPC Connector**

Specifications		
	Singlemode	Multimode
Insert Loss	$\leq 0.20\text{dB}$	$\leq 0.25\text{dB}$
Return Loss	$\geq 50\text{ dB (PC)}$	$\text{PC} \geq 35\text{dB}$
	$\geq 55\text{ dB (UPC)}$	$\text{UPC} \geq 40\text{dB}$
	$\geq 65\text{ dB (APC)}$	
Durability	$< 0.20\text{ dB typical change, 1000 mating}$	
Operating Temperature	From $-40$ to $+80^\circ\text{C}$	
Ferrule Hole Sizes	$125.0_{+1/-0}\mu\text{m}$ , Concentricity: $\leq 1.0\mu\text{m}$	$125\mu\text{m}$ , Concentricity: $1 \leq 3\mu\text{m}$
	$125.5_{+1/-0}\mu\text{m}$ , Concentricity: $\leq 1.0\mu\text{m}$	$127\mu\text{m}$ , Concentricity: $1 \leq 3\mu\text{m}$
	$126.0_{+1/-0}\mu\text{m}$ , Concentricity: $\leq 1.0\mu\text{m}$	$128\mu\text{m}$ , Concentricity: $1 \leq 3\mu\text{m}$

# Fiber optical patch cord & Pigtails

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# Multi fiber optical patch cord & pigtail

## MTRJ

## Patch Cord



### Features

- High return loss
- Low insertion loss
- Plug-jack, RJ-45 style
- TIA/TIA 568-A compliant

### Applications

- CATV, LANs, Telecom, Video
- Active device termination
- Telecommunication networks
- Gigabit applications (ATM, Ethernet)

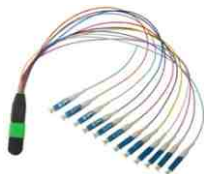
Specifications	PC SM	PC MM
insertion loss	≤0.3dB	≤0.3dB
Return loss	≥50dB	≥20dB
Operating temperature	-40°C to + 75°C	
Durability	≤0.2dB typical change, 500 mating	
Available Wavelengths	SM=1310& 1550nm, MM=850nm	

## Ordering Choice:

Fan-out patch cord  
 Simplex/Duplex  
 Pigtail  
 12 color cable  
 Loose& Tight Buffer  
 Boot color  
 Cable Size  
 0.9mm, 1.8mm, 2.0mm  
 Packing Style  
 Cable type  
 G652D, G657  
 OM1, OM2, OM3, OM4  
 OFNR&LSZH& OFNP  
 Male& Female Type

## MPO

## Patch Cord



### Features

- High return loss
- Low insertion loss
- ICE61754-7 Compliant
- Compact design, up to 12 fiber ribbon

### Applications

- CATV, LANs, Telecom, Video
- Active device termination
- Telecommunication networks
- Gigabit applications (ATM, Ethernet)

Specifications	UPC SM	PC MM	APC SM
insertion loss	≤0.4dB	≤0.3dB	≤0.4dB
Return loss	≥50dB	≥20dB	≥60dB
Operating temperature	-40°C to + 75°C		
Durability	≤0.3dB typical change, 500 mating		
Available Wavelengths	SM=1310& 1550nm, MM=850nm		

## Ordering Choice:

Fan-out patch cord  
 Bare fiber type  
 Ribbon cable type  
 12 color cable  
 Loose& Tight Buffer  
 Boot color  
 Packing style  
 Cable style, Angle= 8 degrees  
 Cable type G652D, G657  
 OM1, OM2, OM3, OM4  
 OFNR&LSZH& OFNP  
 Male& Female Type  
 MPO caste  
 SC&LC  
 12 cores & 24 cores

# Water proof & Armored patch cord



## Description:

Waterproof Pigtail is a length of fiber with one-end connector attached, suitable for out door use and adverse environmental condition.

## Features:

High return loss and low insertion loss  
 Good reliability and stability  
 Excellent water-resistance performance  
 Waterproof, rigid and anti-corrosive copper connector  
 Simple installation  
 Capacity: 2, 4, 6 cords Available  
 Applicable to FC, SC, ST, LC, MU...Connectors

## Application:

Optic Fiber Communications Systems  
 Optical Fiber CATV  
 Connecting with Backbone Optical Cable and Rx

## Specification:

Parameter	PC-SM	UPC-SM	APC-SM	PC-MM
Return Loss	≥45dB	≥50dB	≥60dB	≥20dB
Insertion Loss	≤0.3dB	≤0.3dB	≤0.3dB	≤0.3dB
Repeatability 1000 times	≤0.2dB			
Exchange	≤0.2dB			
Working Temperature	-40°C -75°C			

## Description:

Datolink FTTH steel armored fiber optical patch cords series are made by covering a variety of Japan made SUS-304 stainless steel banding on the tight tube of 0.9mm PVC.

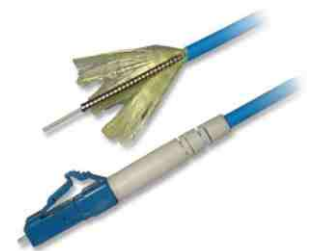
By adopting the processing technical of indoor soft optical fiber cable and fine workmanship for producing fiber optic patch cord, these special fiber optical patch cords are fully protected by steel armor outside the tight tube of 0.9mm PVC. They have high mechanic performance, reliable optical performance and leading anti-ultraviolet radiation function. These steel armored fiber optical patch cords apply to the fields of various data communication, outdoor emergency, buildings without protective cabling, and presently advocated cabling connection of FTTH etc.

## Features:

Full steel armored protection from ceramic ferrule  
 High tensile resistance & anti-pressure  
 Strong anti- ultraviolet radiation  
 High flexibility

## Application Area:

FTTH  
 Defense communications  
 Outdoor Emergency  
 Buildings without protective cabling



Patch Cord Armored Inside



Patch Cord Armored Outside

# 10G OM3,OM4 patch cord

## OM3 Series Optical Fiber

WideGrade 50/125 Multimode Fiber  
OM3 fiber series with scalable link-lengths for 10Gb/s Ethernet

OptiGrade fibers are available in different performance classes and are scalable from 300m up to 500m to meet the specific customer application and demand .  
OptiGrade fibers are fully compatible with the installed fiber base of conventional 50um Multimode fiber (Legacy Local Area Networks )and j-fiber's entire line of high-performance 50um Multimode fiber .



LC-LC MM DX OM3 Patch cord

OptiGrade Classes		300	400	500	Unit
Bandwidth (Overfilled launch, LED based source)	850nm	≥1500	≥2000	≥2500	Mhz+-km
	1300nm	≥500	≥500	≥500	Mhz+-km
Effective Modal Bandwidth	850nm	≥2000	≥2700	≥4000	Mhz+-km
Transmission Link Length for 10Gb/s	850nm	300	400	500	m
	1300nm	300	300	300	m



SC-SC MM DX OM3 Patch cord

### Ordering choice Fiber

50/125(150)  
50/125(300)



LC-LC MM DX OM3 Patch cord

## OM4 Series Optical Fiber

OptiGrade 550 Multimode Fiber OM4

Serial 10Gb/s Ethernet high-speed transmission ,OM4 compliant :OptiGrade Multimode Fibers successfully perform in today's worldwide networks for 10Gb/s high-speed data transmission. With OptiGrade 550 j-fiber now introduces an enhanced version which provides full OM4 standard compliance to support extended link lengths and bandwidth demands, specifically in advanced datacenter and office abling applications.

The new OptiGrade 550 Multimode fiber therefore ensures 10Gb/s Ethernet serial transmission over 550m with increased Effective Modal Bandwidth(EMB)of>=4700MHZ+-km.and Overfilled Launch Bandwidth (OFL)of 3500MHZ+-km.



ST-ST MM DX OM3 Patch cord

OptiGrade Classes		Spec.Value	Unit
Bandwidth (Overfilled launch, LED based source)	850nm	≥3500	Mhz+-km
	1300nm	≥500	Mhz+-km
Effective Modal Bandwidth	850nm	≥47000	Mhz+-km
Transmission Link Length for 10Gb/s	850nm	500	m
	1300nm	500	m



MPO-MPO MM OM3  
12 core Patch cord

### Ordering choice Fiber

50/125(150)  
50/125(300)  
50/125(500)

# Fiber optical adapter & attenuator



**ST DX Adapter**



**FC-SC DX Adapter**



**FC D type Adapter**



**SC SM DX Adapter**

## Features:

Compliant with ANSI, TIA/EIA, NTT and JIS etc  
 Meets UL94-V0 Flammability Requirements  
 High Precision Alignment  
 Low Insertion Loss and High Back Reflection Loss  
 Excellent Interchangeability  
 Excellent Repeatability  
 Good Temperature Characteristic  
 Choice of Housing Material and Sleeve Material



**LC SM DX Adapter**

## Specifications:

Insert loss:  $\leq 0.20\text{dB}$   
 Durability  $< 0.20\text{dB}$  typical change, 1000 mating  
 Operating temperature:  $-40$  to  $+80$  centigrade



**SC/PC Attenuator**



**FC/PC Attenuator**



**LC/PC Attenuator**



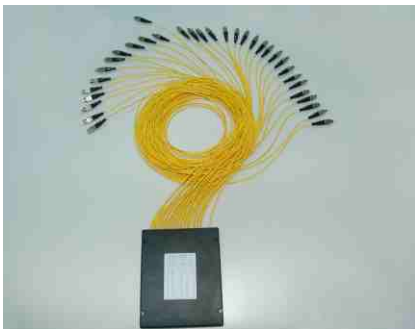
**ST/PC Attenuator**

## Specifications:

Connector Type	SC/FC/ST/LC/MU/MTRJ
Operating Wavelength	1310, 1550 nm
Attenuation Value	1dB~10dB (1dB), 15, 20, 25dB
Optical In-put Power	$\geq 300$ mW
Polarization Loss	$\leq 0.20$ dB
Return Loss (dB)	P Grade(Return Loss $\geq 50\text{dB}$ ) , A Grade(Return Loss $\geq 40\text{dB}$ )
Operating Temp (°C)	$-30$ — $+75$ °C
Storage Temp (°C)	$-40$ — $+85$ °C



# Fused type splitter & PLC splitter



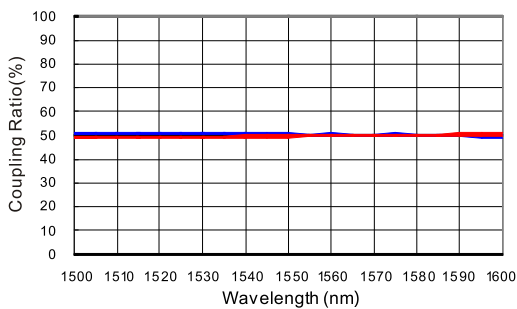
Datolink Standard Single Mode Couplers are high quality components designed to divide or combine optical signal in optical fiber system. These devices are fabricated by using the fused biconical taper (FBT) process and are reliable over wide range of temperature. The operating wavelength is 1310nm or 1550nm and the pass band is 80nm. The coupling ratio can change from 1:99 to 50:50. Various packagings and pigtail configurations can satisfy our customers' requirements.

- Features:**
- Low insertion loss
  - Low excess loss
  - Low PDL
  - High directivity
  - Long haul reliability
  - Customer defined specifications

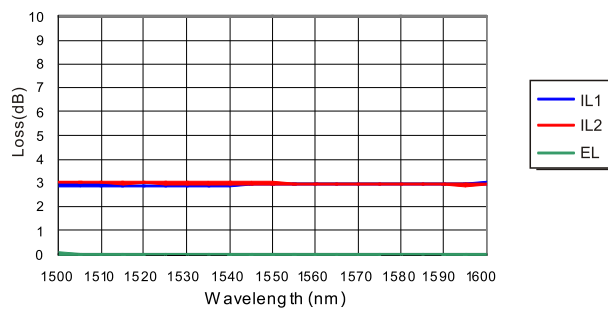
- Application:**
- Telecommunications
  - Fiber in the loop
  - Local area network
  - CATV
  - Fiber optic sensing
  - Test instruments

## Spectral Performance:

Coupling Ratio of Single Window Wideband 50/50 Coupler

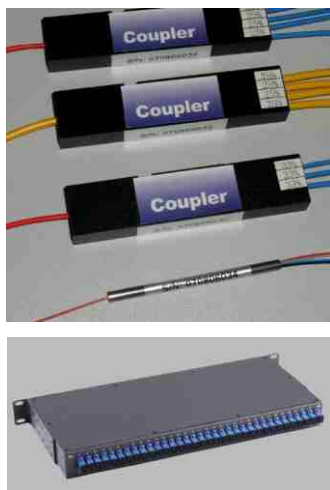


Insertion Loss & Excess Loss of Single Window Wideband 50/50 Coupler



## Description:

Datolink PLC splitter is a high quality passive device. It is especially for passive internet (EPON, BPON, and GPON). And different package can follow clients' different inquiry.



Parameters		1X2	1X4	1X8	1X16	1X32	1X64
Fiber type		SMF-28e or customer specified					
Operating wavelength(nm)		1260-1650					
Insertion loss(dB)	Max (P/A)	3.8/4.0	7.2/7.4	10.5/10.7	13.5/13.7	16.5/16.9	21.0
	Loss Uniformity(dB)	Max	0.6	0.6	0.8	1.2	1.7
Return loss(dB)	Min (P/A)	55/50	55/50	55/50	55/50	55/50	50
PDL(dB)	Max	0.2	0.2	0.3	0.3	0.3	0.4
Directivity(dB)	Min	55	55	55	55	55	55
Wavelength Dependent loss(dB)	Max	0.5	0.5	0.5	0.8	0.8	0.8
Temperature Stability(-40 ~85°C)(dB)	Max	0.5	0.5	0.5	0.8	0.8	1
Operating Temperature (°C)		-40~+85					
Storage Temperature (°C)		-40~+85					

# Fast connector



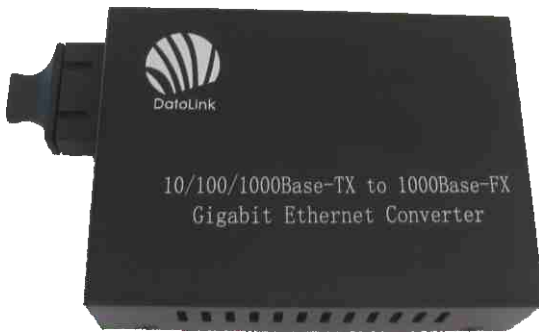
**SC Fast connector**

ITEM	Technical Parameters
Applicable for	2mm/3mm Indoor cable
Optical fiber diameter	125m ( 652 & 657 )
Tight buffer diameter (m)	900m
Fiber mode	Single & multi mode
Operation time	About 120s ( no fiber cut )
Insert loss	$\leq 0.3\text{dB}$ (1310nm & 1550nm)
Return loss	$\leq -40\text{dB}$
Fastening strength of naked fiber	$>5\text{ N}$
Fastening strength of naked fiber holder	$>10\text{ N}$
Tensile strength	$>50\text{ N}$
Using temperature	$-40\sim+75\text{oC}$
On-line tensile strength (20 N)	$\text{IL} \leq 0.2\text{dB}$ $\text{RL} \leq 5\text{dB}$
Mechanical durability (500 times)	$\text{IL} \leq 0.2\text{dB}$ $\text{RL} \leq 5\text{dB}$
Drop-off test (drop-off height 4m, once per direction, totally 3 times)	$\text{IL} \leq 0.2\text{dB}$ $\text{RL} \leq 5\text{dB}$



**FC Fast connector**

# Fiber media converter



## Key Features:

Auto-adaptation 10Mbps and 100Mbps, convenient for network updating

With distinct IC IP113 HIC solution, low-temperature-rise chip, no need of cooling system, realization of flowcontrol, decrease of broadcast storm

With famous brand optical-electronic-integration module providing excellent optical and electrical properties to ensure reliable data transmission and long working life

Supporting broadcast filtering, address auto-learning and auto-updating, and store-and-forward operating mechanism

Supporting full-duplex flow control or half-duplex back pressure working pattern, along with Auto-negotiation

Single RJ-45 electrical port NIC/HUB, auto cross-identification, link to computer network cards or switches or HUB

Supporting the switches to choose between 10/100Mbps store-and forward or 100Mbps straight-through transmission pattern(distinct)

Supporting 1600byte super data packet transmission

Providing indicator lamps for link-loss, electrical and optical link diagnosing, dynamic data transmission and full/half duplex, data rate

With more than 50,000 hours MTBF, complying with telecom operating standard

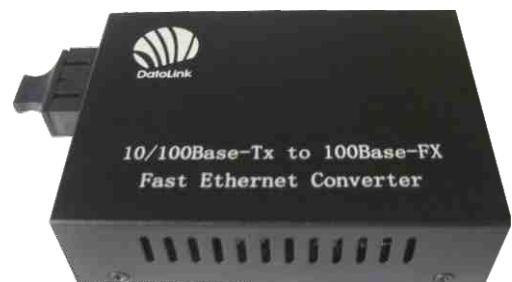
Ultra low power dissipation(< 2.5W, Input:AC140 ~ 260V),low heat, long-time stable work

Supporting choosing optical ports from dual fiber(MM),dual fiber(SM),single fiber(SM)

## Technical Parameter:

Access Method:	10/100Mbps, 1000Mbps, 10/100/1000Mbps
Standard:	IEEE802.3 10Base-T Ethernet,IEEE802.3u,100Base-TX/FX Fast Ethernet, IEEE802.3x Flow control,IEEE802.1q,IEEE802.1p QoS,IEEE802.1d Spanning Tree
Wavelength:	850nm/1310nm/1550nm
Distance:	Dual Fiber MM: 2Km
	Dual Fiber SM: 25/40/60/80/100/120Km
	Single Fiber SM: 20/40/60/80Km
	CAT5: 100m
Port:	RJ45 Connector: Connecting with STP/UTP Cat5
	Optical Connector: MM-SC or ST (fiber dimension: 50,62.5/125μm )
	SM-SC or FC ( fiber dimension: 9/125 μm )
	Single Fiber SM-SC/ FC(fiber dimension: 9/125μm)

Conversion Method:	Media Conversion, Store-and-Forward/straight through
MAC Address Table:	1 K
Buffer Size:	1Mbit
Flow Control:	Duplex: flow control ; Half duplex: back pressure
Time Delay:	Store-and-Forward : 9.6us , Straight-through: 0.9us
BER	<1/1000000000
LED Indicator Lamps:	POWER, FX LINK/ACT (fiber link) FDX ( FX-full duplex), TP LINK/ACT(twisted pair link) TP 100 (TP 100M data rate), FX 100 (FX 100M data rate)(external power)
Power Supply:	AC220 0.5A /DC-48( internal power )
Power Dissipation:	<2.5W
Operating Temperature:	0 ~ 50 °C
Humidity:	5%~90%
Storage Temperature:	-40~ 70 °C
Storage Humidity:	5%~90% non-condensing
Weight:	Net weight:0.416kg(cabinet);0.114kg(power cords) Gross weight:0.53kg
Dimension:	31mm(H)*127mm(W)*155mm(D)(internal power) 25mm(H)* 22mm(W)* 77mm(D)(module-card)



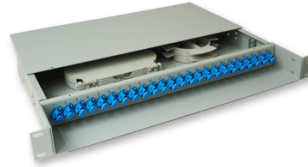
# Fiber optical terminal box/ODF



Fixed wall mounted box



Fiber terminal box



Rack mounted patch panel



ODF

Name	Capacity	P/N	Size (mm)
Drawer style ODF unit	12Core	DTLPP-D12	482×300×45
Drawer style ODF unit	24Core	DTLPP-D24/36	482×300×90
Drawer style ODF unit	36Core	DTLPP-D24/36	482×300×90
Drawer style ODF unit	48Core	DTLPP-D48	482×300×135
Drawer style ODF unit	72Core	DTLPP-D72	482×300×180
Drawer style ODF unit	96Core	DTLPP-D96	482×300×225
Drawer style ODF unit	144Core	DTLPP-D144	482×300×360



Indoor wall mounted box

## Key Features:

Standard 19" width

Capacity: 1-144 fibers, 12 fibers each module

The fusion splicing and distribution module is with sliding and can be pulled out separately.

Material of the metal box: Steel plates and aluminum alloy

Suitable for inserting installation of SC, FC, ST and LC adapter

Front and rear covers can be opened, it is convenient for fiber connecting, supervising and maintaining

## Specifications:

Temperature: -40 to +80 degrees Celsius

Atmosphere: 70 to 106kpa

Sealing property at normal temperature: Internal pressure: 70 KPa, without decrease in 72 hours

High temperature sealing property: internal pressure: 70KPa, without decrease in 168 hours at 60 degree

Insulated resistance : >2×104MΩ

Intensity : 15KV (DC) not being broken down, has no flying arc.

Additional Loss: No additional loss when optic fibers are winded in the splice trays

The-ageing time of the material of the enclosure is beyond 20 years



Slidable rack mounted ODF



Outdoor wall mounted box



Slidable fiber optic patch panel

# Fiber optical Splice closure

## Key Features:

The box add aging-resistant in imported high tensile construction plastic out-faster is made up of stainless steel. Overlap structure in splicing tray easy to install Suitable for ordinary fiber and ribbon fiber Perfect leak proofness and fine function Perfect and reliable sealing operations Fiber-bending radium guaranteed more than 40mm Full accessories for convenient operations Fiber optic splice closure can be used repeatedly High reliability For aerial, and direct buried applications

## Specifications:

Temperature: -40 to +80 degrees Celsius  
 Atmosphere: 70 to 106kpa  
 Sealing property at normal temperature: Internal pressure: 70 KPa, without decrease in 72 hours  
 High temperature sealing property: internal pressure: 70KPa, without decrease in 168 hours at 60 degree  
 Insulated resistance: >2×104MΩ  
 Intensity: 15KV (DC) not being broken down, has no flying arc.  
 Add ional Loss: No additional loss when optic fibers are winded in the splice trays  
 The-aging time of the material of the enclosure is beyond 20 years

Item	Description	Number of inlet/outlet ports	Capacity(Cores)	Size(mm)
1	Fiber closure, dome heat shrinkable type DTLCE-DH1	5	Bunchy: 6-48	φ 178x299
2	Fiber closure, dome heat shrinkable type DTLCE-DH2	5	Bunchy: 12-96, Ribbon: up to 288	φ 190x435
3	Fiber closure, dome heat shrinkable type DTLCE-DH3	8	Bunchy: 12-240, Ribbon: up to 576	φ 220x455



Item	Description	Number of inlet/outlet ports	Capacity(Cores)	Size(mm)
1	Fiber closure, horizontal type DTLCE-H1	4	Bunchy: 6-48	280x200x90
2	Fiber closure, horizontal type DTLCE-H2	6	Bunchy: 6~96; Ribbon: max. 144	410x200x120
3	Fiber closure, horizontal type DTLCE-H3	6	Bunchy: 12~192, Ribbon: max. 432	450x216x160



Item	Description	Number of inlet/outlet ports	Capacity(Cores)	Size(mm)
1	Fiber closure, dome type DTLCE-D1	4	Bunchy: 6-48	φ 178x288
2	Fiber closure, dome type DTLCE-D2	4	Bunchy: 12-96, Ribbon: up to 288	φ 190x415
3	Fiber closure, dome type DTLCE-D3	6	Bunchy: 12-240, Ribbon: up to 576	φ 220x455



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