

ALLOPTO

Your Reliable Fiber Connection

Our Broad Product Range:

- Fiber Optic Connector
- ◎ Fiber Optic Patchcord
- Fiber Optic Adaptor
- ◎ Fiber Optic Attenuator
- Fiber Optic Cable
- ◎ PLC Splitter
- Fiber Optic Coupler
- ◎ Cable Management
- Splice Products
- ◎ Networking Equipment
- Fiber To The Home (FTTH)

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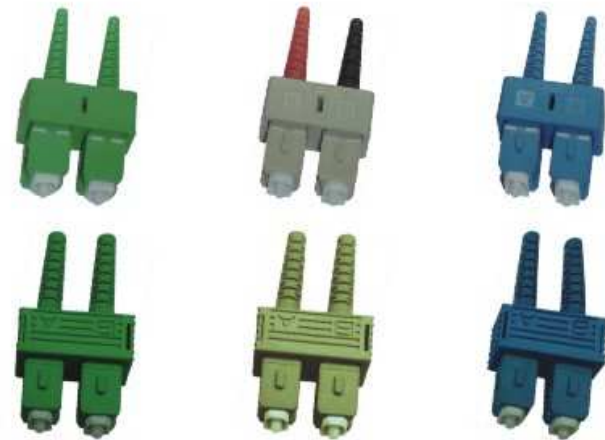
Where your fiber end, Allopto begin...



WWW.ALLOPTO.COM

Features

- Compliant with Telcordia, GR-326-CORE, TIA/EIA and IEC
- Superior Quality Standard PC/UPC/APC Polishing
- Customer Defined Specifications
- RoHS Compliance
- Environmental Stable
- Low Insertion Loss & back Reflection



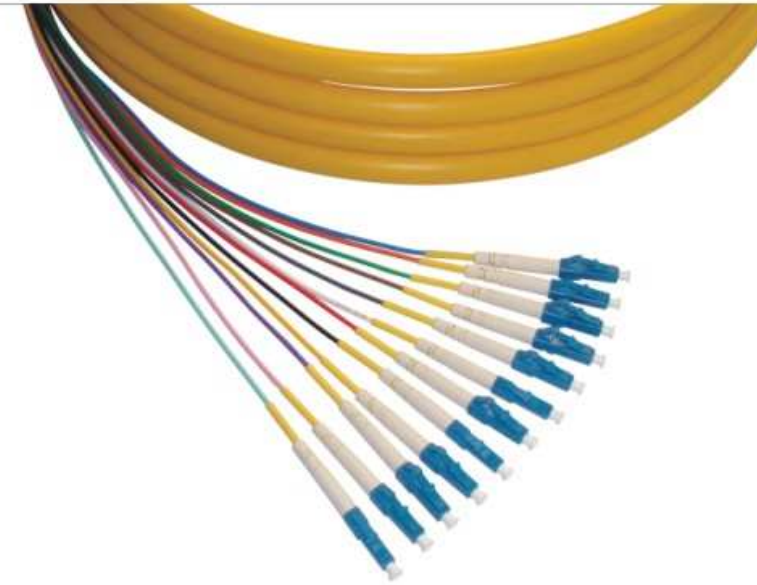
Applications

- CATV Networks
- Telecommunication Networks
- Local Area Networks
- FTTH and FTTx
- Active Device Termination
- Testing Instruments



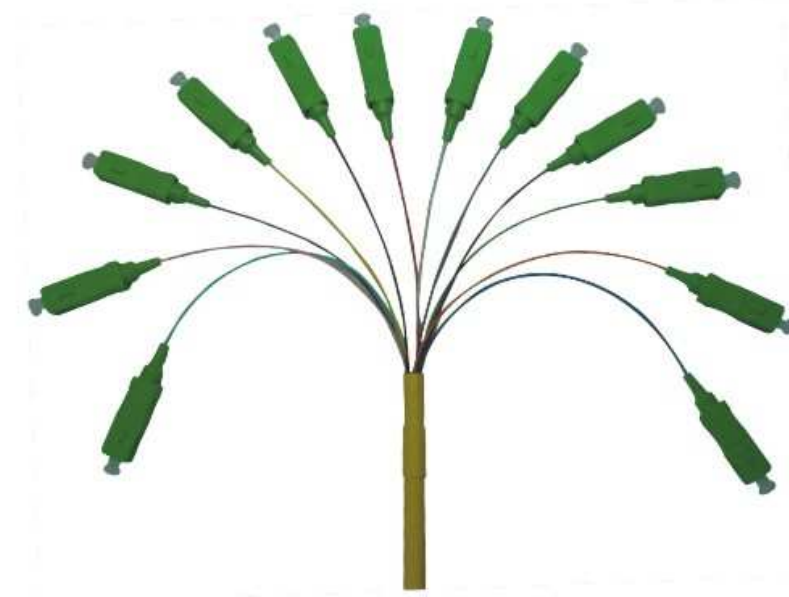
Features

- Compliant with Telcordia, GR-326-CORE, TIA/EIA and IEC
- Low Insertion Loss & Back Reflection
- Environmentally Stable
- 2, 4, 6, 8 and 12 Channels Available
- Save Duct Space, Cost and Installation time
- Easy Push/Pull Operation
- Ribbon Cable/Breakout Cable/Bundle Distribution Cable/Outdoor Waterproof cable optional



Applications

- Optical Splitter
- Optical Termination
- WDM, CWDM, AWG
- FTTH and FTTx



Fiber Optic Patchcord

Features

- Compliant with Telcordia GR-326-Core, TIA/EIA and IEC
- Customer length
- Various connector type available
- Environmental stable

Applications

- Telecommunication network
- CATV system
- Local Area Network
- Active/Passive device
- FTTH and FTTx



Fiber Optic Patchcord



Specification

Optical Performance	Single Mode	Multi Mode		
Insertion Loss	≤ 0.20 dB	≤ 0.30 dB		
Return Loss	≥ 45 dB(PC)	≥ 35 dB		
	≥ 50 dB(UPC)			
	≥ 60 dB(APC)			
Repeatability	≤ 0.10 dB			
Durability	≤ 0.2 dB typical change, 1000 matings			
Operating Temperature	- 20 ~ + 75 °C			
Storage Temperature	- 40 ~ + 85 °C			
Endface Geometry				
Parameter	2.5μm ferrule		1.25μm ferrule	
	UPC	APC	UPC	APC
Radius of Curvature	10~25mm	5~12mm	7~25mm	5~12mm
Apex Offset	0~50μm	0~50μm	0~50μm	0~50μm
Fiber Height	-100~50nm	-100~100nm	-100~50nm	-100~100nm
Angle	--	7.7-8.3degree	--	7.7-8.3degree
3D - Geometry				

Ordering Information

A0 - PC ① ② ③ ④ ⑤ - ⑥ - ⑦ ⑧ - ⑨

① Assembly Type	② Fiber Core	③④ Connector Type	⑤ Fiber Type	⑥ Cable diameter	⑦ Cable Jacket Type	⑧ Cable Color	⑨ Length
PC: PATCHCORD PT: PIGTAIL	Simplex:1 Duplex:2	SCP:SC/PC SCA:SC/APC FCP:FC/PC FCA:FC/APC	SM:9/125 M5:50/125 M6:62.5/125 OM:OM3 50/125	09:0.9mm 16:1.6mm 20:2.0mm 30:3.0mm	P:PVC L:LSZH	YE:YELLOW OR:ORANGE AQ=AQUA	11-99m

▾ Fiber Optic Adaptor

Features

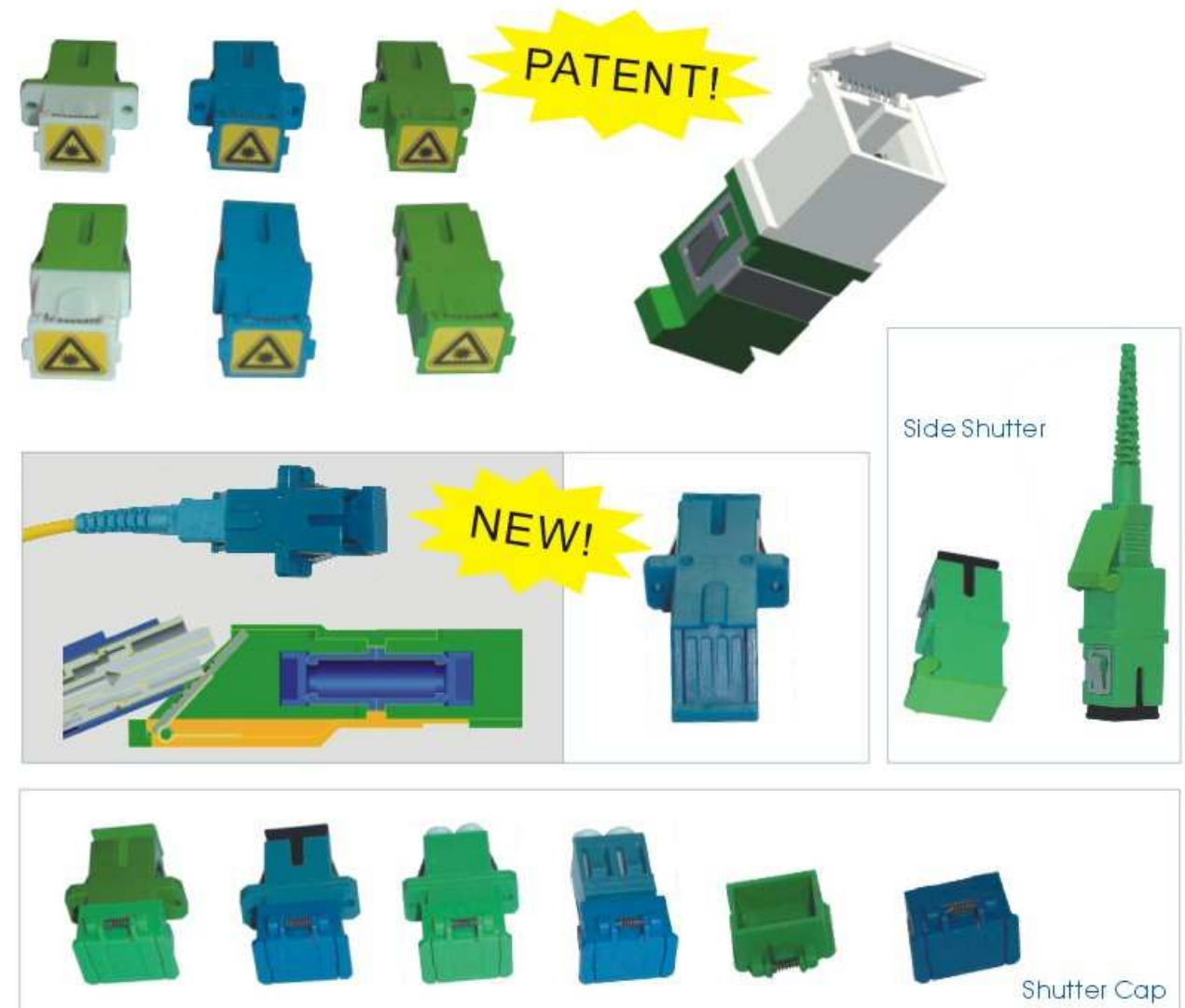
- Low Insertion Loss
- Compliant with Telcordia GR-326-Core, IEC, TIA
- High Precision of Mechanical Dimensions
- RoHS Compliance
- Available Ceramic or PB Sleeves
- Available Hybrid Adaptors/Shutter Adaptor

Applications

- CATV System
- Local Area Networks
- Telecommunication Networks
- FTTH and FTTx
- Testing Equipment
- Fiber LAN



▾ Fiber Shutter Adaptor



Specification

Optical Parameter	W/ Japanese Ceramic Sleeve	W/ Chinese Ceramic Sleeve	W/ PB Sleeve
Insertion Loss	< 0.10dB	< 0.20dB	< 0.30dB
Durability	< 0.10 dB typical change, 1000 times	< 0.20 dB typical change, 1000 times	< 0.20 dB typical change, 500 times
Operating Temp.	-20 ~ + 75°C		
Storage Temp.	-40 ~ + 85°C		

Ordering Information

AO - AD 1 2 3 4 5 - 6

① Adaptor Type	② Connector Finish	③ Sleeve Type	④ Fiber Core	⑤ Housing Color	⑥ Sleeve Grade
FC=FC SC=SC ST=ST MT=MTRJ	P=PC A=APC	C=Ceramic P=P,B	S=Simplex D=Duplex Q=Quad	W=White/Beige B=Blue G=Green M=Metal	P=Premium Japanese A=A grade Chinese sleeve B=B grade Chinese sleeve C=PB Sleeve

Fiber Optic Attenuator



Features

- Compliant with Telcordia-GR-910 Core
- Low Insertion Loss and Back Reflection
- Definable Attenuation from 1 dB to 30dB
- PC, UPC and APC Polish Types
- Available with FC, SC, ST, LC and MU Terminations
- RoHS Compliance

Applications

- Telecommunications Applications
- Local Area Network
- FTTH and FTTx
- DWDM Applications
- Test & Measurement
- Optical Fiber Sensors

Specification

Optical Performance	M-F Plug Type/ In line Type	F-F Adaptor Type
Operating Wavelength	SM 1260-1600nm	MM 1260-1320nm
Testing Wavelength	SM: 1310nm / 1550nm MM: 850nm / 1300nm	1310nm
Attenuation Accuracy	1-9 dB 0.5dB 10-30dB 10% of Attenuation Value	
Return Loss	≥ 45 dB (PC) ≥ 50 dB (UPC) ≥ 60 dB (APC)	N/A
Input Power (Max.)	200mW	
Durability	< 0.20 dB Typical, 1000 matings	
Operating Temp.	-20 ~ +75°C	
Storage Temp.	-40 ~ +85°C	

Ordering Information

A0 - ATTN - ① - ② - ③

① Connection Type	② Model	③ Attenuation Value
FCP=FC/PC SCP=SC/PC	M-F=Male to Female F-F=Female to female INL=Inline Type	05=5 dB 10=10dB

MCP & Loopback

Features

- IEEE802.3z(Gigabit Ethernet)compliant
- Suitable for Gigabit 1 000 BASE-LX on multimode cable
- Eliminate Differential Mode Delay effects
- Tested and approved to Gigabit Ethernet protocols-Coupled Power Ratio(CPR)
- Function like standard patch cords
- Riser,Plenum,and LSZH cables available

Applications

- Gigabit Ethernet hardware upgrade

Specification

Product	Mode Conditioning Patchcord
Cable Plant	62.5/125 or 50/125 MMF
Operating wavelength	1310nm
Maximum insertion loss	0.5dB (Typ:0.25dB)
Coupled power ratio(CPR)	28<CPR<40 dB for 62.5 μm MMF 12<CPR<20 dB for 50μm MMF
Back reflection	SM channel: 30dB,MM channel: 20dB
Mating Durability	500 mating cycles clean every 25 < 0.2dB Change
Operating Temp.	-20 ~ 75°C
Storage Temp.	-40 ~ 85°C

Mode Conditioning Patchcord



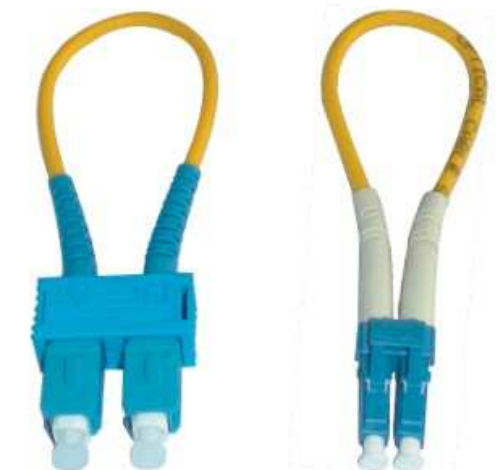
Features

- Compact design
- Compatible with Fast Ethernet, Fiber Channel, ATM, and Gigabit Ethernet
- Available for SC/LC/MTRU,SM/MM

Applications

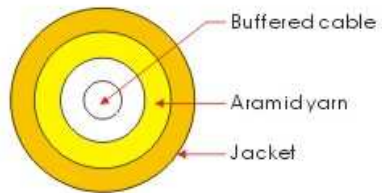
- Equipment interconnection
- Premise networks
- LoopBack for network components testing

Loopback

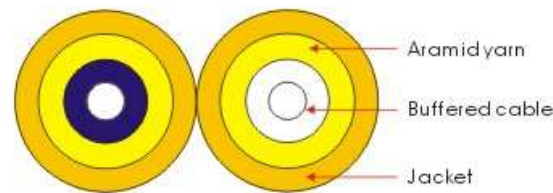


Indoor Cable

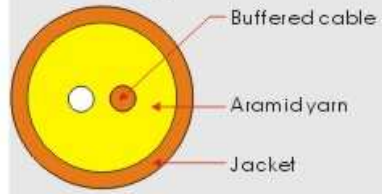
Indoor Simplex Cable(1F)
GJFJV



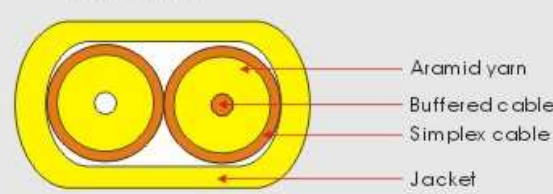
Duplex Zipcord Cable(2F)
GJFJBV



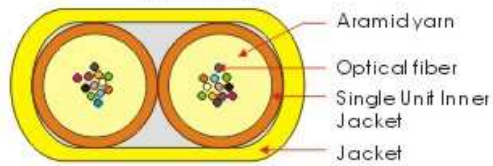
Duplex Round Cable(2F)
GJFJV



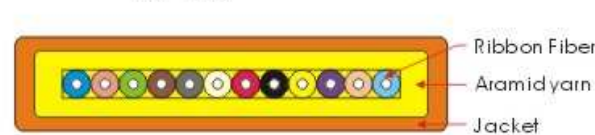
Flat Twin Cable(2F)
GJFHJB2Y



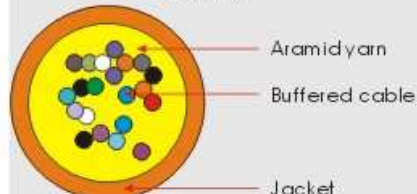
24Fiber Fan-out Mini Cable(12-24F)
GJFHB12Y



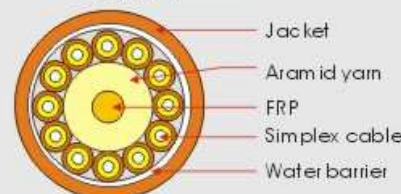
Indoor Ribbon Cable(4-24F)
GJFDBV



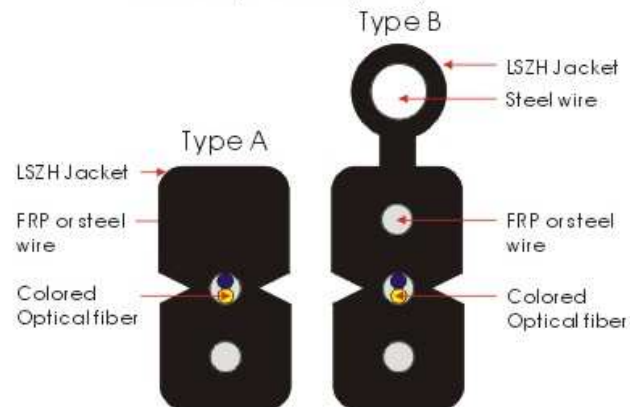
Indoor Distribution Cable(2-48F)
GJFJV



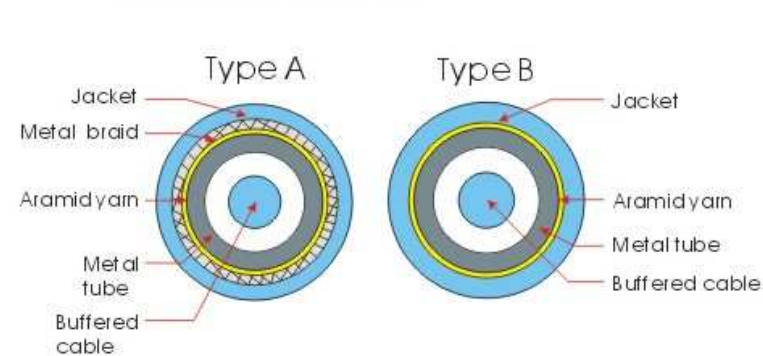
Breakout Cable(2-48F)
GJFPV



FTTH Drop Cable(1-2F)



Indoor Armoured Cable

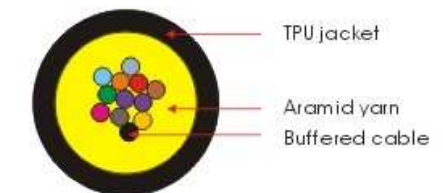


Outdoor Cable

Waterproof Distribution Cable(2-8F)
GJPA



Military Cable(4-48F)
GJFJU



Outdoor/Indoor Cable(2-12F)
GYXTY



Outdoor Armoured Loose Tube Cable(2-12F)
GYXTW



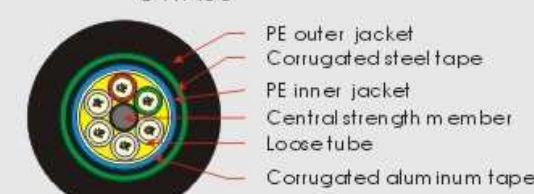
Outdoor Cable(2-288F)
GYTS/A



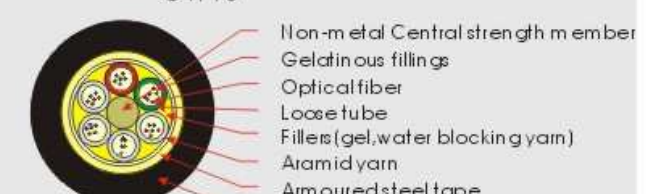
Outdoor Cable(2-288F)
GYTA



Outdoor Cable(2-144F)
GYA53



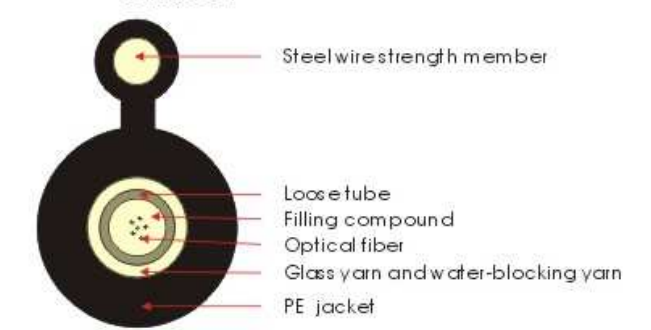
Outdoor Cable(2-144F)
GYT5



Outdoor Cable(2-288F)
GYTC8S



Outdoor Cable(2-12F)
GYTC8Y



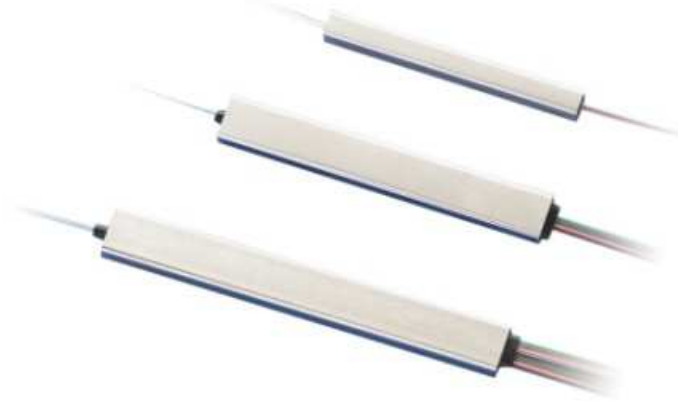
Your Reliable Fiber Connection

Features

- Low excess loss & High performance
- Good uniformity & Low PDL
- Small package size
- Various connector type & Package Size available

Applications

- Telecommunications networks
- CATV system
- Optical equipment
- Fiber optic sensors
- FTTH & FTTx



Planar lightwave circuit (PLC) splitter is fabricated using silica optical waveguide technology. Allopto provides a whole series of 1xN and 2xN splitters that are tailored for specific applications. All products meet Telcordia 1209 and 1221 reliability requirements and are certified by TLC for network deployment.

Specification

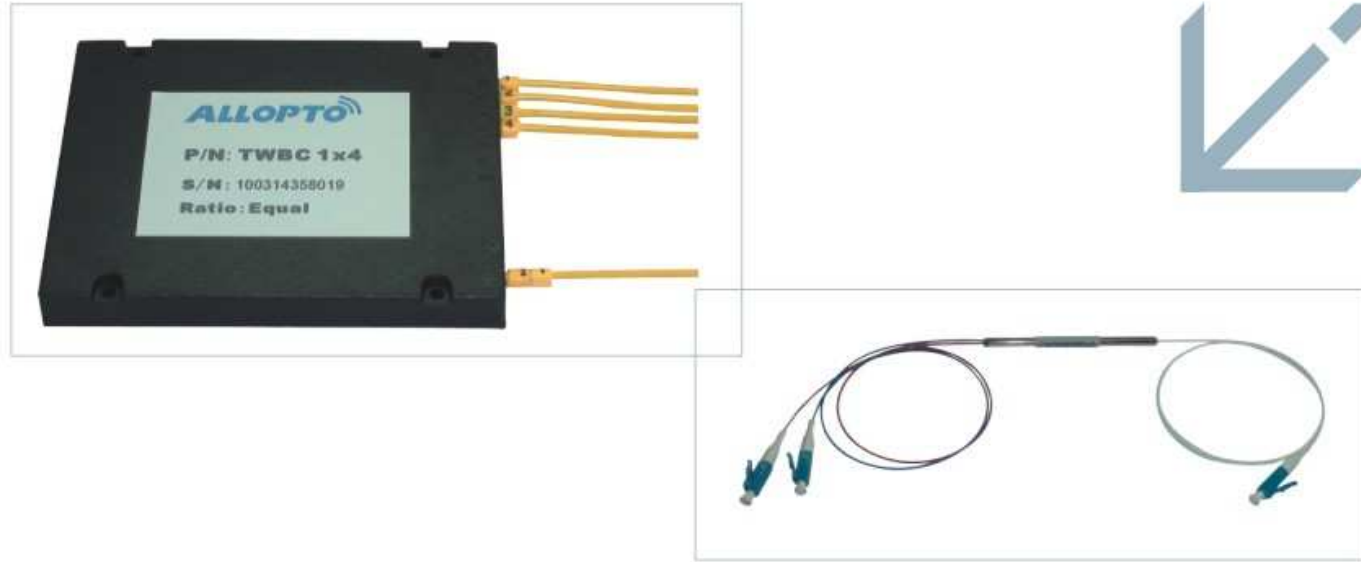
Parameters		1X2	1X4	1X8	1X16	1X32	1X64	2X2	2X4	2X8	2X16	2X32	
Operating Wavelength(nm)		1260~1650											
Insertion Loss(dB)	Typical	3.6	7.0	10.0	13.3	16.3	20.0	3.7	7.0	10.8	13.6	16.8	
	Max(P/S)	3.8/4.0	7.2/7.4	10.5/10.7	13.5/13.7	16.5/16.9	20.5/21.0	3.9/4.2	7.5/7.8	11.2/11.5	14.2/14.5	17.4/17.7	
Loss Uniformity(dB)	Typical	0.3	0.4	0.5	0.6	0.8	1.2	0.5	1.0	1.0	1.2	1.5	
	Max	0.4	0.6	0.8	1.2	1.5	2.5	0.6	1.2	1.5	1.8	2.0	
Return Loss(dB)(P/S)		55/50	55/50	55/50	55/50	55/50	55/50	55/50	55/50	55/50	55/50	55/50	
PDL(dB)	Typical	0.1	0.1	0.15	0.15	0.15	0.2	0.1	0.1	0.2	0.3	0.3	
	Max	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.4	0.4	0.4	
Directivity(dB)		Min 55											
Wavelength Dependent Loss(dB)	Typical	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	
	Max	0.3	0.3	0.3	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.8	
Temperature Stability (-40~85°C)(dB)	Typical	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	
	Max	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	
Operating Temperature(°C)		-40~85											
Storage Temperature(°C)		-40~85											
Packaging Size(mm)	Bare Splitter	40X4X4			50X7X4		60X12X4		50X4X4			60X7X4	
	Blockless Splitter	60X7X4		60X12X5		80X20X6		60X7X4			80X12X5		100X20X6

Notes: 1. All measurements were done at room temperature, and specifications exclude connectors
2.S:Standard, P:Premium

Specification

Parameters	1X2	1X4	1X8	1X16	1X32	1X64	2X2	2X4	2X8	2X16	2X32	
Operating Wavelength(nm)	1260~1650											
Insertion Loss(dB)	Typical	4.0	7.3	10.5	13.8	16.8	20.5	4.0	7.6	11.2	14.2	17.2
	Max(P/S)	4.3/4.5	7.5/7.7	11.0/11.2	14.0/14.2	17.0/17.5	21.0/21.5	4.4/4.7	8.0/8.3	11.7/12.0	14.7/15.0	17.9/18.2
Loss Uniformity(dB)	Typical	0.4	0.5	0.6	0.7	0.9	1.3	0.5	1.0	1.0	1.2	1.5
	Max	0.6	0.8	1.0	1.4	1.7	2.7	0.8	1.4	1.7	2.0	2.2
Return Loss(dB)(P/S)	UPC min	50/45	50/45	50/45	50/45	50/45	50/45	50/45	50/45	50/45	50/45	50/45
	APC min	55/50	55/50	55/50	55/50	55/50	55/50	55/50	55/50	55/50	55/50	55/50
PDL(dB)	Typical	0.1	0.1	0.15	0.15	0.15	0.2	0.1	0.1	0.2	0.3	0.3
	Max	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.4	0.4	0.4
Directivity(dB)		Min 55										
Wavelength Dependent Loss(dB)	Typical	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5
	Max	0.3	0.3	0.3	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.8
Temperature Stability (-40~85°C)(dB)	Typical	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	Max	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Operating Temperature(°C)		-40~85										
Storage Temperature(°C)		-40~85										
Cassette Type		Type O			Type L	Type S	Type O			Type L	Type S	
Packaging Size(LxWxH)(mm)		100X80X9			120X80X18	140X114X18	100X80X9			120X80X18	140X110X18	

Notes: 1. All measurements were done at room temperature, and specifications include connectors
2.S:Standard, P:Premium



Features

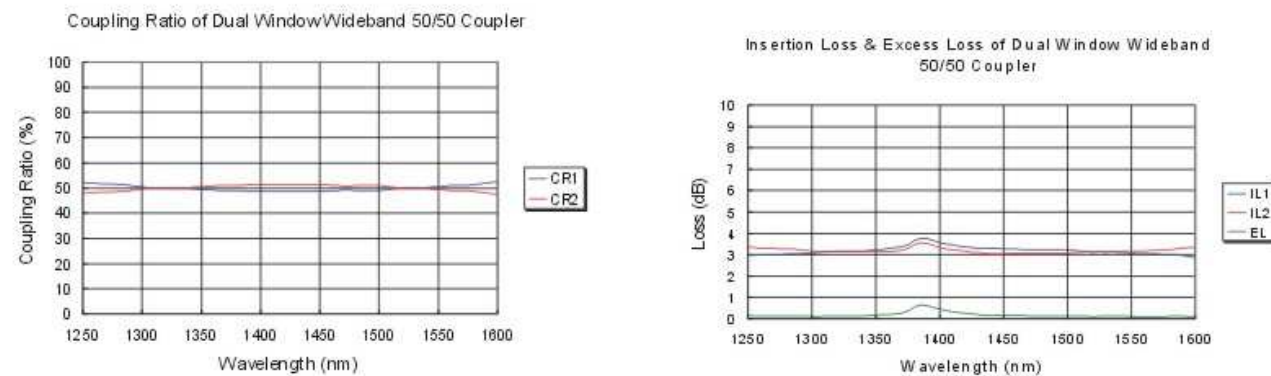
- Low Insertion Loss
- High Directivity
- Excellent Uniformity
- Low PDL

Applications

- Telecommunications
- Subscriber's network Equipment
- CATV & LAN
- Fiber optic sensing

Parameter	Single Mode Single Window (1310 or 1550)						Single Mode Dual Window (1310 & 1550)					
	1X2		1X4		1X8		1X2		1X4		1X8	
	P	A	P	A	P	A	P	A	P	A	P	A
Bandwidth (nm)	±20						±40					
I.L. (dB)	3.2	3.4	6.5	6.8	10	10.5	3.3	3.4	6.6	6.9	10.1	10.6
E.L. (dB)	0.1	0.2	0.3	0.4	0.6	0.7	0.15	0.3	0.4	0.5	0.7	0.8
Uniformity (dB)	0.2	0.4	0.4	0.8	0.8	1.4	0.2	0.4	0.4	0.8	0.8	1.4
Directivity (dB)	> 55											
PDL (dB)	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
Operating Temp.	-20 ~ 75 °C											
Storage Temp.	-40 ~ 85 °C											

Spectrum Diagram



Coupling Ratio	Insertion Loss (dB)			
	1310 or 1550		1310 & 1550	
	Premium	A Grade	Premium	A Grade
Grade				
50/50	3.2	3.4	3.3	3.5
45/55	3.7/2.8	3.9/2.9	3.8/2.9	4.0/3.1
40/60	4.2/2.4	4.4/2.6	4.3/2.5	4.5/2.7
35/65	4.8/2.0	5.0/2.2	4.9/2.1	5.1/2.3
30/70	5.5/1.7	5.7/1.9	5.6/1.8	5.8/2.0
25/75	6.3/1.4	6.6/1.6	6.4/1.5	6.7/1.7
20/80	7.3/1.1	7.6/1.3	7.4/1.2	7.8/1.4
15/85	8.6/0.9	9.1/1.0	8.7/1.0	9.2/1.1
10/90	10.6/0.6	11.2/0.8	10.7/0.7	11.3/0.9
5/95	14.1/0.4	15.4/0.5	14.2/0.5	15.5/0.6
1/99	21.5/0.2	21.7/0.3	22.4/0.3	23.2/0.4

Notes: 1. All measurements were done at room temperature, and specifications exclude connectors
2. S: Standard, P: Premium

Ordering Information

AO - ①①①① / 1XN - ②② - ③③③ - ④④/⑤⑤

① Coupler Type	② Multi Way N:	③ Cable Dia	④ Connector Type	⑤ Coupling Ratio
SMFC=SM Single window 1310 TWBC=SM Dual window 1310/1550	N=1,2,3,4,.....	30=0.3mm 20=0.2mm 09=0.9mm 25=2.5mm	SCA=SC/APC SCP=SC/PC FCA=FC/APC	50/50,55/45,....., 5/95

↘ FAC & Mechanical Splice

Fast Field Connector



Features

- Comply with Telcordia GR-326-CORE
- No epoxy, no polishing required
- Re-usable design
- Easy operation, quick connector
- High performance, high reliability, low loss

Applications

- FTTx fast field termination
- Telecommunication Network
- Data Communication Network

Specification

SPEC.	Technical Parameters
Available for Cable type	Φ 2mm/Φ 3mm/ FTTH drop cable
Available for Connector type	FC/PC, SC/PC
Fiber Mode	SM 652 & 657 / MM
Operation Time	About 120s
Insert Loss	≤ 0.3dB (1310nm & 1550nm)
Return Loss	≤ -40dB Typ. -48dB
Fastening Strength of Fiber	> 5 N
Fastening Strength of Fiber Holder	> 10 N
Tensile Strength	> 50 N
Operating Temp.	-40~+75°C
On-line Tensile Strength (20 N)	Δ IL ≤ 0.2dB Δ RL ≤ 5dB
Mechanical Durability (500 times)	Δ IL ≤ 0.2dB Δ RL ≤ 5dB
Drop-off Test	Δ IL ≤ 0.2dB Δ RL ≤ 5dB

Mechanical Splice



Specification

MODEL : AO-MS-L925B

SPEC.	Technical Parameters
Applicable for	φ0.25 mm & φ0.90 mm Fiber
Optical Fiber Diameter	125 μm (652 & 657)
Tight Buffer Diameter (μm)	250 μm
Fiber Mode	Single & multi mode
Operation Time	About 60s
Insert Loss	≤ 0.15dB (1310nm & 1550nm)
Return Loss	≤ -40dB
Fastening Strength of Bare Fiber	> 5 N
Fastening Strength of Bare Fiber Holder	> 10 N
Operating Temperature	-40~+75°C



↘ Fiber Media Converter



MC100S Series



MC100D Series



MC1000D Series



MC102S Series



MC102D Series



MC1000D Series

Features

- Full IEEE 802.3 & 100BaseFX Compliance
- Extended Environmental Specifications
- Support for Full/Half Duplex Operation
- LED Link/Activity Status Indication
- AutoSensing Speed and Flow Control

Applications

- Fast Ethernet Backbone Connection
- Telecommunication Network
- Data Communication Network

Specification

Parameter	Value
RJ45 Port	10/100Base or 10/100/1000Base
Fiber Optic Port	Multimode or Singlemode
No. of Fiber	One or Two
Fiber Optic Port Speed	100Mbps(100Base FX) or 1000Mbps(1000Base FX)
Fiber Optic Wavelength(nm)	850/1310/1550
Fiber Maximum Distance(km)	Up to 120
Optical Connector	LC, SC, ST, FC
Ethernet Protocols Support	All standard IEEE 802.3

Ordering Information

AO - MC ○○○ ○ ○○
① ② ③

① Series	② Fiber Mode	③ Transmission Distance
100=10/100M(1UTP)	M=Multi Mode	2=2km
102=10/100/1000M(2UTP)	D=SM Dual Fiber	20=20km
1000=10/100/1000M	S=SM Single Fiber	40=40km

Features

- Fiber termination/Connection ports option
- Optical splice capability
- Compact design
- Compatible with most cable management system

Applications

- Telecommunication Networks
- CATV Networks
- Local Area Networks
- Instrumentation
- Data communication Networks



ODF-R-A-24SC



ODF-R-S-24SC



ODF-R-B-12SC2



ODF-R-S-48FC



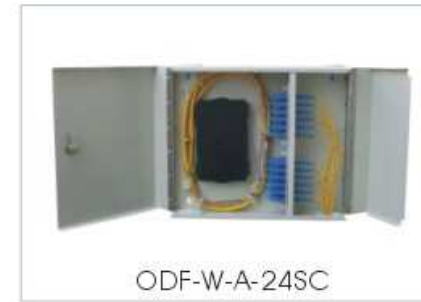
ODF-R-F-48FC



ODF-T-A-8SC



ODF-PLC-R-2-1 6SC



ODF-W-A-24SC



ODF-W-B-1 2FC



ODF-PLC-OW-64SC



ODF-R-B-48SC



ODF-R-B-96SC



ODF-PLC-M-2-32SC



ODF-PLC-W-1-8SC



ODF-PLC-F-1 6X1-8SC

FTTH Fiber Socket



FS-W-4SC



FS-W-2SC/FC



Features

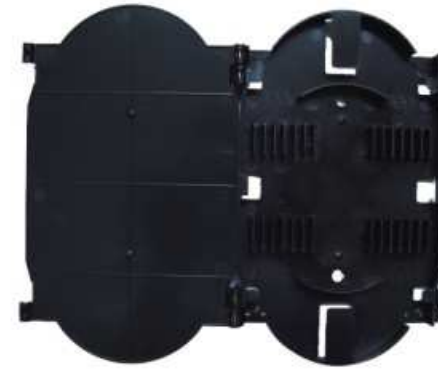
- Closure provides perfect solution for the protection of the junction point of optical fiber cable from environment
- Silicone gasket is used to seal closure and provide a long term reliability
- Closures have two or three cable entrance ports on each end
- Closures can be installed at temperatures between (-40°C ~ 80°C)
- Closures are compact and lightweight

Applications

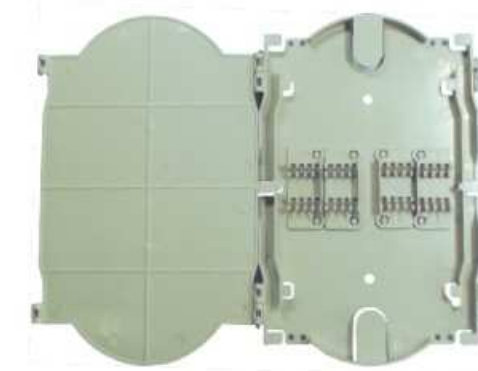
- Telecommunication Networks
- CATV Networks
- Local Area Networks
- Underground, Aerial, Buried
- Vault and Building environments



Splicing Cassette



AO-ST-B24 (12-24F)



AO-SC-A32 (4-32F)

Fiber Protection Sleeve



Ribbon type (8/12F)
L40mm



Simplex type
L40/45/60mm
Dia.2.0/2.5/3.0mm

Specification

Operation Temperature
-45 ~ 100 °C

Heat Shrink Temperature Range
90~110 °C

Standard	Testing reference	Typ. Data
Tensile Strength (MPa)	ASTM D 2671	≥18 MPa
Rupture elongate ratio (%)	ASTM D 2671	700%
Density(g/cm ³)	ISO R1183D	0.94g/cm ³
Intensity (KV/mm)	IEC 243	20 KV/mm
Constant	IEC 243	2.5 max.
Tolerance of length(%)	ASTM D 2671	0+5%

