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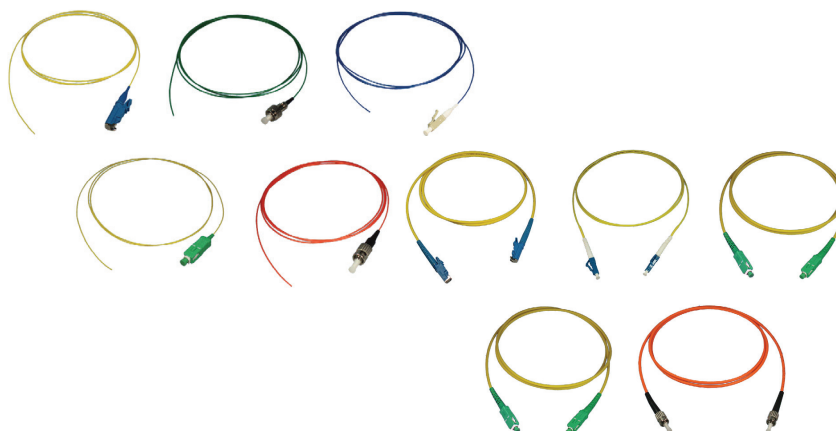
C-EN-A01-08/19-003

### General information :

Cable assemblies are becoming the most important and in common use interconnection parts in communication systems because of varieties and convenient connection.

Euroclust offers nearly all kind of patch cords and pigtails with high technology and stability with different mode (SM/MM) and different fibre and cable types. All the cable assemblies of euroclust could meet IEC, JIS, Bellcore international standards.

Euroclust could provide the most extensive, flexible and efficient solutions for all systems.



### Assembly classes :

euroclust has classified their fiber optic cable assembly portfolio into three different application specific classes - „Standard, Premium, Master“. These classes differ in the SM and MM application by the different assured values of Insertion Loss (I.L.) and Return Loss (R.L.). The insertion loss (I.L.) value is granted in such a way that 97% of all assemblies will not exceed the value mentioned in the tables below, whereas the return loss in no case will be less than the indicated value in the table. For SM applications for any assembly the I.L. and R.L. is measured individually and the measured actual values are indicated either on the packing (standard) or on a separate test protocol (surcharge). For MM assemblies with the assembly class “Standard, Premium or Master” it is secured, that the I.L. and R.L. values are within the indicated values, but are not indicated individually.

### Technical specification:

ITEM	SM	MM
Durability (1000 Mating)	0,2dB max Increase	
Temperature range (°C) (storage)	-25 to +50	
Temperature range (°C) (operation)	-20 to +60	

### Grades classification :

Conector type	SC, LC			ST, FC, SC, LC, E2000			ST, FC, SC, LC, E2000			
	Master A			Premium B			Standard C			
	SM/APC	SM/PC	MM/PC OM3/4	SM/APC	SM/PC	MM/PC OM3/4	SM/APC	SM/PC	MM/PC OM3/4	MM/PC
	Grade A/1	Grade A/2	Grade A/3	Grade B/1	Grade B/2	Grade B/3	Grade C/1	Grade C/2	Grade C/3	Grade C/4
I.L. (97%)	0,10dB	0,10dB	0,15dB	0,15dB	0,15dB	0,25dB	0,30dB	0,30dB	0,30dB	0,30dB
I.L. typical value	0,07dB	0,07dB	0,10dB	0,12dB	0,12dB	0,20dB	0,25dB	0,25dB	0,25dB	0,25dB
R.L. (97%)	60dB	45dB	35dB	60dB	45dB	35dB	60dB	45dB	35dB	N/A
R.L. typical value	65dB	60dB	40dB	65dB	60dB	50dB	65dB	55dB	50dB	35dB

Attenuation Grade	Attenuation random mated IEC 61300-3-34	
A	0,07dB mean	97% of samples achieve at least 0,15dB max
B	0,12dB mean	97% of samples achieve at least 0,25dB max
C	0,25dB mean	97% of samples achieve at least 0,50dB max
D	0,50dB mean	97% of samples achieve at least 1,00dB max

Return Loss Grade	Return Loss Random mated (each to each) IEC 61300-3-6	
Grade 1	60dB (mated) and 55dB (unmated)	
Grade 2	45dB	
Grade 3	35dB	
Grade 4	26dB	

Grade 1 specified as mated (plugged-in) and unmated (against air)

## Fiber specification

Bend Insensitive Multi mode fiber			62,5/125 μm OM1	50/125μm OM2	50/125μm OM3	50/125μm OM4	50/125μm OM5
Attenuation	850nm	dB.km	≤2,7	≤2,3	≤2,3	≤2,3	≤2,4
	953nm		-	-	-	-	≤1,7
	1300nm		≤0,6	≤0,6	≤0,6	≤0,6	≤0,6
OFL Bandwidth	850nm	Mhz.km	≥200	≥700	≥1500	≥3500	≥3500
	953nm		-	-	-	-	≥1850
	1300nm		≥500	≥500	≥500	≥500	≥500
1Gbps Ethernet	SX 850nm	m	≤700	≤750	≤1000	≤1100	-
	LX1300nm		≤500	≤600	≤600	≤600	-
10Gigabit Ethernet SX	850nm	m	-	150	300	550	1100
40 & 100 Gigabit Ethernet	850nm	m	-	-	100	150	600
Group Refractive Index	850nm		1496	1,482	1,482	1,482	1,482
	1300nm		1491	1,477	1,477	1,477	1,477
Numerical Aperture		μm	0,275±0,015	0,20±0,015	0,20±0,015	0,20±0,015	0,20±0,015
Core diameter		μm	62,5±2,5	50.0±2,5	50.0±2,5	50.0±2,5	50.0±2,5
Core Non-Circularity		%	≤5,0	≤5,0	≤5,0	≤5,0	≤5,0
Cladding Diameter		μm	125±1.0	125±1.0	125±1.0	125±1.0	125±0,8
Clad Non-Circularity		%	≤1,0	≤1,0	≤1,0	≤1,0	≤0,6
Coating Diameter		μm	245±7	245±7	245±7	245±7	245±7
Coating Non-Circularity		%	≤6,0	≤6,0	≤6,0	≤6,0	≤6,0
Core/Clad Concentricity Error		μm	≤1.5	≤1.0	≤1.0	≤1.0	≤1.0
Coating-Clad Concentricity Error		μm		≤12	≤12	≤12	≤12
Zero Dispersion Wavelength		nm	1295 -1365	1295 -1320	1295 -1320	1295 -1320	1297 -1328
Zero Dispersion Slope	1295-1300nm	(ps/(nm <sup>2</sup> .kkm))	-	≤0,001*(λ <sub>0</sub> -1190)			≤4(-103)/(840(1-(λ <sub>0</sub> /840) <sup>4</sup> ))
	1300-1320nm		-	≤0,11			

Note: MM OM5 fiber from YOFC company. Use optical fibres from other company upon request.

Single mode fiber			9/125μm G.652D	9/125μm G.657.A2	9/125μm G657.B2	9/125μm G.655.D
Maximum Attenuation	1310nm	dB/km	≤0,32	0,33-0,35	0,33-0,35	-
	1383±3*nm		≤0,32	0,31-0,35	0,31-0,35	≤0,32
	1490nm		≤0,21	0,21-0,24	0,21-0,24	-
	1550nm		≤0,18	0,19-0,20	0,19-0,20	≤0,19
	1625nm		≤0,20	0,20-0,23	0,20-0,23	≤0,21
Point Discontinuity	1310nm	dB	≤0,05	≤0,05	≤0,05	-
	1550nm		≤0,05	≤0,05	≤0,05	≤0,05
Mode-Field Diameter	1310nm	μm	9,2±0.4	8,6±0.4	8,6±0.4	-
	1550nm		10,4±0.5	9,6±0.5	9,6±0.5	9,6±0.4
Cable Cut-Off Wavelength (λ <sub>cc</sub> )		μm	≤1260	≤1260	≤1260	-
Max. Difference - Attenuation vs Wavelength :	1310nm	dB/km	0,03	0,03	0,03	0,03
	1550nm		0,02	0,02	0,02	0,02
PMD Link Design Value		ps/√km	≤0.04**	≤0.06**	≤0.06**	≤0.04**
Maximum Individual Fiber PMD		ps/√km	≤0.1	≤0.2	≤0.2	≤0.1
Dispersion (λ <sub>0</sub> ) :	1550nm	ps/(nm.km)	≤18,0	≤18,0	≤18,0	-
	1625nm		≤22,0	≤23,0	≤23,0	5,8-11,2
Coating Diameter		μm	242±5	242±5	242±5	245±5
Coating-Cladding Concentricity		μm	<12	<12	<12	<12
Cladding Diameter		μm	125±0.7	125±0.7	125±0.7	125±0.7
Core/Clad Concentricity		μm	≤0.5	≤0.5	≤0.5	≤0.5
Cladding Non-Circularity		%	≤0,7	≤0,7	≤0,7	≤0,7

\* - Attenuation post-hydrogen aging according to IEC 60793-2-5 Section C.5 for B.1.3 fibers. Alternative attenuation offerings available upon request

\*\* - Complies with IEC 60794-3:2001, Section 5.5, Method 1, (m=20, Q=0,01%), September 2001.

General information:

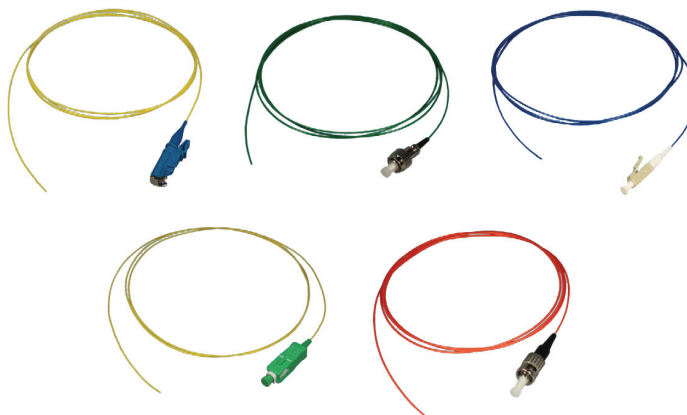
Normally for SM use optical fibres from Corning company. Use optical fibres from other company upon request.

### Field of Application

- Telecommunication
- CATV
- LAN and WAN
- Network
- Broadband
- FTTx

### Features

- Meet IEC international standard requirements
- High performance and cost effective
- Mass and flexible production meeting variety demand
- Custom assemblies available upon request
- OEM available upon request
- Unibody connectors



### Product description

Pigtails with one side mounted connectors are favorable used to divide multi core fiber optic cables by use of a splicing technique. In order to obtain an optimal splice procedure semi tight fiber with loose secondary coating without any gel is used. Thus stripping of 100cm in one working step is possible. Fiber pigtails are equipped with connectors without any strain relief, as patch panels and splice boxes afford enough protection against environmental influences.

### General information

- Fibers :**
- for all available types of fibres see page number 2
  - SM fibres are produce by Corning company, MM fibers are from YOFC. Use optical fibers from other company available on request.
- Stripability :**
- **Tight** - easy stripping up to 10cm
  - **Easy strip** - easy stripping up to 100cm
- Length possibilities :**
- all pigtails are available in 1m, 1,5m, 2m, 2,5m and 5m
- Dust cap :**
- standard dust cap is semi transparent. Other colors are available
- Buffer material :**
- LSZH - Low Smoke Zero Halogen
- Boot material :**
- TPU (Thermoplastic polyurethane)
- Boot RAL color :**
- Blue RAL 5015, White RAL 9003, Green RAL 6018, Beige RAL 1013, Aqua RAL 6027, Heather violet RAL 4003, Lime Green Pantone 22974

	SM/PC	SM/APC	MM/OM1	MM/OM2	MM/OM3	MM/OM4	MM/OM5
<b>ST</b>	Blue	-	Black	Beige	Aqua	Heather violet	Lime green
<b>SC</b>	Blue	Green	Black	Beige	Aqua	Heather violet	Lime green
<b>LC</b>	Blue	Green	Black	Beige	Aqua	Heather violet	Lime green
<b>FC</b>	Blue	Green	Black	Beige	Aqua	Heather violet	Lime green
<b>E2000</b>	Blue (blue lever)	Green (green lever)	Black (orange lever)	Black (orange lever)	Black (aqua lever)	Black (aqua lever)	-

- Buffer color coding :** (single color set)
- SM E9/125 yellow
  - MM G62,5/125 OM1 grey
  - MM G50/125, OM2 orange
  - MM G50/125 OM3 turquoise/aqua
  - MM G50/125 OM4 heather violet
  - MM G50/125 OM5 lime green

**Note :-** 250µm primary coating and 900µm buffer jacket have an identical colors (bare fiber and buffer jacket)

### Color information:

No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	Red	Green	Blue	Yellow	White	Grey	Brown	Violet	Aqua	Black	Orange	Pink

Any other colors according to IEC60794-2/DIN VDE 088 part 3) on specific request, in case a delivery with form of 12 piece packing is requested the 12 pigtails will be delivered with the 12 colors according to IEC/DIN standard

## ec article number system - Fiber Pigtails

EC3\_ . X X . - - -  
 0 . 1 2 3 4 5 6 . 7 8 9 - A B C D

### Position 0 - stripability

- 0 - C - LSZH, easy strip  
 E - LSZH, tight buffer

### Position 5,6 - buffer outer diameter

- 5,6 - 06 - 0,6mm buffer  
 09 - 0,9mm buffer - STANDARD

### Position 1 - connector type

- 1 - 1 - FC connector  
 2 - SC connector  
 3 - ST connector  
 4 - LC connector  
 7 - E2000 connector  
 B - LCsx HD (push-pull)  
 Y - SC OM3/OM4 Grade A  
 Z - LC OM3/OM4 Grade A

### Position 7,8,9 - length of pigtail

- 7,8,9 - 001 - 1,0m length  
 1P5 - 1,5m length  
 002 - 2,0m length - STANDARD  
 2P5 - 2,5m length  
 005 - 5,0m length

### Position 2 - fiber type and connector grade

- 2 - 1 - MM/PC 50/125, OM5, Grade B  
 2 - SM/UPC 9/125 G652D, Grade C/2  
 3 - SM/APC 9/125 G652D, Grade C/1  
 4 - MM/PC 62.5/125 (OM1), Grade C/4  
 5 - MM/PC 50/125 (OM2), Grade C/4  
 6 - MM/PC 50/125 (OM3) 1500/500, Grade C/3  
 7 - MM/PC 50/125 (OM4) 3500/500, Grade C/3  
 8 - SM/UPC 9/125 G657A1, Grade C/2  
 9 - SM/UPC 9/125 G657B3, Grade C/2  
 A - SM/APC 9/125 G657A1, Grade C/1  
 B - SM/APC 9/125 G657B3, Grade C/1  
 C - MM/PC 50/125 (OM3) 1500/500, Grade B/3  
 D - MM/PC 50/125 (OM4) 3500/500, Grade B/3  
 E - SM/UPC 9/125 G652D, Grade B/2  
 F - SM/APC 9/125 G652D, Grade B/1  
 G - SM/UPC 9/125 G652D, Grade A/2  
 H - SM/APC 9/125 G652D, Grade A/1  
 I - SM/UPC 9/125 G657A1, Grade B/2  
 J - SM/APC 9/125 G657A1, Grade B/1  
 K - SM/UPC 9/125 G657A1, Grade A/2  
 L - SM/APC 9/125 G657A1, Grade A/1  
 M - SM/UPC 9/125 G655C/D, Grade C/2  
 N - SM/APC 9/125 G655C/D, Grade C/1  
 O - SM/UPC 9/125 G657A2, Grade C/2  
 P - SM/APC 9/125 G657A2, Grade C/1  
 Q - SM/UPC 9/125 G657A2, Grade B/2  
 R - SM/APC 9/125 G657A2, Grade B/1  
 S - SM/UPC 9/125 G657A2, Grade A/2  
 T - SM/APC 9/125 G657A2, Grade A/1  
 U - SM/UPC 9/125 G657B3, Grade B/2  
 V - SM/APC 9/125 G657B3, Grade B/1  
 W - SM/UPC 9/125 G655, Grade B/2  
 X - SM/APC 9/125 G655, Grade B/1

### Position A,B - buffer color

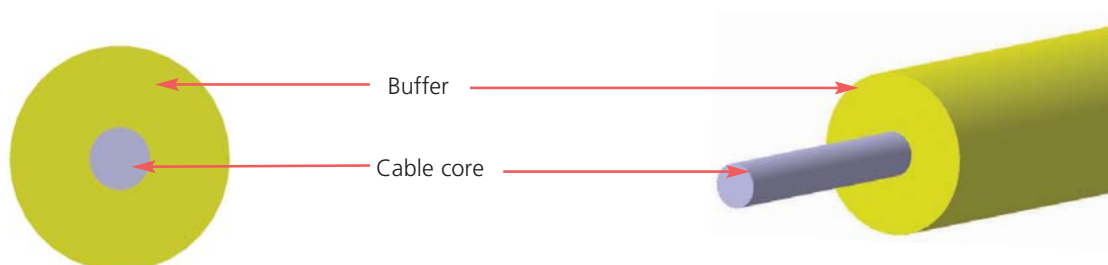
- A,B - AQ - Aqua  
 BL - Blue  
 BK - Black  
 BR - Brown  
 GR - Green  
 GY - Grey  
 OR - Orange  
 PI - Pink  
 RE - Red  
 TW - Twelve DIN colors - STANDARD  
 YE - Yellow  
 VI - Violet  
 WH - White  
 EI - Eight DIN colors  
 FO - Four DIN colors  
 HV - Heather Violet  
 LG - Lime Green

### Position C - type of packing

- C - \_ (blank) - Single packing  
 C - Cardboard, 12 pieces in one bag - STANDARD  
 D - Cardboard, 12 pieces in one bag - one color  
 E - Cardboard, 8 pieces in one bag  
 F - Cardboard, 4 pieces in one bag

### Position D - test protocol

- D - \_ (blank) - no test protocol  
 T - with test protocol - STANDARD



Features
- For direct connector assembly
- Tight or semi-tight version is available
- High flexibility
- Halogen free and non-corrosive fire gases
- Tight bending radius
- Jelly free

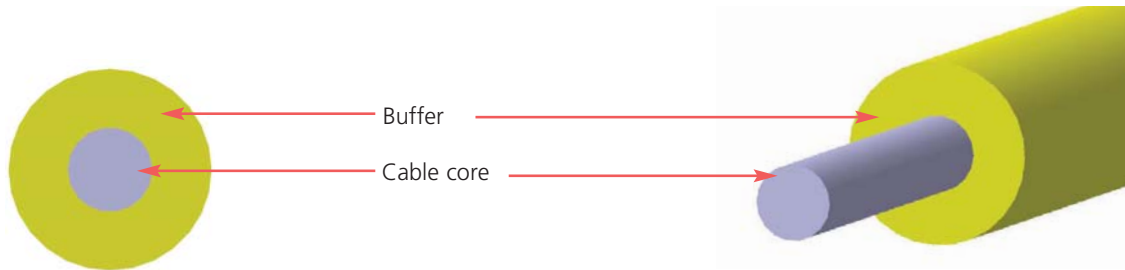
Temperature range
LSZH jacket -20°C to +70°C
Temperature range according to (IEC 60794-1-2-F1)

Field of Application
- Pigtail assemblies for fusion or mechanical splicing within distribution frames and termination boxes
- Mini patch cables within protected enclosures
- For termination with passive optical components such as connectors

Technical specifications	
Fibers	1 colour coded singlemode or multimode optical fiber
Color	See the section color information
Lifetime	30 years

Technical data:	
Cable diameter (µm)	600
Nominal weight (kg/km)	0,7
Tensile strength (N)	3
Impact resistance (w/g)	50
Crush resistance (N/10cm)	6
Min. bending radius (mm)	3xD
Outer jacket	LSZH

## Buffer 0,9mm



### Features

- For direct connector assembly
- Tight or semi-tight version is available
- High flexibility
- Halogen free and non-corrosive fire gases
- Tight bending radius
- Jelly free

### Temperature range

LSZH jacket -20°C to +70°C  
 Temperature range according to (IEC 60794-1-2-F1)

### Field of Application

- Pigtail assemblies for fusion or mechanical splicing within distribution frames and termination boxes
- Mini patch cables within protected enclosures
- For termination with passive optical components such as connectors

### Technical specifications

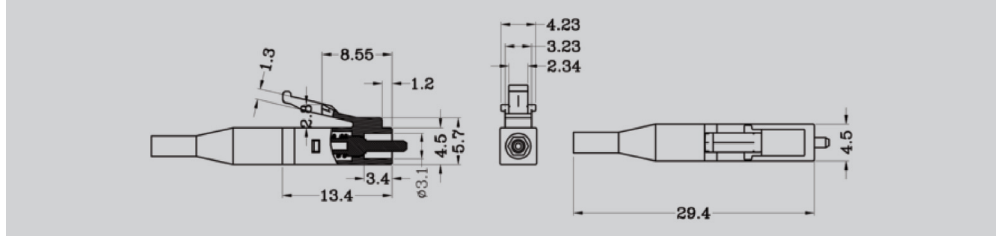
Fibers	1 colour coded singlemode or multimode optical fiber
Colour	See the section color information
Lifetime	30 years

### Technical data:

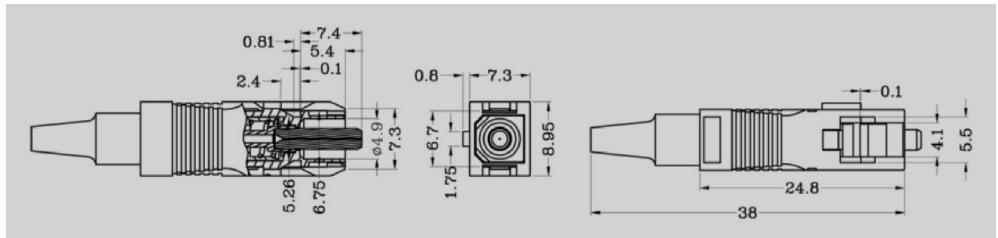
Cable diameter (µm)	900
Nominal weight (kg/km)	0,9
Tensile strength short term (N)	6
Tensile strength long term(N)	3
Min. bending radius dynamic (mm)	20xD
Min. bending radius static (mm)	10xD
Outer jacket	LSZH

Types of fiber optic pigtails :

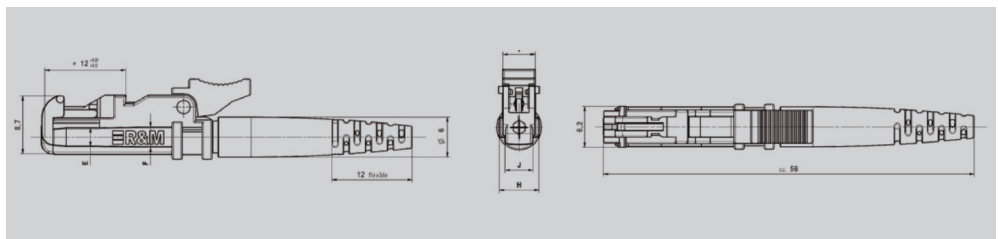
LC type :



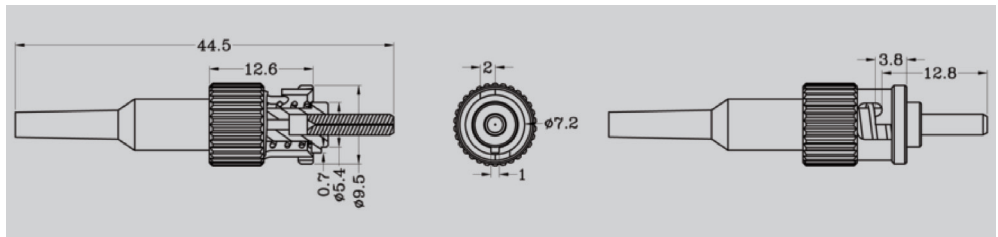
SC type :



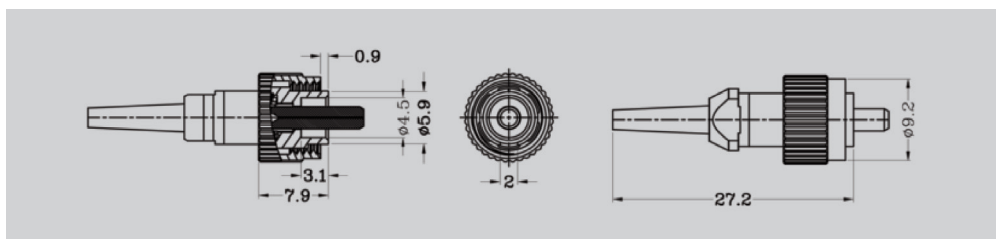
E2000 type :



ST type :



FC type :





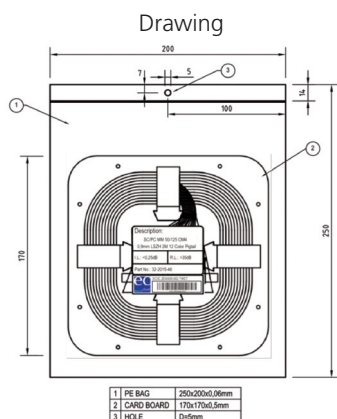
# Packing information-Fiber pigtail

## Packing and labeling :

### Cardboard packing:

- 12 pieces in one foil bag
- measurement protocol with value per pigtail
- weight of one packing :

	SC	LC	FC	ST	E2000
12pcs	83g	48g	92g	100g	55g
8pcs	58g	34g	64g	69g	39g
4pcs	30g	18g	33g	36g	20g



**Test protocol**

90mm

**Test Protocol**

Date: 18th, Sep, 2013  
 Article description: SC-APC Pigtail, SM  
 Production code No.: P/N 32-2013-38  
 Fiber type: 9/125µm, SM, OFS-Fiber  
 Cable type: 0.9mm, LSZH, 12 color DIN  
 Cable designation: Optical cable  
 xx(M)/xx(Y)-SM FIBER LSZH \*\*\*\*M  
 Length: 2.0m  
 Compliance: RoHS  
 Grade: C1  
 Insertion loss: <0.3dB  
 Return loss: >=65dB

\*Connector surface check with 400 times enlargement  
 \*Test according IEC874-1 method 7  
 \*Fibre protrusion : < ± 50µm, (except MTRJ)  
 \*Clean ferrule before using

Test at wavelength: 1310nm  
 Actual measured values ( dB ) only for SM:

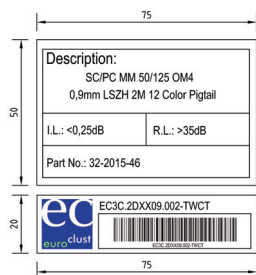
Port 1: blue	I.L.= 0.14
Port 2: orange	I.L.= 0.09
Port 3: green	I.L.= 0.17
Port 4: brown	I.L.= 0.08
Port 5: grey	I.L.= 0.11
Port 6: white	I.L.= 0.08
Port 7: red	I.L.= 0.16
Port 8: black	I.L.= 0.15
Port 9: yellow	I.L.= 0.14
Port 10: purple	I.L.= 0.17
Port 11: pink	I.L.= 0.08
Port 12: aqua	I.L.= 0.19

Connector Type:  
 SC-APC plastic housing green

Tested By: \_\_\_\_\_

150mm

### Labeling :



->This label can be removed or substituted with other logo

Note: Custom labeling is available on request.

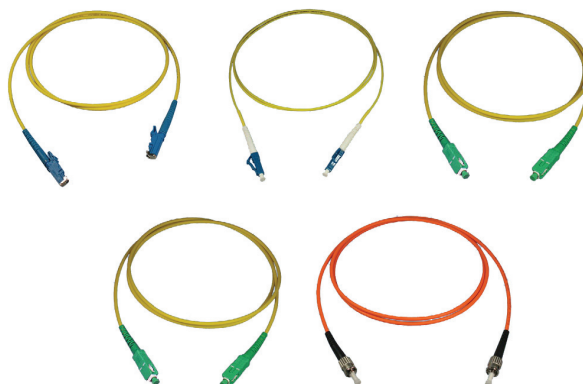
## Cable patch cord - general information

### Field of Application

- Telecommunication
- CATV
- LAN and WAN
- Network
- Broadband
- FTTx

### Features

- Meet IEC international standard requirements
- High performance and cost effective
- Mass and flexible production meeting variety demand
- Custom assemblies available upon request
- OEM available upon request
- Unibody connectors



### Product description

Patch cables/Patch cords are mainly used on patch panel or for the connection between outlets and terminal equipments. Duplex cables together with duplex adapters avoid the permutation of transmitter and receiver terminals. The quality of connectors and the fibers are mainly determined by the insertion loss (I.L.) and return loss (R.L.).

### General information

**Fibers :**

- for all available types of fibres see page number 2.
- SM fibres are produced by Corning company, MM fibers are from YOFC. Use optical fibers from other company available on request.

**Stripability :**

- **Tight** - easy stripping up to 10cm (patchcord)
- **Easy strip** - easy stripping up to 100cm (cable pigtail)

**Length possibilities :**

- all patch cords are available in 0,1m, 0,2m, 0,3m, 1m, 2m, 3m, 4m, etc...
- Other lengths are available on request

**Dust cap :**

- standard dust cap is semi transparent. Other colors are available
- special dust cap for LC connector - 1W type



**Buffer material :**

- LSZH - Low Smoke Zero Halogen

**Boot:** Material : TPU (Thermoplastic polyurethane)

EC color standard :

Cable	Connector	Duplex											
		2xST		2xFC		SCdx		LCdx		Simplex			
		Black	White	Black	White	Blue	White	Blue	White	Blue	Blue	Blue	Blue
SM/E9 - OS2	PC	Black	White	Black	White	Blue	White	Blue	White	Blue	Blue	Blue	Blue
SM/E9 - OS2	APC	Black	White	Green	White	Green	White	Green	White	Green	Green	Green	Green
MM/G50 OM2	PC	Black	White	Black	White	Blue	White	Blue	White	White	White	White	White
MM/G50 OM3	PC	Black	White	Black	White	Blue	White	Blue	White	White	White	White	White
MM/G50 OM4	PC	Black	White	Black	White	Blue	White	Blue	White	White	White	White	White
MM/G50 OM5	PC	Black	White	Black	White	Blue	White	Blue	White	White	White	White	White
MM/G62.5 OM1	PC	Black	White	Black	White	Black	White	Black	White	Black	Black	Black	Black

**Buffer color coding :**

- SM E9/125 yellow
- MM G62,5/125 OM1 grey
- MM G50/125 OM2 orange
- MM G50/125 OM3 turquoise/aqua
- MM G50/125 OM4 heather violet
- MM G50/125 OM5 Lime Green

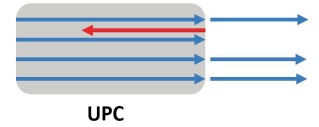
**Note :** - 250µm primary coating and 900µm buffer jacket have an identical colors (bare fiber and buffer jacket)  
 - Compliance with Telecordia GR-326 Core and IEC 62005

# Cable patch cord - technical information

## Physical contact :

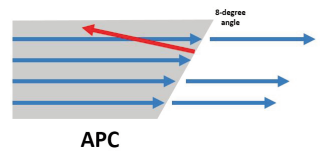
### Physical Contact: PC=0°

The end face of connector is under 90° to the optical axis. By using spherical polish and spring-loaded ferrules, the fibres make contact at the front surfaces, whereby the air between the fibres is squeezed out and a glass-to-glass transition is formed. This leads to a low reflection and a low transition attenuation.



### Angled Physical Contact APC=8°

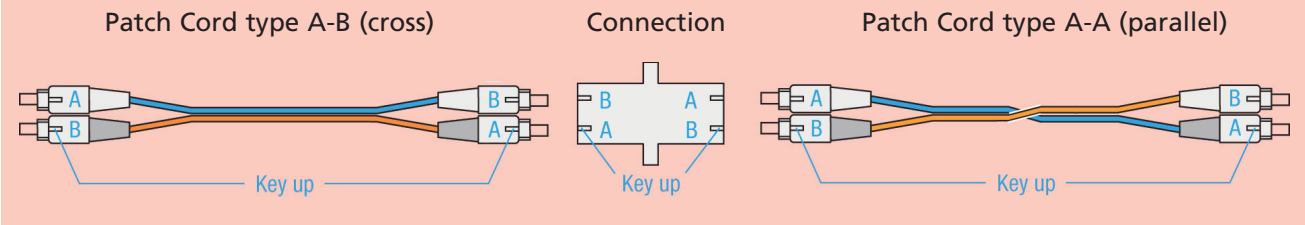
The end face of connector is under 8° to the vertical axis. Angular cut of the front surfaces steepens the reflected modes to such a degree, that they are no longer guided inside the core but coupled into the cladding whilst maintaining the reflection losses. APC is a combination of angular cut and spherical polish. These connector types are low in attenuation and almost reflection-free, but they can only be polished on machines.



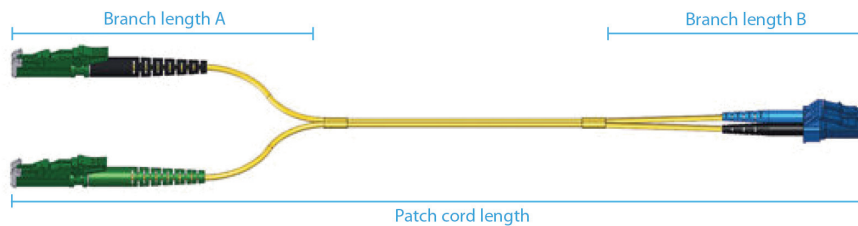
## Figure:



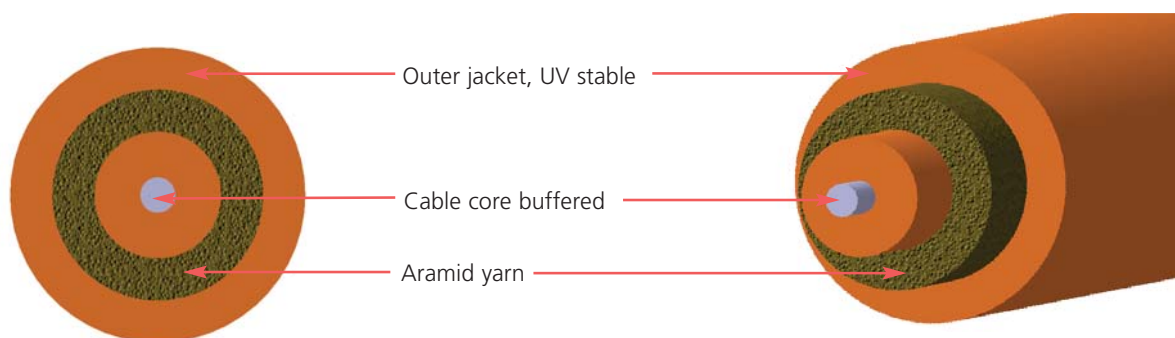
## Polarity of Patch Cord:



## Patch Cord lengths:



C-EN-A01-08/19-003



### Features

- Indoor installation possible
- Aramid yarn
- Can be terminated directly
- Flexible and resilient
- Tight bending radius

### Temperature range

LSZH jacket -20°C to +70°C  
Temperature range according to (IEC 60794-1-2-F1)

### Field of Application

- Installation inside of telecommunication and datasystems
- Installation in dry and damp rooms
- Underground laying is not allowed

### Product description

Simplex cable is flexible and resilient. This cable can be terminated directly. Water blocking aramid yarn provides better tensile strength of cable. Suitable for indoor installation.

### Technical specifications

Fibers	1 colour coded singlemode or multimode optical fiber
Colour	Fibers - see the section color information table Jacket - orange (other colors available upon request)
Lifetime	30 years

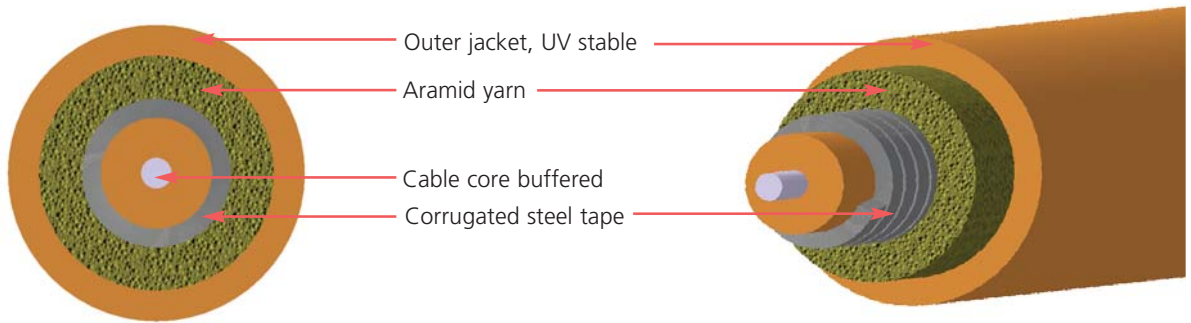
### Technical data:

	1,2	1,2	1,6	1,8	2,0	2,4	3,0
Cable diameter (mm)	1,2	1,2	1,6	1,8	2,0	2,4	3,0
Cable core diameter (µm)	250	250/500	250/600	250/600	250/900	250/900	250/900
Nominal weight (kg/km)	1,1	1,7	2,9	3,2	3,5	5,0	6,8
Tensile strength short term (N)	10	10	100	100	100	100	150
Tensile strength long term (N)	20	20	40	40	60	60	80
Min. bending radius dynamic (mm)	20xD	20xD	20xD	20xD	20xD	20xD	20xD
Min. bending radius static (mm)	10xD	10xD	10xD	10xD	10xD	10xD	10xD
Crush resistance (N/100mm <sup>2</sup> )	500	500	500	500	500	500	500
Outer jacket	LSZH	LSZH	LSZH	LSZH	LSZH	LSZH	LSZH

Note: For further information about ec article numbers of fiber optic cable, please check our Fiber Optic cable catalog.

## Armoured simplex cable

J-V(ZN)(SR)H



### Features

- Indoor or outdoor installation possible
- Aramid yarn
- High compression resistant
- Full rodent protection
- Micro diameter
- Good flexibility

### Temperature range

LSZH jacket -40°C to +75°C  
Temperature range according to (IEC 60794-1-2-F1)

### Field of Application

- Workstation connecting cables
- Indoor/outdoor cabling
- Make jumper, patchcord

### Product description

Simplex cable with full rodent protection has good flexibility and high compression resistant. Aramid yarn and metal armouring provides better tensile strength of cable. Suitable for indoor or outdoor installation.

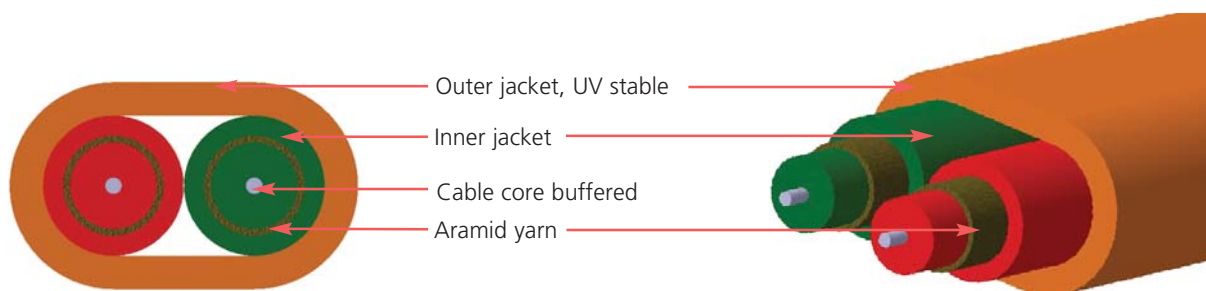
### Technical specifications

Fibers	1 colour coded singlemode or multimode optical fiber
Colour	Fibers - see the section color information table Jacket - orange (other colors available upon request)
Lifetime	30 years

### Technical data:

	2,0	2,4	2,8	3,0
Cable diameter (mm)	2,0	2,4	2,8	3,0
Cable core diameter (µm)	250/600	250/600	250/600	250/600
Nominal weight (kg/km)	6	9,6	10	10,6
Standard put-up length (m)	500,1000,2000	500,1000,2000	500,1000,2000	500,1000,2000
Tensile strength (N)	150	200	200	200
Impact resistance (w/g)	200	200	200	200
Crush resistance (N/10cm)	2000	2000	2000	2000
Min. bending radius (mm)	10xD	10xD	10xD	10xD
Outer jacket	LSZH	LSZH	LSZH	LSZH

Note: For further information about ec article numbers of fiber optic cable, please check our Fiber Optic cable catalog.



#### Features

- Indoor installation possible
- Aramid yarn
- Can be terminated directly
- Flexible and resilient
- Tight bending radius

#### Temperature range

LSZH jacket -20°C to +70°C  
Temperature range according to (IEC 60794-1-2-F1)

#### Field of Application

- Installation inside of telecommunication and datasystems
- Installation in dry and dump rooms
- Underground laying is not allowed

#### Product description

Duplex cable is flexible and resilient. Two single fiber cables lying parallel to one another with strain relief elements (aramid) and halogen-free, flame-retardant jacket. This cable can be terminated directly. Aramid strength member provides better tensile strength of cable. Suitable for indoor installation.

#### Technical specifications

Fibers	Two singlemode or multimode optical fibers in tight (stripability up to 10 cm) or easy strip (stripability more than 100 cm), LSZH buffered cable core
Colour	Fibers - see the section color information table Jacket - orange (other colors available upon request)
Lifetime	30 years

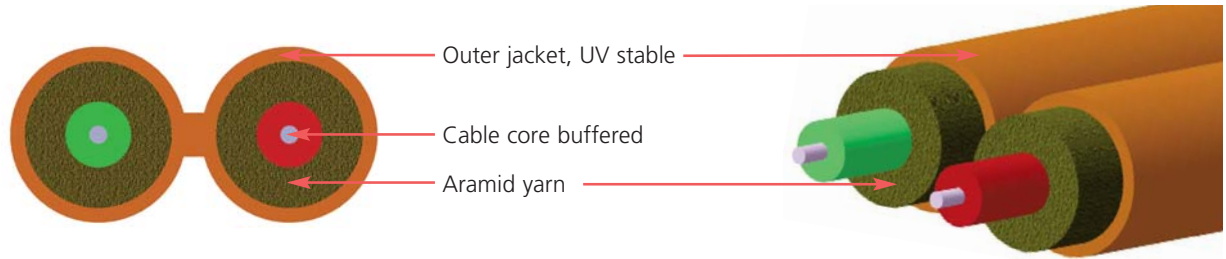
#### Technical data:

Cable size (mm)	3,1x5,2	4,0x7,0
Cable core diameter (µm)	250/900	250/900
Nominal weight (kg/km)	31	35
Tensile strength short term (N)	200	300
Tensile strength long term (N)	100	160
Min. bending radius dynamic (mm)	20xD	20xD
Min. bending radius static (mm)	10xD	10xD
Crush resistance (N/100mm <sup>2</sup> )	1000	1000
Outer jacket	LSZH	LSZH

Note: For further information about ec article numbers of fiber optic cable, please check our Fiber Optic cable catalog.

## Duplex cable Fig.8

J-V(ZN)H



### Features

- Indoor installation possible
- Aramid yarn
- Can be terminated directly
- Flexible and resilient
- Tight bending radius
- Figure "8" easy to divide

### Temperature range

LSZH jacket -20°C to +70°C  
Temperature range according to (IEC 60794-1-2-F1)

### Field of Application

- Installation inside of telecommunication and datasystems
- Installation in dry and dump rooms
- Underground laying is not allowed

### Product description

Duplex cable is flexible and resilient. This cable can be terminated directly. Aramid strength member provides better tensile strength of cable. Suitable for indoor installation. Duplex cable Fig. "8" is easy to divide.

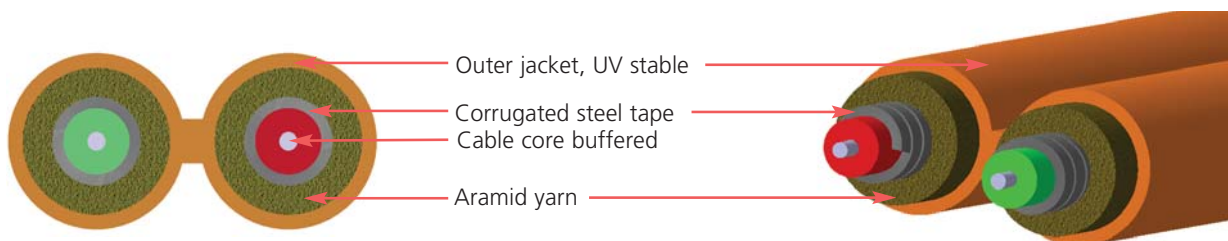
### Technical specifications

Fibers	Two singlemode or multimode optical fibers in tight (stripability up to 10 cm) or easy strip (stripability more than 100 cm), LSZH buffered cable core
Colour	Fibers - see the section color information table Jacket - orange (other colors available upon request)
Lifetime	30 years

### Technical data:

Cable size (mm)	1,6x3,3	1,8x3,7	2,0x4,1	2,8x5,7
Cable core diameter (µm)	250/900	250/900	250/900	250/900
Nominal weight (kg/km)	5,7	5,7	8,2	13,2
Tensile strength short term (N)	160	160	200	300
Tensile strength long term (N)	80	80	100	160
Min. bending radius static (mm)	20xD	20xD	20xD	20xD
Min. bending radius dynamic (mm)	10xD	10xD	10xD	10xD
Crush resistance (N/100mm <sup>2</sup> )	1000	1000	1000	1000
Outer jacket	LSZH	LSZH	LSZH	LSZH

Note: For further information about ec article numbers of fiber optic cable, please check our Fiber Optic cable catalog.



#### Features

- Full rodent protection
- Avoid improper twisting
- High tensile resistance
- Flexible, convenient to connection and easy to deploy
- Suitable for indoor or outdoor use

#### Temperature range

LSZH jacket -40°C to +75°C  
Temperature range according to (IEC 60794-1-2-F1)

#### Field of Application

- Workstation connecting cables
- Computer room cabling
- Short run office cabling
- Suitable outdoor placement

#### Product description

Duplex armoured cable with full rodent protection has high tensile strength. Coat of aramid yarn and corrugated steel tape armoring provides high level of strength. Suitable for indoor or outdoor installation.

#### Technical specifications

Fibers	2 colour coded singlemode or multimode optical fibers
Colour	Fibers - see the section color information table Jacket - orange (other colors available upon request)
Lifetime	30 years

#### Technical data:

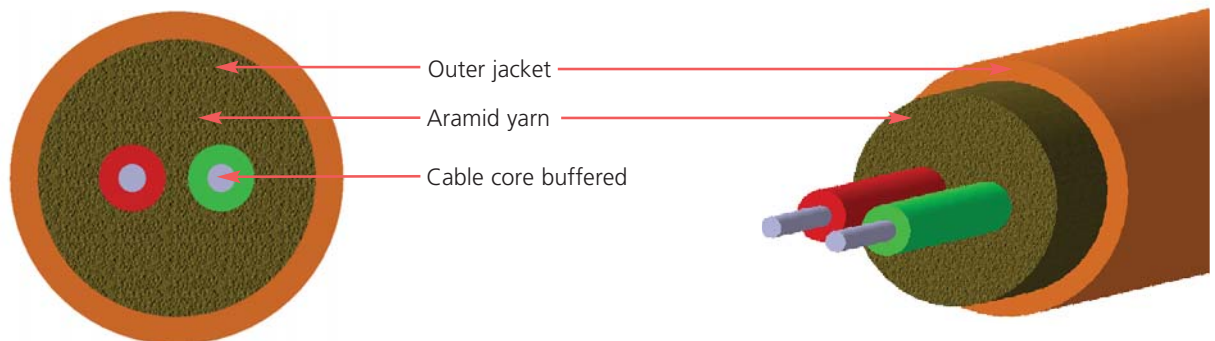
Cable size (mm)	2,0x4,2	2,4x5,0	2,8x5,8	3,0x6,2
Cable core diameter (µm)	250/600	250/600	250/600	250/600
Nominal weight (kg/km)	12	19,2	20	21,2
Standard put-up length (m)	500,1000,2000	500,1000,2000	500,1000,2000	500,1000,2000
Tensile strength (N)	225	300	300	300
Impact resistance (g)	200	200	200	200
Crush resistance (N/10cm)	2000	2000	2000	2000
Min. bending radius (mm)	10xD	10xD	10xD	10xD
Outer jacket	LSZH	LSZH	LSZH	LSZH

Note: For further information about ec article numbers of fiber optic cable, please check our Fiber Optic cable catalog.



## Duplex round cable

J-V(ZN)H



### Features

- Indoor installation possible
- Aramid yarn strength member
- High compression resistant
- Flame-retardant
- Small diameter
- Physically soft

### Temperature range

LSZH jacket                      -20°C to +70°C  
Temperature range according to (IEC 60794-1-2-F1)

### Field of Application

- Building to building connecting cables
- Indoor cabling
- Communication equipment

### Product description

Duplex round cable has small outer diameter and low attenuation. His aramid yarn strength member ensures high tensile strength and long term stable transmission for optical fibers. Suitable for indoor installation.

### Technical specifications

Fibers	2 colour coded singlemode or multimode optical fibers
Colour	Fibers - see the section color information table Jacket - orange (other colors available upon request)
Lifetime	30 years

### Technical data:

	2,0	3,0	5,0
Cable diameter (mm)	2,0	3,0	5,0
Cable core diameter (µm)	250/600	250/900	250/900
Nominal weight (kg/km)	4,3	7,6	19
Tensile strength short term (N)	100	80	160
Tensile strength long term (N)	60	40	80
Min. bending radius dynamic (mm)	15xD	20xD	20xD
Min. bending radius static (mm)	10xD	10xD	10xD
Crush resistance (N/100mm <sup>2</sup> )	500	500	500
Outer jacket	LSZH	LSZH	LSZH

EC3\_ . - A B C D  
 0. 1 2 3 4 5 6 7 8 9

**Position 0 - cable type, jacket material, stripability**

- 0 - 5 - Simplex, LSZH, tight buffer
- 6 - Duplex Fig.8, LSZH, tight buffer
- B - Duplex Fig.0, LSZH, tight buffer
- F - Simplex, LSZH, easy strip
- G - Duplex, LSZH, easy strip
- H - Simplex, LSZH, tight buffer, armoured
- S - Simplex, LSZH, tight buffer, armoured
- T - Duplex Fig.8, LSZH, tight buffer, armoured
- U - Duplex Fig.0, LSZH, tight buffer, armoured
- V - Round, LSZH, tight buffer, armoured
- I - Duplex, LSZH tight buffer, round cable

**Position 1, 3 - connector type**

- 1, 3 - 1 - FC connector
- 2 - SC connector
- 3 - ST connector
- 4 - LC connector
- 5 - MU
- 6 - MT-RJ (only for duplex)
- 7 - E2000 connector
- A - LCdx Uniboot
- B - LCsx High Density (push-pull)
- C - LCdx High Density (push-pull)
- W - LC OM2, Grade B
- X - ST OM2, Grade B
- Y - SC OM3/OM4 Grade A
- Z - LC OM3/OM4 Grade A

**Position 2, 4 - fiber type and connector grade**

- 2, 4 - 1 - MM/PC 50/125, OM5, Grade B
- 2 - SM/UPC 9/125 G652D, Grade C/2
- 3 - SM/APC 9/125 G652D, Grade C/1
- 4 - MM/PC 62.5/125 (OM1), Grade C/4
- 5 - MM/PC 50/125 (OM2), Grade C/4
- 6 - MM/PC 50/125 (OM3) 1500/500, Grade C/3
- 7 - MM/PC 50/125 (OM4) 3500/500, Grade C/3
- 8 - SM/PC 9/125 G657A1, Grade C/2
- 9 - SM/PC 9/125 G657B3, Grade C/2
- A - SM/APC 9/125 G657A1, Grade C/1
- B - SM/APC 9/125 G657B3, Grade C/1
- C - MM/PC 50/125 (OM3) 1500/500, Grade B/3
- D - MM/PC 50/125 (OM4) 3500/500, Grade B/3
- E - SM/PC 9/125 G652D, Grade B/2
- F - SM/APC 9/125 G652D, Grade B/1
- G - SM/UPC 9/125 G652D, Grade A/2
- H - SM/APC 9/125 G652D, Grade A/1
- I - SM/UPC 9/125 G657A1, Grade B/2
- J - SM/APC 9/125 G657A1, Grade B/1
- K - SM/UPC 9/125 G657A1, Grade A/2
- L - SM/APC 9/125 G657A1, Grade A/1
- M - SM/UPC 9/125 G655C/D, Grade C/2
- N - SM/APC 9/125 G655C/D, Grade C/1
- O - SM/UPC 9/125 G657A2, Grade C/2
- P - SM/APC 9/125 G657A2, Grade C/1
- Q - SM/UPC 9/125 G657A2, Grade B/2
- R - SM/APC 9/125 G657A2, Grade B/2
- S - SM/UPC 9/125 G657A2, Grade A/2
- T - SM/APC 9/125 G657A2, Grade A/1
- U - SM/UPC 9/125 G657B3, Grade B/2
- V - SM/APC 9/125 G657B3, Grade B/1
- W - SM/UPC 9/125 G655, Grade B/2
- X - SM/APC 9/125 G655, Grade B/1

**Position 5,6 - simplex cable outer diameter**

- 5,6 - 12 - Simplex diameter 1,2mm
- 14 - Simplex diameter 1,4mm
- 16 - Simplex diameter 1,6mm
- 20 - Simplex diameter 2,0mm
- 24 - Simplex diameter 2,4mm
- 30 - Simplex diameter 3,0mm

**Position 7,8,9 - length of patch cord**

- 7,8,9 - 0P5 - 0,5m length
- 001 - 1m length
- 1P5 - 1,5m length
- 002 - 2m length
- 2P5 - 2,5m length
- 003 - 3m length
- 004 - 4m length
- 005 - 5m length
- 006 - 6m length
- 007 - 7m length
- 7P5 - 7,5m length
- 008 - 8m length
- 009 - 9m length
- 010 - 10m length
- 011 - 11m length
- 012 - 12m length
- 013 - 13m length
- 014 - 14m length
- 015 - 15m length

**Position A,B - jacket color**

- A,B - AQ - Aqua
- BL - Blue
- BK - Black
- BR - Brown
- GR - Green
- GY - Grey
- OR - Orange
- PI - Pink
- RE - Red
- YE - Yellow
- VI - Violet
- WH - White
- HV - Heather Violet
- LG - Lime Green

**Position C - polarity for duplex**

- C - \_ (blank) - cross
- Y - parallel

**Position D - test protocol**

- D - \_ (blank) - no test protocol
- T - with test protocol - STANDARD

## SC termination type

### Termination types for simplex :

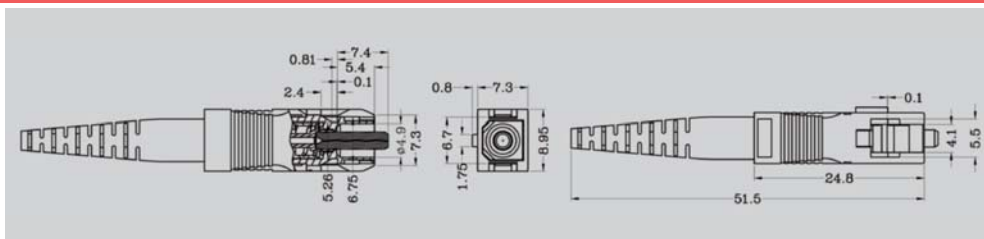
#### SC PC / SC PC type :



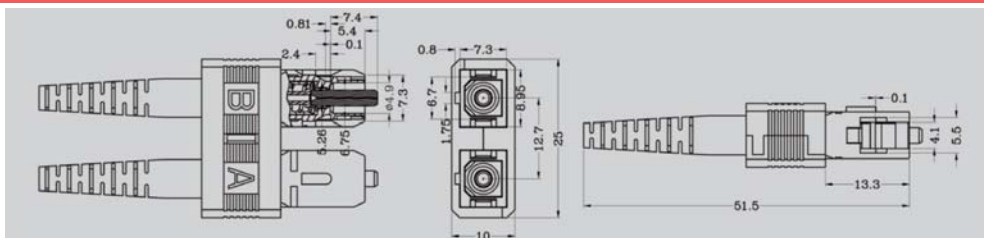
- Designed to exceed the requirement of Verizon FOC TPR 9409 requirements
- 4 direction tuning feature to improve random mating IL
- Pre-assembled one piece design to reduce assembly time
- Low insertion loss and back reflection
- Pull-proof design
- Rugged and adaptable compared to other connectors

Technical parameters	Standard	Value
Mating durability	IEC 61300-2-2	500 x minimum
Cable retention	IEC 61300-2-4	100N, 120s
Fiber retention (pigtailed)	IEC 61300-2-4	5N, 60s
Vibration	IEC 61300-2-1	10-55Hz, 1oktave/min., 3axis of 15cycles, 0,5h/axis, amplitude 0,75mm
Repeated bending patch cable	IEC 60794-1-E6	100cycles -90°/0°/+90°/0° , Load=5N
Repeated bending pigtail	IEC 60794-1-E6	100cycles -90°/0°/+90°/0° , Load=0,2N
Drop	IEC 61300-2-12	1,5m, 5 times
Static side load patch cable	IEC 61300-2-42	1N, 1h
Static load pigtail	IEC 61300-2-42	0,2N, 5 min.
Cold	IEC 61300-2-17	25°C, 96h
Dry heat	IEC 61300-2-18	70°C, 96h
Change of temperature	IEC 61300-2-22	-25°C to +70°C, 12 cycles
Heat resistance	IEC 61300-2-18	70°C, 1000h
Damp heat	IEC 61300-2-19	40°C at 93%, 96h

### SC simplex :



### SC duplex with clip :



### Boots possibilities for SC connectors:

Type code	Diameter	Length	Drawing
SC2037501	2,0mm	37,5mm	37.50
SC3037501	3,0mm	37,5mm	37.50
SC2037502	2,0mm	37,5mm	37.50
SC2037502	3,0mm	37,5mm	37.50
SC2036500	2,0mm	36,5mm	36.50
SC2036500	3,0mm	36,5mm	36.50

Type code	Diameter	Length	Drawing
SC1230800	1,2mm	30,8mm	30.80
SC1630800	1,6mm	30,8mm	30.80
SC2030800	2,0mm	30,8mm	30.80
SC203850F	3,0mm	38,5mm	38.50
SC303850F	2,0mm	38,5mm	38.50

NOTE:  
 - Bold style means preferred boot type.  
 - Yellow cell means flexible (bendable) boot

### Termination types for simplex :

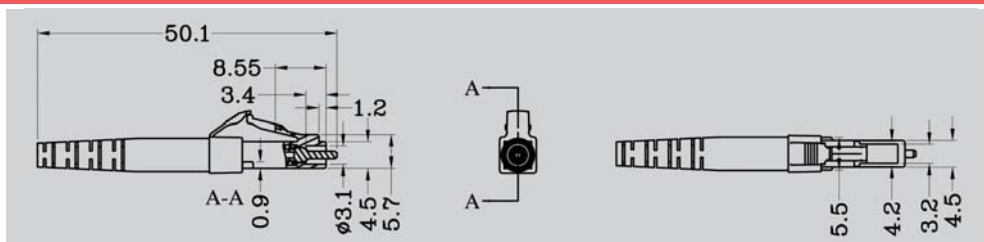
#### LC PC / LC PC type :



- Compact, pull-proof design
- Fully compatible with standard LC products
- Connector body can be used for both simplex and duplex configuration
- Plastic housing and boot made from UL-rated materials
- Optional anti-snap simplex collar and duplex clip

Technical parameters	Standard	Value
Mating durability	IEC 61300-2-2	500 x minimum
Cable retention	IEC 61300-2-4	100N, 120s
Fiber retention (pigtailed)	IEC 61300-2-4	5N, 60s
Vibration	IEC 61300-2-1	10-55Hz, 1oktave/min., 3axis of 15cycles, 0,5h/axis, amplitude 0,75mm
Repeated bending patch cable	IEC 60794-1-E6	200cycles -90°/0°/+90°/0° , Load=5N
Repeated bending pigtail	IEC 60794-1-E6	200cycles -90°/0°/+90°/0° , Load=0,2N
Drop	IEC 61300-2-12	1,5m, 5 times
Static side load patch cable	IEC 61300-2-42	1N, 1h
Static load pigtail	IEC 61300-2-42	0,2N, 5 min.
Cold	IEC 61300-2-17	25°C, 96h
Dry heat	IEC 61300-2-18	70°C, 96h
Change of temperature	IEC 61300-2-22	-25°C to +70°C, 12 cycles
Heat resistance	IEC 61300-2-18	70°C, 1000h
Damp heat	IEC 61300-2-19	40°C at 93%, 96h

#### LC simplex UNIBODY:



#### Boots possibilities for LC connectors:

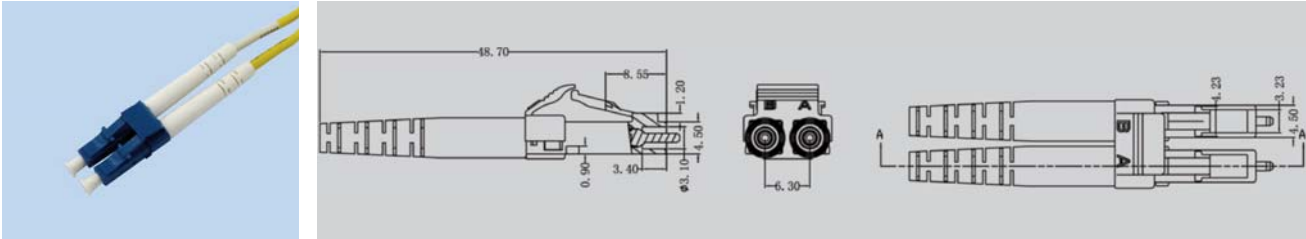
Type code	Diameter	Length	Drawing
LC1220000	1,2mm	20mm	
LC1620000	1,6mm	20mm	
LC2014500	2,0mm	14,5mm	
LC3014500	3,0mm	14,5mm	
LC2012000	2,0mm	12mm	
LC3012000	3,0mm	12mm	
LC2019000	2,0mm	19mm	
LC3019000	3,0mm	19mm	
LC2020000	2,0mm	20mm	
LC3020000	3,0mm	20mm	

Type code	Diameter	Length	Drawing
LC2025000	2,0mm	25mm	
LC3025000	3,0mm	25mm	
LC202500B	2,0mm	25mm	
LC302500B	3,0mm	25mm	
LC203640B	2,0mm	36,4mm	
LC303640B	3,0mm	36,4mm	
LC203900F	2,0mm	39mm	

NOTE: Bold style means preferred boot  
Yellow cell means flexible (bendable) boot

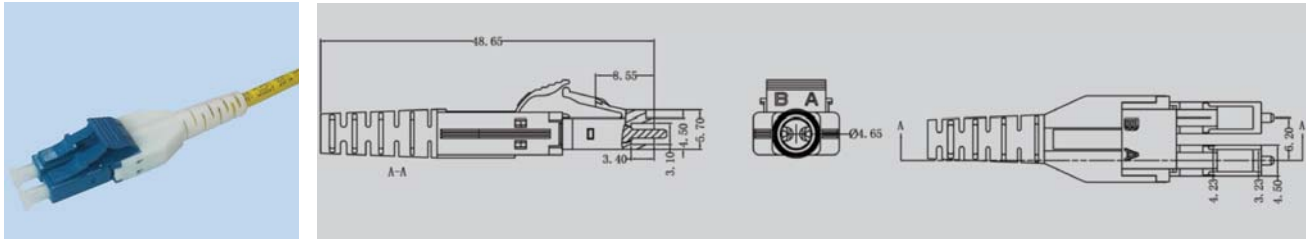
# LC termination type

## LC duplex UNIBODY :



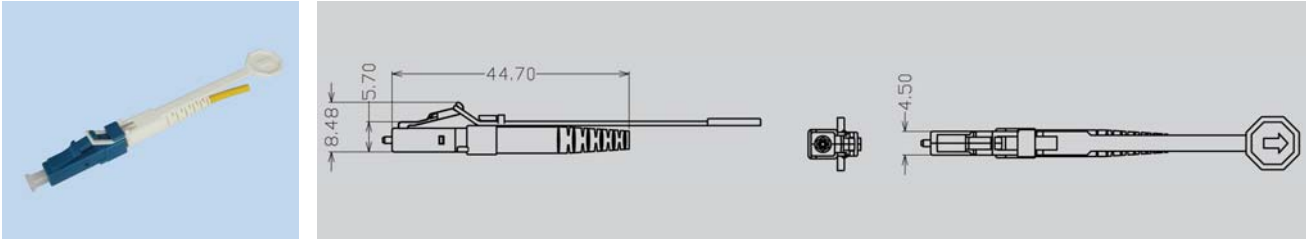
- Features:**
- Single body delivers maximum strength against mechanical tests
  - Designed to exceed the requirement of Verizon FOC TPR 9409 requirement
  - Various option of boots are available to meet your need

## LCdx uniboot :



- Features:**
- LC duplex connector uses a single housing and single boot
  - Polarisation version A, B
  - Compact, pull-proof design
  - Cable diameters 2,0mm, 3,0mm and 4,0mm

## LCsx push-pull :



- Features:**
- Easy to release trigger connector
  - 60% increase in density
  - Stackable adapters

## LCdx push-pull :



- Features:**
- Easy to release trigger connector
  - 60% increase in density
  - Stackable adapters

C-EN-A01-08/19-003

### Termination types for simplex :

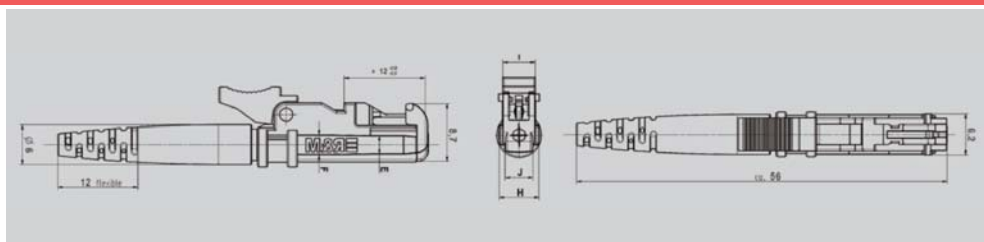
#### E2000 PC / E2000 PC type :



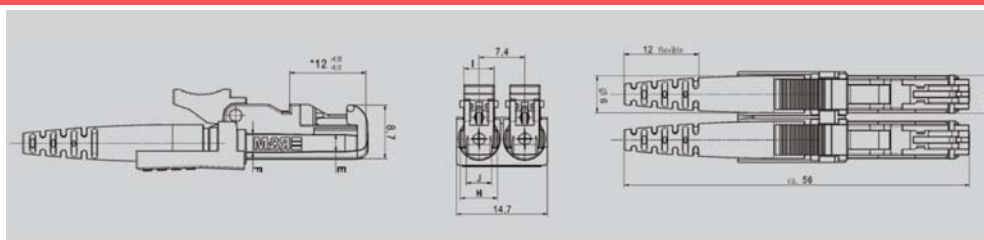
- Compact, pull-proof design
- Fully compatible with standard LC products
- Connector body can be used for both simplex and duplex configuration
- Plastic housing and boot made from UL-rated materials
- Optional anti-snap simplex collar and duplex clip

Technical parameters	Standard	Value
Mating durability	IEC 61300-2-2	1000 x minimum
Cable retention	IEC 61300-2-4	100N, 120s
Fiber retention (pigtailed)	IEC 61300-2-4	5N, 60s
Vibration	IEC 61300-2-1	10-55Hz, 1oktave/min., 3axis of 15cycles, 0,5h/axis, amplitude 0,75mm
Repeated bending patch cable	IEC 60794-1-E6	100cycles -90°/0°/+90°/0°, Load=5N
Repeated bending pigtail	IEC 60794-1-E6	100cycles -90°/0°/+90°/0°, Load=0,2N
Drop	IEC 61300-2-12	1,5m, 5 times
Static side load patch cable	IEC 61300-2-42	1N, 1h
Static load pigtail	IEC 61300-2-42	0,2N, 5 min.
Cold	IEC 61300-2-17	-25°C, 96h
Dry heat	IEC 61300-2-18	70°C, 96h
Change of temperature	IEC 61300-2-22	-25°C to +70°C, 12 cycles
Heat resistance	IEC 61300-2-18	70°C, 1000h
Damp heat	IEC 61300-2-19	40°C at 93%, 96h

### E2000 simplex :



### E2000 duplex :



Reference	Dimensions	
	Minimum	Maximum
E	2,75 mm	2,79 mm
F	2,95 mm	2,99 mm
H	5,95 mm	5,98 mm
I	4,93 mm	4,98 mm
J	4,13 mm	4,18 mm

## ST termination type

### Termination types for simplex :

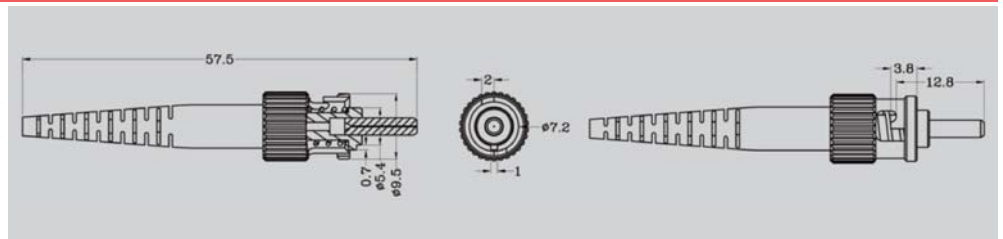
#### ST PC / ST PC type :



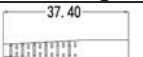

- Bayonet style (stick and twist) housing for easy connection
- Zirconia ceramic ferrule available in several performance grades
- Low insertion loss and back reflection capability

Technical parameters	Standard	Value
Mating durability	IEC 61300-2-2	500 x minimum
Cable retention	IEC 61300-2-4	100N, 120s
Fiber retention (pigtailed)	IEC 61300-2-4	5N, 60s
Vibration	IEC 61300-2-1	10-55Hz, 1oktave/min., 3axis of 15cycles, 0,5h/axis, amplitude 0,75mm
Repeated bending patch cable	IEC 60794-1-E6	100cycles -90°/0°/+90°/0° , Load=5N
Repeated bending pigtail	IEC 60794-1-E6	100cycles -90°/0°/+90°/0° , Load=0,2N
Drop	IEC 61300-2-12	1,5m, 5 times
Static side load patch cable	IEC 61300-2-42	1N, 1h
Static load pigtail	IEC 61300-2-42	0,2N, 5 min.
Cold	IEC 61300-2-17	25°C, 96h
Dry heat	IEC 61300-2-18	70°C, 96h
Change of temperature	IEC 61300-2-22	-25°C to +70°C, 12 cycles
Heat resistance	IEC 61300-2-18	70°C, 1000h
Damp heat	IEC 61300-2-19	40°C at 93%, 96h

#### ST simplex :



#### Boots possibilities for SC connectors:

Type code	Diameter	Length	Drawing
SC2037501	2,0mm	37,4mm	
SC3037501	3,0mm	37,4mm	

### Termination types for simplex :

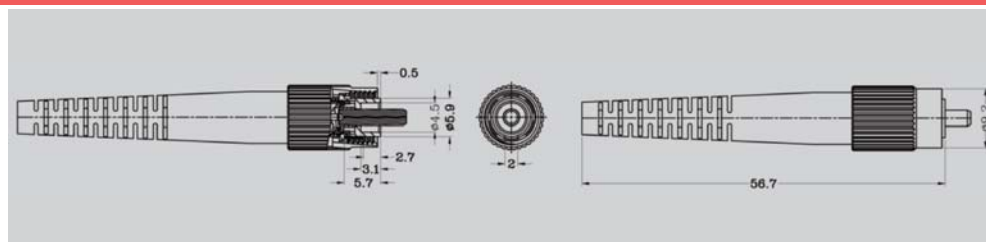
#### FC PC / FC PC type :



- Pre-assembled one piece design
- Various boot color to meet customer need
- Meets and exceeds the TIA/EIA, IEC and JIS SC Specification

Technical parameters	Standard	Value
Mating durability	IEC 61300-2-2	500 x minimum
Cable retention	IEC 61300-2-4	100N, 120s
Fiber retention (pigtailed)	IEC 61300-2-4	5N, 60s
Vibration	IEC 61300-2-1	10-55Hz, 1oktave/min., 3axis of 15cycles, 0,5h/axis, amplitude 0,75mm
Repeated bending patch cable	IEC 60794-1-E6	100cycles -90°/0°/+90°/0° , Load=5N
Repeated bending pigtail	IEC 60794-1-E6	100cycles -90°/0°/+90°/0° , Load=0,2N
Drop	IEC 61300-2-12	1,5m, 5 times
Static side load patch cable	IEC 61300-2-42	1N, 1h
Static load pigtail	IEC 61300-2-42	0,2N, 5 min.
Cold	IEC 61300-2-17	25°C, 96h
Dry heat	IEC 61300-2-18	70°C, 96h
Change of temperature	IEC 61300-2-22	-25°C to +70°C, 12 cycles
Heat resistance	IEC 61300-2-18	70°C, 1000h
Damp heat	IEC 61300-2-19	40°C at 93%, 96h

#### FC simplex :



#### Boots possibilities for FC connectors:

Type code	Diameter	Length	Drawing
FC2026500	2,0mm	26,5mm	
FC3026500	3,0mm	26,5mm	
FC2043700	2,0mm	43,7mm	
FC3043700	3,0mm	43,7mm	

NOTE:  
- Bold style means preferred boot type



## MT-RJ termination type

### MT-RJ / MT-RJ type :



- Precision molded MT ferrule
- High precision guide pins for exact alignment
- Duplex ferrule
- Plug-jack (RJ-45) design
- TIA/EIA 568-A Compliant
- Tunable zirconia connector ferrule
- Polishing does not require diamond film

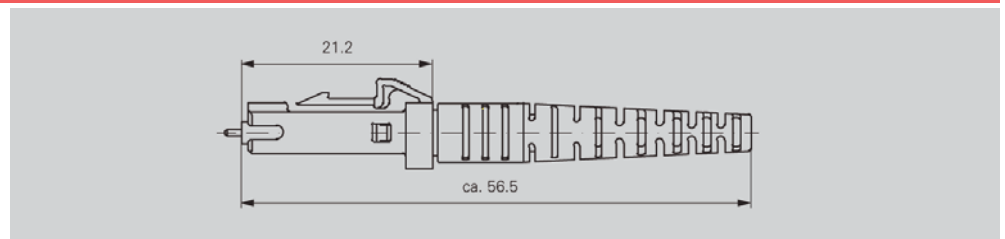
Technical parameters	Standard	Singlemode 0° PC	Multimode 0° PC
Insertion Loss (dB)	IEC 61300-3-4; $\lambda = 1300/1550\text{nm}$	typ.0,4 max.1	typ.0,2 max.0,5
Return Loss (dB)	IEC 61300-3-6; $\lambda = 1300/1550\text{nm}$	typ.30 max.20	typ.50 max.40
Repeatability of IL (dB)	IEC 61300-2-2; $\lambda = 1300/1550\text{nm}$	max. $\pm 0.2$	
Service life		500 mate/demate cycles	
Operating temperature (°C)		-40/+85*	

\* May be further limited by cable specifications

### Product description

The MT-RJ is a SFF duplex connector with a molded body, including two fibers spaced 750  $\mu\text{m}$  apart within a plastic mini-MT ferrule. MT-RJ connector is the ideal solution for 10-100 Mbit Ethernet up to applications in Gigabit Ethernet. This connector is available as an assembled pigtail or patchcord; with a mini zip cord construction, or a 3mm cable with a ribbon of two fibers inside. Due to its excellent performance and technical characteristics, it's the optimal connector system for FTT-X applications.

### MT-RJ duplex :



MU / MU type :



- NTT-MU hardware compatibility
- Pre assembled 1pc style
- Tunable zirconia connector ferrule
- Compact, pull-proof design
- Corrosion resistant body
- Universal Duplex Clip
- UL-rated plastic housing and boot

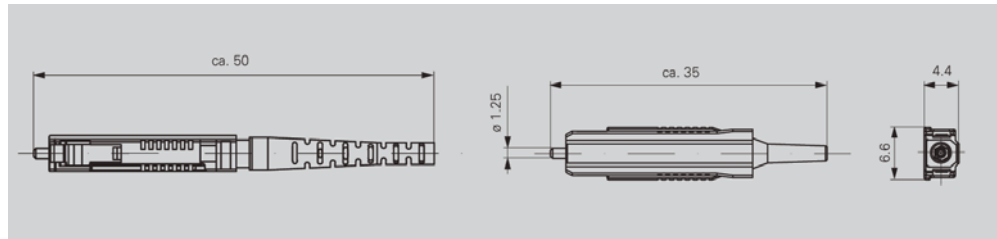
Technical parameters	Standard	Singlemode 0° PC	Singlemode 8° PC	Multimode 0° PC
Insertion Loss (dB)	IEC 61300-3-4; $\lambda = 1300/1550\text{nm}$	typ.0,2 max.0,4	typ.0,2 max.0,4	typ.0,15 max.0,4
Return Loss (dB)	IEC 61300-3-6; $\lambda = 1300/1550\text{nm}$	typ. 40	min. 50	min. 70**
Repeatability of IL (dB)	IEC 61300-2-2; $\lambda = 1300/1550\text{nm}$	max. $\pm 0.1$		
Service life		1000 mate/demate cycles		
Operating temperature (°C)		-40/+85*		

\* May be further limited by cable specifications  
 \*\*Measured with high precision reflectometer

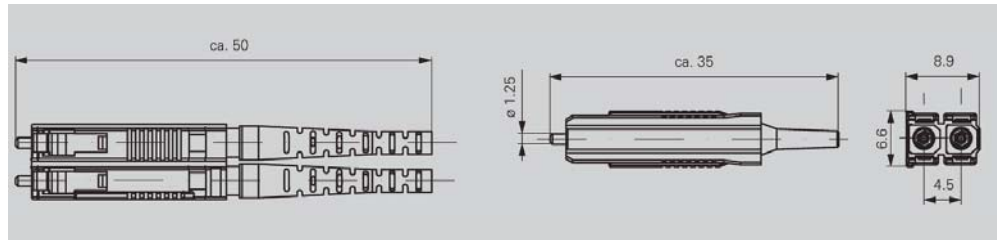
Product description

The MU incorporates the positive mechanical and optical performance features of the SC style connector in a high density small form factor (SFF) design. The miniature unit-coupling MU is currently recognized by the IEC International standard organization. This fiber optic connector system features a compact connector housing and a  $\varnothing 1.25$  mm diameter ferrule. The MU is available as a Simplex or Duplex connector for both Single Mode (PC or APC) and Multimode applications

MT-RJ simplex :



MT-RJ duplex :



# Cable patch cord - Packing and marking

**Packing and marking :**

- 1 piece in one foil bag
- Dimensions of plastic bag depends from length of patch cord:
  - 1-10m - 20,3cm x 20,3cm
  - 10-20m - 22,9cm x 22,9cm
  - 20m < - 25,0cm x 25,0cm

**Labeling:**



->This label can be removed or substituted with other logo

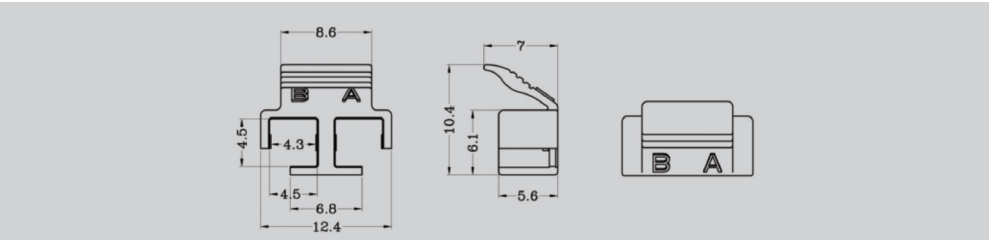
**Picture**



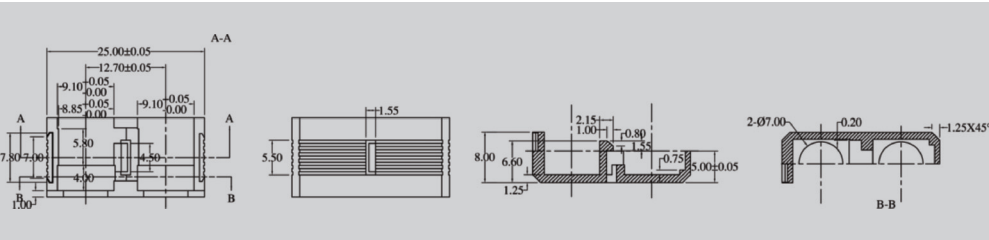
Note: Custom labeling is available on request.  
Patch cord cable can be marked by flag on both sides. The flags contain requested information.

**Clips for duplex executions :**

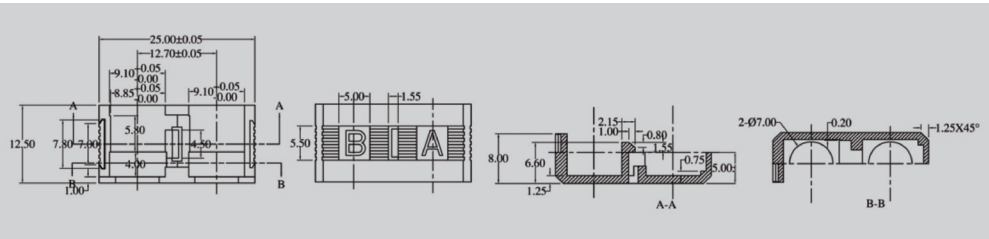
**LCdx clip :**



**SCdx clip bottom case :**



**SCdx clip upper case :**



Note: Our data sheets are not binding. They are merely a general, informative, and non-binding description and can be changed by us at any time.

C-EN-A01-08/19-003