

Patchcords and pigtails

SC

DESCRIPTION:

SC connectors offer outstanding packing density. Their pus-pull design reduces the chance of fiber end face contact damage during connection.

Tunable SC connectors are also available. Please see our other data sheet.



AVAILABLE CONNECTOR TYPES:



PC



APC

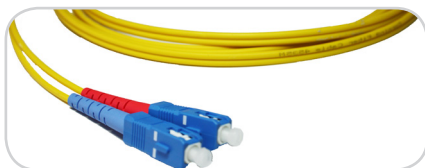


MM



Duplex with clip

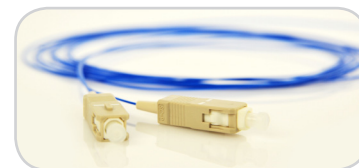
PATCHCORDS, PIGTAILS EXAMPLES:



Example of SC PC duplex patchcord



Example of SC APC patchcord



Example of SC PC pigtail with multimode fiber

STANDARD TECHNICAL DATA:

Connectors	SM		MM
Polishing connector	APC 8°	UPC	PC
Connector color	green**	blue**	beige**
Insertion loss (dB)	≤0.3	≤0.3	≤0.3
Return loss (dB)	≥65	≥55	≥35
Cable/Fiber			
Class	Patch Cord, Pigtail*		
Diameter (mm)	0.9, 1.6, 1.8, 2.0, 2.4, 2.8, others**		
Jacket color	yellow, others**		orange, others**
Fiber / conductor diameter (μm)	9/125		50/125, 62.5/125
Fiber type	SM – G.652 D, G.655, G.657 A, G.657B3, others** MM – OM1, OM2, OM3, OM4, others**		
Length (L)	0.5 +/- 0.03 ~ 30m +/- 0.3, others**		

* - for more details please see our patchcables datasheet

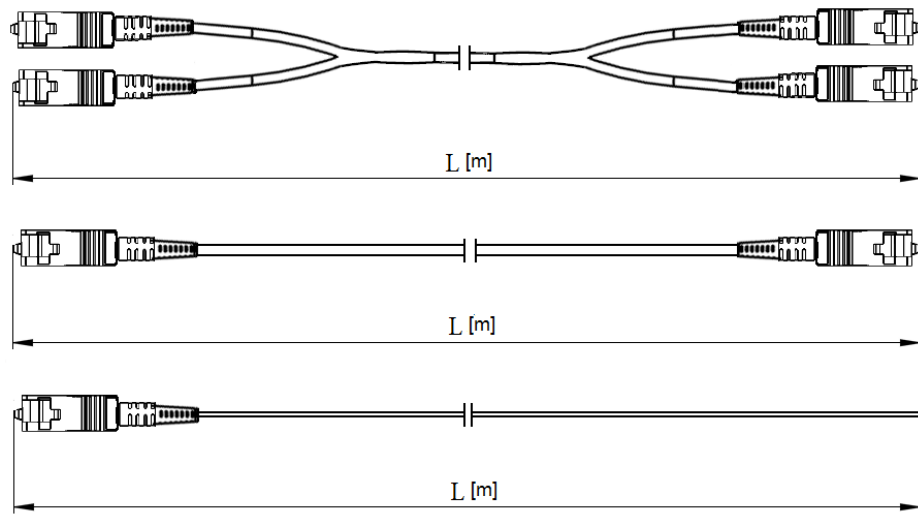
** - for more details please ask our sales department

PREMIUM TECHNICAL DATA FOR SM:

Connectors	APC	PC
Insertion loss (dB)	≤0.1	≤0.1
Return loss (dB)	≥75	≥55

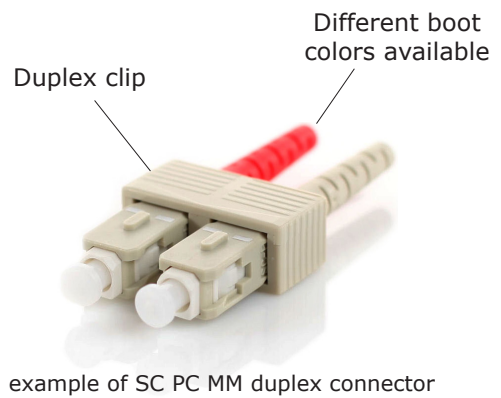
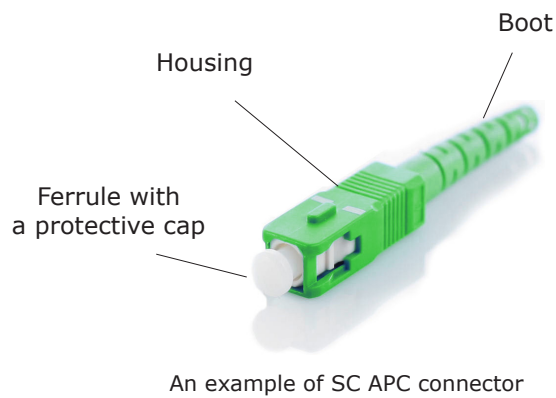
For more details please ask our sales department.

EXAMPLE CONFIGURATIONS:

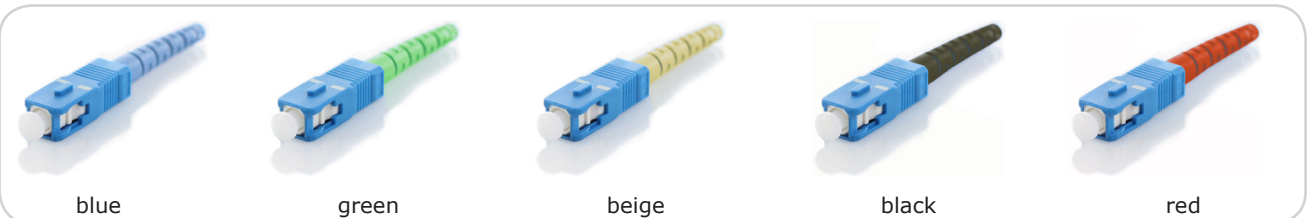


Schematic examples of duplex, simplex patchcord and pigtail SC

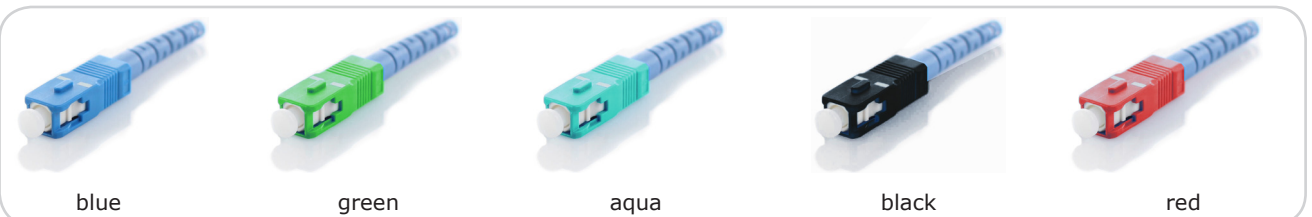
SC CONNECTOR ASSEMBLIES:



Examples of available boot colors:



Examples of available housing colors:



BOOT AND CLIP TYPES:

Boot for 0.9mm fiber



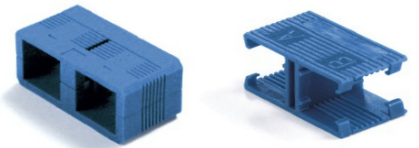
Boot for 2.0mm fiber



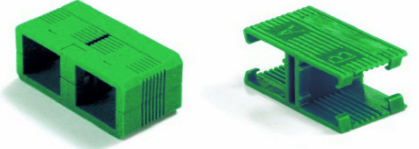
Boot for 3.0mm fiber



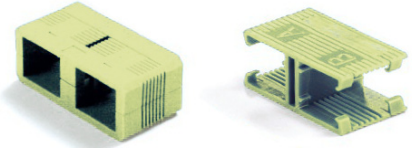
Standard and premium clip - blue



Standard and premium clip - green



Standard and premium clip - beige



XP FIT PLUS SC FIELD INSTALLABLE CONNECTOR:

- pre-polished, pre-assembled connector,
- installation process quicker than two minutes
- housing colors: blue, white, green, black

The XP Fit Plus SC pack includes:

- 10 pcs. SC SM PC connectors
- 10 pcs. Boots
- 1 Fiber Holder
- 1 Assembling Jig

For more details please ask our sales department



Watch the installation process on YouTube



Specification

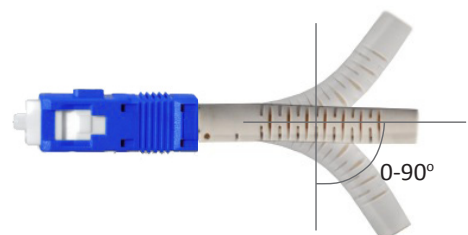
Insertion loss (dB)	0.20 SM PC
	0.30 SM APC
	0.10 MM
Return loss (dB)	≥55 PC
	≥60 APC
Durability	≤0.1dB, 500 matings
Operating temperature range (°C)	-40 - +75
Tensile	TIA/EIA 568-B.3
Intermateability	IEC 61754-4
Boot color	white, others*

* - for more details please ask our sales department

FLEX ANGLED BOOT:

- without limitations in 0-90° bending,
- freedom of movement,
- designed for high density environments,
- enables perfect fiber dressing.

For more details please ask our sales department

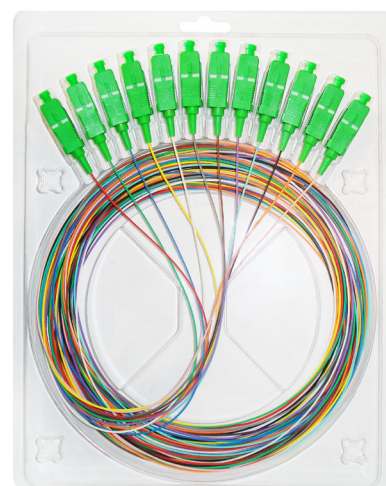


0-90° no limitations flex angled boot

PACKING INFORMATION

- special cable marking:
 - with red ring
 - with heat shrinking sleeves
- pigtails and patchcord packed in plastic bags (24x35mm or 175x235mm)
- for pigtails blister packing is also available
- plastic bags and blisters packed in A, B, C or D boxes
- at special request measurement protocols are attached
- example 5m patchcord and pigtail weights:
 - PTCH SX: 0.036kg
 - PTCH DX: 0.041kg
 - PGT: 0.010kg

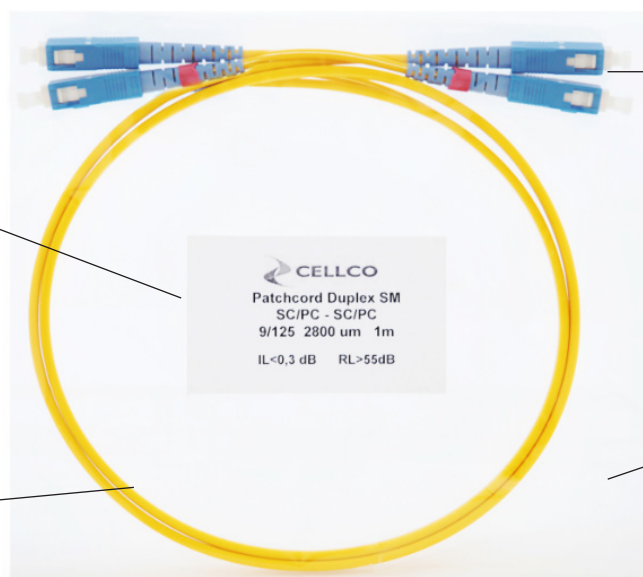
Individual packing solutions are available (package type, labeling, etc.).



Example of SC pigtails placed in blister box

labeling with test results

carefully winded cable



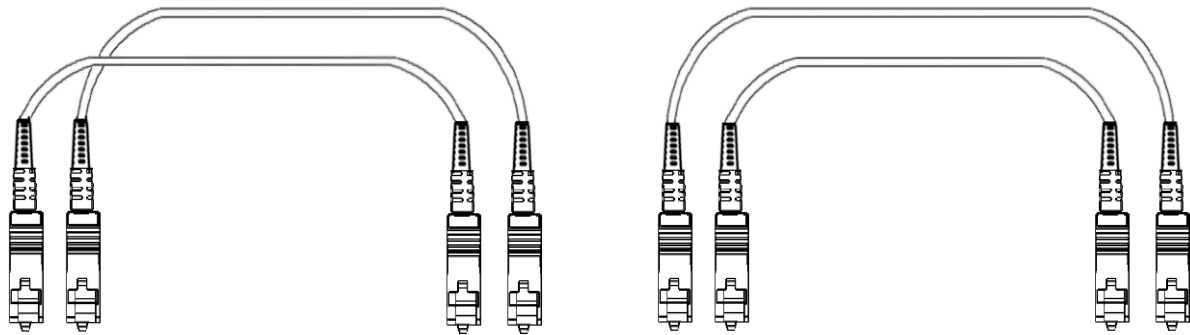
connectors put in one line

plastic bag

PTCH/PGT SC

For more information please ask our sales department
For more details about blister box please see our datasheet.

For duplex patchcords two versions are available:



Cross

1:1

We have put into practice a multistage process of assembling patchcords as well as a measurement and quality control system. We measure, among other things:

- ferrule quality (ferrule's front enlarged 400 times)
- interferometric testing
- insertion loss
- back reflection

INTERFEROMETRIC TESTING (according to IEC 61300-3-17)

Parameters: ferrule end face geometry for connector

Apex offset SM: $\leq 70\mu\text{m}$ MM: NA

5 – 30 mm

PC

Radius

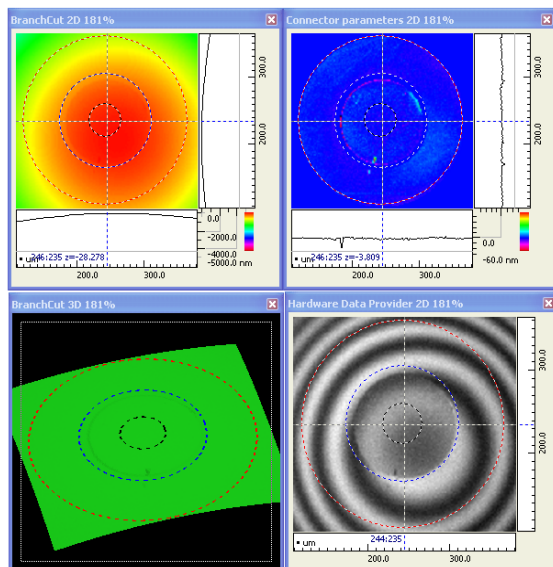
5 – 12 mm

APC

NA

MM

An example of SC interferometric testing:



Measurement	Value	Min	Max
Curvature radius (mm)	9.73	5.00	12.00
Curvature radius low (mm)	9.14		
Curvature radius high (mm)	9.48		
Linear offset (μm)	10.67	0.00	70.00
Polish angle (deg)	7.977	7.800	8.200
Keying offset (deg)	-0.051	-0.200	0.200
Spherical fiber height (nm)	-20	-100	100
Fiber roughness Avg (nm)	4		
Fiber roughness Max (nm)	6		
Ferrule roughness Avg (nm)	8		
Ferrule roughness Max (nm)	10		

PASS



Cellco Communications provides tunable connectors:
For more information please see **Tuning connectors** datasheet.

TEST REPORT OF LC CONNECTORS

Standard class:

Parameter	IL (dB)		RL (dB)	
	IEC 61300-3-4		IEC 61300-3-6	
Connector type	PC	$\leq 0,3$	≥ 55	
	APC	$\leq 0,3$	≥ 65	
	MM	$\leq 0,3$	≥ 35	

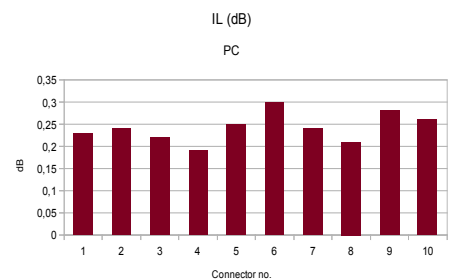
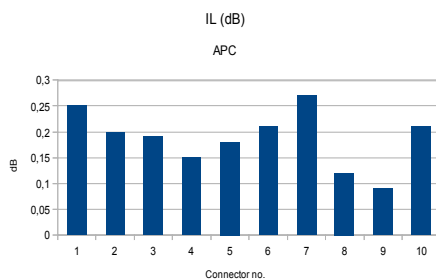
Premium class for SM:

Parameter	IL (dB)		RL (dB)	
	IEC 61300-3-4		IEC 61300-3-6	
Connector type	PC	≤ 0.1	≥ 55	
	APC	≤ 0.1	≥ 75	

An example of SC connector measurement (standard class):

Attenuation test according to IEC 61300-3-4

Connector no.	IL (dB)	
	APC	PC
1	0.25	0.23
2	0.20	0.24
3	0.19	0.22
4	0.15	0.19
5	0.18	0.25
6	0.21	0.3
7	0.27	0.24
8	0.12	0.21
9	0.09	0.28
10	0.21	0.26



Return loss according to IEC 61300-3-6

Connector no.	RL (dB)	
	APC	PC
1	66.3	57.2
2	65.0	57.9
3	68.4	59.2
4	70.3	61.3
5	66.3	64.2
6	69.2	55.5
7	66.4	56.3
8	69.3	61.7
9	70.3	56.3
10	66.8	55.7

