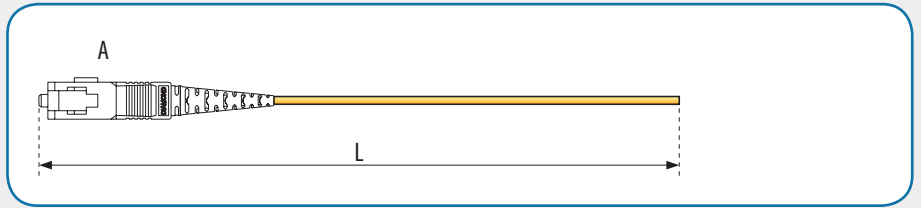


PIGTAILS | PATCHCORDS

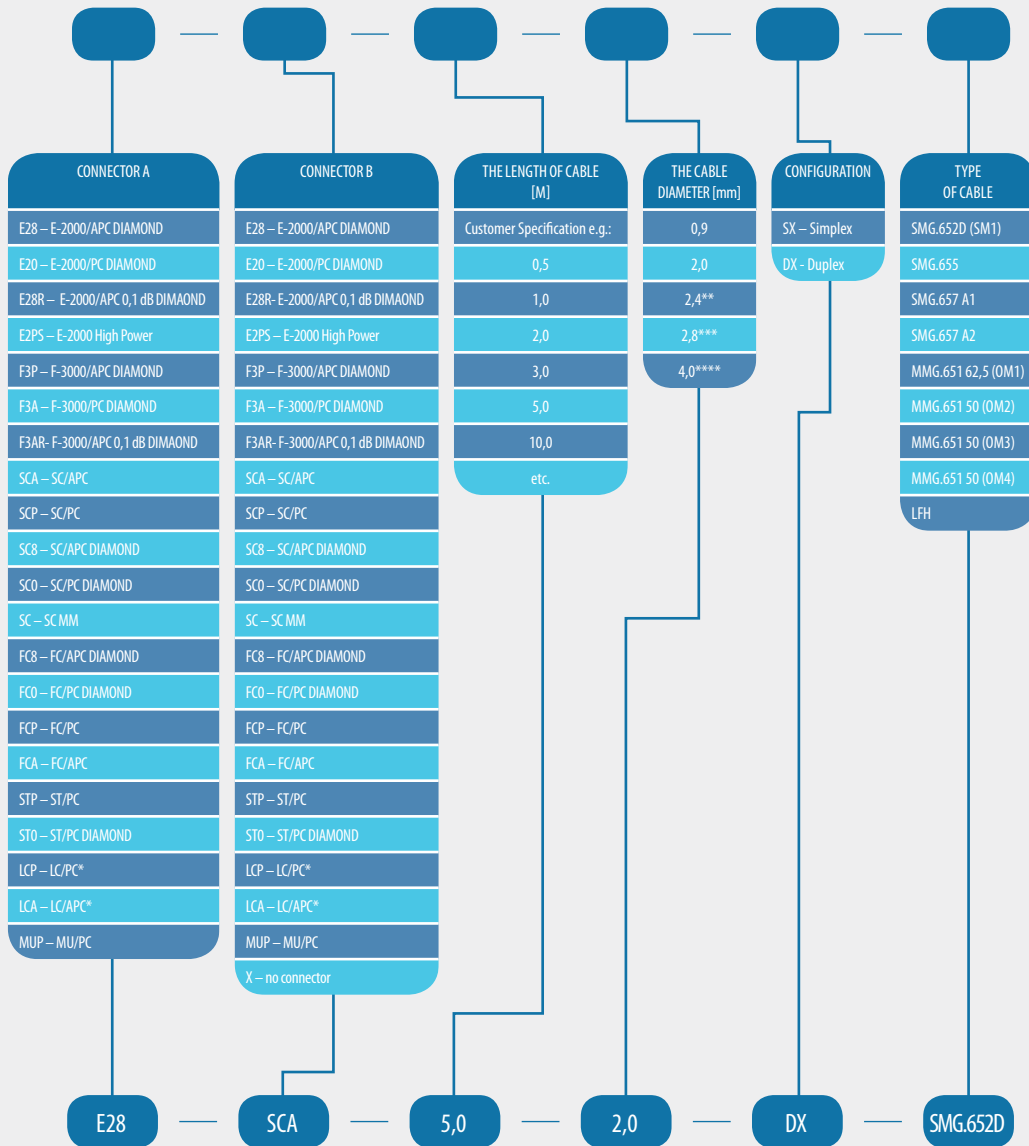
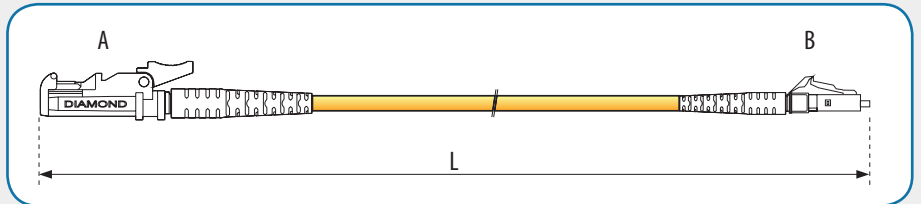
PIGTAIL

one end terminated cable



PATCHCORD

both ends terminated cable



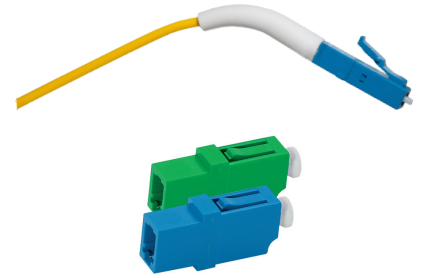
Ordering pigtails: no connector on side B. Ordering patchcords: connectors on sides A and B.  
PLEASE NOTE: before choosing the type of boot, please check if it is available for required type of connector.

- \* For LC connectors boots are also available in 45\* and 90\* version.
- \*\* For multimode cables.
- \*\*\* For LFH coloured cables are also available.
- \*\*\*\* For LFH only white colour is available.

## LC CONNECTORS AND ADAPTERS

### FEATURES:

- small-form-factor construction, ferrule 1.25 mm
- comply with the standards: IEC 61754-20, PN-EN50377-7-4, ZN-13/TP S.A.-044
- available in PC and APC versions, and in duplex construction



*LC Connectors and Adapters*

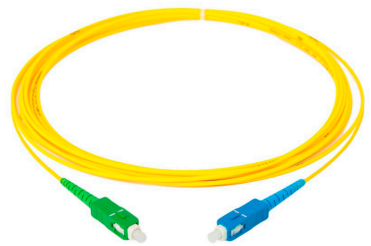
## SC CONNECTORS AND ADAPTERS

### FEATURES:

- monoblock connector with zirconia ceramic ferrule
- comply with the standards: IEC-61754-4, PN-EN186260:2000, ZN-13/TP S.A.-044
- available in MM, SM, PC and APC versions, and in duplex construction
- SC/APC adapters are also available with translucent protective caps - the fastest and the cheapest method for optical fibre tracing



*SC MM Pigtail*



*SC APC - SC PC Patchcord*



*SC/APC Adapter  
with translucent protective cap*

## ST CONNECTORS AND ADAPTERS



*ST Connectors and Adapters*

### FEATURES:

- monoblock connector with zirconia ceramic ferrule
- comply with the standards: IEC 61754-2, ZN-13/TP S.A.-044
- available in MM and SM PC versions

LAN

FTTx

PON



## SINGLE MODE PATCHCORD TECHNICAL SPECIFICATIONS:

Optical parameters:	Value:
<b>Parameter (fiber):</b>	
Attenuation at 1310 nm (dB/km)	≤ 0,35 dB
Attenuation at 1383 + 3 nm (dB/km)	≤0.35dB/KM
Attenuation at 1490 nm (dB/km)	≤0.2dB/KM
Attenuation at 1550 nm (dB/km)	≤0.21dB/KM
Attenuation at 1625 nm (dB/km)	≤0.23dB/KM
Attenuation change over the range 1285-1330 nm (ref. 1310 nm) (dB/km)	≤0.03dB/KM
Attenuation change over the range 1525-1575 nm (ref. 1550 nm) (dB/km)	≤0.02dB/KM
Attenuation change over the range 1490-1625 nm (ref. 1550 nm) (dB/km)	≤0.04dB/KM
Zero Dispersion Wavelength (nm)	1300nm-1324nm
Zero Dispersion Slope (ps/nm <sup>2</sup> .km)	≤0.091ps/(nm <sup>2</sup> .km)
Mode Field Diameter at 1310 nm (µm)	(804-8.8)±0.4um
Cable Cut-off Wavelength (nm)	≤1260nm
Macrobending loss, 100 turns on mandrel diameter of 30 mm at 1625 nm (dB)	0.05dB/km
Polarization Mode Dispersion (ps/√km)	≤0.08
<b>Parameter (connector):</b>	
Insertion Loss (dB)	≤0.30dB
Return Loss (dB)	≥55dB

Geometrical parameters:	Value:
<b>Parameter (fiber):</b>	
Cladding Diameter (µm)	124.8±0.7um
Cladding non Circularity (%)	≤0.07%
Core concentricity error (µm)	≤0.5um
Primary coating-cladding concentricity error (µm)	≤12.0um

Mechanical parameters:	Value:
<b>Parameter (fiber):</b>	
Proof stress level (GPa)	0.69Gpa
Coating strip force (average) (N)	1.7N
Coating strip force (peak) (N)	1.3-8.9 (N)
Stress corrosion susceptibility parameter, nd	≥20nd
Tensile strength (median) for 0,5m specimen length (GPa)	≥2.76Gpa
<b>Parameter (connector):</b>	
Number of mating cycles without degradation of performance	≥90%
<b>Parameter (cable):</b>	
Minimum bend radius without tension (mm)	5mm
Minimum bend radius with tension (mm)	7.5mm
Maximum pulling force (IEC 60794-1-21-E1) (N)	1000N
Crush resistance (IEC 60794-1-21-E3) (N)	Long term 100N/100nm, short term 500N/100nm
Impact resistance (IEC 60794-1-21-E4) (N.m)	4

Environmental parameters:	Value:
<b>Parameter (fiber):</b>	
Operating Temperature range (IEC-60794-1-F1)	(-10°C) ~ (+50°C)
Storage Temperature range	(-25°C) ~ (+80°C)
Temperature cycling; -60°C to +85°C (dB/km)*	≤0.05dB/KM
Water immersion; 30 days at 25°C (dB/km)*	≤0.05dB/KM
Dry heat; 30 days at 85°C (dB/km)*	≤0.05dB/KM
Damp heat; 30 days at 85°C – 85 % RH (dB/km)*	≤0.05dB/KM

\* Change in attenuation at 1550 and 1625 nm from the initial value due to tests

## SINGLE MODE PIGTAIL TECHNICAL SPECIFICATIONS:

Optical parameters:	Value:
<b>Parameter (fiber):</b>	
Attenuation at 1310 nm (dB/km)	≤ 0,35 dB
Attenuation at 1383 + 3 nm (dB/km)	≤0.35dB/KM
Attenuation at 1490 nm (dB/km)	≤0.2dB/KM
Attenuation at 1550 nm (dB/km)	≤0.21dB/KM
Attenuation at 1625 nm (dB/km)	≤0.23dB/KM
Attenuation change over the range 1285-1330 nm (ref. 1310 nm) (dB/km)	≤0.03dB/KM
Attenuation change over the range 1525-1575 nm (ref. 1550 nm) (dB/km)	≤0.02dB/KM
Attenuation change over the range 1490-1625 nm (ref. 1550 nm) (dB/km)	≤0.04dB/KM
Zero Dispersion Wavelength (nm)	1300nm-1324nm
Zero Dispersion Slope (ps/nm <sup>2</sup> .km)	≤0.091ps/(nm <sup>2</sup> .km)
Mode Field Diameter at 1310 nm (μm)	(804-8.8)±0.4um
Cable Cut-off Wavelength (nm)	≤1260nm
Macrobending loss, 100 turns on mandrel diameter of 30 mm at 1625 nm (dB)	0.05dB/km
Polarization Mode Dispersion (ps/√km)	≤0.08
<b>Parameter (connector):</b>	
Insertion Loss (dB)	≤0.30dB
Return Loss (dB)	≥55dB

Geometrical parameters:	Value:
<b>Parameter (fiber):</b>	
Cladding Diameter (μm)	124.8±0.7um
Cladding non Circularity (%)	≤0.07%
Core concentricity error (μm)	≤0.5um
Primary coating-cladding concentricity error (μm)	≤12.0um

Mechanical parameters:	Value:
<b>Parameter (fiber):</b>	
Proof stress level (GPa)	0.69Gpa
Coating strip force (average) (N)	1.7N
Coating strip force (peak) (N)	1.3-8.9 (N)
Stress corrosion susceptibility parameter, nd	≥20nd
Tensile strength (median) for 0,5m specimen length (GPa)	≥2.76Gpa
<b>Parameter (connector):</b>	
Number of mating cycles without degradation of performance	≥90%
<b>Parameter (cable):</b>	
Minimum bend radius without tension (mm)	5mm
Minimum bend radius with tension (mm)	7.5mm
Maximum pulling force (IEC 60794-1-21-E1) (N)	1000N
Crush resistance (IEC 60794-1-21-E3) (N)	Long term 100N/100nm, short term 500N/100nm
Impact resistance (IEC 60794-1-21-E4) (N.m)	4

Environmental parameters:	Value:
<b>Parameter (fiber):</b>	
Operating Temperature range (IEC-60794-1-F1)	(-10°C) ~ (+50°C)
Storage Temperature range	(-25°C) ~ (+80°C)
Temperature cycling; -60°C to +85°C (dB/km)*	≤0.05dB/KM
Water immersion; 30 days at 25°C (dB/km)*	≤0.05dB/KM
Dry heat; 30 days at 85°C (dB/km)*	≤0.05dB/KM
Damp heat; 30 days at 85°C – 85 % RH (dB/km)*	≤0.05dB/KM

\* Change in attenuation at 1550 and 1625 nm from the initial value due to tests

## MULTI MODE PATCHCORD TECHNICAL SPECIFICATIONS:

Optical parameters:	
Parameter (fiber):	Value:
Attenuation at 850 nm (dB/km)	≤2.3dB/KM
Attenuation at 1300 nm (dB/km)	≤0.6dB/KM
Zero Dispersion Wavelength (nm)	1295nm-1320nm
Zero Dispersion Slope (ps/nm <sup>2</sup> .km)	≤0.11[PS/nm <sup>2</sup> .km]
Effective modal Bandwidth at 850 nm (MHz.km)	≥950/≥2000≥470(MHz.km)
Minimum Overfilled Modal Bandwidth at 850 nm (MHz.km)	≥700/≥1500≥3500(MHz.km)
Minimum Overfilled Modal Bandwidth at 1300 nm (MHz.km)	≥500/≥500≥500(MHz.km)
Macrobending loss, 100 turns on mandrel diameter of 75 mm at 850 and 1300 nm (dB)	≤0.5dB
Numerical Aperture	±0.015
Parameter (connector):	
Insertion Loss (dB)	≤0.3dB
Return Loss (dB)	≥20dB

Geometrical parameters:	
Parameter (fiber):	Value:
Cladding Diameter (μm)	124.8±0.7μm
Cladding non Circularity (%)	≤1.0%
Core diameter (μm)	50±2.5μm
Core-cladding concentricity error (μm)	≤1.0μm
Core non-circularity (%)	≤1.0%
Primary coating-cladding concentricity error (μm)	≤12.0μm

Mechanical parameters:	
Parameter (fiber):	Value:
Proof stress level (GPa)	0.69Gpa
Coating strip force (average) (N)	1.5N
Coating strip force (peak) (N)	≥1.3N ≤8.9N
Stress corrosion susceptibility parameter, nd	≥20nd
Tensile strength (median) for 0,5m specimen length (GPa)	≥2.76Gpa
Parameter (connector):	
Number of mating cycles without degradation of performance	≥90%
Parameter (cable):	
Minimum bend radius without tension (mm)	5mm
Minimum bend radius with tension (mm)	7.5mm
Maximum pulling force (IEC 60794-1-21-E1) (N)	1000N
Crush resistance (IEC 60794-1-21-E3) (N)	Long term 100N/100nm, short term 500N/100nm
Impact resistance (IEC 60794-1-21-E4) (N.m)	20

Environmental parameters:	
Parameter (fiber):	Value:
Operating Temperature range (IEC-60794-1-F1)	(-10°C) ~ (+50°C)
Storage Temperature range	(-25°C) ~ (+80°C)
Temperature cycling; -60°C to +85°C (dB/km)*	≤0.1dB
Water immersion; 30 days at 25°C (dB/km)*	≤0.1dB
Dry heat; 30 days at 85°C (dB/km)*	≤0.1dB
Damp heat; 30 days at 85°C – 85 % RH (dB/km)*	≤0.1dB

\* Change in attenuation at 850 and 1300 nm from the initial value due to tests

## MULTI MODE PIGTAIL TECHNICAL SPECIFICATIONS:

Optical parameters:	
Parameter (fiber):	Value:
Attenuation at 850 nm (dB/km)	≤2.3dB/KM
Attenuation at 1300 nm (dB/km)	≤0.6dB/KM
Zero Dispersion Wavelength (nm)	1295nm-1320nm
Zero Dispersion Slope (ps/nm <sup>2</sup> .km)	≤0.11[PS/nm <sup>2</sup> .km]
Effective modal Bandwidth at 850 nm (MHz.km)	≥950/≥2000≥470(MHz.km)
Minimum Overfilled Modal Bandwidth at 850 nm (MHz.km)	≥700/≥1500≥3500(MHz.km)
Minimum Overfilled Modal Bandwidth at 1300 nm (MHz.km)	≥500/≥500≥500(MHz.km)
Macrobending loss, 100 turns on mandrel diameter of 75 mm at 850 and 1300 nm (dB)	≤0.5dB
Numerical Aperture	±0.015
Parameter (connector):	
Insertion Loss (dB)	≤0.3dB
Return Loss (dB)	≥20dB

Geometrical parameters:	
Parameter (fiber):	Value:
Cladding Diameter (μm)	124.8±0.7um
Cladding non Circularity (%)	≤1.0%
Core diameter (μm)	50±2.5um
Core-cladding concentricity error (μm)	≤1.0um
Core non-circularity (%)	≤1.0%
Primary coating-cladding concentricity error (μm)	≤12.0um

Mechanical parameters:	
Parameter (fiber):	Value:
Proof stress level (GPa)	0.69Gpa
Coating strip force (average) (N)	1.5N
Coating strip force (peak) (N)	≥1.3N ≤8.9N
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Crush resistance (IEC 60794-1-21-E3) (N)	Long term 100N/100nm, short term 500N/100nm
Impact resistance (IEC 60794-1-21-E4) (N.m)	20

Environmental parameters:	
Parameter (fiber):	Value:
Operating Temperature range (IEC-60794-1-F1)	(-10°C) ~ (+50°C)
Storage Temperature range	(-25°C) ~ (+80°C)
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Water immersion; 30 days at 25°C (dB/km)*	≤0.1dB
Dry heat; 30 days at 85°C (dB/km)*	≤0.1dB
Damp heat; 30 days at 85°C – 85 % RH (dB/km)*	≤0.1dB

\* Change in attenuation at 850 and 1300 nm from the initial value due to tests