OptiPRO 10 Indoor Multi-Mode LSZH Cables
10Gb/s Bit Rate LAN Cables

The Clipsal OptiPRO 10 Indoor Mullti-Mode Low Smoke Zero Halogen Cable is designed to provide superior optical performance. This fibre supports 10Gb/s signaling up to 300 metres with serial 850nm transducers. The buffered fibres are surrounded by aramid yarns for strength, and are covered with Low Smoke Zero Halogen (LSZH) to meet tough emission controls.

10GID02MMLSZH

PHYSICAL SPECIFICATIONS

Numerical Aperture (NA)		**0.200±0.015**
Group Index of refraction (N_{eff}) (Typical)	**@850nm** **@1300nm**	**1.482** **1.477**
Zero Dispersion Wavelength		**1295 ~ 1320nm**
Zero Dispersion Slope	**1295~1300nm** **1300~1320nm**	**≤0.001 (λ_0-1190)ps/(nm².km)** **≤0.011ps/(nm².km)**
Back Seatter Characteristics (@1300nm)		
Step (Mean of Bidirectional Measurement)		**≤0.10dB**
Irregularities over Fibre Length		**≤0.10dB**
Geometrical Characteristics		
Core Diameter		**50±2.5µm**
Core Non-circularity		**≤6.0%**
Cladding Diameter		**125±2.0µm**
Cladding Non-circularity		**≤1.0%**
Coating Diameter		**245±10µm**
Coating/Cladding Concentricity Error		**≤12.5µm**
Coating Diameter Non-circularity		**≤6.0%**
Core/Cladding Concentricity Error		**≤1.5µm**
Delivery Length (km/reel)		**Standard Delivery Lengths up to 8.8km** *(other fibre lengths available on request)*

OPTICAL CHARACTERISTICS

		50/125µm	62.5/125µm	9/125µm
Attenuation (+20ºC)	**@850nm**	**≤3.5dB / km**	**≤3.5dB / km**	
	@1300nm	**≤1.5dB / km**	**≤1.5dB / km**	
	@1310nm			**≤0.45dB / km**
	@1550nm			**≤0.30dB / km**
Bandwidth	**@850nm**	**≥500MHz.km**	**≥200MHz.km**	
	@1300nm	**≥1000MHz.km**	**≥600MHz.km**	
Numerical Aperture		**0.200±0.015 NA**	**0.275±0.015 NA**	
Cable Cut-off Wavelength λcc				**≤1260 nm**
Attenuation at temperature cycling $\Delta\alpha$(-20ºC~+60ºC)	**@1300nm**	**≤0.50dB / km**	**≤0.50dB / km**	
	@1550nm			**≤0.20dB / km**

PRODUCT FEATURE

- Optimised 50µm Multi-Mode fibre. Meets and exceeds OM3 specifications in Standards.
- Over 1,500 MHz-Km laser bandwidth at 850nm.
- Designed to support IEEE 802.3 10 Gigabit Ethernet standard to 300m.
- LSZH Fire rated.

CUSTOMER BENEFITS

- Latest fibre technology provides ultimate bandwidth performance.
- Ready to cope with building backbone applications from 10Mb/s to 10Gb/s.
- Industry leading Lifetime Warranty – unique to the market!

CATALOGUE NUMBER	DESCRIPTION
10GID02MMLSZH	OptiPRO 10, Indoor, Multi-Mode, LSZH Cable, 2 Core
10GID04MMLSZH	OptiPRO 10, Indoor, Multi-Mode, LSZH Cable, 4 Core
10GID06MMLSZH	OptiPRO 10, Indoor, Multi-Mode, LSZH Cable, 6 Core
10GID12MMLSZH	OptiPRO 10, Indoor, Multi-Mode, LSZH Cable, 12 Core
10GID24MMLSZH	OptiPRO 10, Indoor, Multi-Mode, LSZH Cable, 24 Core

OptiPRO Indoor LSZH Building Cables
1Gb/s Bit Rate LAN Cables

The Clipsal OptiPRO Indoor Multi-Mode Low Smoke Zero Halogen Cable is designed to provide the superior optical performance. All cables use high quality Single-Mode or Multi-Mode fibres. Each fibre is coated to 900 microns with durable, protective material. The buffers are colour-coded. Buffered fibres are surrounded by aramid yarns for strength, and are covered with Low Smoke Zero Halogen (LSZH). The cables meet the requirements for OFNR riser indoor types.

ID06SMLSZH

PHYSICAL SPECIFICATIONS

Geometrical Characteristics	
Core Diameter	**50±2.5µm** **62.5±2.5µm**
Core Non-circularity	**≤1.0%**
Cladding Diameter	**125±1.0µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12.0µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤1.5µm**
Delivery Length (km/reel)	**Standard Delivery Lengths up to 2.2km** *(other fibre lengths available on request)*

OPTICAL CHARACTERISTICS

		50/125µm	**62.5/125µm**	**9/125µm**
Attenuation (+20ºC)	**@850nm**	**≤3.5dB / km**	**≤3.5dB / km**	
	@1300nm	**≤1.5dB / km**	**≤1.5dB / km**	
	@1310nm			**≤0.45dB / km**
	@1550nm			**≤0.30dB / km**
Bandwidth	**@850nm**	**≥500MHz.km**	**≥200MHz.km**	
	@1300nm	**≥1000MHz.km**	**≥600MHz.km**	
Numerical Aperture		**0.200±0.015 NA**	**0.275±0.015 NA**	
Cable Cut-off Wavelength λcc				**≤1260 nm**
Attenuation at temperature cycling Δα(-20ºC~+60ºC)	**@1300nm**	**≤0.50dB / km**	**≤0.50dB / km**	
	@1550nm			**≤0.20dB / km**

PRODUCT FEATURES

- High quality and compact design.
- Colour jacket is LSZH fire rated.
- Small diameter and bend radius.
- Compliant with Bellcore GR-409-CORE and TIA/EIA-568 Standards.
- UL approval for OFNR riser type.
- Complies with ANSI/TIA/EIA-568-B.3 Standards.
- 900mm buffered fibre enables easy and consistent stripping.
- LSZH Fire rated.

CUSTOMER BENEFITS

- Easy termination.
- Small diameter and bend radius provide easy installation in space constrained areas.
- Supports Gigabit Ethernet application.
- Compact size and lightweight.
- Ideal for routing inside building areas.

CATALOGUE NUMBER	DESCRIPTION
ID02SM5LSZH	OptiPRO Indoor 50µm SM 2-Core LSZH Cable
ID02SM6LSZH	OptiPRO Indoor 62.5µm SM 2-Core LSZH Cable
ID04SM5LSZH	OptiPRO Indoor 50µm SM 4-Core LSZH Cable
ID04SM6LSZH	OptiPRO Indoor 62.5µm SM 4-Core LSZH Cable
ID06SM5LSZH	OptiPRO Indoor 50µm SM 6-Core LSZH Cable
ID06SM6LSZH	OptiPRO Indoor 62.5µm SM 6-Core LSZH Cable
ID12SM5LSZH	OptiPRO Indoor 50µm SM 12-Core LSZH Cable
ID12SM6LSZH	OptiPRO Indoor 62.5µm SM 12-Core LSZH Cable
ID02MM5LSZH	OptiPRO Indoor 50µm MM 2-Core LSZH Cable
ID02MM6LSZH	OptiPRO Indoor 62.5µm MM 2-Core LSZH Cable
ID04MM5LSZH	OptiPRO Indoor 50µm MM 4-Core LSZH Cable
ID04MM6LSZH	OptiPRO Indoor 62.5µm MM 4-Core LSZH Cable
ID06MM5LSZH	OptiPRO Indoor 50µm MM 6-Core LSZH Cable
ID06MM6LSZH	OptiPRO Indoor 62.5µm MM 6-Core LSZH Cable
ID12MM5LSZH	OptiPRO Indoor 50µm MM 12-Core LSZH Cable
ID12MM6LSZH	OptiPRO Indoor 62.5µm MM 12-Core LSZH Cable

OptiPRO Tight Buffer Building Cables
1Gb/s Bit Rate LAN Cables

The Clipsal OptiPRO Tight Buffer Building Cable is designed to provide superior optical performance. These flexible, flame retardant cables are for use indoors. All cables use high quality Single-Mode or Multi-Mode fibres. Each fibre is coated to 900 microns with durable, protective material. Buffers are colour-coded.The buffered fibres are surrounded by aramid yarns for strength, and are covered with PVC or Low Smoke Zero Halogen (LSZH). The cables meet the requirement for OFNR riser indoor types.

TB04SM9PVC

MECHANICAL PERFORMANCE

Fibre Count	4-Fibre	6-Fibre	8-Fibre	12-Fibre
Cable Outside Diameter	4.8mm	6.5mm	6.8mm	7.1mm
Cable Weight	23kg/km	37.4kg/km	41.2kg/km	47kg/km
Maximum Tensile Load				
Loaded, N	1,000	1,000	1,400	1,800
Unloaded, N	300	300	440	600
Minimum Bend Radius				
Load (cm)	7.2	9.7	10.2	10.4
Installed (cm)	4.8	6.5	6.8	7.1
Storage Temperature Range	-40˚C ~ 70˚C			
Operating Temperature Range	-20˚C ~ 75˚C			

OPTICAL CHARACTERISTICS

		50/125µm	62.5/125µm	9/125µm
Attenuation (+20ºC)	@850nm	≤3.5dB / km	≤3.5dB / km	
	@1300nm	≤1.5dB / km	≤1.5dB / km	
	@1310nm			≤0.45dB / km
	@1550nm			≤0.30dB / km
Bandwidth	@850nm	≥500MHz.km	≥200MHz.km	
	@1300nm	≥1000MHz.km	≥600MHz.km	
Numerical Aperture		0.200±0.015 NA	0.275±0.015 NA	
Cable Cut-off Wavelength λcc				≤1260 nm
Attenuation at temperature cycling Δα(-20ºC~+60ºC)	@1300nm	≤0.50dB / km	≤0.50dB / km	
	@1550nm			≤0.20dB / km

PRODUCT FEATURES

- High quality and compact design.
- Small diameter and bend radius.
- Compliant with Bellcore GR-409-CORE and ANSI/TIA/EIA-568 Standards.

CUSTOMER BENEFITS

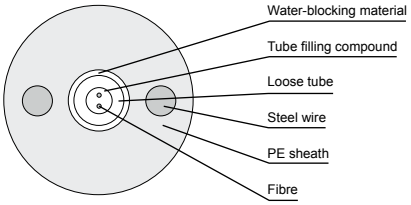
- Easy to terminate.
- Easy installation in space constrained area.

CATALOGUE NUMBER	DESCRIPTION
TB04SM9PVC	OptiPRO, Single-Mode, Tight Buffer Building Cable, PVC, 4 Core
TB06SM9PVC	OptiPRO, Single-Mode, Tight Buffer Building Cable, PVC, 6 Core
TB08SM9PVC	OptiPRO, Single-Mode, Tight Buffer Building Cable, PVC, 8 Core
TB12SM9PVC	OptiPRO, Single-Mode, Tight Buffer Building Cable, PVC, 12 Core
TB04MM5PVC	OptiPRO, 50µm, Multi-Mode, Tight Buffer Building Cable, PVC, 4 Core
TB06MM5PVC	OptiPRO, 50µm, Multi-Mode, Tight Buffer Building Cable, PVC, 6 Core
TB08MM5PVC	OptiPRO, 50µm, Multi-Mode, Tight Buffer Building Cable, PVC, 8 Core
TB12MM5PVC	OptiPRO, 50µm, Multi-Mode, Tight Buffer Building Cable, PVC, 12 Core
TB04MM6PVC	OptiPRO, 62.5µm, Multi-Mode, Tight Buffer Building Cable, PVC, 4 Core
TB06MM6PVC	OptiPRO, 62.5µm, Multi-Mode, Tight Buffer Building Cable, PVC, 6 Core
TB08MM6PVC	OptiPRO, 62.5µm, Multi-Mode, Tight Buffer Building Cable, PVC, 8 Core
TB12MM6PVC	OptiPRO, 62.5µm, Multi-Mode, Tight Buffer Building Cable, PVC, 12 Core

OptiPRO Unitube Non-Armoured Cables

The Clipsal OptiPRO Unitube Non-Armoured Cable is housed in a loose tube made of a high modulus plastic. The tube is filled with a water-resistant filling compound. Over the tube, water-blocking material is applied to keep the cable watertight. Two parallel steel wires are placed at the two sides of the cable. The cable is covered with a polyethylene (PE) sheath.

UTNA02SM9



PHYSICAL SPECIFICATIONS

Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤0.8µm**
Curl	**≥4m**

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

PRODUCT FEATURES

- Accurate fibre excess length.
- High strength loose tube.
- Two parallel steel wires.
- PE sheath.
- Small diameter, lightweight and hassle-free installation.
- Long delivery length.

CUSTOMER BENEFITS

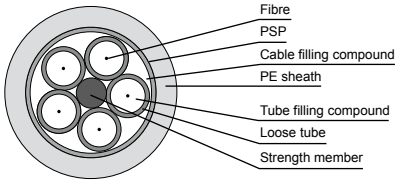
- Accurate fibre excess length ensures good mechanical and temperature performance.
- High strength loose tube is hydrolysis resistant and special tube filling compound ensures critical protection of fibre.
- Two parallel steel wires ensure tensile strength.
- PE sheath protects cable from ultraviolet radiation.

CATALOGUE NUMBER	DESCRIPTION
UTNA04SM9	OptiPRO, Single-Mode, Unitube Non-Armoured Cable, Polyethylene, 4 Core
UTNA06SM9	OptiPRO, Single-Mode, Unitube Non-Armoured Cable, Polyethylene, 6 Core
UTNA08SM9	OptiPRO, Single-Mode, Unitube Non-Armoured Cable, Polyethylene, 8 Core
UTNA04MM5	OptiPRO, 50µm, Multi-Mode, Unitube Non-Armoured Cable, Polyethylene, 4 Core
UTNA06MM5	OptiPRO, 50µm, Multi-Mode, Unitube Non-Armoured Cable, Polyethylene, 6 Core
UTNA08MM5	OptiPRO, 50µm, Multi-Mode, Unitube Non-Armoured Cable, Polyethylene, 8 Core
UTNA04MM6	OptiPRO, 62.5µm, Multi-Mode, Unitube Non-Armoured Cable, Polyethylene, 4 Core
UTNA06MM6	OptiPRO, 62.5µm, Multi-Mode, Unitube Non-Armoured Cable, Polyethylene, 6 Core
UTNA08MM6	OptiPRO, 62.5µm, Multi-Mode, Unitube Non-Armoured Cable, Polyethylene, 8 Core

OptiPRO Stranded Loose Tube Light-Armoured Cables

The OptiPRO Stranded Loose Tube Light-Armoured Cable is housed in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A steel wire, sheathed with polyethylene (PE) is used for cables with high fibre counts and is located in the core centre to act as a metallic strength member. Tubes and fillers are stranded around the strength member into a compact and circular cable core. Polyethylene Steel Polyethylene (PSP) is longitudinally applied over the cable core, and the core is then filled with a filling compound to protect it from water ingress. The cable is covered with a PE sheath.

SLLA04SM915



PHYSICAL SPECIFICATIONS

Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤0.8µm**
Curl	**≥4m**

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

PRODUCT FEATURES

- Accurate fibre excess length.
- High strength loose tube.
- Specially designed compact structure.
- Crush resistant and flexible.
- Tight water-resistant measures - steel wire used as central strength member, loose tube filling compound, 100% cable core filling, PSP enhancing moisture-proofing and water-blocking material.

CUSTOMER BENEFITS

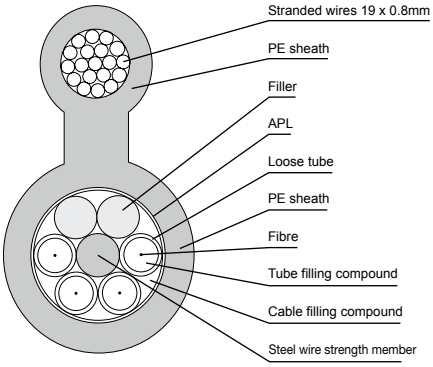
- Accurate fibre excess length ensures good mechanical and temperature performance.
- High strength loose tube is hydrolysis resistant and special tube filling compound ensures critical protection of fibre.
- Specially designed compact structure prevents loose tubes from shrinking.

CATALOGUE NUMBER	DESCRIPTION
SLLA04SM9/15	OptiPRO, Single-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Light-Armoured Cable, Polyethylene, 4 Core
SLLA06SM9/15	OptiPRO, Single-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Light-Armoured Cable, Polyethylene, 6 Core
SLLA12SM9/24	OptiPRO, Single-Mode, Stranded Loose Tube (2 Tube & 4 Fillers) Light-Armoured Cable, Polyethylene, 12 Core
SLLA04MM5/15	OptiPRO, 50µm, Multi-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Light-Armoured Cable, Polyethylene, 4 Core
SLLA06MM5/15	OptiPRO, 50µm, Multi-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Light-Armoured Cable, Polyethylene, 6 Core
SLLA12MM5/24	OptiPRO, 50µm, Multi-Mode, Stranded Loose Tube (2 Tube & 4 Fillers) Light-Armoured Cable, Polyethylene, 12 Core
SLLA04MM6/15	OptiPRO, 62.5µm, Multi-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Light-Armoured Cable, Polyethylene, 4 Core
SLLA06MM6/15	OptiPRO, 62.5µm, Multi-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Light-Armoured Cable, Polyethylene, 6 Core
SLLA12MM6/24	OptiPRO, 62.5µm, Multi-Mode, Stranded Loose Tube (2 Tube & 4 Fillers) Light-Armoured Cable, Polyethylene, 12 Core

OptiPRO Stranded Wire Reinforced Metallic Strength Member Cables Aerial Cables

The OptiPRO Stranded Wire Reinforced Metallic Strength Member Cable is housed in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. The tubes and fillers are stranded around the strength member into a compact and circular cable core. After an Aluminium Polyethylene Laminate (APL) moisture barrier is applied around the cable core, this part of cable, accompanied with the stranded wires as the supporting part, are covered with a polyethylene (PE) sheath in a figure 8 structure. This type of cable is specifically used in self-supporting aerial installations.

SWNS04SM9/15



PHYSICAL SPECIFICATIONSV

Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤0.8µm**
Curl	**≥4m**

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

PRODUCT FEATURES

- Accurate fibre excess length.
- High strength loose tube.
- Specially designed compact structure.
- Crush resistant and flexible.
- Tight water-resistant measures - steel wire used as central strength member, loose tube filling compound, 100% cable core filling, APL enhancing moisture-proofing and water-blocking material.

CUSTOMER BENEFITS

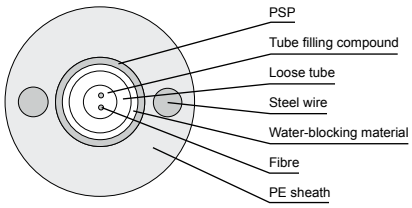
- Accurate fibre excess length ensures good mechanical and temperature performance.
- High strength loose tube is hydrolysis resistant and special tube filling compound ensures critical protection of fibre.
- Specially designed compact structure prevents loose tubes from shrinking.

CATALOGUE NUMBER	DESCRIPTION
SWNS04SM9/15	OptiPRO, Single-Mode, Stranded Wire Reinforced (1 Tube & 5 Fillers) Metallic Strength Member Cable, Polyethylene, 4 Core
SWNS06SM9/15	OptiPRO, Single-Mode, Stranded Wire Reinforced (1 Tube & 5 Fillers) Metallic Strength Member Cable, Polyethylene, 6 Core
SWNS12SM9/24	OptiPRO, Single-Mode, Stranded Wire Reinforced (2 Tube & 4 Fillers) Metallic Strength Member Cable, Polyethylene, 12 Core
SWNS04MM5/15	OptiPRO, 50µm, Multi-Mode, Stranded Wire Reinforced (1 Tube & 5 Fillers) Metallic Strength Member Cable, Polyethylene, 4 Core
SWNS06MM5/15	OptiPRO, 50µm, Multi-Mode, Stranded Wire Reinforced (1 Tube & 5 Fillers) Metallic Strength Member Cable, Polyethylene, 6 Core
SWNS12MM5/24	OptiPRO, 50µm, Multi-Mode, Stranded Wire Reinforced (2 Tube & 4 Fillers) Metallic Strength Member Cable, Polyethylene, 12 Core
SWNS04MM6/15	OptiPRO, 62.5µm, Multi-Mode, Stranded Wire Reinforced (1 Tube & 5 Fillers) Metallic Strength Member Cable, Polyethylene, 4 Core
SWNS06MM6/15	OptiPRO, 62.5µm, Multi-Mode, Stranded Wire Reinforced (1 Tube & 5 Fillers) Metallic Strength Member Cable, Polyethylene, 6 Core
SWNS12MM6/24	OptiPRO, 62.5µm, Multi-Mode, Stranded Wire Reinforced (2 Tube & 4 Fillers) Metallic Strength Member Cable, Polyethylene, 12 Core

OptiPRO Unitube Light-Armoured Cables
Direct, Buried Cables

The Clipsal OptiPRO Unitube Light-Armoured Cable features a loose tube, made of a high modulus plastic. The tube is filled with a water-resistant filling compound and is longitudinally wrapped with a layer of Polyethylene Steel Polyethylene (PSP). Between the PSP and the loose tube, water-blocking material is applied to keep the cable compact and watertight. Two parallel steel wires are placed at the two sides of the steel tape. The cable is covered with a polyethylene (PE) sheath.

UTLA04SM9



PHYSICAL SPECIFICATIONS

Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤0.8µm**
Curl	**≥4m**

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

PRODUCT FEATURES

- Accurate fibre excess length.
- High strength loose tube.
- Specially designed compact structure and PE sheath.
- Crush resistant and flexible.
- PSP enhances the cable's crush-resistance, impact-resistance and moisture-proofing.
- Two parallel steel wires ensure tensile strength.
- Small diameter, lightweight and hassle-free installation.
- Long delivery length.

CUSTOMER BENEFITS

- Accurate fibre excess length ensures good mechancial and temperature performance.
- High strength loose tube is hydrolysis resistant and special tube filling compound ensures critical protection of fibre.
- Specially designed compact structure prevents loose tubes from shrinking.
- PE sheath protects cable from ultra-violet radiation.

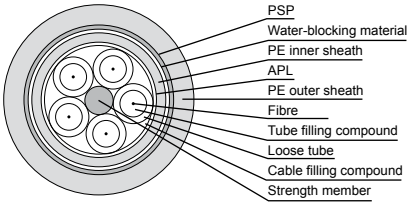
CATALOGUE NUMBER	DESCRIPTION
UTLA04SM9	OptiPRO, Single-Mode, Unitube Light-Armoured Cable, Polyethylene, 4 Core
UTLA06SM9	OptiPRO, Single-Mode, Unitube Light-Armoured Cable, Polyethylene, 6 Core
UTLA12SM9	OptiPRO, Single-Mode, Unitube Light-Armoured Cable, Polyethylene, 12 Core
UTLA04MM5	OptiPRO, 50µm, Multi-Mode, Unitube Light-Armoured Cable, Polyethylene, 4 Core
UTLA06MM5	OptiPRO, 50µm, Multi-Mode, Unitube Light-Armoured Cable, Polyethylene, 6 Core
UTLA12MM5	OptiPRO, 50µm, Multi-Mode, Unitube Light-Armoured Cable, Polyethylene, 12 Core
UTLA04MM6	OptiPRO, 62.5µm, Multi-Mode, Unitube Light-Armoured Cable, Polyethylene, 4 Core
UTLA06MM6	OptiPRO, 62.5µm, Multi-Mode, Unitube Light-Armoured Cable, Polyethylene, 6 Core
UTLA12MM6	OptiPRO, 62.5µm, Multi-Mode, Unitube Light-Armoured Cable, Polyethylene, 12 Core

OptiPRO Stranded Loose Tube Armoured Cables, Single-Mode Direct, Buried Cables

The OptiPRO Stranded Loose Tube Armoured Cable (with moisture barrier) is housed in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A steel wire, sheathed with polyethylene (PE) is used for cables with high fibre counts and is located in the core centre to act as a metallic strength member.

Tubes and fillers are stranded around the strength member into a compact and circular cable core. An Aluminium Polyethylene Laminate (APL) is applied around the cable core, which is then filled with filling compound to protect it from water-ingress. The cable core is covered with a thin PE inner sheath. After the Polyethylene Steel Polyethylene (PSP) is longitudinally applied over the inner sheath, the cable is covered with a PE outer sheath.

SLAM04SM9/15



PHYSICAL SPECIFICATIONS

Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤0.8µm**
Curl	**≥4m**

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

PRODUCT FEATURES

- Accurate fibre excess length.
- High strength loose tube.
- Specially designed compact structure.
- Crush resistant and flexible.
- Tight water-resistant measures - steel wire used as central strength member, loose tube filling compound, 100% cable core filling, APL moisture barrier, PSP enhanced moisture-proofing and water-blocking material.

CUSTOMER BENEFITS

- Accurate fibre excess length ensures good mechanical and temperature performance.
- High strength loose tube is hydrolysis resistant and special tube filling compound ensures critical protection of fibre.
- Specially designed compact structure prevents loose tubes from shrinking.

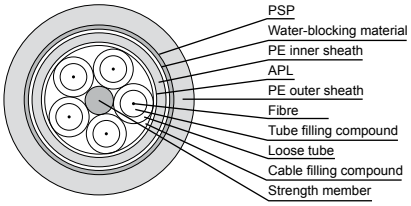
CATALOGUE NUMBER	DESCRIPTION
SLAM04SM9/15	OptiPRO, Single-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Armoured Cable, Polyethylene, 4 Core
SLAM06SM9/15	OptiPRO, Single-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Armoured Cable, Polyethylene, 6 Core
SLAM12SM9/24	OptiPRO, Single-Mode, Stranded Loose Tube (2 Tube & 4 Fillers) Armoured Cable, Polyethylene, 12 Core

OptiPRO Stranded Loose Tube Armoured Cables, Multi-Mode Direct, Buried Cables

The OptiPRO Stranded Loose Tube Armoured Cable (with moisture barrier) is housed in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A steel wire, sheathed with polyethylene (PE) is used for cables with high fibre counts and is located in the core centre to act as a metallic strength member.

Tubes and fillers are stranded around the strength member into a compact and circular cable core. An Aluminium Polyethylene Laminate (APL) is applied around the cable core, which is then filled with filling compound to protect it from water-ingress. The cable core is covered with a thin PE inner sheath. After the Polyethylene Steel Polyethylene (PSP) is longitudinally applied over the inner sheath, the cable is covered with a PE outer sheath.

SLAM04MM5/15



PHYSICAL SPECIFICATIONS

Core Diameter	**50±2.5µm** **62.5±2.5µm**
Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤1.5µm**
Delivery Length (km/reel)	**Standard Delivery Lengths up to 8.8km** *(other fibre lengths available on request)*

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

PRODUCT FEATURES

- Accurate fibre excess length.
- High strength loose tube.
- Specially designed compact structure.
- Crush resistant and flexible.
- Tight water-resistant measures - steel wire used as central strength member, loose tube filling compound, 100% cable core filling, APL moisture barrier, PSP enhanced moisture-proofing and water-blocking material.

CUSTOMER BENEFITS

- Accurate fibre excess length ensures good mechanical and temperature performance.
- High strength loose tube is hydrolysis resistant and special tube filling compound ensures critical protection of fibre.
- Specially designed compact structure prevents loose tubes from shrinking.

CATALOGUE NUMBER	DESCRIPTION
SLAM04MM5/15	OptiPRO, 50µm, Multi-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Armoured Cable, Polyethylene, 4 Core
SLAM06MM5/15	OptiPRO, 50µm, Multi-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Armoured Cable, Polyethylene, 6 Core
SLAM12MM5/24	OptiPRO, 50µm, Multi-Mode, Stranded Loose Tube (2 Tube & 4 Fillers) Armoured Cable, Polyethylene, 12 Core
SLAM04MM6/15	OptiPRO, 62.5µm, Multi-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Armoured Cable, Polyethylene, 4 Core
SLAM06MM6/15	OptiPRO, 62.5µm, Multi-Mode, Stranded Loose Tube (1 Tube & 5 Fillers) Armoured Cable, Polyethylene, 6 Core
SLAM12MM6/24	OptiPRO, 62.5µm, Multi-Mode, Stranded Loose Tube (2 Tube & 4 Fillers) Armoured Cable, Polyethylene, 12 Core

OptiPRO Indoor/Outdoor LSZH Cables, Single-Mode

The OptiPRO Indoor Outdoor LSZH Cable is a low smoke zero halogen (LSZH) cable that provides excellent anti-flame performance. The need for splicing between indoor and outdoor cables can be eliminated. The buffered tubes are surrounded by aramid yarns and are covered by a low smoke flame-retardant jacket for protection. A direct outdoor to indoor transition can be completed with this single cable.

The OptiPRO Indoor Outdoor LSZH Cable passed the following tests:
- IEC 754 part 3, Acidity/Corrosively based on pH and Conductivity Measurements
- IEC 332 part 3, Flammability and Fire Retardant
- NES 713, Toxicity Index
- IEC 1034, Smoke Emissions

IOD04SMLSZH

PRODUCT FEATURES

- Complies with ANSI/TIA/EIA-568-B.3 Standards.
- All dielectric self-supporting fibre.
- Filled with water-resistant filling compound.
- LSZH rated.

CUSTOMER BENEFITS

- Supports Gigabit Ethernet application.
- Suitable for indoor/outdoor or inter and intra building backbones installation.
- Water-blocking.
- Excellent anti-flame performance.

PHYSICAL SPECIFICATIONS

Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤0.8µm**
Curl	**≥4m**

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

CATALOGUE NUMBER	DESCRIPTION
IOD04SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 4 Core
IOD06SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 6 Core
IOD16SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 16 Core
IOD18SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 18 Core
IOD24SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 24 Core
IOD30SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 30 Core
IOD48SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 48 Core
IOD60SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 60 Core
IOD72SMLSZH	OptiPRO, Single-Mode, Indoor/Outdoor Cable, LSZH, 72 Core

OptiPRO Indoor/Outdoor LSZH Cables, Multi-Mode
Duct Cables

The OptiPRO Indoor Outdoor LSZH Cable is a low smoke zero halogen (LSZH) cable that provides excellent anti-flame performance. The need for splicing between indoor and outdoor cables can be eliminated. The buffered tubes are surrounded by aramid yarns and are covered by a low smoke, flame-retardant jacket for protection. A direct outdoor to indoor transition can be completed with this single cable.

The OptiPRO Indoor Outdoor LSZH Cable passed the following tests:
- IEC 754 part 3, Acidity/Corrosively based on pH and Conductivity Measurements
- IEC 332 part 3, Flammability and Fire Retardant
- NES 713, Toxicity Index
- IEC 1034, Smoke Emissions

IOD04MMLSZH

PRODUCT FEATURES
- Complies with ANSI/TIA/EIA-568-B.3 Standards.
- All dielectric self-supporting fibre.
- Filled with water-resistant filling compound.
- LSZH rated.

CUSTOMER BENEFITS
- Supports Gigabit Ethernet application.
- Suitable for indoor/outdoor or inter/intra building backbones installation.
- Water-blocking.
- Excellent anti-flame performance.

PHYSICAL SPECIFICATIONS

Core Diameter	**50±2.5µm** **62.5±2.5µm**
Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤1.5µm**
Delivery Length (km/reel)	**Standard Delivery Lengths up to 8.8km** *(other fibre lengths available on request)*

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

CATALOGUE NUMBER	DESCRIPTION
IOD04MM5LSZH	50um MM 4-Core Indoor/Outdoor LSZH Cable
IOD04MM6LSZH	62.5um MM 4-Core Indoor/Outdoor LSZH Cable
IOD06MM5LSZH	50um MM 6-Core Indoor/Outdoor LSZH Cable
IOD06MM6LSZH	62.5um MM 6-Core Indoor/Outdoor LSZH Cable
IOD08MM5LSZH	50um MM 8-Core Indoor/Outdoor LSZH Cable
IOD08MM6LSZH	62.5um MM 8-Core Indoor/Outdoor LSZH Cable
IOD12MM5LSZH	50um MM 12-Core Indoor/Outdoor LSZH Cable
IOD12MM6LSZH	62.5um MM 12-Core Indoor/Outdoor LSZH Cable
IOD16MM5LSZH	50um MM 16-Core Indoor/Outdoor LSZH Cable
IOD16MM6LSZH	62.5um MM 16-Core Indoor/Outdoor LSZH Cable
IOD18MM5LSZH	50um MM 18-Core Indoor/Outdoor LSZH Cable
IOD18MM6LSZH	62.5um MM 18-Core Indoor/Outdoor LSZH Cable
IOD24MM5LSZH	50um MM 24-Core Indoor/Outdoor LSZH Cable
IOD24MM6LSZH	62.5um MM 24-Core Indoor/Outdoor LSZH Cable
IOD30MM5LSZH	50um MM 30-Core Indoor/Outdoor LSZH Cable
IOD30MM6LSZH	62.5um MM 30-Core Indoor/Outdoor LSZH Cable
IOD48MM5LSZH	50um MM 48-Core Indoor/Outdoor LSZH Cable
IOD48MM6LSZH	62.5um MM 48-Core Indoor/Outdoor LSZH Cable
IOD60MM5LSZH	50um MM 60-Core Indoor/Outdoor LSZH Cable
IOD60MM6LSZH	62.5um MM 60-Core Indoor/Outdoor LSZH Cable
IOD72MM5LSZH	50um MM 72-Core Indoor/Outdoor LSZH Cable
IOD72MM6LSZH	62.5um MM 72-Core Indoor/Outdoor LSZH Cable

OptiPRO Loose Tube Indoor/Outdoor Cables, Single-Mode

The OptiPRO Loose Tube Indoor Outdoor Cable is composed of colour coded fibres housed in a coloured buffer tube. Dielectric rods are located in the centre acting as non-metallic strength members.

IODLT006SMPVC

PHYSICAL SPECIFICATIONS

Cladding Diameter	**125.0±1µm**
Cladding Non-circularity	**≤1.0%**
Coating Diameter	**245±10µm**
Coating/Cladding Concentricity Error	**≤12µm**
Coating Diameter Non-circularity	**≤6.0%**
Core/Cladding Concentricity Error	**≤0.8µm**
Curl	**≥4m**

OPTICAL CHARACTERISTICS

		9/125µm	50/125µm	62.5/125µm
Attenuation (+20ºC)	**@850nm**		**≤3.0dB / km**	**≤3.0dB / km**
	@1300nm		**≤1.0dB / km**	**≤1.0dB / km**
	@1310nm	**≤0.36dB / km**		
	@1550nm	**≤0.22dB / km**		
Bandwidth	**@850nm**		**≥500MHz.km**	**≥200MHz.km**
	@1300nm		**≥1000MHz.km**	**≥600MHz.km**
Numerical Aperture			**0.200±0.015 NA**	**0.275±0.015 NA**
Cable Cut-off Wavelength λcc		**≤1260 nm**		

PRODUCT FEATURES

- Complies with ANSI/TIA/EIA-568-B.3 Standards.
- Aerial self-supporting or duct or direct burial.
- Filled with water-resistant filling compound.
- Polyethylene (PE) outer sheath.

CUSTOMER BENEFITS

- Supports Gigabit Ethernet application.
- Good for indoor/outdoor or inter/intra building backbones installation.
- Water-blocking.

CATALOGUE NUMBER	DESCRIPTION
IODLT006SMPVC	OptiPRO, Single-Mode, Loose Tube Indoor/Outdoor Cable, PVC, 6 Core
IODLT012SMPVC	OptiPRO, Single-Mode, Loose Tube Indoor/Outdoor Cable, PVC, 12 Core
IODLT024SMPVC	OptiPRO, Single-Mode, Loose Tube Indoor/Outdoor Cable, PVC, 24 Core

Clipsal Titanium®
Fibre Patch Panels & Splice Trays

The Clipsal Titanium® Fibre Management Enclosure is a superior and compact fibre termination solution. It provides a rack/cabinet mountable solution with a provision to splice up to 48 external optional fibres to 48 pigtails. Installed with a pair of cable radius guides, this enclosure can also facilitate a maximum of 24 fibre patching applications.

This powder coated steel enclosure comes with a tinted removable Plexiglass cover for ease of installation, inspection and testing. Innovated design such as slide in/out cable entry provides additional flexibility during installation, movement or changes in the future.

Designed with multiple applications in mind, the Clipsal Titanium® Fibre Management Enclosure can accommodate different types of modular adapter panels and splice trays (optional) to give outstanding performance and functionality.

TFM1USC24

TECHNICAL SPECIFICATIONS

Material	**Powder Coated Mild Steel**
Accommodation	**Up to 24 x ST Connectors** **Up to 24 x SC Connectors** **Up to 48 LC Connectors** **Up to 48 x MTRJ Connectors**
Cable Termination	**Direct Termination**
Options	**Mechanical & Fusion Splicing**

PRODUCT FEATURES

- 1U panel and 19" front rack mounting enclosure provides patching and fibre slack storage capability conduit or standard tube interfacing.
- Accommodates up to 3 connector panels.
- Access connector panel with front quick release latch cover.
- Nylon cable radius guide and centre strength member clamp.
- Cable fibre track cover provides additional protection and a clean outlook.
- Tinted, easy access slide-out and removable Plexiglass cover.
- Accommodates both Single-Mode and Multi-Mode fibre.
- Additional rear mount ears (a set of 2) for cabinet mounting.
- Rugged steel construction in graphite finish.
- Optional splice tray can be mounted to the unit.
- Slide in cable entry panel with 2 x 25mm diameter holes.

CUSTOMER BENEFITS

- Provide patching and fibre slack storage capability with technicians and users in mind.
  - The technician's side has facilities for securing the cable, storing fibre slack and arranging the terminated fibres.
  - The user's side has similar features for the management of fibre optic patch cord.
- 66mm deep front cable panel for patch cord management and protection.
- Side-out Medium Density optical fibre management enclosure (SoMedD) for optimum access, to ease installation, inspection and testing.
- Slide-in cable entry panel with 2 x 25mm diameter holes allow flexible conduit or standard tube interfacing during installation.
- Nylon cable radius guide within the enclosure to accommodate excess fibres while maintaining fibre bend radius.
- Cable fibre track cover to give additional protection and clean outlook.
- Optional splice tray can be mounted to manage and protect either fusion or mechanical splices.

CATALOGUE NUMBER	DESCRIPTION
TFM1ULC48	1U, 48-Port LC Fibre Patch Panel
TFM1USC24	1U, 24-Port SC Fibre Patch Panel
TFM1UST24	1U, 24-Port ST Fibre Patch Panel
TFM1UMTRJ48	1U, 48-Port MTRJ Fibre Patch Panel
TFM1ULCS8P	1U, LC Simplex Fibre Patch Panel, with 8 Adaptors
TFM1ULCD4P	1U, LC Duplex Fibre Patch Panel, with 4 Adaptors
TFM1ULCD8P	1U, LC Duplex Fibre Patch Panel, with 8 Adaptors
TFM1USCS8P	1U, SC Simplex Fibre Patch Panel, with 8 Adaptor

CATALOGUE NUMBER	DESCRIPTION
TFM1USCD4P	1U, SC Duplex Fibre Patch Panel, with 4 Adaptors
TFM1USTS8P	1U, ST Simplex Fibre Patch Panel, with 8 Adaptors
TFM1UMTRJ4P	1U, MTRJ Duplex Fibre Patch Panel, with 4 Adaptors
TFM1UMTRJ8P	1U, MTRJ Duplex Fibre Patch Panel, with 8 Adaptors
TFM1U	1U, 24-Port Fibre Sliding Enclosure, Unloaded
TFM1UBLANKP	1U, Fibre Blank Connector Panel
TFSK24F	Fusion 24 Splice Tray
TFSK48F	Fusion 48 Splice Tray

SC Fibre Patch Cords

The Simplex and Duplex SC Fibre Patch Cords are 3.0mm cordage with push-pull SC connectors terminated on each end. These patch cords are available in Simplex, Duplex, Multi-Mode and Single-Mode configurations.

TFP1C3S19S05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Simplex: 3.0mm; Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Engineered Resin**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM)** **9/125µm**	**Multi-Mode (MM)** **50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**SC**
Mean Insertion Loss	**0.2dB**
Maximum Insertion Loss	**0.4dB**
Maximum Reflection	**-50dB (SM)/-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**
Cable	**50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM)/1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Simplex, Duplex, Single-Mode and Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- All cords are factory terminated and tested.
- Provides a reliable and durable connection solution.

SC Fibre Patch Cords

CATALOGUE NUMBER	DESCRIPTION
Simplex OS1, Single-Mode	
TFP1C3S19S05	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 0.5m
TFP1C3S19S10	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.0m
TFP1C3S19S15	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.5m
TFP1C3S19S20	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP1C3S19S30	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP1C3S19S50	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 5.0m
TFP1C3S19S100	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 10.0m
Duplex OS1, Single-Mode	
TFP2C3S19S05	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 0.5m
TFP2C3S19S10	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.0m
TFP2C3S19S15	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.5m
TFP2C3S19S20	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP2C3S19S30	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP2C3S19S50	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 5.0m
TFP2C3S19S100	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 10.0m
Duplex OM1, Multi-Mode	
TFP2C3M16M05	SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 0.5m
TFP2C3M16M10	SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.0m
TFP2C3M16M15	SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.5m
TFP2C3M16M20	SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2C3M16M30	SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2C3M16M50	SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 5.0m
TFP2C3M16M100	SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 10.0m
Simplex OM2, Multi-Mode	
TFP1C3M25M05	SC, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP1C3M25M10	SC, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP1C3M25M15	SC, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP1C3M25M20	SC, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP1C3M25M30	SC, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP1C3M25M50	SC, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP1C3M25M100	SC, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
Duplex OM2, Multi-Mode	
TFP2C3M25M05	SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2C3M25M10	SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2C3M25M15	SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2C3M25M20	SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2C3M25M30	SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2C3M25M50	SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2C3M25M100	SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
Simplex OM3, Multi-Mode	
TFP1C3M35M05	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP1C3M35M10	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP1C3M35M15	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP1C3M35M20	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP1C3M35M30	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP1C3M35M50	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP1C3M35M100	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
Duplex OM3, Multi-Mode	
TFP2C3M35M05	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2C3M35M10	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2C3M35M15	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2C3M35M20	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2C3M35M30	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2C3M35M50	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2C3M35M100	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

ST Fibre Patch Cords

The Simplex and Duplex ST Fibre Patch Cords are 3.0mm cordage with push-pull ST connectors terminated on each end. These patch cords are available in Simplex, Duplex, Multi-Mode and Single-Mode configurations.

TFP1C3S19S05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Simplex: 3.0mm; Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Nickel Plated Zinc**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM) 9/125µm**	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**ST**
Mean Insertion Loss	**0.2dB**
Maximum Insertion Loss	**0.4dB**
Maximum Reflection	**-50dB (SM)/-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**
Cable	**9 (SM)/50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM)/1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Single-Mode and Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

ST Fibre Patch Cords

CATALOGUE NUMBER	DESCRIPTION
OS1, Single-Mode	
TFP1T3S19S05	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 0.5m
TFP1T3S19S10	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.0m
TFP1T3S19S15	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.5m
TFP1T3S19S20	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP1T3S19S30	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP1T3S19S50	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 5.0m
TFP1T3S19S100	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 10.0m
OS1, Single-Mode	
TFP2T3S19S05	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 0.5m
TFP2T3S19S10	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.0m
TFP2T3S19S15	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.5m
TFP2T3S19S20	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP2T3S19S30	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP2T3S19S50	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 5.0m
TFP2T3S19S100	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 10.0m
OM1 Multi-Mode	
TFP2T3M16M05	ST, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 0.5m
TFP2T3M16M10	ST, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.0m
TFP2T3M16M15	ST, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.5m
TFP2T3M16M20	ST, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2T3M16M30	ST, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2T3M16M50	ST, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 5.0m
TFP2T3M16M100	ST, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 10.0m
OM2, Multi-Mode	
TFP1T3M25M05	ST, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP1T3M25M10	ST, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP1T3M25M15	ST, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP1T3M25M20	ST, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP1T3M25M30	ST, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP1T3M25M50	ST, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP1T3M25M100	ST, Simplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
OM2, Multi-Mode	
TFP2T3M25M05	ST, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2T3M25M10	ST, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2T3M25M15	ST, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2T3M25M20	ST, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2T3M25M30	ST, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2T3M25M50	ST, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2T3M25M100	ST, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
OM3, Multi-Mode	
TFP1T3M35M05	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP1T3M35M10	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP1T3M35M15	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP1T3M35M20	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP1T3M35M30	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP1T3M35M50	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP1T3M35M100	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
OM3, Multi-Mode	
TFP2T3M35M05	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2T3M35M10	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2T3M35M15	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2T3M35M20	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2T3M35M30	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2T3M35M50	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2T3M35M100	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

LC Fibre Patch Cords

The Simplex and Duplex LC Fibre Patch Cords are 3.0mm cordage with push-pull LC connectors terminated on each end. These patch cords are available in Simplex, Duplex, Multi-Mode and Single-Mode configurations.

TFP1L3S19S10

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Simplex: 3.0mm; Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Engineered Resin**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM) 9/125µm**	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**LC**
Mean Insertion Loss	**0.2dB**
Maximum Insertion Loss	**0.4dB**
Maximum Reflection	**-50dB (SM)/-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**
Cable	**9 (SM)/50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM)/1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

LC Fibre Patch Cords

CATALOGUE NUMBER	DESCRIPTION
Simplex OS1, Single-Mode	
TFP1L3S19S05	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 0.5m
TFP1L3S19S10	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.0m
TFP1L3S19S15	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.5m
TFP1L3S19S20	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP1L3S19S30	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP1L3S19S50	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 5.0m
TFP1L3S19S100	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 10.0m
Duplex OS1, Single-Mode	
TFP2L3S19S05	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 0.5m
TFP2L3S19S10	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.0m
TFP2L3S19S15	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.5m
TFP2L3S19S20	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP2L3S19S30	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP2L3S19S50	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 5.0m
TFP2L3S19S100	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 10.0m
Duplex OM1, Multi-Mode	
TFP2L3M16M05	LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 0.5m
TFP2L3M16M10	LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.0m
TFP2L3M16M15	LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.5m
TFP2L3M16M20	LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2L3M16M30	LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2L3M16M50	LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 5.0m
TFP2L3M16M100	LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 10.0m
Duplex OM3, Multi-Mode	
TFP2L3M35M05	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2L3M35M10	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2L3M35M15	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2L3M35M20	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2L3M35M30	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2L3M35M50	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2L3M35M100	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

MTRJ Fibre Patch Cords

The Duplex MTRJ Fibre Patch Cords are 3.0mm cordage with push-pull ST connectors terminated on each end. These patch cords are available in Duplex Multi-Mode and Single-Mode configurations.

TFP2M3S19S10

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Engineered Resin**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM)** **9/125µm**	**Multi-Mode (MM)** **50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**MTRJ**
Mean Insertion Loss	**0.4dB**
Maximum Insertion Loss	**0.5dB**
Maximum Reflection	**-20dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**
Cable	**9 (SM)/50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM)/1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Single-Mode and Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

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CUSTOMER BENEFITS

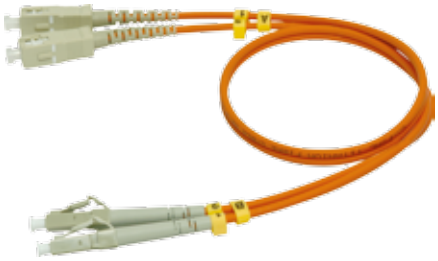
- Supports LAN, WAN and active device termination.
- All cords are factory terminated and tested.
- Provides a reliable and durable connection solution.

MTRJ Fibre Patch Cords

CATALOGUE NUMBER	DESCRIPTION
Duplex OS1, Single-Mode	
TFP2M3S19S05	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 0.5m
TFP2M3S19S10	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.0m
TFP2M3S19S15	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 1.5m
TFP2M3S19S20	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP2M3S19S30	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP2M3S19S50	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 5.0m
TFP2M3S19S100	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 10.0m
Duplex OM1, Multi-Mode	
TFP2M3M16M05	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 0.5m
TFP2M3M16M10	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.0m
TFP2M3M16M15	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.5m
TFP2M3M16M20	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2M3M16M30	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2M3M16M50	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 5.0m
TFP2M3M16M100	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 10.0m
Duplex OM3, Multi-Mode	
TFP2M3M35M05	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2M3M35M10	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2M3M35M15	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2M3M35M20	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2M3M35M30	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2M3M35M50	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2M3M35M100	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

SC-LC Fibre Patch Cords

The Duplex SC-LC Fibre Patch Cords are 3.0mm cordage with push-pull SC-LC connectors terminated on each end. These patch cords are available in Duplex Multi-Mode configurations.



TFP2CL3M16M05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Engineered Resin**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM) 9/125µm**	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	SC	LC
Mean Insertion Loss	**0.2dB**	**0.2dB**
Maximum Insertion Loss	**0.4dB**	**0.4dB**
Maximum Reflection	**-50dB (SM)/-25dB (MM)**	**-50dB (SM)/-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**9 (SM)/50 (MM)**	**9 (SM)/50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM)/1.5dB/km (MM)**	**3.5dB/km (SM)/1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Duplex, Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

SC-LC Fibre Patch Cords

CATALOGUE NUMBER	DESCRIPTION
OM1, Multi-Mode	
TFP2CL3M16M05	SC-LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 0.5m
TFP2CL3M16M10	SC-LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.0m
TFP2CL3M16M15	SC-LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.5m
TFP2CL3M16M20	SC-LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2CL3M16M30	SC-LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2CL3M16M50	SC-LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 5.0m
TFP2CL3M16M100	SC-LC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 10.0m
OM2, Multi-Mode	
TFP2CL3M25M05	SC-LC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2CL3M25M10	SC-LC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2CL3M25M15	SC-LC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2CL3M25M20	SC-LC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2CL3M25M30	SC-LC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2CL3M25M50	SC-LC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2CL3M25M100	SC-LC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
OM3, Multi-Mode	
TFP2CL3M35M05	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2CL3M35M10	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2CL3M35M15	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2CL3M35M20	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2CL3M35M30	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2CL3M35M50	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2CL3M35M100	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

SC-MTRJ Fibre Patch Cords

The Duplex SC-MTRJ Fibre Patch Cords are 3.0mm cordage with push-pull SC-MTRJ connectors terminated on each end. These patch cords are available in Duplex Multi-Mode configurations.

TFP2CL3M16M05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector	
Ferrule Materials	**Zirconia Ceramic**
Housing Body	**Engineered Resin**
Cable	
Boot	**Thermoplastic Elastomer**
Flammability	**UL 94V-0**
Glass Core/Cladding Diameter	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**
Jacket Specification	**OFNR/LSZH**

PERFORMANCE

Connector	SC	MTRJ
Mean Insertion Loss	**0.2dB**	**0.4dB**
Maximum Insertion Loss	**0.4dB**	**0.5dB**
Maximum Reflection	**-25dB (MM)**	**-20dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**50 (MM)/62.5 (MM)**	**50 (MM)/62.5 (MM)**
Cable Attenuation @ 23˚C Typical	**1.5dB/km (MM)**	**1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Duplex, Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

SC-MTRJ Fibre Patch Cords

CATALOGUE NUMBER	DESCRIPTION
OM1, Multi-Mode	
TFP2CM3M16M05	SC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 0.5m
TFP2CM3M16M10	SC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.0m
TFP2CM3M16M15	SC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.5m
TFP2CM3M16M20	SC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2CM3M16M30	SC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2CM3M16M50	SC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 5.0m
TFP2CM3M16M100	SC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 10.0m
OM2, Multi-Mode	
TFP2CM3M25M05	SC-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2CM3M25M10	SC-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2CM3M25M15	SC-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2CM3M25M20	SC-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2CM3M25M30	SC-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2CM3M25M50	SC-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2CM3M25M100	SC-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
OM3, Multi-Mode	
TFP2CM3M35M05	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2CM3M35M10	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2CM3M35M15	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2CM3M35M20	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2CM3M35M30	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2CM3M35M50	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2CM3M35M100	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

ST-SC Fibre Patch Cords

The Duplex ST-SC Fibre Patch Cords are 3.0mm cordage with push-pull ST-SC connectors terminated on each end. These patch cords are available in Duplex Multi-Mode configurations.

TFP2TC3M16M10

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector	**ST**	**SC**
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Nickel Plated Zinc**	**Engineered Resin**
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Multi-Mode (MM) 50/125µm or 62.5/125µm**	
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**ST**	**SC**
Mean Insertion Loss	**0.2dB**	**0.2dB**
Maximum Insertion Loss	**0.4dB**	**0.4dB**
Maximum Reflection	**-25dB (MM)**	**-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**50 (MM)/62.5 (MM)**	**50 (MM)/62.5 (MM)**
Cable Attenuation @ 23˚C Typical	**1.5dB/km (MM)**	**1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Duplex Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

ST-SC Fibre Patch Cords

CATALOGUE NUMBER	DESCRIPTION
OM1, Multi-Mode	
TFP2TC3M16M05	ST-SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 0.5m
TFP2TC3M16M10	ST-SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.0m
TFP2TC3M16M15	ST-SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.5m
TFP2TC3M16M20	ST-SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2TC3M16M30	ST-SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2TC3M16M50	ST-SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 5.0m
TFP2TC3M16M100	ST-SC, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 10.0m
OM2, Multi-Mode	
TFP2TC3M25M05	ST-SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2TC3M25M10	ST-SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2TC3M25M15	ST-SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2TC3M25M20	ST-SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2TC3M25M30	ST-SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2TC3M25M50	ST-SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2TC3M25M100	ST-SC, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m
OM3, Multi-Mode	
TFP2TC3M35M05	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2TC3M35M10	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2TC3M35M15	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2TC3M35M20	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2TC3M35M30	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2TC3M35M50	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2TC3M35M100	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

ST-MTRJ Fibre Patch Cords

The Duplex ST-MTRJ Fibre Patch Cords are 3.0mm cordage with push-pull ST-MTRJ connectors terminated on each end. These patch cords are available in Duplex Multi-Mode configurations.

TFP2TM3M25M05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector	**ST**	**MTRJ**
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Nickel Plated Zinc**	**Engineered Resin**
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Multi-Mode (MM) 50/125µm or 62.5/125µm**	
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**ST**	**MTRJ**
Mean Insertion Loss	**0.2dB**	**0.4dB**
Maximum Insertion Loss	**0.4dB**	**0.5dB**
Maximum Reflection	**-25dB (MM)**	**-20dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**50 (MM)**	**50 (MM)**
Cable Attenuation @ 23˚C Typical	**1.5dB/km (MM)**	**1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Duplex, Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

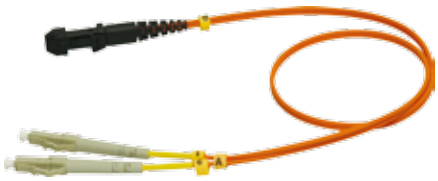
CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

CATALOGUE NUMBER	DESCRIPTION
TFP2TM3M25M05	ST-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2TM3M25M10	ST-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2TM3M25M15	ST-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2TM3M25M20	ST-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2TM3M25M30	ST-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2TM3M25M50	ST-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2TM3M25M100	ST-MTRJ, Duplex, OM2, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

LC-MTRJ Fibre Patch Cords

The Duplex LC-MTRJ Fibre Patch Cords are 3.0mm cordage with push-pull LC-MTRJ connectors terminated on each end. These patch cords are available in Duplex Multi-Mode configurations.



TFP2LM3M16M05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

MECHANICAL CHARACTERISTICS

Connector	
Ferrule Materials	**Zirconia Ceramic**
Housing Body	**Engineered Resin**
Cable	
Boot	**Thermoplastic Elastomer**
Flammability	**UL 94V-0**
Glass Core/Cladding Diameter	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**
Jacket Specification	**OFNR/LSZH**

PERFORMANCE

Connector	LC	MTRJ
Mean Insertion Loss	**0.2dB**	**0.4dB**
Maximum Insertion Loss	**0.4dB**	**0.5dB**
Maximum Reflection	**-25dB (MM)**	**-20dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**50 or 62.5 (MM)**	**50 or 62.5 (MM)**
Cable Attenuation @ 23˚C Typical	**1.5dB/km (MM)**	**1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Duplex, Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

CATALOGUE NUMBER	DESCRIPTION
OM1, Multi-Mode	
TFP2LM3M16M05	LC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 0.5m
TFP2LM3M16M10	LC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.0m
TFP2LM3M16M15	LC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 1.5m
TFP2LM3M16M20	LC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2LM3M16M30	LC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2LM3M16M50	LC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 5.0m
TFP2LM3M16M100	LC-MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 10.0m
OM3, Multi-Mode	
TFP2LM3M35M05	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 0.5m
TFP2LM3M35M10	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.0m
TFP2LM3M35M15	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 1.5m
TFP2LM3M35M20	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2LM3M35M30	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2LM3M35M50	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 5.0m
TFP2LM3M35M100	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 10.0m

ST Fibre Pigtails

The Simplex ST Fibre Pigtails are 3.0mm cordage with push-pull ST connectors terminated on each end. These pigtails are available in Simplex Multi-Mode configurations.

TFT1T3S19S05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Simplex: 3.0mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Simplex, Single-Mode and Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

CATALOGUE NUMBER	DESCRIPTION
OS1, Single-Mode	
TFT1T3S19S05	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 0.5m
TFT1T3S19S10	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 1.0m
TFT1T3S19S15	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 1.5m
TFT1T3S19S20	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 2.0m
OM1, Multi-Mode	
TFT1T3M16M05	ST, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 0.5m
TFT1T3M16M10	ST, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 1.0m
TFT1T3M16M15	ST, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 1.5m
TFT1T3M16M20	ST, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 2.0m
OM3, Multi-Mode	
TFT1T3M35M05	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 0.5m
TFT1T3M35M10	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 1.0m
TFT1T3M35M15	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 1.5m
TFT1T3M35M20	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 2.0m

SC Fibre Pigtails

The Simplex SC Fibre Pigtails are 3.0mm cordage with push-pull SC connectors terminated on each end. These pigtails are available in Simplex Single-Mode and Multi-Mode configurations.

TFT1C3S19S05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Simplex: 3.0mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Simplex, Single-Mode and Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

CATALOGUE NUMBER	DESCRIPTION
OS1, Single-Mode	
TFT1C3S19S05	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 0.5m
TFT1C3S19S10	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 1.0m
TFT1C3S19S15	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 1.5m
TFT1C3S19S20	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 2.0m
OM1, Multi-Mode	
TFT1C3M16M05	SC, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 0.5m
TFT1C3M16M10	SC, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 1.0m
TFT1C3M16M15	SC, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 1.5m
TFT1C3M16M20	SC, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 2.0m
OM3, Multi-Mode	
TFT1C3M35M05	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 0.5m
TFT1C3M35M10	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 1.0m
TFT1C3M35M15	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 1.5m
TFT1C3M35M20	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 2.0m

LC Fibre Pigtails

The Simplex LC Fibre Pigtails are 3.0mm cordage with push-pull LC connectors terminated on each end. These pigtails are available in Simplex Multi-Mode configurations.

TFT1L3S19S05

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Simplex: 3.0mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Simplex, Single-Mode and Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

CATALOGUE NUMBER	DESCRIPTION
OS1, Single-Mode	
TFT1L3S19S05	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 0.5m
TFT1L3S19S10	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 1.0m
TFT1L3S19S15	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 0.5m
TFT1L3S19S20	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 2.0m
OM1, Multi-Mode	
TFT1L3M16M05	LC, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 0.5m
TFT1L3M16M10	LC, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 1.0m
TFT1L3M16M15	LC, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 1.5m
TFT1L3M16M20	LC, Simplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 2.0m
OM3, Multi-Mode	
TFT1L3M35M05	LC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 0.5m
TFT1L3M35M10	LC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 1.0m
TFT1L3M35M15	LC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 1.5m
TFT1L3M35M20	LC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 2.0m

MTRJ Fibre Pigtails

The Simplex MTRJ Fibre Pigtails are 3.0mm cordage with push-pull MTRJ connectors terminated on each end. These pigtails are available in Duplex Single-Mode and Multi-Mode configurations.

PHYSICAL SPECIFICATIONS

Coated Fibre Diameter	**250µm**
Cable Outside Diameter	**Duplex: 6.6mm x 3.6mm**
Min. Bend Radius	**3.8cm**

OPTICAL SPECIFICATIONS

Multi-Mode	
Min. Bandwidth @850nm @1300nm	**200MHz-km** **500MHz-km**
Single-Mode	
Average Loss	**0.3dB/mated connector**
Return Loss	**-50dB max.**

TFT2M3S19S05

PRODUCT FEATURES

- Meets ANSI/TIA/EIA 568-B.3 and ISO/IEC 11801 Standards.
- Patch cords are available in Duplex, Single-Mode and Multi-Mode configurations with different length options.
- Cords are easy-to-install and environmentally stable.

CUSTOMER BENEFITS

- Supports LAN, WAN and active device termination.
- Provides a reliable and durable connection solution.
- All cords are factory terminated and tested.

CATALOGUE NUMBER	DESCRIPTION
OS1, Single-Mode	
TFT2M3S19S05	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 0.5m
TFT2M3S19S10	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 1.0m
TFT2M3S19S15	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 1.5m
TFT2M3S19S20	MTRJ, Duplex, OS1, Single-Mode, 9/125µm, Fibre Pigtail, 2.0m
OM1, Multi-Mode	
TFT2M3M16M05	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 0.5m
TFT2M3M16M10	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 1.0m
TFT2M3M16M15	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 1.5m
TFT2M3M16M20	MTRJ, Duplex, OM1, Multi-Mode, 62.5/125µm, Fibre Pigtail, 2.0m
OM3, Multi-Mode	
TFT2M3M35M05	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 0.5m
TFT2M3M35M10	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 1.0m
TFT2M3M35M15	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 1.5m
TFT2M3M35M20	MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Pigtail, 2.0m

Through Adaptors

The Clipsal Fibre Optic Connectors and Adaptors are a superior product delivering the best networking performance when used in conjunction with other Clipsal Fibre Optic products.

TFA1TSMZM

TFA1CSMZP

TFA2CSMZP

TFA2LMMZP

TFA2LSMZP

TFA2MSMP

CATALOGUE NUMBER	DESCRIPTION
ST Adaptors	
TFA1TSMZM	ST Adaptor, Simplex, Single-Mode, Zirconia Ceramic, Metal
TFA1TMMZM	ST Adaptor, Simplex, Multi-Mode, Zirconia Ceramic, Metal
SC Adaptors	
TFA1CSMZP	SC Adaptor, Simplex, Single-Mode, Zirconia Ceramic, Plastic
TFA1CMMZP	SC Adaptor, Simplex, Multi-Mode, Zirconia Ceramic, Plastic
TFA2CSMZP	SC Adaptor, Duplex, Single-Mode, Zirconia Ceramic, Plastic
TFA2CMMZP	SC Adaptor, Duplex, Multi-Mode, Zirconia Ceramic, Plastic
LC Adaptors	
TFA2LSMZP	LC Adaptor, Duplex, Single-Mode, Zirconia Ceramic, Plastic
TFA2LMMZP	LC Adaptor, Duplex, Multi-Mode, Zirconia Ceramic, Plastic
MTRJ Adaptors	
TFA2MSMP	MTRJ Adaptor, Duplex, Single-Mode, Plastic
TFA2MMMP	MTRJ Adaptor, Duplex, Multi-Mode, Plastic
SC-ST Adaptors	
TFA2CTSMZP	SC-ST Adaptor, Duplex, Single-Mode, Zirconia Ceramic, Plastic
TFA2CTMMZP	SC-ST Adaptor, Duplex, Multi-Mode, Zirconia Ceramic, Plastic
SC-LC Adaptors	
TFA2CLSMZP	SC-LC Adaptor, Duplex, Single-Mode, Zirconia Ceramic, Plastic
TFA2CLMMZP	SC-LC Adaptor, Duplex, Multi-Mode, Zirconia Ceramic, Plastic

Connectors

Clipsal offers the customer access to the most popular connector and adaptor types including the new Clipsal Titanium® connector. The Clipsal Fibre Optic Connectors and Adaptors are a superior product delivering the best networking performance when used in conjunction with Clipsal Fibre Optic products.

TFSTSM3

TFCSCMM3

TFCLCMM1

TFCMTRJMM2

CATALOGUE NUMBER	DESCRIPTION
ST Connectors	
TFCSTSM3	ST Connector, Single-Mode, 3.0mm
TFCSTSM9	ST Connector, Single-Mode, 900µm
TFSCTMM3	ST Connector, Multi-Mode, 3.0mm
TFSCTMM9	ST Connector, Multi-Mode, 900µm
SC Connectors	
TFCSCSM3	SC Connector, Single-Mode, 3.0mm
TFCSCSM9	SC Connector, Single-Mode, 900µm
TFCSCMM3	SC Connector, Multi-Mode, 3.0mm
TFCSCMM9	SC Connector, Multi-Mode, 900µm
LC Connectors	
TFCLCSM1	LC Connector, Single-Mode, 1.8mm
TFCLCSM3	LC Connector, Single-Mode, 3.0mm
TFCLCMM1	LC Connector, Multi-Mode, 1.8mm
TFCLCMM3	LC Connector, Multi-Mode, 3.0mm
MTRJ Connectors	
TFCMTRJSM2	MTRJ Connector, Single-Mode, 2.0mm
TFCMTRJMM2	MTRJ Connector, Multi-Mode, 2.0mm

SC Ultraflex Fibre Patch Cords

Clipsal Titanium® Ultraflex Fibre Patch Cord delivers the best fibre solution when used in conjunction with other Clipsal Titanium® products. The Ultraflex Fibre Cord provides extra durability and flexibility which is suitable for use in workstation environments. The fibre cords allow for tighter bending radius than normal fibre optic cords and can withstand rough installation situations. The outer layer of the Ultraflex cord consists of a permanent polymeric coating which protects the fibre from the environment. As an integral part of Clipsal Titanium® series, this product complements the Clipsal Titanium® Fibre range of products.

TFP2C3S19S30U

MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Engineered Resin**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM) 9/125µm**	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	**125µm**
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**SC**
Mean Insertion Loss	**0.2dB**
Maximum Insertion Loss	**0.4dB**
Maximum Reflection	**-50dB (SM)/-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**
Cable	**9 (SM)/50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM)/1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- 9.5mm extreme bending radius (30mm for standard).
- High mechanical strength.
- Extra flexibility and durability.
- Reduce bend stress by 20% as compared to standard glass fibre cords.
- Outer layer consists of a tough, flexible permanent polymeric coating.
- Meets TIA/EIA, ISO, EN Standards.

CUSTOMER BENEFITS

- Suitable for routing and managing of all installations.
- Allows for tighter bending radius to withstand rough installation situations.
- Permanent polymeric coating protects outer cladding glass surface from nicks.
- Extra durability, flexibility and improved reliability.
- Well suited for use in workstation environment.

CATALOGUE NUMBER	DESCRIPTION
OS1, Single-Mode	
TFP1C3S19S20U	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP1C3S19S30U	SC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP2C3S19S20U	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP2C3S19S30U	SC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
OM3, Multi-Mode	
TFP1C3M35M20U	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP1C3M35M30U	SC, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2C3M35M20U	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2C3M35M30U	SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP1C3M36M20U	SC, Simplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP1C3M36M30U	SC, Simplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2C3M36M20U	SC, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2C3M36M30U	SC, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m

ST Ultraflex Fibre Patch Cords

Clipsal Titanium® Ultraflex Fibre Patch Cord delivers the best fibre solution when used in conjunction with other Clipsal Titanium® products. The Ultraflex Fibre Cord provides extra durability and flexibility which is suitable for use in workstation environments. The fibre cords allow for tighter bending radius than normal fibre optic cords and can withstand rough installation situations. The outer layer of the Ultraflex cord consists of a permanent polymeric coating which protects the fibre from the environment. As an integral part of Clipsal Titanium® series, this product complements the Clipsal Titanium® Fibre range of products.

MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Nickel Plated Zinc**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM) 9/125µm**	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	**125µm**
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**ST**
Mean Insertion Loss	**0.2dB**
Maximum Insertion Loss	**0.4dB**
Maximum Reflection	**-50dB (SM) /-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**
Cable	**9 (SM)/50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM) /1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- 9.5mm extreme bending radius (30mm for standard).
- High mechanical strength.
- Extra flexibility and durability.
- Reduce bend stress by 20% as compared to standard glass fibre cords.
- Outer layer consists of a tough, flexible permanent polymeric coating.
- Meets TIA/EIA, ISO, EN Standards.

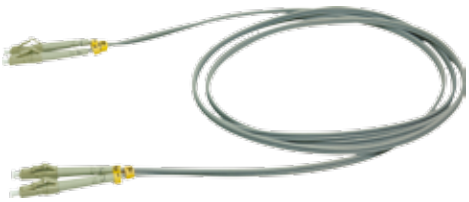
CUSTOMER BENEFITS

- Suitable for routing and managing of all installations.
- Allows for tighter bending radius to withstand rough installation situations.
- Permanent polymeric coating protects outer cladding glass surface from nicks.
- Extra durability, flexibility and improved reliability.
- Well suited for use in workstation environment.

CATALOGUE NUMBER	DESCRIPTION
OS1, Single-Mode	
TFP1T3S19S20U	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP1T3S19S30U	ST, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP2T3S19S20U	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP2T3S19S30U	ST, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
OM3, Multi-Mode	
TFP1T3M35M20U	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP1T3M35M30U	ST, Simplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2T3M35M20U	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2T3M35M30U	ST, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP1T3M36M20U	ST, Simplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP1T3M36M30U	ST, Simplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m
TFP2T3M36M20U	ST, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2T3M36M30U	ST, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m

LC Ultraflex Fibre Patch Cords

Clipsal Titanium® Ultraflex Fibre Patch Cord delivers the best fibre solution when used in conjunction with other Clipsal Titanium® products. The Ultraflex Fibre Cord provides extra durability and flexibility which is suitable for use in workstation environments. The fibre cords allow for tighter bending radius than normal fibre optic cords and can withstand rough installation situations. The outer layer of the Ultraflex cord consists of a permanent polymeric coating which protects the fibre from the environment. As an integral part of Clipsal Titanium® series, this product complements the Clipsal Titanium® Fibre range of products.



MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Engineered Resin**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM) 9/125µm**	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	**125µm**
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**LC**
Mean Insertion Loss	**0.2dB**
Maximum Insertion Loss	**0.4dB**
Maximum Reflection	**-50dB (SM)/-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**
Cable	**9 (SM)/50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM)/1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- 9.5mm extreme bending radius (30mm for standard).
- High mechanical strength.
- Extra flexibility and durability.
- Reduce bend stress by 20% as compared to standard glass fibre cords.
- Outer layer consists of a tough, flexible permanent polymeric coating.
- Meets TIA/EIA, ISO, EN Standards.

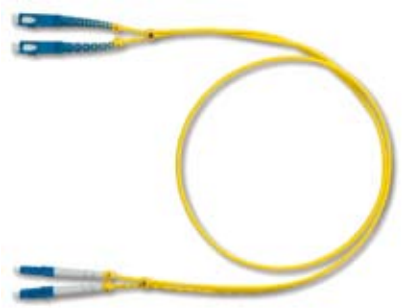
CUSTOMER BENEFITS

- Suitable for routing and managing of all installations.
- Allows for tighter bending radius to withstand rough installation situations.
- Permanent polymeric coating protects outer cladding glass surface from nicks.
- Extra durability, flexibility and improved reliability.
- Well suited for use in workstation environment.

CATALOGUE NUMBER	DESCRIPTION
OS1, Single-Mode	
TFP1L3S19S20U	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP1L3S19S30U	LC, Simplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
TFP2L3S19S20U	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 2.0m
TFP2L3S19S30U	LC, Duplex, OS1, Single-Mode, 9/125µm, Fibre Patch Cord, 3.0m
OM3, Multi-Mode	
TFP2L3M35M20U	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2L3M35M30U	LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2L3M36M20U	LC, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2L3M36M30U	LC, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m

SC-LC Ultraflex Fibre Patch Cords

Clipsal Titanium® Ultraflex Fibre Patch Cord delivers the best fibre solution when used in conjunction with other Clipsal Titanium® products. The Ultraflex Fibre Cord provides extra durability and flexibility which is suitable for use in workstation environments. The fibre cords allow for tighter bending radius than normal fibre optic cords and can withstand rough installation situations. The outer layer of the Ultraflex cord consists of a permanent polymeric coating which protects the fibre from the environment. As an integral part of Clipsal Titanium® series, this product complements the Clipsal Titanium® Fibre range of products.



TFP2CL3M16M30U

MECHANICAL CHARACTERISTICS

Connector		
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Engineered Resin**	
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Single-Mode (SM) 9/125µm**	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**	**125µm**
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**SC**	**LC**
Mean Insertion Loss	**0.2dB**	**0.2dB**
Maximum Insertion Loss	**0.4dB**	**0.4dB**
Maximum Reflection	**-50dB (SM)/-25dB (MM)**	**-50dB (SM)/-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**9 (SM)/50 (MM)**	**9 (SM)/50 (MM)**
Cable Attenuation @ 23˚C Typical	**3.5dB/km (SM)/ 1.5dB/km (MM)**	**3.5dB/km (SM)/ 1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- 9.5mm extreme bending radius (30mm for standard).
- High mechanical strength.
- Extra flexibility and durability.
- Reduce bend stress by 20% as compared to standard glass fibre cords.
- Outer layer consists of a tough, flexible permanent polymeric coating.
- Meets TIA/EIA, ISO, EN Standards.

CUSTOMER BENEFITS

- Suitable for routing and managing of all installations.
- Allows for tighter bending radius to withstand rough installation situations.
- Permanent polymeric coating protects outer cladding glass surface from nicks.
- Extra durability, flexibility and improved reliability.
- Well suited for use in workstation environment.

CATALOGUE NUMBER	DESCRIPTION
TFP2CL3M35M20U	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2CL3M35M30U	SC-LC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2CL3M36M20U	SC-LC, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2CL3M36M30U	SC-LC, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m

SC-MTRJ Ultraflex Fibre Patch Cords

Clipsal Titanium® Ultraflex Fibre Patch Cord delivers the best fibre solution when used in conjunction with other Clipsal Titanium® products. The Ultraflex Fibre Cord provides extra durability and flexibility which is suitable for use in workstation environments. The fibre cords allow for tighter bending radius than normal fibre optic cords and can withstand rough installation situations. The outer layer of the Ultraflex cord consists of a permanent polymeric coating which protects the fibre from the environment. As an integral part of Clipsal Titanium® series, this product complements the Clipsal Titanium® Fibre range of products.

MECHANICAL CHARACTERISTICS

Connector	
Ferrule Materials	**Zirconia Ceramic**
Housing Body	**Engineered Resin**
Cable	
Boot	**Thermoplastic Elastomer**
Flammability	**UL 94V-0**
Glass Core/Cladding Diameter	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**
Jacket Specification	**OFNR/LSZH**

PERFORMANCE

Connector	**SC**	**MTRJ**
Mean Insertion Loss	**0.2dB**	**0.4dB**
Maximum Insertion Loss	**0.4dB**	**0.5dB**
Maximum Reflection	**-25dB (MM)**	**-20dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**50 (MM)/62.5 (MM)**	**50 (MM)/62.5 (MM)**
Cable Attenuation @ 23˚C Typical	**1.5dB/km (SM)**	**1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- 9.5mm extreme bending radius (30mm for standard).
- High mechanical strength.
- Extra flexibility and durability.
- Reduce bend stress by 20% as compared to standard glass fibre cords.
- Outer layer consists of a tough, flexible permanent polymeric coating.
- Meets TIA/EIA, ISO, EN Standards.

CUSTOMER BENEFITS

- Suitable for routing and managing of all installations.
- Allows for tighter bending radius to withstand rough installation situations.
- Permanent polymeric coating protects outer cladding glass surface from nicks.
- Extra durability, flexibility and improved reliability.
- Well suited for use in workstation environment.

CATALOGUE NUMBER	DESCRIPTION
TFP2CM3M35M20U	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2CM3M35M30U	SC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2CM3M36M20U	SC-MTRJ, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2CM3M36M30U	SC-MTRJ, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m

ST-SC Ultraflex Fibre Patch Cords

Clipsal Titanium® Ultraflex Fibre Patch Cord delivers the best fibre solution when used in conjunction with other Clipsal Titanium® products. The Ultraflex Fibre Cord provides extra durability and flexibility which is suitable for use in workstation environments. The fibre cords allow for tighter bending radius than normal fibre optic cords and can withstand rough installation situations. The outer layer of the Ultraflex cord consists of a permanent polymeric coating which protects the fibre from the environment. As an integral part of Clipsal Titanium® series, this product complements the Clipsal Titanium® Fibre range of products.

MECHANICAL CHARACTERISTICS

Connector	**ST**	**SC**
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Nickel Plated Zinc**	**Engineered Resin**
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Multi-Mode (MM) 50/125µm or 62.5/125µm**	
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**ST**	**SC**
Mean Insertion Loss	**0.2dB**	**0.2dB**
Maximum Insertion Loss	**0.4dB**	**0.4dB**
Maximum Reflection	**-25dB (MM)**	**-25dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**50 or 62.5 (MM)**	**50 or 62.5 (MM)**
Cable Attenuation @ 23˚C Typical	**1.5dB/km (MM)**	**1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- 9.5mm extreme bending radius (30mm for standard).
- High mechanical strength.
- Extra flexibility and durability.
- Reduce bend stress by 20% as compared to standard glass fibre cords.
- Outer layer consists of a tough, flexible permanent polymeric coating.
- Meets TIA/EIA, ISO, EN Standards.

CUSTOMER BENEFITS

- Suitable for routing and managing of all installations.
- Allows for tighter bending radius to withstand rough installation situations.
- Permanent polymeric coating protects outer cladding glass surface from nicks.
- Extra durability, flexibility and improved reliability.
- Well suited for use in workstation environment.

CATALOGUE NUMBER	DESCRIPTION
TFP2TC3M35M20U	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2TC3M35M30U	ST-SC, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2TC3M36M20U	ST-SC, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2TC3M36M30U	ST-SC, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m

ST-MTRJ Ultraflex Fibre Patch Cords

Clipsal Titanium® Ultraflex Fibre Patch Cord delivers the best fibre solution when used in conjunction with other Clipsal Titanium® products. The Ultraflex Fibre Cord provides extra durability and flexibility which is suitable for use in workstation environments. The fibre cords allow for tighter bending radius than normal fibre optic cords and can withstand rough installation situations. The outer layer of the Ultraflex cord consists of a permanent polymeric coating which protects the fibre from the environment. As an integral part of Clipsal Titanium® series, this product complements the Clipsal Titanium® Fibre range of products.

MECHANICAL CHARACTERISTICS

Connector	**ST**	**MTRJ**
Ferrule Materials	**Zirconia Ceramic**	
Housing Body	**Nickel Plated Zinc**	**Engineered Resin**
Cable		
Boot	**Thermoplastic Elastomer**	
Flammability	**UL 94V-0**	
Glass Core/Cladding Diameter	**Multi-Mode (MM) 50/125µm**	
Polymer Coating Diameter	**125µm**	
Jacket Specification	**OFNR/LSZH**	

PERFORMANCE

Connector	**ST**	**MTRJ**
Mean Insertion Loss	**0.2dB**	**0.4dB**
Maximum Insertion Loss	**0.4dB**	**0.5dB**
Maximum Reflection	**-25dB (MM)**	**-20dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**50 (MM)**	**50 (MM)**
Cable Attenuation @ 23˚C Typical	**1.5dB/km (MM)**	**1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- 9.5mm extreme bending radius (30mm for standard).
- High mechanical strength.
- Extra flexibility and durability.
- Reduce bend stress by 20% as compared to standard glass fibre cords.
- Outer layer consists of a tough, flexible permanent polymeric coating.
- Meets TIA/EIA, ISO, EN Standards.

CUSTOMER BENEFITS

- Suitable for routing and managing of all installations.
- Allows for tighter bending radius to withstand rough installation situations.
- Permanent polymeric coating protects outer cladding glass surface from nicks.
- Extra durability, flexibility and improved reliability.
- Well suited for use in workstation environment.

CATALOGUE NUMBER	DESCRIPTION
TFP2TM3M35M20U	ST-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2TM3M35M30U	ST-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2TM3M36M20U	ST-MTRJ, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2TM3M36M30U	ST-MTRJ, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m

LC-MTRJ Ultraflex Fibre Patch Cords

Clipsal Titanium® Ultraflex Fibre Patch Cord delivers the best fibre solution when used in conjunction with other Clipsal Titanium® products. The Ultraflex Fibre Cord provides extra durability and flexibility which is suitable for use in workstation environments. The fibre cords allow for tighter bending radius than normal fibre optic cords and can withstand rough installation situations. The outer layer of the Ultraflex cord consists of a permanent polymeric coating which protects the fibre from the environment. As an integral part of Clipsal Titanium® series, this product complements the Clipsal Titanium® Fibre range of products.

MECHANICAL CHARACTERISTICS

Connector	
Ferrule Materials	**Zirconia Ceramic**
Housing Body	**Engineered Resin**
Cable	
Boot	**Thermoplastic Elastomer**
Flammability	**UL 94V-0**
Glass Core/Cladding Diameter	**Multi-Mode (MM) 50/125µm or 62.5/125µm**
Polymer Coating Diameter	**125µm**
Jacket Specification	**OFNR/LSZH**

PERFORMANCE

Connector	**LC**	**MTRJ**
Mean Insertion Loss	**0.2dB**	**0.4dB**
Maximum Insertion Loss	**0.4dB**	**0.5dB**
Maximum Reflection	**-25dB (MM)**	**-20dB (MM)**
Connector Durability (500 matings)	**<0.2dB max.**	**<0.2dB max.**
Cable	**50 or 62.5 (MM)**	**50 or 62.5 (MM)**
Cable Attenuation @ 23˚C Typical	**1.5dB/km (MM)**	**1.5dB/km (MM)**

ENVIRONMENTAL

Operating Temperature Range	**0˚C to 70˚C**
Storage Temperature Range	**-10˚C to 75˚C**

PRODUCT FEATURES

- 9.5mm extreme bending radius (30mm for standard).
- High mechanical strength.
- Extra flexibility and durability.
- Reduce bend stress by 20% as compared to standard glass fibre cords.
- Outer layer consists of a tough, flexible permanent polymeric coating.
- Meets TIA/EIA, ISO, EN Standards.

CUSTOMER BENEFITS

- Suitable for routing and managing of all installations.
- Allows for tighter bending radius to withstand rough installation situations.
- Permanent polymeric coating protects outer cladding glass surface from nicks.
- Extra durability, flexibility and improved reliability.
- Well suited for use in workstation environment.

CATALOGUE NUMBER	DESCRIPTION
TFP2LM3M35M20U	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 2.0m
TFP2LM3M35M30U	LC-MTRJ, Duplex, OM3, Multi-Mode, 50/125µm, Fibre Patch Cord, 3.0m
TFP2LM3M36M20U	LC-MTRJ, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 2.0m
TFP2LM3M36M30U	LC-MTRJ, Duplex, OM3, Multi-Mode, 62.5/125µm, Fibre Patch Cord, 3.0m

Breakout Kits

The Breakout Kit allows direct termination into fibre apparatus. It comes with six or twelve 25" x 47" tubing along with an easy, snap-together housing. The 6 fibre and 12 fibre accepts 2.4mm and 3.0mm buffer tubes respectively. The different lengths of tubing provide installers with great flexibility. It is simple-to-use as no epoxy or special tools are required.

KIT6FOBRKOUT25

CATALOGUE NUMBER	DESCRIPTION
KIT6FOBRKOUT25	6 Fibre with 25"Tubing, Breakout Kit for Fibre Optic
KIT6FOBRKOUT47	6 Fibre with 47"Tubing, Breakout Kit for Fibre Optic
KIT12FOBRKOUT25	12 Fibre with 25"Tubing, Breakout Kit for Fibre Optic
KIT12FOBRKOUT47	12 Fibre with 47"Tubing, Breakout Kit for Fibre Optic