Optical Fibre Assemblies

Catalogue 2017

OPTICAL FIBRE ASSEMBLIES

Datatronix®

Fostering Innovation

Empowering businesses through innovative network solutions.

We have been pushing boundaries and providing innovative products and solutions to clients around the world for nearly two decades. Our experience has taught us, that innovation can be achieved when people collaborate. The process and results are overly rewarding when creative minds are put together, that is why we work with clients throughout the entire design and engineering process to bring their innovations to life. Our high-quality manufacturing process, means that we enable our engineers to bring their visions to life, with the speed and scale that our clients demand.

We use the most advanced manufacturing innovations available, reducing lead time and making us more responsive. Our advantage system for manufacturing that we use, allows for global breakthroughs, and drives a culture of continuous improvement, which involves all processes in between.

Datatronix believes that achieving product excellence requires rising above industry standards; being better than our competitors by developing superior designs and manufacturing them with excellent processes, tight controls, and first-rate materials. Indeed, higher levels of quality and reliability are symbols of all Datatronix products.

Commitment.

Delivering world-class client service and technical innovation are not just goals: they are imbedded in to Datatronix's DNA.

Trust.

We strive to under promise and over deliver. Datatronix earns the trust of clients, partners, and employees through actions every day.

Reliability.

Clients and business partners depend on Datatronix because of our uncompromising focus on quality.

ISO 9001:2008 Certified.

Products bearing the Datatronix name have been certified to meet the highest industry quality standards.

Fast Deployment.

We use the most advanced manufacturing innovations available, reducing lead time and making us more responsive.

Value.

Value is the combination of quality, efficacy, and a fair price. Datatronix supply superior products, affordably.

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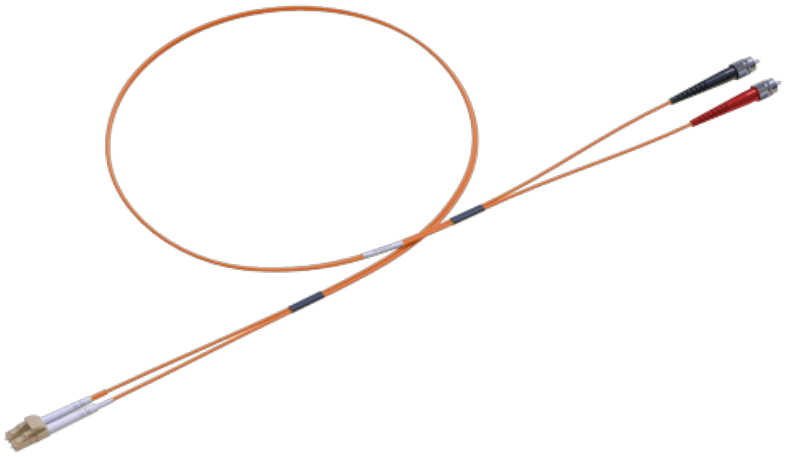
"Our clients and business partners can safely depend on Datatronix products because of our uncompromising focus on quality."

Optical Fibre Assemblies

Patch Cords



OM1 Multimode Patch Cords

High performance OM1 multimode patch cords, manufactured for internal applications using high quality Low Smoke Zero Halogen (LSZH) cable and low loss optimized connectors. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Data centres
- Gigabit Ethernet (1000BASE-SX) applications (275m link)
- Legacy networks (Ethernet, Fast Ethernet, FDDI)
- Backbone, horizontal and riser applications
- Video, data and voice services

Features

- SC, LC, ST, FC and MTRJ connectors
- Available in simplex or duplex
- 900µm / 600 µm tight buffer
- Duplex LC and SC assemblies available with clips
- TIA/EIA 492AAAA and IEC60793-2-10 A1b compliant
- Low Smoke Zero Halogen (LSZH) cable
- Available in orange colour
- REACH, RoHS and SvHC compliant

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Note: Return Loss > 28dB based on sample data using method IEC 61300-3-6		

Cable Specification

CHARACTERISTICS	SIMPLEX	DUPLEX
Cable Material	LSZH	LSZH
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to +60	-20 to +60
Fire Specification	IEC 60332-1	IEC 60332-1

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	3.0 @ 850nm / 0.8 @ 1300nm
Bandwidth OFL (MHz x km)	200 @ 850nm / 500 @ 1300nm

Patch Cords

Ordering Information

PCF
Fibre Patch Cord

Connector A	
00	LC
02	SC
04	ST
05	FC
07	E2000
09	MU
10	MTRJ

Connector B	
00	LC
02	SC
04	ST
05	FC
07	E2000
09	MU
10	MTRJ

+

Fibre Type	
1	OM1

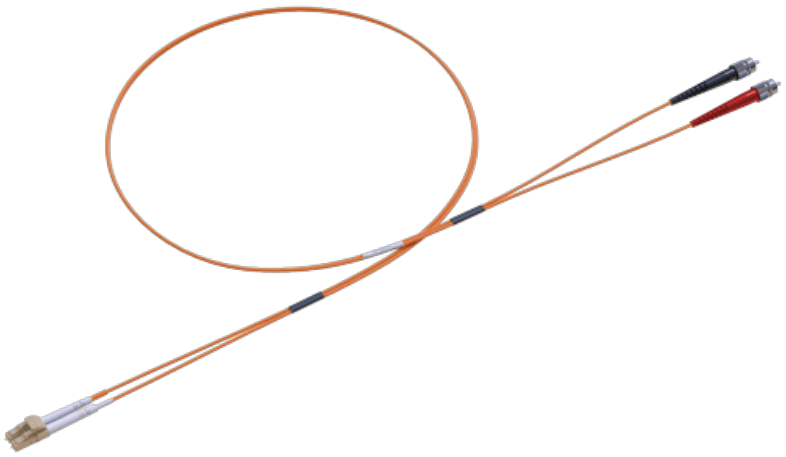
Configuration	
1	Simplex
2	Duplex
3	Flat Duplex

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

PCF-0000-12-05 – Patch Cord LC/UPC-LC/UPC Multimode OM1 Duplex 5m
PCF-0204-11-10 – Patch Cord SC/UPC-ST/UPC Multimode OM1 Simplex 10m



OM2 Multimode Patch Cords

High performance OM2 multimode patch cords, manufactured for internal applications using high quality Low Smoke Zero Halogen (LSZH) cable and low loss optimized connectors. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Data centres
- Gigabit Ethernet (1000BASE-SX) applications (275m link)
- Legacy networks (Ethernet, Fast Ethernet, FDDI)
- Backbone, horizontal and riser applications
- Video, data and voice services

Features

- SC, LC, ST, FC and MTRJ connectors
- Available in simplex or duplex
- 900µm / 600 µm tight buffer
- Duplex LC and SC assemblies available with clips
- ITU-T G.651.1, TIA/EIA 492AAA and IEC60793-2-10 A1a.1a compliant
- Low Smoke Zero Halogen (LSZH) cable
- Available in orange colour
- REACH, RoHS and SvHC compliant

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Note: Return Loss > 28dB based on sample data using method IEC 61300-3-6		

Cable Specification

CHARACTERISTICS	
Cable Material	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to +60
Fire Specification	IEC 60332-1

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	2.8 @ 850nm / 0.8 @ 1300nm
Bandwidth OFL (MHz x km)	500 @ 850nm / 500 @ 1300nm

Ordering Information

PCF
Fibre Patch Cord

Connector A	
00	LC
02	SC
04	ST
05	FC
07	E2000
09	MU
10	MTRJ

Connector B	
00	LC
02	SC
04	ST
05	FC
07	E2000
09	MU
10	MTRJ

+

Fibre Type	
2	OM2

Configuration	
1	Simplex
2	Duplex
3	Flat Duplex

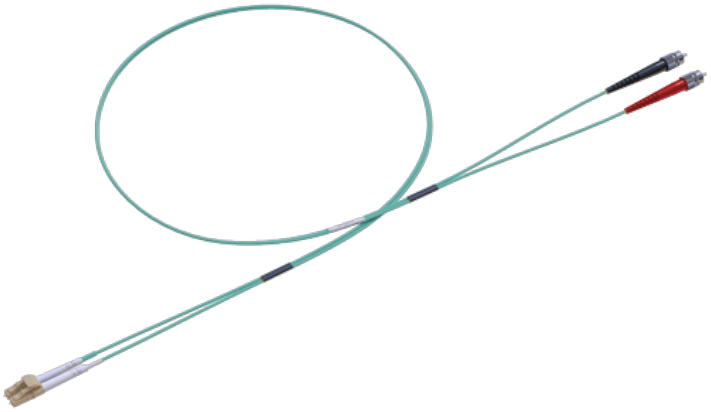
+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

PCF-0000-22-05 – Patch Cord LC/UPC-LC/UPC Multimode OM2 Duplex 5m
PCF-0204-21-10 – Patch Cord SC/UPC-ST/UPC Multimode OM2 Simplex 10m

Patch Cords



OM3 Multimode Patch Cords

High performance OM3 multimode patch cords, manufactured for internal applications using high quality Low Smoke Zero Halogen (LSZH) cable and low loss optimized connectors. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Data centres
- 40/100 Gigabit Ethernet applications
- 10 Gigabit Ethernet (10GBASE-SR) applications (300m link)
- Gigabit Ethernet (1000BASE-SX) applications (1000m link)
- Legacy networks (Ethernet, Fast Ethernet, FDDI)
- Backbone, horizontal and riser applications
- Video, data and voice services

Features

- SC, LC, ST, FC and MTRJ connectors
- Available in simplex or duplex
- 900µm / 600 µm tight buffer
- Duplex LC and SC assemblies available with clips
- ITU-T G.651.1, TIA/EIA 492AAAC and IEC60793-2-10 A1a.2a compliant
- Low Smoke Zero Halogen (LSZH) cable
- Available in aqua or purple colour
- REACH, RoHS and SvHC compliant

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Note: Return Loss > 28dB based on sample data using method IEC 61300-3-6		

Cable Specification

CHARACTERISTICS	SIMPLEX	DUPLEX
Cable Material	LSZH	LSZH
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to +60	-20 to +60
Fire Specification	IEC 60332-1	IEC 60332-1

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	2.8 @ 850nm / 0.8 @ 1310nm
Bandwidth OFL (MHz x km)	1500 @ 850nm / 500 @ 1310nm
Bandwidth LEMB (MHz x km)	2000 @ 850nm

Ordering Information

PCF
Fibre Patch Cord

Connector A	
00	LC
02	SC
04	ST
05	FC
07	E2000
09	MU
10	MTRJ

Connector B	
00	LC
02	SC
04	ST
05	FC
07	E2000
09	MU
10	MTRJ

+

Fibre Type	
3	OM3

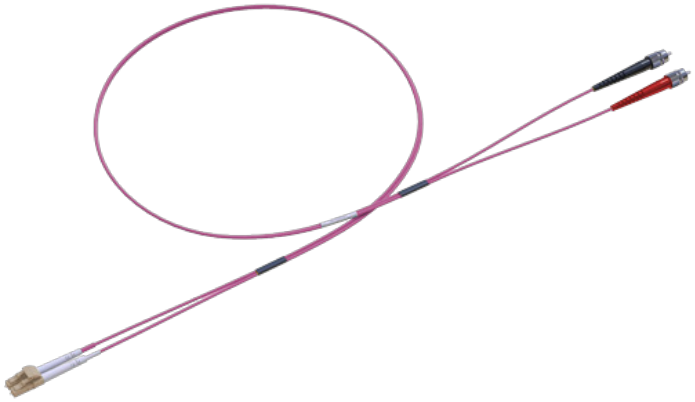
Configuration	
1	Simplex
2	Duplex
3	Flat Duplex

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

PCF-0000-32-05 – Patch Cord LC/UPC-LC/UPC Multimode OM3 Duplex 5m
PCF-0204-31-10 – Patch Cord SC/UPC-ST/UPC Multimode OM3 Simplex 10m



OM4 Multimode Patch Cords

High performance OM4 multimode patch cords, manufactured for internal applications using high quality Low Smoke Zero Halogen (LSZH) cable and low loss optimized connectors. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Data centres
- 40/100 Gigabit Ethernet applications
- 10 Gigabit Ethernet (10GBASE-SR) applications (300m link)
- Gigabit Ethernet (1000BASE-SX) applications (1000m link)
- Legacy networks (Ethernet, Fast Ethernet, FDDI)
- Backbone, horizontal and riser applications
- Video, data and voice services

Features

- SC, LC, ST, FC and MTRJ connectors
- Available in simplex or duplex
- 900µm / 600 µm tight buffer
- Duplex LC and SC assemblies available with clips
- ITU-T G.651.1, TIA/EIA 492AAAD and IEC60793-2-10 A1a.3a compliant
- Low Smoke Zero Halogen (LSZH) cable
- Available in aqua or Erika violet colour
- REACH, RoHS and SvHC compliant

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Note: Return Loss > 28dB based on sample data using method IEC 61300-3-6		

Cable Specification

CHARACTERISTICS	SIMPLEX	DUPLEX
Cable Material	LSZH	LSZH
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to +60	-20 to +60
Fire Specification	IEC 60332-1	IEC 60332-1

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	2.8 @ 850nm / 0.8 @ 1310nm
Bandwidth OFL (MHz x km)	3500 @ 850nm / 500 @ 1310nm
Bandwidth LEMB (MHz x km)	4700 @ 850nm

Ordering Information

PCF
Fibre Patch Cord

Connector A	
00	LC
02	SC
04	ST
05	FC
07	E2000
09	MU
10	MTRJ

Connector B	
00	LC
02	SC
04	ST
05	FC
07	E2000
09	MU
10	MTRJ

+

Fibre Type	
4	OM4

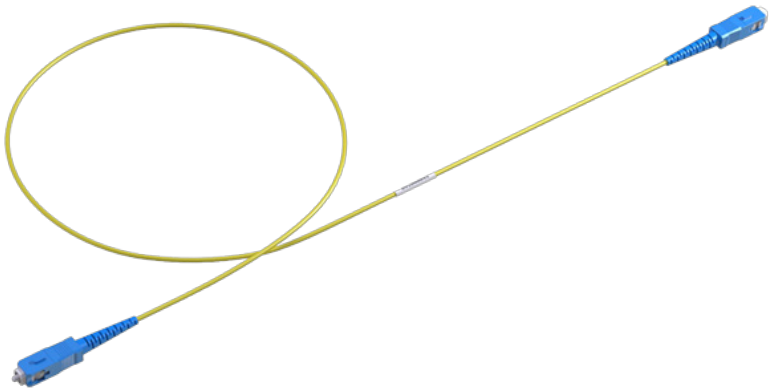
Configuration	
1	Simplex
2	Duplex
3	Flat Duplex

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

PCF-0000-42-05 – Patch Cord LC/UPC-LC/UPC Multimode OM4 Duplex 5m
PCF-0204-41-10 – Patch Cord SC/UPC-ST/UPC Multimode OM4 Simplex 10m



Singlemode Patch Cords

High performance OS2 singlemode patch cords, manufactured for internal applications using high quality Low Smoke Zero Halogen (LSZH) cable and low loss optimized connectors. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Telecommunication networks
- FTTx
- WDM/DWDM
- Data centres
- 40/100 Gigabit Ethernet applications
- Gigabit/10G/40G/100G applications
- Legacy networks (Ethernet, Fast Ethernet, FDDI)
- Backbone, horizontal and riser applications
- Supports video, data and voice services

Features

- SC, LC, ST, FC and MTRJ UPC and APC connectors
- Available in simplex or duplex
- 900µm / 600 µm tight buffer
- Duplex LC and SC assemblies available with clips
- to ITU-T G.652D, TIA/EIA 492 CAAB and ITU-T G.657A1 or A2 compliant
- Low Smoke Zero Halogen (LSZH) cable
- Available in yellow colour
- REACH, RoHS and SvHC compliant

Specifications

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.18dB	IEC 61300-3-4
Ave/Random	0.18dB	IEC 61300-3-34
Return Loss	55/65dB	IEC 61300-3-6

Cable Specification

CHARACTERISTICS	SIMPLEX	DUPLEX
Cable Material	LSZH	LSZH
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to +60	-20 to +60
Fire Specification	IEC 60332-1	IEC 60332-1

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	0.38 @ 1310nm / 0.25 @ 1550nm
Chromatic Dispersion (ps / nm x km)	3.0 @ 1310nm / 18.0 @ 1550nm

Ordering Information

PCF
Fibre Patch Cord

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A
09	MU
10	MTRJ

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A
09	MU
10	MTRJ

+

Fibre Type	
9	G.652.D
55	G.655
A1	G.657A1
A2	G.657A2

Configuration	
1	Simplex
2	Duplex
3	Flat Duplex

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

PCF-0100-92-05 – Patch Cord LC/APC-LC/UPC Singlemode G.652.D Duplex 5m
PCF-0204-91-10 – Patch Cord SC/UPC-ST/UPC Singlemode G.652.D Simplex 10m

E2000 Patch Cords

High performance E2000 patch cords, manufactured for internal applications using high quality Low Smoke Zero Halogen (LSZH) cable and low loss zirconia ferrule connectors. They are offered with UPC (singlemode and multimode) or APC polishing (singlemode). They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Telecommunication networks
- Data centres
- FTTH
- LAN and WAN

Features

- E2000 connectors with metal shutter
- Available as hybrid patch cords with FC, LC, SC or ST connectors
- Available in various fibre types: OS1/OS2 (G.652D, G657A1, G.657.A2), OM1, OM2, OM3 or OM4
- Low Smoke Zero Halogen (LSZH) jacket
- REACH, RoHS and SvHC compliant

Patch Cords

Specifications

CHARACTERISTICS	UNITS	SIMPLEX	DUPLEX
Cable Material		LSZH	LZSH
Strength Member		Aramid	Aramid
Crush	N	1000	1000
Operating Temperature	°C	-20 to +60	-20 to +60
Secondary Buffer Diameter (2.0mm and 3.0mm)	µm	900±50	900±50
Minimum Bending Radius		10D (installed) 20D (loaded)	10D (installed) 20D (loaded)

Standards Compliance

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL MAX/Master (Acceptance)	0.30dB	0.30dB	IEC 61300-3-4
Ave/Master	0.15dB	0.15dB	IEC 61300-3-4
Return Loss	55/65dB	-	IEC 61300-3-6

Ordering Information

PCF
Fibre Patch Cord

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

+

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1
A2	G.657.A2

Configuration	
1	Simplex
2	Duplex
3	Flat Duplex
1R	Simplex Riser
2R	Duplex Riser

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

PCF-0707-92-15 – Patch Cord E2000/UPC – E2000/UPC Singlemode G.652.D Duplex LSZH 15m

Data Centre Patch Cords

Premium Data Centre patch cords, designed for low loss data centre applications. They are terminated with premium grade zirconia ferrule connector in order to offer low optical power loss and enhanced transmission performance.

Applications

- Data Centres
- Critical network applications
- High bandwidth ethernet
- Fibre Channel
- Storage Area Networks

Features

- Low loss optical performance
- Offered with optimized LC and SC connectors
- IEC, EIA/TIA and Telecordia compliant
- Available in OM3, OM4 and OS2
- Standard or reduced bend sensitivity option
- Flexible boot allows connection in compact spaces
- RoHS materials, REACH and SvHC compliant

Specifications

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	0.15dB	IEC 61300-3-4
Ave/Master	0.12dB	0.08dB	IEC 61300-3-4
Ave/Random	0.12dB	0.10dB	IEC 61300-3-34
Return Loss*	55/65dB	>28dB	IEC 61300-3-6

*Return Loss based on sample data

MECHANICAL PROPERTIES	VALUE	CONFORMANCE
Mechanical Endurance	500 matings	IEC 61300-2-2
Vibration	10-55Hz, 0.75 amplitude	IEC 61300-2-1
Drop	5 drops at 1m	IEC 61300-2-12
Cable retention	50N	IEC 61300-2-4
Cable torsion	1.5kg-2.5kg for 2mm-3mm cable diameter	IEC 61300-2-5

CONNECTOR TYPE	CONFORMANCE	SINGLEMODE	MULTIMODE	SIGNLEMODE DUPLEX	MULTIMODE DUPLEX
SC Connector	IEC 61754-4	SM PC – Blue, Blue Boots APC – Green, Green Boots	MM PC – Aqua, Aqua Boots	SM PC – Blue, Blue Boots APC – Green, Green Boots	MM PC – Aqua, Aqua Boots
LC Connector	IEC 61754-20	SM PC – Blue, White Boots APC – Green, White Boots	MM PC – Aqua, White Boots	SM PC – Blue, White Boots APC – Green, White Boots	MM PC – Aqua, White Boots

Cable Specification

CHARACTERISTICS	
Cable Material	LSZH*
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (˚C)	-20 to +60
Fire Specification	IEC 60332-1
Secondary Buffer Diameter (2.0mm) µm	900±50
Secondary Buffer Diameter (1.6mm and 1.8 mm)	600±50
Minimum Bend Radius (mm)	10D (installed) – 20D (loaded)

*Also available in PVC

Ordering Information

PCD
Data Centre Fibre Patch Cord

Connector A	
00	LC
01	LCA
02	SC
03	SCA

Connector B	
00	LC
01	LCA
02	SC
03	SCA

+

Fibre Type	
9	G.652.D
3	OM3
4	OM4
A1	G.657.A1
A2	G.657.A2
3R	OM3 RBS
4R	OM4 RBS

Cable Diameter	
6	1..6mm
8	1..8mm
2	2mm

Configuration	
1	Simplex
2	Duplex
1L	Simplex LSZH 3
2L	Duplex LSZH3

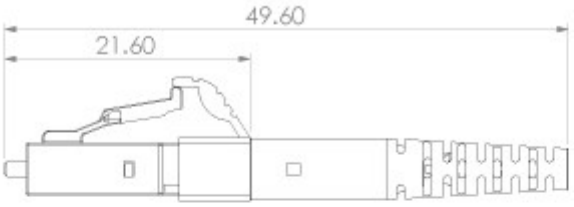
+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

PCD-0000-3R62L-15 – Data Centre Patch Cord LC/UPC – LC/UPC Multimode OM3 RBS Duplex 1.6mm LSZH 3 15m
PCD-0003-A222-05 – Data Centre Patch Cord LC/UPC – SC/APC Singlemode G.657.A2 Duplex 2mm LSZH 5m

Technical Drawing



Patch Cords

Premium Patch Cords

A high performance, premium range of patch cords, designed data centers, telecommunication networks and other critical applications telecommunication applications using high quality Low Smoke Zero Halogen (LSZH) cable and premium grade zirconia ferrule connectors. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Data centres
- FTTx
- Telecommunication networks
- LAN, WAN, CATV

Features

- Premium grade zirconia ferrule connectors
- Available in singlemode and multimode
- TIA/EIA, ISO/IEC and Telcordia compliant
- RoHS, REACH and SvHC compliant

Specifications

CHARACTERISTICS	UNITS	SIMPLEX	DUPLEX
Cable Material		LSZH	LSZH
Strength Member		Aramid	Aramid
Crush	N	1000	1000
Operating Temperature	°C	-20 to +60	-20 to +60
Secondary Buffer Diameter (2.0mm, 2.4mm and 3.0mm)	µm	900±50	900±50
Secondary Buffer Diameter (1.6mm and 1.8mm)	µm	600±50	600±50
Minimum Bending Radius	µm	10D (installed) 20D (loaded)	10D (installed) 20D(loaded)

IMP: The Patch Cords are available in standard length of 1m, 2m, 3m, 5m, and 10m. For other lengths please contact us for the actual lead times.

Standards Compliance

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL MAX/Master (Acceptance)	0.15dB	0.15dB	IEC 61300-3-4
Ave/Master*	0.12dB	0.08dB	IEC 61300-3-4
Ave/Random*	0.12dB	0.10dB	IEC 61300-3-34
Return Loss	55/65 dB	-	IEC 61300-3-6

MECHANICAL PROPERTIES	CRITERIA*	CONFORMANCE
Mechanical endurance	500 matings	IEC 61300-2-2
Vibration	10-55 Hz, 0.75 amplitude	IEC 61300-2-1
Drop	Drop height 1m, 5 drops	IEC 61300-2-12
Cable retention	Magnitude 50 N	IEC 61300-2-4
Cable torsion	1.5 kg-2.5 kg for 2mm-3mm cable diameter	IEC 61300-2-5

* The change in attenuation for all the above listed criteria shall be a maximum of 0.20dB

CONNECTOR TYPE	CONFORMANCE	SINGLEMODE	MULTIMODE	SM DUPLEX	MM DUPLEX
SC connector	IEC 61754-4	SM PC – Blue APC – Green	MM PC - Beige	SM PC – Beige APC-Green with clips	MM PC-Beige with clips Boot-Red & Black
LC connector	IEC 61754-20	SM PC-Blue APC-Green Boot-White	MM PC-Beige Boot-White	SM PC-Blue APC-Green with clips Boot-White	MM PC-Beige with clips Boot-White
ST connector	IEC 61754-2	SM PC-Yellow Boot	MM PC-Black Boot	SM PC-Yellow Boot	MM PC-Red & Black Boot
FC connector	IEC 61754-123	SM PC-Blue Boot APC-Green Boot	MM PC-Black Boot	SM PC-Blue Boot APC-Green Boot	MM PC-Black Boot
E2000 connector	IEC 61754-15	SM PC-Blue Boot-Black APC-Green	MM PC-Beige Boot-Black	SM PC-Blue Boot-Black APC-Green	MM PC-Beige Boot-Black

IMP: Please note that the LC 2mm connectors will have heat shrinks to serve the purpose of cable retention. C clips will be provided for channel identification of

duplex FC and ST Patch Cords.

Ordering Information

PCP
Premium Fibre Patch Cord

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

+

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1
A2	G.657.A2
R3	OM3 RBS
R4	OM4 RBS

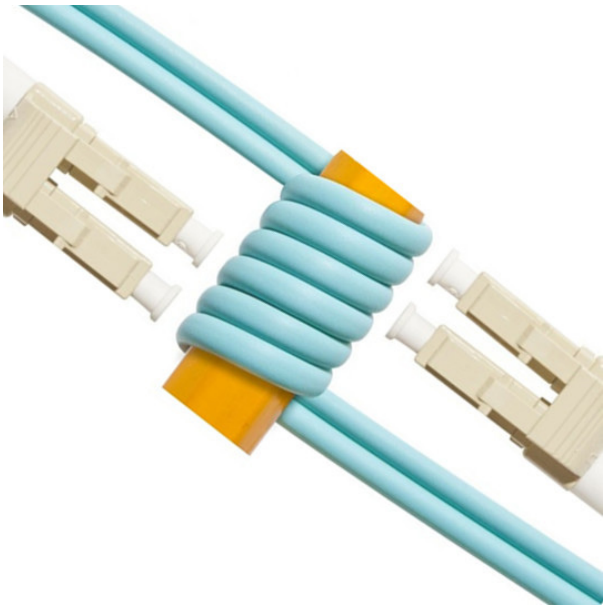
Configuration	
1	Simplex
2	Duplex
3	Flat Duplex
1R	Simplex Riser
2R	Duplex Riser

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

PCP-0000-R42-15 – Premium Patch Cord LC/UPC – LC/UPC OM4 RBS Duplex 2mm LSZH 15m



Reduced Bend Sensitivity Patch Cords

Reduced bend sensitivity patch cords, available in multimode (OM3, OM4) and singlemode (G.657.A1, G.657.A2) classes. They consist of a high quality Low Smoke Zero Halogen (LSZH) cable and low loss optimized connectors. These assemblies are designed and manufactured to perform with a very low optical loss under bend conditions, while remaining compatible with conventional cabling infrastructure. They fully conform to ISO/IEC and TIA/EIA standards.

Applications

- Telecommunication networks
- Data centres
- High Bandwidth Ethernet
- Fibre Channel
- Storage Area Networks

Features

- FTTH installations in existing buildings
- FTTH cabling in POPs, MDU distribution points and subscriber connections
- Data centres where network uptime is critical
- Generally, when small radius installation is needed or the cabling may be subjected to occasional small radius events

Specifications

Termination Specification

General mechanical and optical specifications of RBS Patch Cords are as per corresponding standard products including IEC and TIA/EIA standards conformance.

FIBRE CLASS	GUIDELINE RADIUS
Standard Multimode and Singlemode	30mm

Reduced Bend Sensitivity Multimode

FIBRE CLASS	FIBRE STANDARD	GUIDELINE RADIUS	RADIUS TURNS	LOSS AT 850NM	LOSS AT 1300NM
OM3 RBS	OM3	10mm	15mm2	≤ 0.1 dB	≤ 0.3 dB
OM4 RBS	OM4	10mm	7.5mm2	≤ 0.2 dB	≤ 0.4 dB

Reduced Bend Sensitivity Singlemode

FIBRE CLASS	FIBRE STANDARD	GUIDELINE RADIUS	LOSS AT 1550NM 15MM RADIUS 10 TURNS	LOSS AT 1550NM 10MM RADIUS 1 TURN	LOSS AT 1550NM 7.5MM RADIUS 1 TURN
657A1	ITU-TG657A1/OS1/OS2	15mm	≤ 0.25 dB	≤ 0.75 dB	-
OM4 RBS	ITU-TG657A2/OS1/OS2	7.5mm	≤ 0.03 dB	≤ 0.1 dB	≤ 0.5 dB

Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- IEC-61754-7 & EIA/TIA-604-5
- NFPA 262 (OFNP) or IEC 60332 (LSZH)
- IEC-60793

Ordering Information

PCR
Telecom Fibre Patch Cord

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

+

Fibre Type	
A1	G.657.A1
A2	G.657.A2
R3	OM3 RBS
R4	OM4 RBS

Cable Diameter	
6	1.6mm
8	1.8mm
2	2mm

Configuration	
1	Simplex
2	Duplex
3	Flat Duplex

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

PCR-0000-A162-15 – RBS Patch Cord LC/UPC – LC/UPC Singlemode G.657.A1 Duplex 1.6mm LSZH 15m
PCR-0002-R322-05 – RBS Patch Cord LC/UPC – SC/UPC Multimode OM3 Duplex 2mm LSZH 5m

OM3 & OM4 Reduced Bend Sensitivity LC Short Boot Patch Cords

High performance LC short boot Multimode patch cords, designed for high density applications, using high quality OM3 and OM4 reduced bend sensitivity Low Smoke Zero Halogen (LSZH) cable. The small form factor of the boot combined with the bend insensitive cable makes this series of patch cords an ideal solution for applications where high density is required. The shorter length of the connector allows a bigger space between the rack and the closed cabinet door.

Applications

- Data centres
- LAN and WAN

Features

- Short connector boot length that maintains minimum bend radius
- Optimized for high density applications

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC 61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Return Loss	28dB	IEC 61300-3-6

Cable Specification

CHARACTERISTICS	SIMPLEX/DUPLEX
Cable Material*	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to +60
Fire Specification	IEC 60332-1

* OFNR (RISER) also available

Fibre Specification

CHARACTERISTICS	
Attenuation (dB / km)	2.8 @ 850nm / 0.8 @ 1300nm
OM3 Bandwidth (MHz x km)	1500 @ 850nm / 500 @ 1300nm / 2000 @ 850nm
OM4 Bandwidth (MHz x km)	3500 @ 850nm / 500 @ 1300nm / 4700 @ 850nm

Ordering Information

PCS
RBS Short Boot Fibre Patch Cord

Connector A	
S0	LC Short Boot

Connector B	
00	LC
S0	LS Short Boot
02	SC
04	ST
05	FC

+

Fibre Type	
R3	OM3 RBS
R4	OM4 RBS

Cable Diameter	
6	1..6mm
8	1..8mm
2	2mm

Configuration	
1	Simplex
2	Duplex
1L	Simplex LSZH 3
2L	Duplex LSZH3
1R	Simplex Riser
2R	Duplex Riser

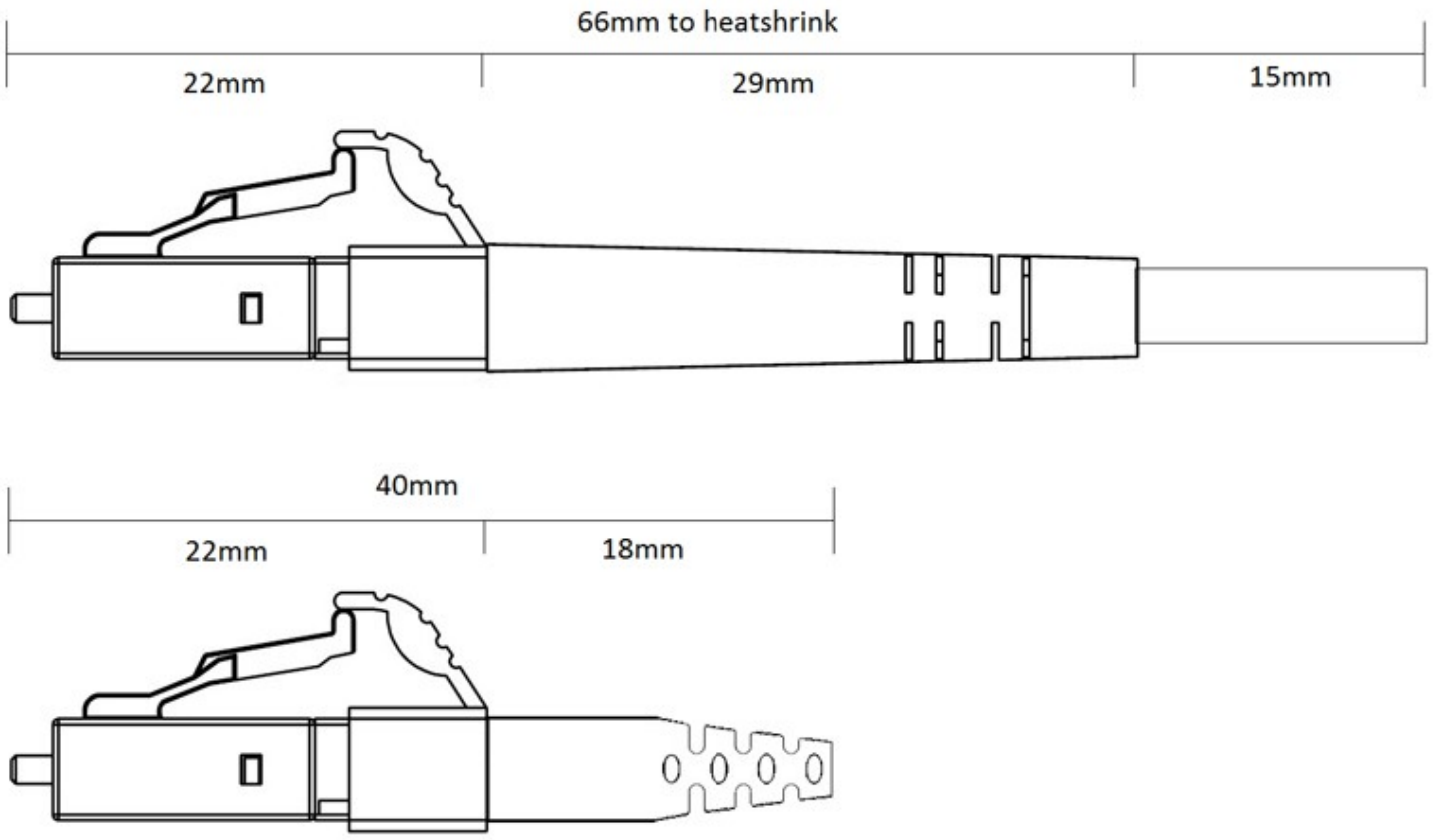
+

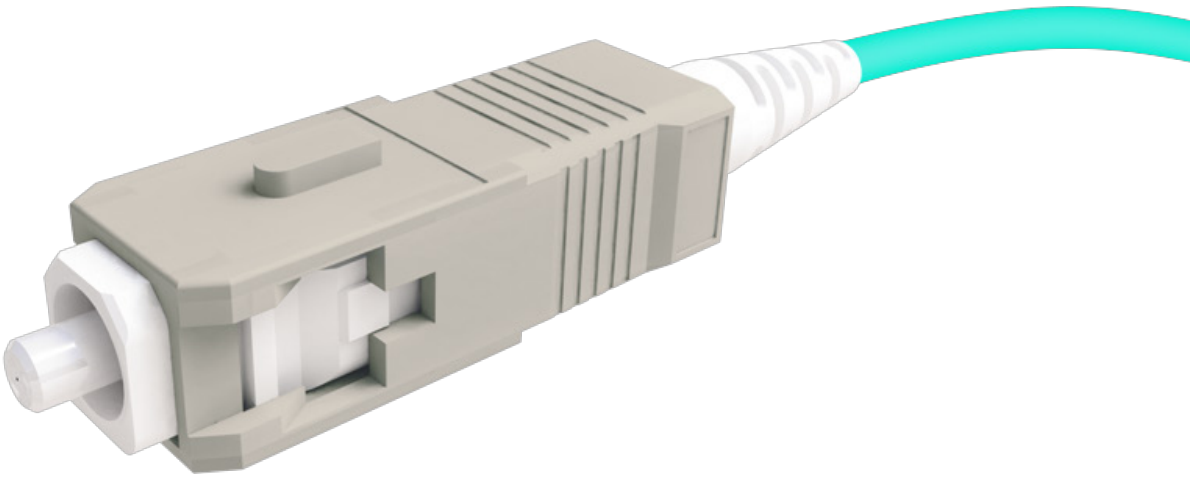
Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

PCS-S0S0-R362-15 – Patch Cord LC/UPC Short Boot – LC/UPC Short Boot Multimode OM3 Duplex 1.6mm LSZH 15m

Technical Drawing





OM3 & OM4 Reduced Bend Sensitivity SC Short Boot Patch Cords

High performance SC short boot Multimode patch cords, designed for high density applications, using high quality OM3 and OM4 reduced bend sensitivity Low Smoke Zero Halogen (LSZH) cable. The small form factor of the boot combined with the bend insensitive cable makes this series of patch cords an ideal solution for applications where high density is required. The shorter length of the connector allows a bigger space between the rack and the closed cabinet door.

Applications

- Data centres
- LAN and WAN

Features

- Short connector boot length that maintains minimum bend radius
- Optimized for high density applications

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC 61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Return Loss	28dB	IEC 61300-3-6

Cable Specification

CHARACTERISTICS	SIMPLEX/DUPLEX
Cable Material*	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to +60
Fire Specification	IEC 60332-1

* PVC (RISER) also available

Fibre Specification

CHARACTERISTICS	
Attenuation (dB / km)	2.8 @ 850nm / 0.8 @ 1300nm
OM3 Bandwidth (MHz x km)	1500 @ 850nm / 500 @ 1300nm / 2000 @ 850nm
OM4 Bandwidth (MHz x km)	3500 @ 850nm / 500 @ 1300nm / 4700 @ 850nm

Ordering Information

PCS
RBS Short Boot Fibre Patch Cord

Connector A	
S2	SC Short Boot

Connector B	
00	LC
S0	LS Short Boot
02	SC
S2	SC Short Boot
04	ST
05	FC

+

Fibre Type	
R3	OM3 RBS
R4	OM4 RBS

Cable Diameter	
6	1..6mm
8	1..8mm
2	2mm

Configuration	
1	Simplex
2	Duplex
1L	Simplex LSZH 3
2L	Duplex LSZH3
1R	Simplex Riser
2R	Duplex Riser

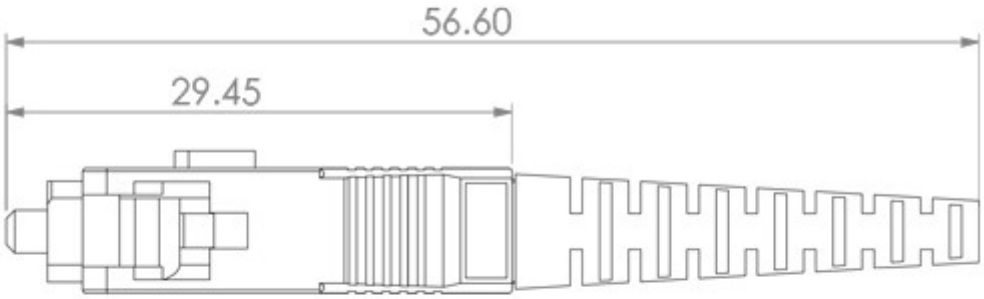
+

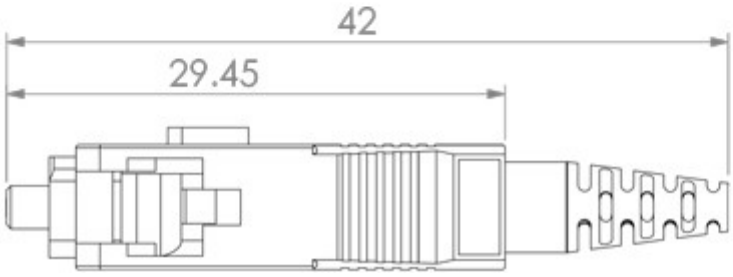
Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

PCS-S2S0-A162-15 – Patch Cord SC/UPC Short Boot – LC/UPC Short Boot Multimode OM4 Duplex 1.6mm LSZH 15m

Technical Drawing





OS1/OS2 G657 Singlemode LC Short Boot Patch Cords

High performance LC short boot singlemode patch cords, designed for high density applications, using high quality G.567 reduced bend sensitivity Low Smoke Zero Halogen (LSZH) cable. The small form factor of the boot combined with the bend insensitive cable makes this series of patch cords an ideal solution for applications where high density is required. The shorter length of the connector allows a bigger space between the rack and the closed cabinet door.

Applications

- Data centres
- Central Offices
- FTTx
- CATV / VIDEO
- WDM / DWDM
- LAN and WAN

Features

- Short connector boot length that maintains minimum bend radius
- Optimized for high density applications

Specifications

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	CONFORMACE
IL Max/Master (Acceptance)	0.25dB	IEC 61300-3-4
Ave/Master	0.18dB	IEC 61300-3-4
Ave/Random	0.18dB	IEC 61300-3-34
Return Loss UPC/APC	55/65 dB	IEC 61300-3-6

Cable Specification

CHARACTERISTICS	SIMPLEX/DUPLEX
Cable Material *	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to +60
Fire Specification	IEC 60332-1

*PVC (RISER) also available

Fibre Specification

CHARACTERISTICS	
Attenuation (dB / km)	0.38 @ 1310nm / 0.25 @ 1550nm
Chromatic Dispersion (ps/nm x km)	3.0 @ 1310nm / 18.0 @ 1550nm

Ordering Information

PCS
RBS Short Boot Fibre Patch Cord

Connector A	
S0	LC Short Boot
S1	LCA Short Boot

Connector B	
00	LC
01	LCA
S0	LS Short Boot
S1	LCA Short Boot
02	SC
03	SCA
04	ST
05	FC
06	FCA

+

Fibre Type	
A1	G.657.A1
A2	G.657.A2
B3	G.657.B3

Cable Diameter	
6	1..6mm
8	1..8mm
2	2mm

Configuration	
1	Simplex
2	Duplex
3	Flat Duplex
1L	Simplex LSZH 3
2L	Duplex LSZH3
1R	Simplex Riser
2R	Duplex Riser

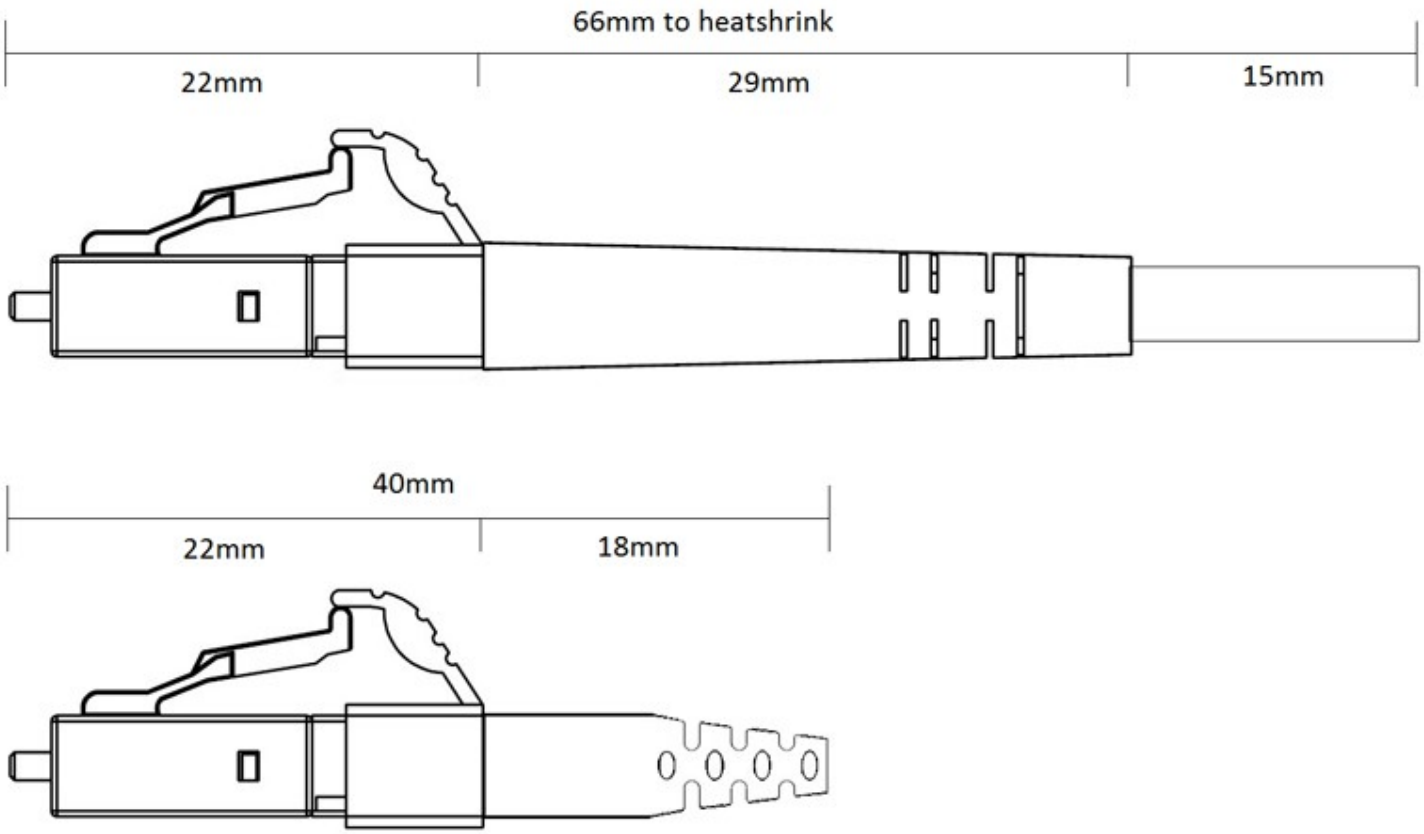
+

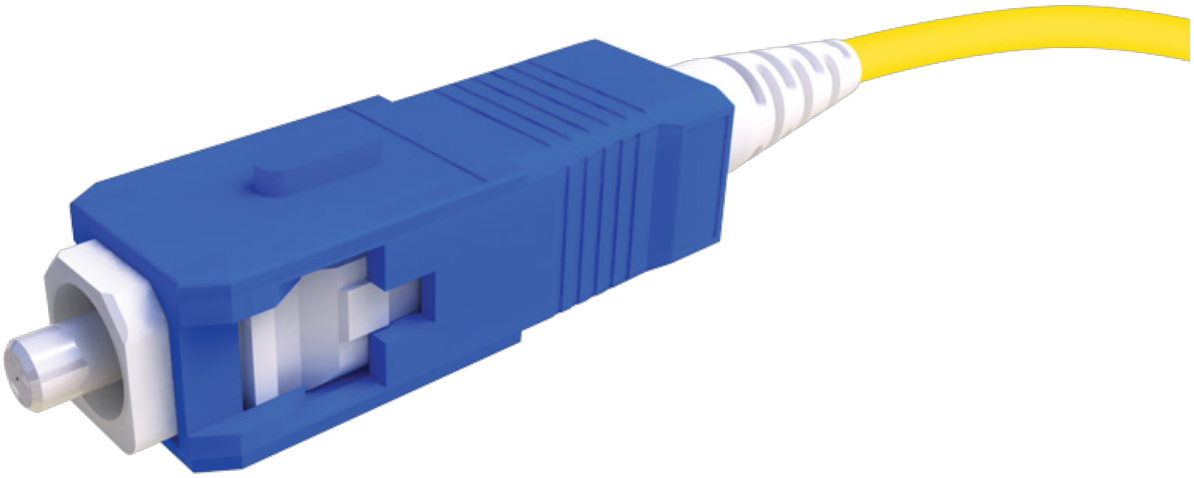
Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

PCS-S0S0-A162-15 – Patch Cord LC/UPC Short Boot – LC/UPC Short Boot Singlemode G.657.A1 Duplex 1.6mm LSZH 15m

Technical Drawing





OS1/OS2 G657 Singlemode SC Short Boot Patch Cords

High performance SC short boot singlemode patch cords, designed for high density applications, using high quality G.567 reduced bend sensitivity Low Smoke Zero Halogen (LSZH) cable. The small form factor of the boot combined with the bend insensitive cable makes this series of patch cords an ideal solution for applications where high density is required. The shorter length of the connector allows a bigger space between the rack and the closed cabinet door.

Applications

- Data centres
- Central Offices
- FTTx
- CATV / VIDEO
- WDM / DWDM
- LAN and WAN

Features

- Short connector boot length that maintains minimum bend radius
- Optimized for high density applications

Specifications

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	CONFORMACE
IL Max/Master (Acceptance)	0.25dB	IEC 61300-3-4
Ave/Master	0.18dB	IEC 61300-3-4
Ave/Random	0.18dB	IEC 61300-3-34
Return Loss UPC/APC	55/65 dB	IEC 61300-3-6

Cable Specification

CHARACTERISTICS	SIMPLEX/DUPLEX
Cable Material *	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to +60
Fire Specification	IEC 60332-1

*PVC (RISER) also available

Fibre Specification

CHARACTERISTICS	
Attenuation (dB / km)	0.38 @ 1310nm / 0.25 @ 1550nm
Chromatic Dispersion (ps/nm x km)	3.0 @ 1310nm / 18.0 @ 1550nm

Ordering Information

PCS
RBS Short Boot Fibre Patch Cord

Connector A	
S2	SC Short Boot
S3	SCA Short Boot

Connector B	
00	LC
01	LCA
S0	LC Short Boot
S1	LCA Short Boot
02	SC
03	SCA
S2	SC Short Boot
S3	SCA Short Boot
04	ST
05	FC
06	FCA

+

Fibre Type	
A1	G.657.A1
A2	G.657.A2
B3	G.657.B3

Cable Diameter	
6	1..6mm
8	1..8mm
2	2mm

Configuration	
1	Simplex
2	Duplex
3	Flat Duplex
1L	Simplex LSZH 3
2L	Duplex LSZH3
1R	Simplex Riser
2R	Duplex Riser

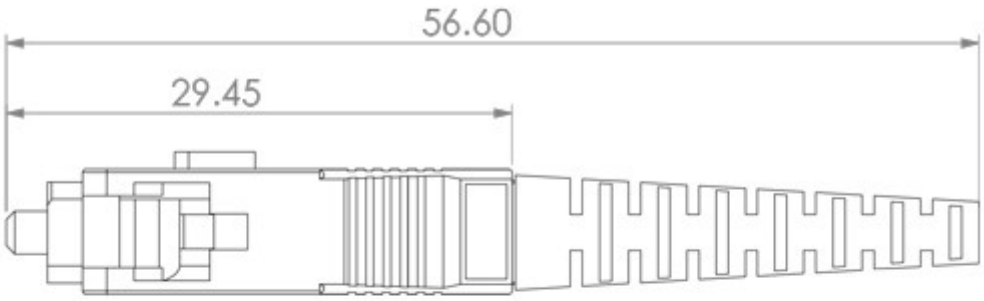
+

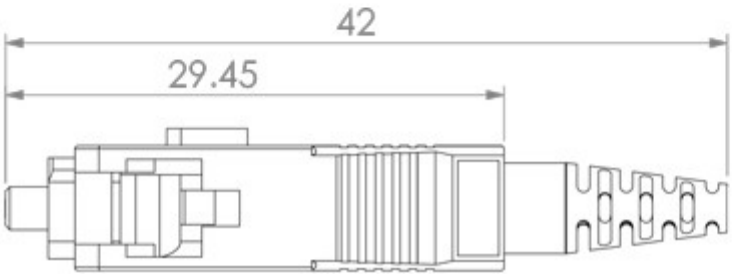
Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

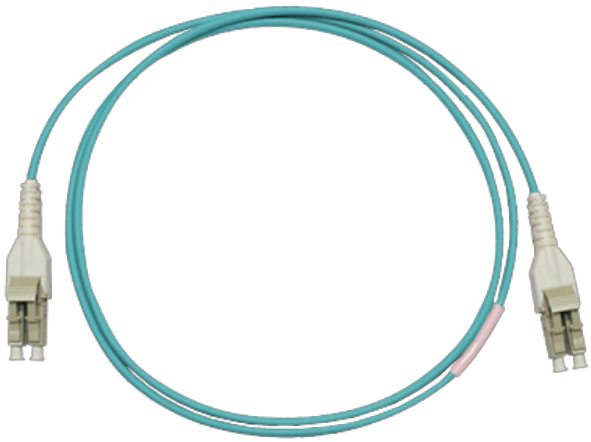
Example:

PCS-S2S0-A162-15 – Patch Cord SC/UPC Short Boot – LC/UPC Short Boot Singlemode G.657.A1 Duplex 1.6mm LSZH 15m

Technical Drawing







LC Uniboot Patch Cords

LC Uniboot high performance patch cords are especially designed and manufactured for better airflow and cable management in high density applications. The connector uniboot design in combination with the use of round duplex LSZH, plenum or riser cable, reduces cable management up to 70% comparing to a standard patch cord solution.

Applications

- Data centres
- Telecommunication networks
- High density applications
- Application where air flow within the rack is important

Features

- Offered with uniboot connector
- Available with LSZH, Plenum and Riser rated duplex cable in 2.4mm or 3mm
- Improved cable management
- Improved air flow
- Available various cable types and lengths

Specifications

Connector Specification

OPTICAL PERFORMANCE – STANDARD	SM	MM	CONFORMANCE
Insertion Loss (MAX/MASTER)	0.25dB	0.25dB	IEC 61300-3-4
Ave/Master	0.18dB	0.15dB	IEC 61300-3-4
Ave/Random	0.18dB	0.20dB	IEC 61300-3-34

OPTICAL PERFORMANCE – LOW LOSS PREMIUM	SM	MM	CONFORMANCE
Insertion Loss (MAX/MASTER)	0.15dB	0.15dB	IEC 61300-3-4
Ave/Master	0.12dB	0.08dB	IEC 61300-3-4
Ave/Random	0.12dB	0.10dB	IEC 61300-3-34

Cable Specification

CHARACTERISTICS	UNITS	3mm ROUND DUPLEX	2.4mm ROUND DUPLEX
Cable Material		LSZH	LSZH
Strength Member		Aramid	Aramid
Crush	N/100mm	1000	1000
Operating Temperature	°C	-20 to +60	-20 to +60
Secondary Buffer Diameter	µm	900+/-50	600+/-50
Minimum Bending Radius	mm	10D (installed) 20D (loaded)	10D (installed) 20D (loaded)

Ordering Information

PCU
Uniboot LC Fibre Patch Cord

Connector A	
U0	LC

Connector B	
U0	LC

+

Fibre Type	
9	G.652.D
3	OM3
4	OM4
A1	G.657.A1
A2	G.657.A2

Cable Diameter	
2	2.4mm
3	3mm

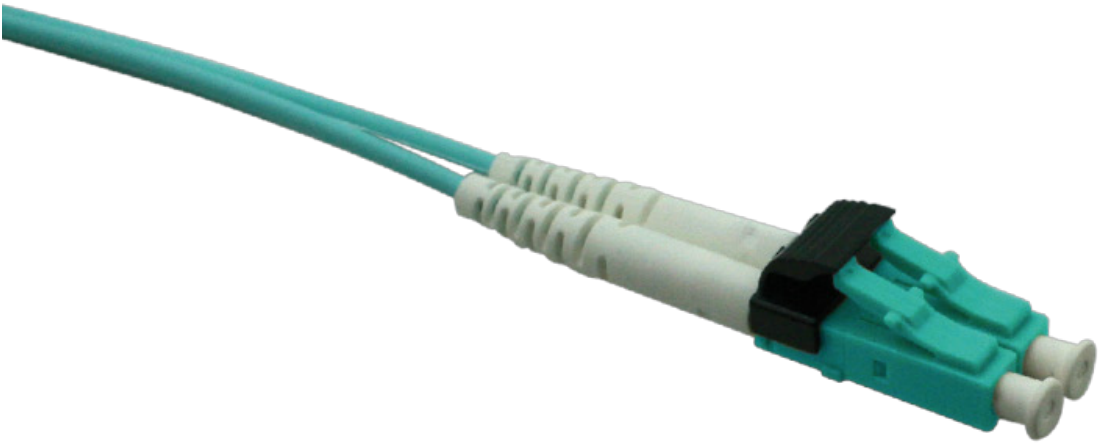
Configuration	
2	Duplex
2R	Duplex Riser
2P	Duplex Plenum

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

PCU-U0U0-422-15 – Patch Cord LC/UPC Uniboot – LC/UPC Uniboot OM4 Duplex 2.4mm LSZH 15m



mSFP Mini LC Patch Cords

High performance mini-LC patch cords designed and manufactured for the interconnection between patch panels and high density equipment.
Mini-LC connectors are designed with a pitch of 5.25mm for use with mSFP transceivers, allowing up to 64 channels in 1U.

Applications

- Data centres
- Storage Area Networks
  - Brocade: FC8-64 blades used in DCX and DCX 8150 family SAN Backbones
  - IBM: FC#3864 blades used in SAN768B and SAN384B Backbones
  - HP: 64-port 8Gb Fibre Channel Blades used in SN8000B SAN Director

Features

- Available with LC connectors
- Available in multiple fibre types and lengths
- ISO/IEC, TIA/EIA and Telcordia compliant
- RoHS, REACH and SvHC compliant

Specifications

Patch Cords

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	IEC 61300-3-4
Ave/Master	0.08dB	IEC 61300-3-4
Ave/Random	0.10dB	IEC 61300-3-34
Return Loss UPC/APC	>28dB	IEC 61300-3-6

MECHANICAL PROPERTIES	VALUE	CONFORMANCE
Mechanical endurance	500 matings	IEC 61300-2-2
Vibration	10-55 Hz, 0.75 amplitude	IEC 61300-2-1
Drop	5 drops at 1m	IEC 61300-2-12
Cable retention	50N	IEC 61300-2-4
Cable torsion	1.5kg – 2.5kg for 2mm – 3mm cable diameter	IEC 61300-2-5

CONNECTOR TYPE	CONFORMACE	MULTIMODE DUPLEX
LC Connector	IEC 61754-20	MM PC – Aqua, White Boots

Cable Specification

CHARACTERISTICS	
Cable Material	LSZH*
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to +60
Fire Performance	IEC 60332-1
Secondary Buffer Diameter (2.0mm) µm	900±50
Secondary Buffer Diameter (1.6mm and 1.8mm)	600±50
Minimum Bend Radius (mm)	10D (installed) – 20D (loaded)

*Also available in PVC

Ordering Information

PCM
Mini LC Fibre Patch Cord

Connector A	
M0	LC

Connector B	
00	LC

+

Fibre Type	
3	OM3

Cable Diameter	
6	1.6mm
8	1.8mm
2	2mm

Configuration	
2	Duplex
2L	Duplex LSZH 3
2V	Duplex PVC

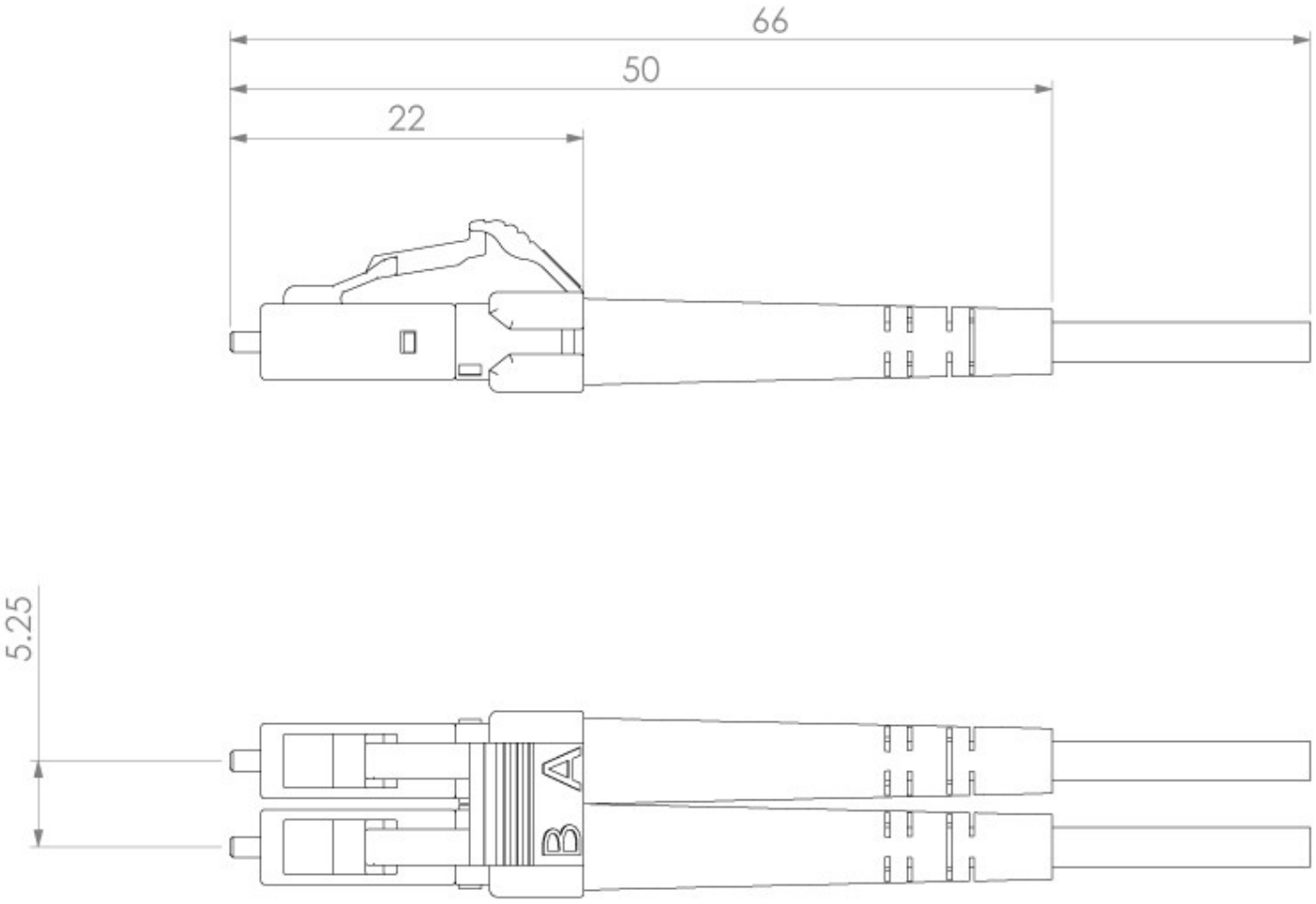
+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

PCM-M000-322-15 – Patch Cord Mini LC/UPC – LC/UPC OM3 Duplex 2mm LSZH 15m

Technical Drawing



Premium Telecom Patch Cords

High performance OS2 singlemode patch cords, designed for low loss telecommunication applications using high quality Low Smoke Zero Halogen (LSZH) cable and premium grade zirconia ferrule connectors. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Telecommunication networks
- High Bandwidth Ethernet
- Fibre Channel
- Storage Area Networks

Features

- Premium Low Loss optical performance
- Optimized SC and LC connectors
- Available in simplex or duplex
- Flexible boot
- 900µm / 600 µm tight buffer
- Duplex LC and SC assemblies available with clips
- Cable available with IEC 60332-3-24 fire performance
- Standard and bend insensitive single mode fibre types, G652D, G657 A1, G657 A2
- IEC, EIA/TIA and Telcordia compliant
- REACH, RoHS and SvHC compliant

Specifications

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	IEC 61300-3-4
Max IL/Random (97%)	0.30dB	IEC61300-3-4
Ave/Master	0.12dB	IEC 61300-3-4
Ave/Random	0.12dB	IEC 61300-3-34
Return Loss UPC/APC	55/65dB	IEC 61300-3-6

MECHANICAL PROPERTIES	VALUE	CONFORMANCE
Mechanical Endurance	500 matings	IEC 61300-2-2
Vibration	10-55Hz, 0.75 amplitude	IEC 61300-2-1
Drop	5 drops at 1m	IEC 61300-2-12
Cable retention	50N	IEC 61300-2-4
Cable torsion	1.5kg-2.5kg for 2mm-3mm cable diameter	IEC 61300-2-5

CONNECTOR TYPE	CONFORMANCE	SINGLEMODE	SIGNLEMODE DUPLEX
SC Connector	IEC 61754-4	SM PC – Blue, Blue Boots APC – Green, Green Boots	SM PC – Blue, Blue Boots APC – Green, Green Boots
LC Connector	IEC 61754-20	SM PC – Blue, White Boots APC – Green, White Boots	SM PC – Blue, White Boots APC – Green, White Boots

Cable Specification

CHARACTERISTICS	
Cable Material	LSZH*
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (˚C)	-20 to +60
Fire Specification	IEC 60332-1
Secondary Buffer Diameter (2.0mm) µm	900±50
Secondary Buffer Diameter (1.6mm and 1.8 mm)	600±50
Minimum Bend Radius (mm)	10D (installed) – 20D (loaded)

*Also available in PVC

Ordering Information

PCT
Telecom Fibre Patch Cord

Connector A	
00	LC
01	LCA
S0	LS Short Boot
02	SC
03	SCA

Connector B	
00	LC
01	LCA
S0	LS Short Boot
02	SC
03	SCA

+

Fibre Type	
9	G.652.D
A1	G.657.A1
A2	G.657.A2

Cable Diameter	
6	1..6mm
8	1..8mm
2	2mm

Configuration	
1	Simplex
2	Duplex
13	Simplex LSZH 3
23	Duplex LSZH3
1V	Simplex PVC
2V	Duplex PVC

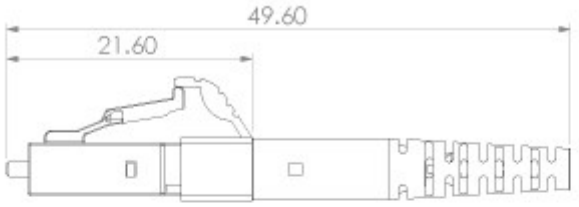
+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

PCT-S000-962-15 – Telecom Patch Cord LC/UPC Short Boot – LC/UPC Singlemode G.652.D Duplex 1.6mm LSZH 15m
PCT-0003-A222V-05 – Telecom Patch Cord LC/UPC – SC/APC Singlemode G.657.A2 Duplex 2mm PVC 5m

Technical Drawing



Armoured Patch Cords

Enhanced armoured patch cords, constructed with a helical stainless steel tape over a buffered fibre surrounded by a layer of aramid and stainless steel mesh with an outer Low Smoke Zero Halogen (LSZH) jacket. They are used in outdoor applications in customer premises, central offices and in harsh environments.

Applications

- Harsh environment applications
- Military applications
- FTTx
- LAN and WAN
- Broadband network
- PON
- CATV / VIDEO

Features

- Easy installation
- Available with SC, LC, ST and FC connectors
- Available in different fibre types and custom lengths
- Low Smoke Zero Halogen (LSZH) jacket
- IEC, TIA/EIA and Telcordia compliant
- REACH, SvHC and RoHS compliant

Specifications

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE
IL Max/Master (Acceptance)	0.30dB	0.30dB
Ave/Master	0.18dB	0.2dB
Ave/Random	0.18dB	-
Return Loss Singlemode UPC/APC	45/60 dB	NA

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km) Singlemode	0.40 @ 1310nm / 0.30 @ 1550nm
Chromatic Dispersion (ps/nm x km) Singlemode	3.0 @ 1310nm / 18.0 @ 1550nm
Attenuation (dB/km) Multimode	2.8 @ 850nm / 0.8 @ 1300nm

Cable Specification

CHARACTERISTICS	SIMPLEX	DUPLEX
Cable Material	LSZH	LSZH
Strength Member	Aramid	Aramid
Tensile (N) long term	80	80
Tensile (N) short term	150	150
Crush (N) long term	1000	1000
Crush (N) short term	3000	3000
Impact	1 N.m, additional att≤0.1dB, sheath no crack	
Repeating bending	40N, 200cycles, additional att≤0.4dB, sheath no crack	
Torsion	40 N, 10cycles, ±180°, additional att≤0.4dB, sheath no crack	
Operating Temperature (°C)	-20 to +60	-20 to +60
Fire Specification	IEC 60332-1	IEC 60332-1
Salt spray	35±2 ℃, 48 h, brine concentration 5%, Appearance without exception, steel pipe without rust marks	

Ordering Information

PCF
Fibre Patch Cord

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA

+

Fibre Type	
9	OS1/OS2
1	OM1
2	OM2
3	OM3
4	OM4

Configuration	
1	Simplex
2	Duplex

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

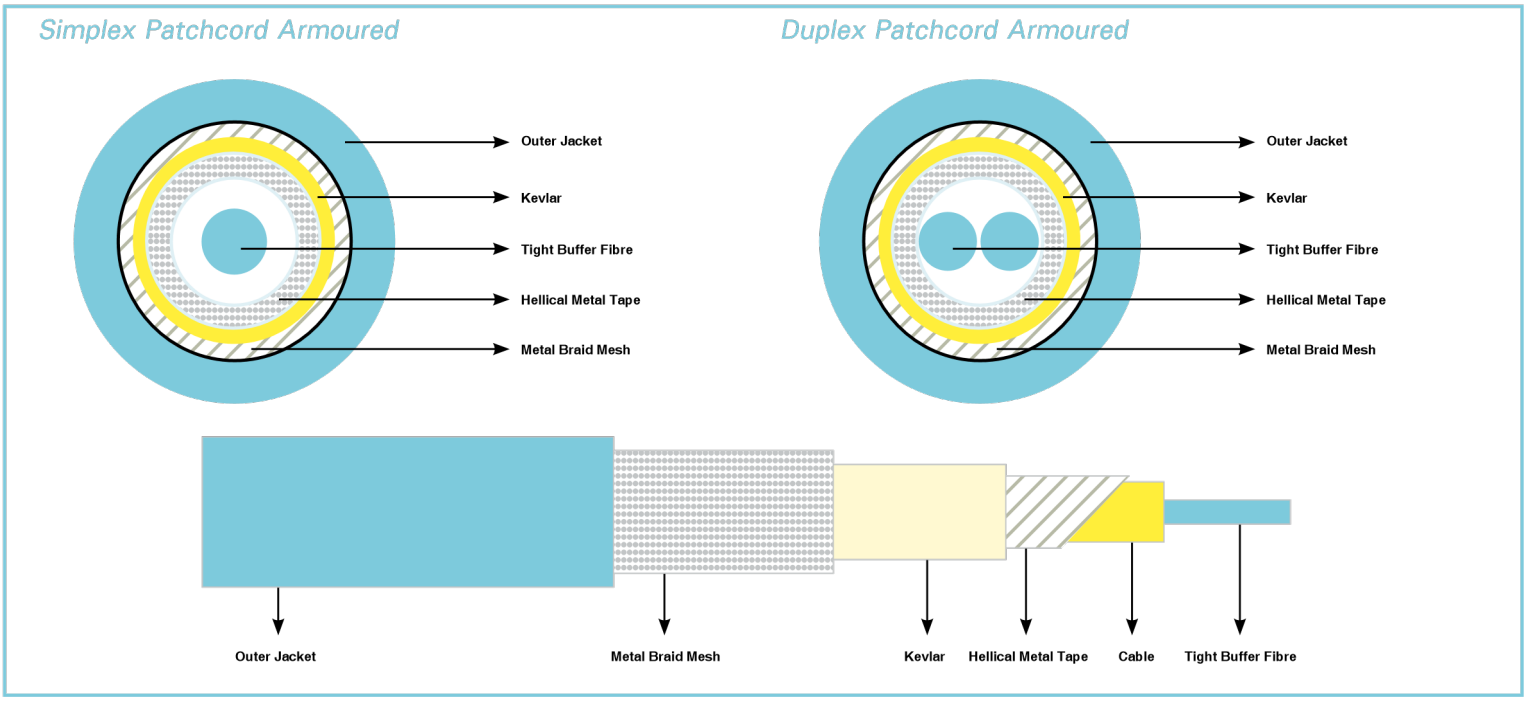
+

Cable Type	
A	Armoured

Examples:

PCF-0100-92-05-A – Patch Cord LC/APC-LC/UPC Singlemode G.657A1 Duplex Armoured 5m
PCF-0204-41-10 -A– Patch Cord SC/UPC-ST/UPC Multimode OM4 Simplex Armoured 10m

Technical Drawing



Mode Conditioning Patch Cords

High quality mode conditioning patch cords designed for the use of 1310nm laser switches in multimode 62.5/125 and 50/125 installations. These patch cords allow a much higher bandwidth by providing an off-center launch in to the multimode fibre and aligning a singlemode termination at the laser transmitter.

Applications

- Applications that require Multimode network connection to Singlemode transmitter

Features

- Available with multiple connector options
- Low insertion loss and reduced modal noise
- Increased transmission bandwidth

Specifications

DESCRIPTION	62.5MM MMF	50MM MMF
Operating wavelength	1310nm	
Maximum insertion loss	0.5dB	
Coupled power ratio (CPR)	28 to 40dB	12 to 20dB
Back reflection S/M channel	30dB	
Back reflection M/M channel	20dB	
Connector finish	PC or APC	
Ferrule radius of curvature	10 to 25mm	
Fibre height	-50 to 50 nm	
Maximum angular offset	1°	
Sheath colour	Orange (yellow for SM leg)	Orange (yellow for SM leg)

DESCRIPTION	
Temperature Cycling	(IEC 61300-2-22) -40 to +75°C, 40 cycles, = 0.2dB Change
Damp Heat	(IEC 61300-2-19) 60°C at 95%, RH, 96 hours, = 0.2dB Change
Vibration (Mated Pair)	(IEC 61300-2-1) 10-55Hz, 1.5mm P to P, = 0.2dB Change
Mating Durability	(IEC 61300-2-2), 1000 mating cycles, clean every 25, <0.2dB Change
Operating Temperature	(IEC 61300-2-22) -20 to +60°C

Patch Cord Specification

SPECIFICATION	
Connectors available Types	FC, ST, SC, LC
Product Packaging	Each patch cord is packaged individually and individually identified for traceability, test certification is supplied for each assembly
Length	2000mm ±10mm Other lengths available to order

Ordering Information

PCMC
Mode Conditioning Fibre Patch Cord

Connector A	
00	LC
02	SC
04	ST
05	FC

Connector B	
00	LC
02	SC
04	ST
05	FC

+

Fibre Type	
1	OM1
2	OM2

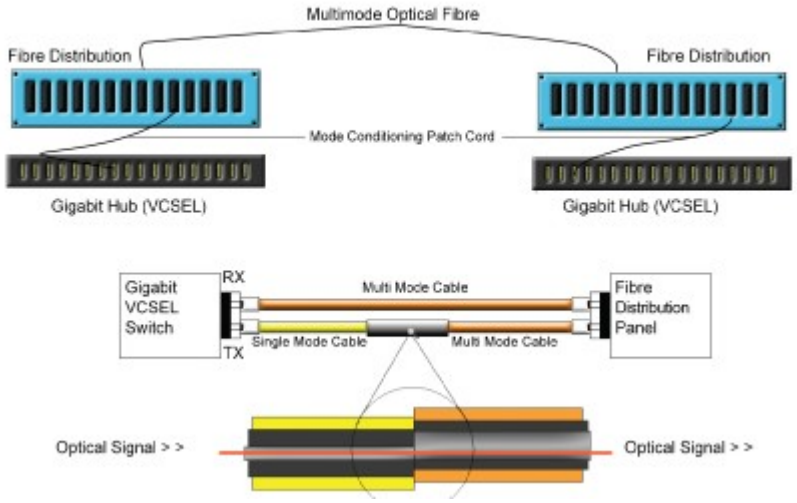
+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Examples:

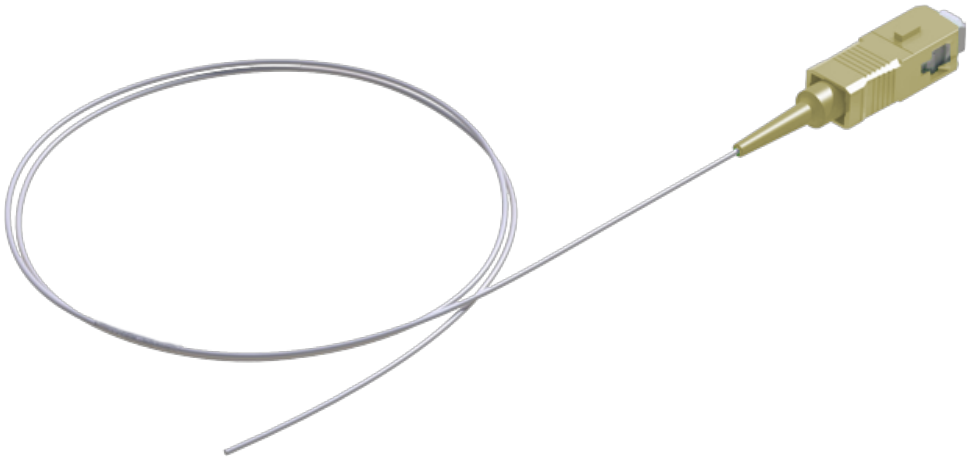
PCMC-0500-2-05 – Mode Conditioning Patch Cord FC to LC OM2

Technical Drawing



Optical Fibre Assemblies

Pigtails



OM1 Multimode Pigtails

OM1 multimode pigtails are used for the termination of optical cables via fusion or mechanical splicing. They consist of a high quality 900um LSZH cable terminated with an optimized connector for low insertion loss and low back reflection. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Termination of optical networks via fusion or mechanical splicing
- Data centres, Premises and Telecommunication applications
- Patch panels, wall boxes, ODFs and splice cassettes

Features

- Available with SC, LC, ST or FC connectors
- Available with 900µm tight buffered or easy strip white coloured cable
- Low smoke zero halogen (LSZH) buffer
- Multimode Fibre compliant with TIA/EIA 492AAAA
- REACH, RoHS and SvHC compliant
- Available in standard 12 colors as per IEC 60304 and in standard and blister packing

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Note: Return Loss > 28dB based on sample data using method IEC 61300-3-6		

Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX
Crush	N/100mm	500
Operating Temperature	°C	-20 to +60
Stripping Length – Easy Strip	m	1.5 minimum
Stripping Length – Tight Buffer	mm	30 nominal
Nominal Buffer Diameter	µm	900 +/- 50
Max Tensile Load	N	6

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	3.0 @ 850nm / 0.8 @ 1300nm
Bandwidth OFL (MHz x km)	200 @ 850nm / 500 @ 1300nm

Ordering Information

PT
Pigtail

Connector	
00	LC
02	SC
04	ST
05	FC

+

Fibre Type	
1	OM1

+

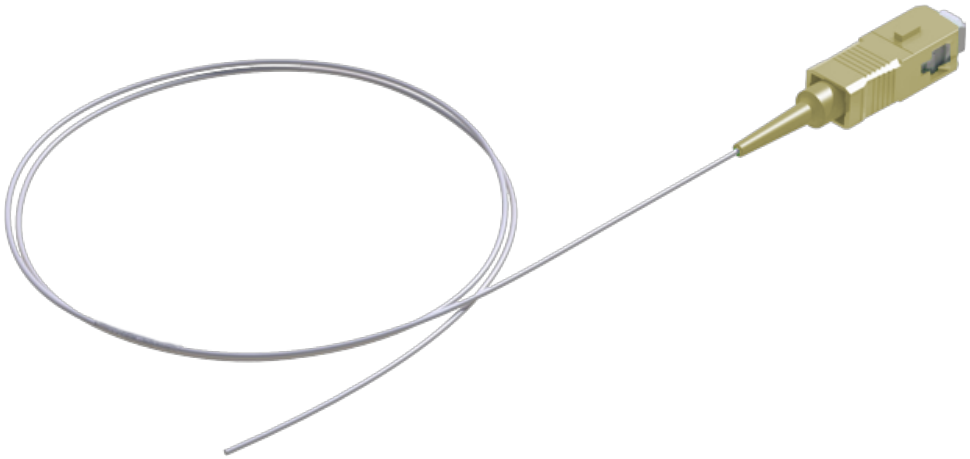
Length	
01	1m
01.5	1.5m
02	2m
...	...
xx	Specify

+

Extra Options	
E	Easy Strip
/12	Tight Buffer Pack of 12
E/12	Easy Strip Pack of 12
MC/12	Tight Buffer 12 Colours Pack
EMC/12	Easy Strip 12 Colours Pack
BMC/12	Tight Buffer 12 Colours Blister Pack
EBMC/12	Easy Strip 12 Colours Blister Pack

Examples:

PT-00-1-01 – Pigtail LC/UPC Multimode OM1 1m
PT-02-1-02-E – Pigtail SC/UPC Multimode OM1 Easy Strip 2m
PT-05-1-01-EMC/12 – Pigtail FC/UPC Multimode OM1 Easy Strip 1m 12 Colours Pack



OM2 Multimode Pigtails

OM2 multimode pigtails are used for the termination of optical cables via fusion or mechanical splicing. They consist of a high quality 900um LSZH cable terminated with an optimized connector for low insertion loss and low back reflection. They fully conform to IEC, TIA/EIA and Telcordia standards.

Applications

- Termination of optical networks via fusion or mechanical splicing
- Data centres, Premises and Telecommunication applications
- Patch panels, wall boxes, ODFs and splice cassettes

Features

- Available with SC, LC, ST or FC connectors
- Available with 900µm tight buffered or easy strip white coloured cable
- Low smoke zero halogen (LSZH) buffer
- Multimode Fibre compliant with ITU-G651.1, TIA/EIA 492AAAB
- REACH, RoHS and SvHC compliant
- Available in standard 12 colors as per IEC 60304 and in standard and blister packing

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Note: Return Loss > 28dB based on sample data using method IEC 61300-3-6		

Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX
Crush	N/100mm	500
Operating Temperature	°C	-20 to +60
Stripping Length – Easy Strip	m	1.5 minimum
Stripping Length – Tight Buffer	mm	30 nominal
Nominal Buffer Diameter	µm	900 +/- 50
Max Tensile Load	N	6

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	2.8 @ 850nm / 0.8 @ 1310nm
Bandwidth OFL (MHz x km)	500 @ 850nm / 500 @ 1310nm

Ordering Information

PT
Pigtail

Connector	
00	LC
02	SC
04	ST
05	FC

+

Fibre Type	
2	OM2

+

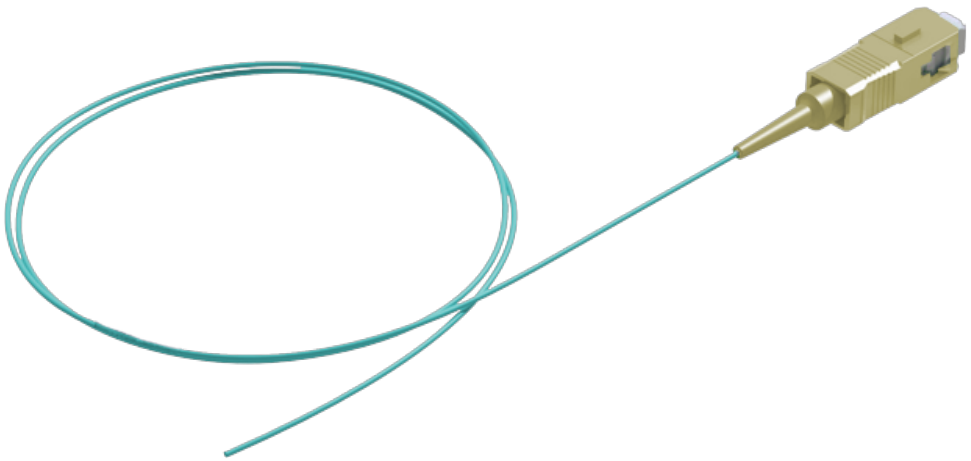
Length	
01	1m
01.5	1.5m
02	2m
...	...
xx	Specify

+

Extra Options	
E	Easy Strip
/12	Tight Buffer Pack of 12
E/12	Easy Strip Pack of 12
MC/12	Tight Buffer 12 Colours Pack
EMC/12	Easy Strip 12 Colours Pack
BMC/12	Tight Buffer 12 Colours Blister Pack
EBMC/12	Easy Strip 12 Colours Blister Pack

Examples:

PT-00-2-01 – Pigtail LC/UPC Multimode OM2 1m
PT-02-2-02-E – Pigtail SC/UPC Multimode OM2 Easy Strip 2m
PT-05-2-01-EMC/12 – Pigtail FC/UPC Multimode OM2 Easy Strip 1m 12 Colours Pack



OM3 Multimode Pigtails

OM3 multimode pigtails are used for the termination of optical cables via fusion or mechanical splicing. They consist of a high quality 900um LSZH cable terminated with an optimized connector for low insertion loss and low back reflection. They fully conform to IEC, TIA/EIA and Telcordia standards.

Applications

- Termination of optical networks via fusion or mechanical splicing
- Data centres, Premises and Telecommunication applications
- Patch panels, wall boxes, ODFs and splice cassettes

Features

- Available with SC, LC, ST or FC connectors
- Available with 900µm tight buffered or easy strip white coloured cable
- Low smoke zero halogen (LSZH) buffer
- Multimode Fibre compliant with ITU-G651.1, TIA/EIA 492AAAC
- REACH, RoHS and SvHC compliant
- Available in standard 12 colors as per IEC 60304 and in standard and blister packing

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Note: Return Loss > 28dB based on sample data using method IEC 61300-3-6		

Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX
Crush	N/100mm	500
Operating Temperature	°C	-20 to +60
Stripping Length – Easy Strip	m	1.5 minimum
Stripping Length – Tight Buffer	mm	30 nominal
Nominal Buffer Diameter	µm	900 +/- 50
Max Tensile Load	N	6

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	2.8 @ 850nm / 0.8 @ 1310nm
Bandwidth OFL (MHz x km)	1500 @ 850nm / 500 @ 1310nm
Bandwidth EMBc (MHz x km)	2000 @ 850nm

Ordering Information

PT
Pigtail

Connector	
00	LC
02	SC
04	ST
05	FC

+

Fibre Type	
3	OM3

+

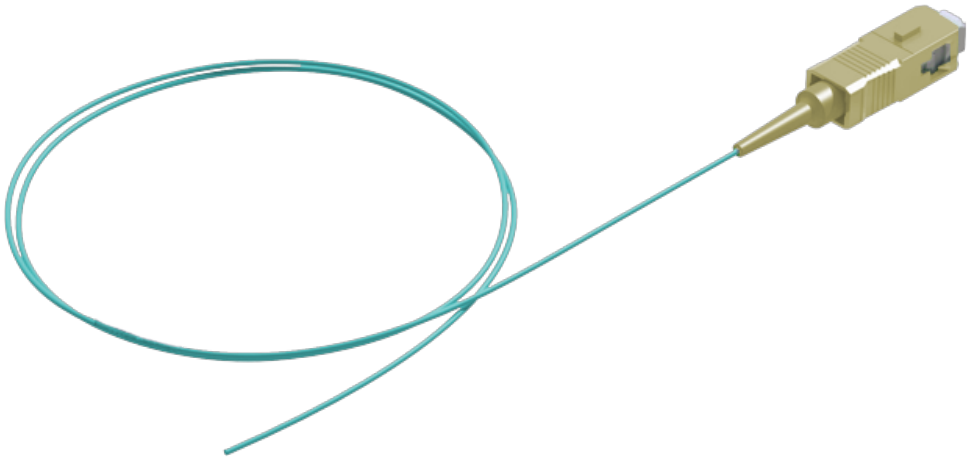
Length	
01	1m
01.5	1.5m
02	2m
...	...
xx	Specify

+

Extra Options	
E	Easy Strip
/12	Tight Buffer Pack of 12
E/12	Easy Strip Pack of 12
MC/12	Tight Buffer 12 Colours Pack
EMC/12	Easy Strip 12 Colours Pack
BMC/12	Tight Buffer 12 Colours Blister Pack
EBMC/12	Easy Strip 12 Colours Blister Pack

Examples:

PT-00-3-01 – Pigtail LC/UPC Multimode OM3 1m
PT-02-3-02-E – Pigtail SC/UPC Multimode OM3 Easy Strip 2m
PT-05-3-01-EMC/12 – Pigtail FC/UPC Multimode OM3 Easy Strip 1m 12 Colours Pack



OM4 Multimode Pigtails

OM4 multimode pigtails are used for the termination of optical cables via fusion or mechanical splicing. They consist of a high quality 900um LSZH cable terminated with an optimized connector for low insertion loss and low back reflection. They fully conform to IEC, TIA/EIA and Telcordia standards.

Applications

- Termination of optical networks via fusion or mechanical splicing
- Data centres, Premises and Telecommunication applications
- Patch panels, wall boxes, ODFs and splice cassettes

Features

- Available with SC, LC, ST or FC connectors
- Available with 900µm tight buffered or easy strip aqua coloured cable
- Low smoke zero halogen (LSZH) buffer
- Multimode Fibre compliant with TIA/EIA 492AAAA
- REACH, RoHS and SvHC compliant
- Available in standard 12 colors as per IEC 60304 and in standard and blister packing

Specifications

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.15dB	IEC 61300-3-4
Ave/Random	0.20dB	IEC 61300-3-34
Note: Return Loss > 28dB based on sample data using method IEC 61300-3-6		

Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX
Crush	N/100mm	500
Operating Temperature	°C	-20 to +60
Stripping Length – Easy Strip	m	1.5 minimum
Stripping Length – Tight Buffer	mm	30 nominal
Nominal Buffer Diameter	µm	900 +/- 50
Max Tensile Load	N	6

Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km)	2.8 @ 850nm / 0.8 @ 1300nm
Bandwidth OFL (MHz x km)	3500 @ 850nm / 500 @ 1300nm
Bandwidth EMBc (MHz x km)	4700 @ 850nm

Ordering Information

PT
Pigtail

Connector	
00	LC
02	SC
04	ST
05	FC

+

Fibre Type	
4	OM4

+

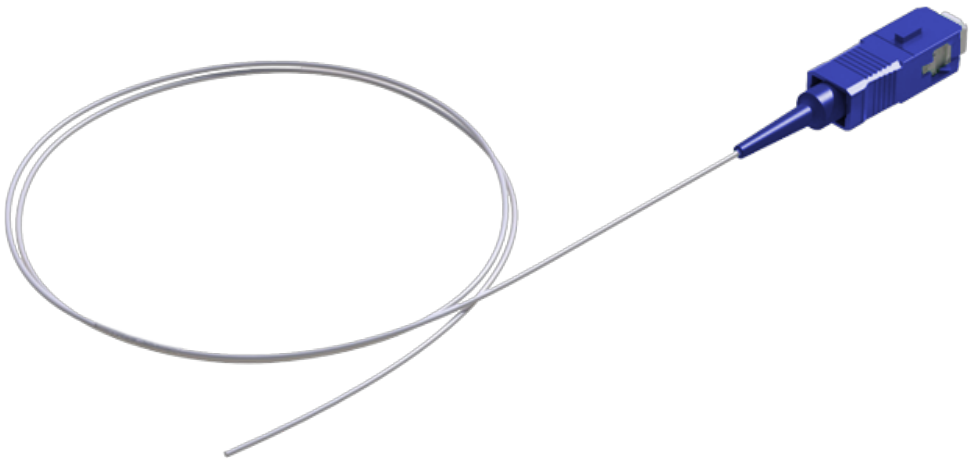
Length	
01	1m
01.5	1.5m
02	2m
...	...
xx	Specify

+

Extra Options	
E	Easy Strip
/12	Tight Buffer Pack of 12
E/12	Easy Strip Pack of 12
MC/12	Tight Buffer 12 Colours Pack
EMC/12	Easy Strip 12 Colours Pack
BMC/12	Tight Buffer 12 Colours Blister Pack
EBMC/12	Easy Strip 12 Colours Blister Pack

Examples:

PT-00-4-01 – Pigtail LC/UPC Multimode OM4 1m
PT-02-4-02-E – Pigtail SC/UPC Multimode OM4 Easy Strip 2m
PT-05-4-01-EMC/12 – Pigtail FC/UPC Multimode OM4 Easy Strip 1m 12 Colours Pack



Singlemode Pigtails

Singlemode pigtails are used for the termination of optical cables via fusion or mechanical splicing. They consist of a high quality 900um LSZH cable terminated with an optimized connector for low insertion loss and low back reflection. They fully conform to ISO/IEC, TIA/EIA and Telcordia standards.

Applications

- Termination of optical networks via fusion or mechanical splicing
- FTTx
- Data centres, Premises and Telecommunication applications
- Patch panels, wall boxes, ODFs and splice cassettes

Features

- Available with SC, LC, ST or FC UPC and APC connectors
- Available with 900µm tight buffered or easy strip white coloured cable
- Low smoke zero halogen (LSZH) buffer
- Multimode Fibre compliant with TIA/EIA 492CAAA
- REACH, RoHS and SvHC compliant
- Available in standard 12 colors as per IEC 60304 and in standard and blister packing

Specifications

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	IEC61300-3-4
Ave/Master	0.18dB	IEC 61300-3-4
Ave/Random	0.18dB	IEC 61300-3-34
Return Loss	55/65dB	IEC 61300-3-6

Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX
Crush	N/100mm	500
Operating Temperature	°C	-20 to +60
Stripping Length – Easy Strip	m	1.5 minimum
Stripping Length – Tight Buffer	mm	30 nominal
Nominal Buffer Diameter	µm	900 +/- 50
Max Tensile Load	N	6

Pigtails

Ordering Information

PT
Pigtail

Connector	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

+

Fibre Type	
9	G.652.D
A1	G.657.A1
A2	G.657.A2
55	G.655

+

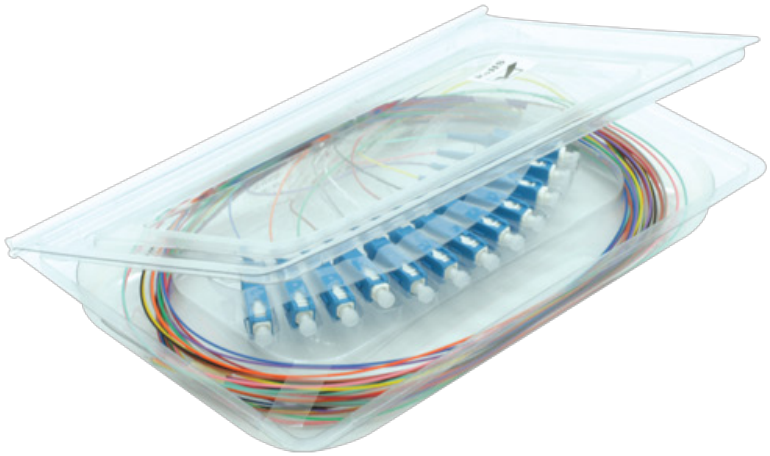
Length	
01	1m
01.5	1.5m
02	2m
...	...
xx	Specify

+

Extra Options	
E	Easy Strip
/12	Tight Buffer Pack of 12
E/12	Easy Strip Pack of 12
MC/12	Tight Buffer 12 Colours Pack
EMC/12	Easy Strip 12 Colours Pack
BMC/12	Tight Buffer 12 Colours Blister Pack
EBMC/12	Easy Strip 12 Colours Blister Pack

Examples:

PT-01-9-01 – Pigtail LC/APC Singlemode G.652. 1m
PT-02-A1-02-E – Pigtail SC/UPC Singlemode G.657.A.1 Easy Strip 2m
PT-07-A2-01-EMC/12 – Pigtail E200/UPC Singlemode G.657.A2 Easy Strip 1m 12 Colours Pack



Blister Packed Pigtails

High quality 12 colours blister Packed pigtails is a cost effective and environment friendly option to purchase Datatronix pigtails, reducing the amount of paperwork and packaging.

Applications

- Termination of optical networks via fusion or mechanical splicing
- Data centres, Premises and Telecommunication applications
- Patch panels, wall boxes, ODFs and splice cassettes

Features

- Available with FC, LC, SC and ST connectors
- Offered in IEC colour code (DIN available upon request)
- Convenient space saving shipping and storage
- Easy strip 900um buffer as standard (tight buffered available upon request)
- Generating less waste from packaging – Environmentally friendly

Specifications

Connector Performance

	MAX
Insertion Loss	0.25dB
Return Loss (SM UPC)	>55dB
Return Loss (SM APC)	>65dB
Operating Temperature	-20˚C to + 60°C
Intermateability	Compatible with all equivalent connectors as per IEC 61754

Ordering Information

PT
Pigtail

Connector	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

+

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3

+

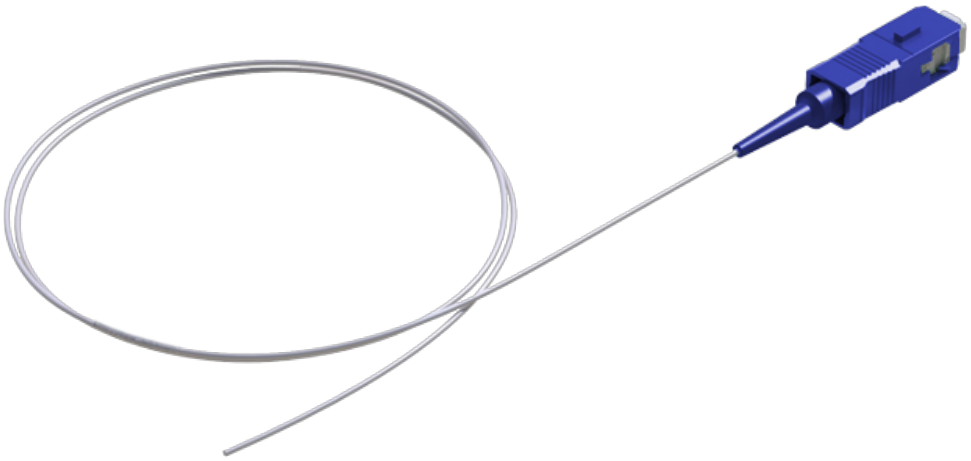
Length	
01	1m
01.5	1..5m
02	2m
...	...
xx	Specify

+

EBMC/12	Easy Strip 12 Colours Blister Pack

Examples:

PT-02-9-02-EBMC/12 – Pigtail SC/UPC Singlemode G.652.D Easy Strip 2m 12 Colours Blister Pack



Semi-Tight Buffer Enhanced Pigtails

Semi tight buffer pigtails are used for the termination of optical cables via fusion or mechanical splicing. They consist of a high-quality semi tight buffered 900um LSZH cable that can be easily stripped to longer length than tight buffered pigtails. They are terminated with an optimized connector for low insertion loss and low back reflection. They fully conform to IEC, TIA/EIA and Telcordia standards.

Applications

- Termination of optical networks via fusion or mechanical splicing
- FTTx
- Data centres, Premises and Telecommunication applications
- Patch panels, wall boxes, ODFs and splice cassettes

Features

- Available with SC, LC, ST and FC connectors
- Suitable for splicing
- Offered with Semi-tight 900um buffer that can be stripped up to 100mm in one pass
- Available in standard single mode and multimode fibre types
- Low smoke zero halogen (LSZH) secondary buffer
- REACH, RoHS and SvHC materials compliant

Specifications

Connector Specification

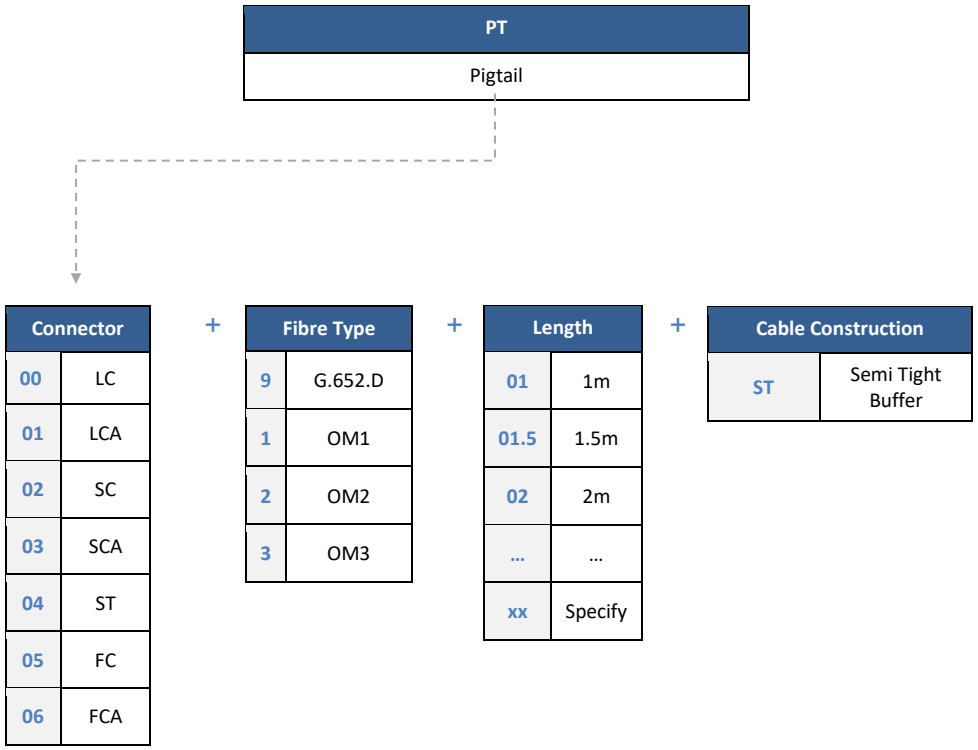
OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL MAX/Master (Acceptance)	0.25dB	0.25dB	IEC 61300-3-4
Ave/Master	0.18dB	0.15dB	IEC 61300-3-4
Ave/Random	0.18dB	0.20dB	IEC 61300-3-34
Return Loss	55/65dB	>28dB	IEC 61300-3-6

Note: Multimode Return Loss >28dB based on sample data using method IEC 61300-3-6

Cable Specification

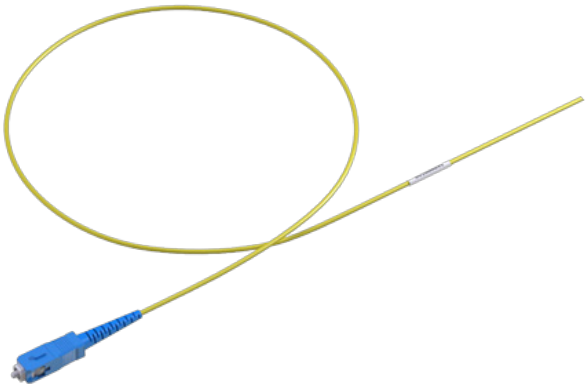
CHARACTERISTICS	UNITS	SIMPLEX
Crush	N/100mm	500
Operating Temperature	˚C	-20 to +60
Nominal Buffer Diameter	Mm	900+/-500
Max Tensile Load	N	6

Ordering Information



Example:

PT-01-9-01-ST – Pigtail LC/APC Singlemode G.652.D 1m



Cabled Pigtails

Cabled pigtails are used for the termination of optical cables via fusion or mechanical splicing. They consist of a high quality 2mm or 3mm LSZH cable that allows more robust handling. They are terminated with an optimized connector for low insertion loss and low back reflection. They fully conform to IEC, TIA/EIA and Telcordia standards.

Applications

- CATV / VIDEO
- Passive Optical Network (PON)
- WDM / DWDM
- FTTH
- Data centres - Supports high speed multi-channel video, data and voice services in metropolitan and access networks
- ATM, SONET and WDM

Features

- No need to be protected inside a panel or a wall box
- Can be fed through tight spaces and spliced or terminated
- Fibre options and wide range of connector available
- Other fibre types and cable diameters available upon request
- REACH, RoHS and SvHC compliant
- Standard cable diameters are 2mm for LC and MU and 3mm for SC, ST and FC
- Tight Buffer 900µm buffer internal construction as standard (easy strip available upon request)

Specifications

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25dB	0.25dB	IEC 61300-3-4
Ave/Master	0.18dB	0.15dB	IEC 61300-3-4
Ave/Random	0.18dB	0.20dB	IEC 61300-3-34
Return Loss*	55/65dB	>28dB	IEC 61300-3-6
Note: Multimode Return Loss >28dB based on sample data using method IEC 61300-3-6			

Connector Performance

CHARACTERISTICS	
Cable Material	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (˚C)	-20 to +60
Fire Specification	IEC 60332-1
***Cable materials to suit alternate fire specifications on request**	

Ordering Information

PTC
Cabled Pigtail

Connector	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2A
08	E2A
09	MU
10	MTRJ

+

Fibre Type	
9	G.652.D
1	OM1
2	OM2
4	OM3
4	OM4
A1	G.657.A1
A2	G.657.A2

Configuration	
1	Simplex
2	Duplex
3	Flat Duplex

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

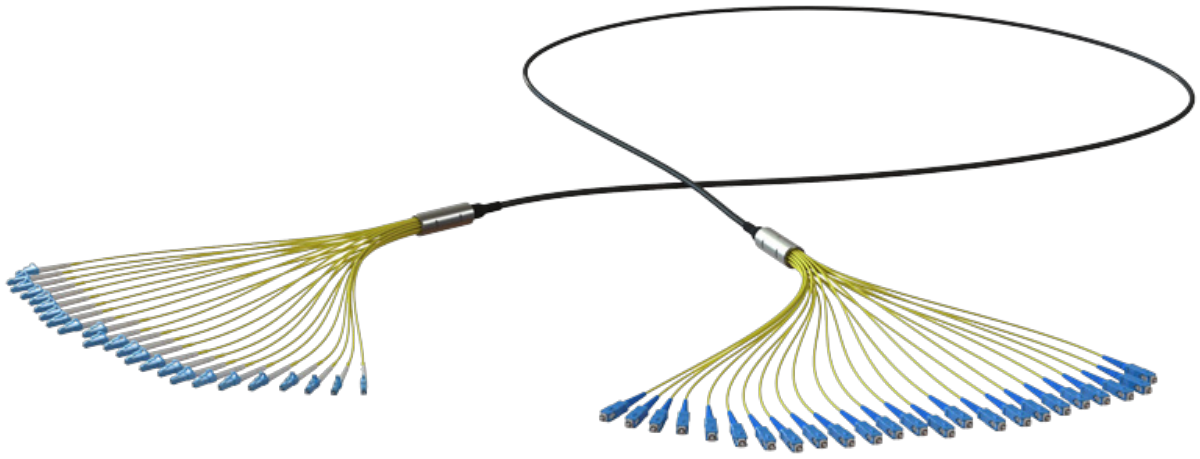
Examples:

PTC-01-91-01 – Cabled Pigtail LC/APC Singlemode G.652.D Simplex 1m
PTC-02-12-02 – Cabled Pigtail SC/UPC Multimode OM1 Duplex 2m

Optical Fibre Assemblies

Multi-Fibre Assemblies

Multi Fibre Assemblies



Multi-Fibre Loose Tube Cable Assemblies

Loose tube multi-fibre pre-terminated assemblies designed and manufactured with a variety of standard optical and MTP® connectors. With a core count up to 144 fibres using 900um or 2mm ruggedised tails they are an ideal solution for high density applications.

Applications

- Data centres
- Telecommunication networks
- Internal and backbone applications

Features

- Low loss performance
- Up to 144 fibres – ideal for high density applications
- Available with both standard optical connectors and MTP®
- Available in OS1/2, G.657A1, OM1, OM2, OM3, OM4
- Option for 900µm or 2mm ruggedised tails
- 100% factory terminated and tested
- Saves installation time and costs
- Option for MTP® to MTP® trunk or MTP® to LC or SC fanout
- Compact size
- TIA/EIA, ISO/IEC and Telcordia compliant
- RoHS, REACH and SvHC compliant

Specifications

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, G.657A1, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Tail Dimensions	900µm Simplex Tails Stagger Configuration, 2mm Simplex Tails Staggered Configuration
Terminations	SC, LC, FC, ST, E2000
Cable Construction	Single Loose Tube (LT) 2-24 Cores (IEC 60794), Multi Loose Tube up to 48 Cores, Single Loose Tube STA Armoured 2-24 cores, Multi Loose Tube STA Armoured up to 48 cores, Jacket Material: LZSH, PE; OFNP, OFNR, Jacket Colour: Black
Cable Diameter	Single LT (Up to 12 Cores) OD MAX: 6.5 ± 0.3mm, Single LT (Up to 24 Cores) OD MAX: 6.7 ± 0.3mm Multi LT (Up to 48 Cores) OD MAX: 9.7 ± 0.3mm
Crush Resistance	Single LT 1000N / 100mm, Multi LT 3000N/100mm
Cable Tensile Strength	Single LT (Short/Long) 1000N/500N, Multi LT (Short/Long) 1500N/500N
Cable Strength Member	Single LT: E-glass, Multi LT: FRP/E-glass
Storage Temperature	-20 ~ +60°C
Installation Temperature	-20 ~ +60°C
Operating Temperature	-20 ~ +60°C
Tail Protection	Crush Resistance Tube – OD MAX 25mm (24x900µm Tails, 12x2mm Tails) Crush Resistance Tube - OD MAX 32mm (48x900µm Tails, 24x2mm Tails)
Pulling Element	RPS Reusable Sock End A (Assembly Length above 20 meters)
Gland	PG 13.5 End A/B (24x900µm Tails, 12x2mm Tails), M25 End A/B (48x900µm Tails, 24x2mm Tails)
Packaging	Length ≤ 100 - Heavy Duty PE bag / Length >100m - Drum (up to 24xFibres)

Connector Performance

OPTICAL PERFORMANCE*	MM PREMIUM	MM STANDARD	SM PREMIUM	SM STANDARD	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	0.25dB	0.15dB	0.25dB	IEC 61300-3-4
Ave/Master	0.08dB	0.15dB	0.12dB	0.18dB	IEC 61300-3-4
Ave/Random	0.10dB	0.20dB	0.12dB	0.18dB	IEC 61300-3-34
RL (Min Acceptance)	NA	NA	55/65**	55/65**	IEC 61300-3-6

*Connector Performance table does not to E2A terminations. **UPC/APC

Cable Performance

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient (dB/km)	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm) ≤0.34 Typ (1310nm) ≤0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≥200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	N/A	N/A	≥ 2000 (850nm)	≥ 4700 (850nm)

Multi Fibre Assemblies

Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- ISO/IEC 60793 and ISO/IEC 60794
- ISO/IEC 61753, IEC 61754 and IEC 61755
- ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

P
Fibre Pre-terminated Cable

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A
20	MTP® Male
22	MTP® Female
24	MTP® Male Elite
26	MTP® Female Elite

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A
20	MTP® Male
22	MTP® Female
24	MTP® Male Elite
26	MTP® Female Elite

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1

Cable Type	
LT	Loose Tube Cable with 900um Tails
LR	Loose Tube Cable with 2mm Tails
ST	Loose Tube STA Cable with 900um Tails
SR	Loose Tube STA Cable with 2mm Tails

Fibre Count	
02	2
04	4
06	6
08	8
12	12
16	16
24	24
48	48

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

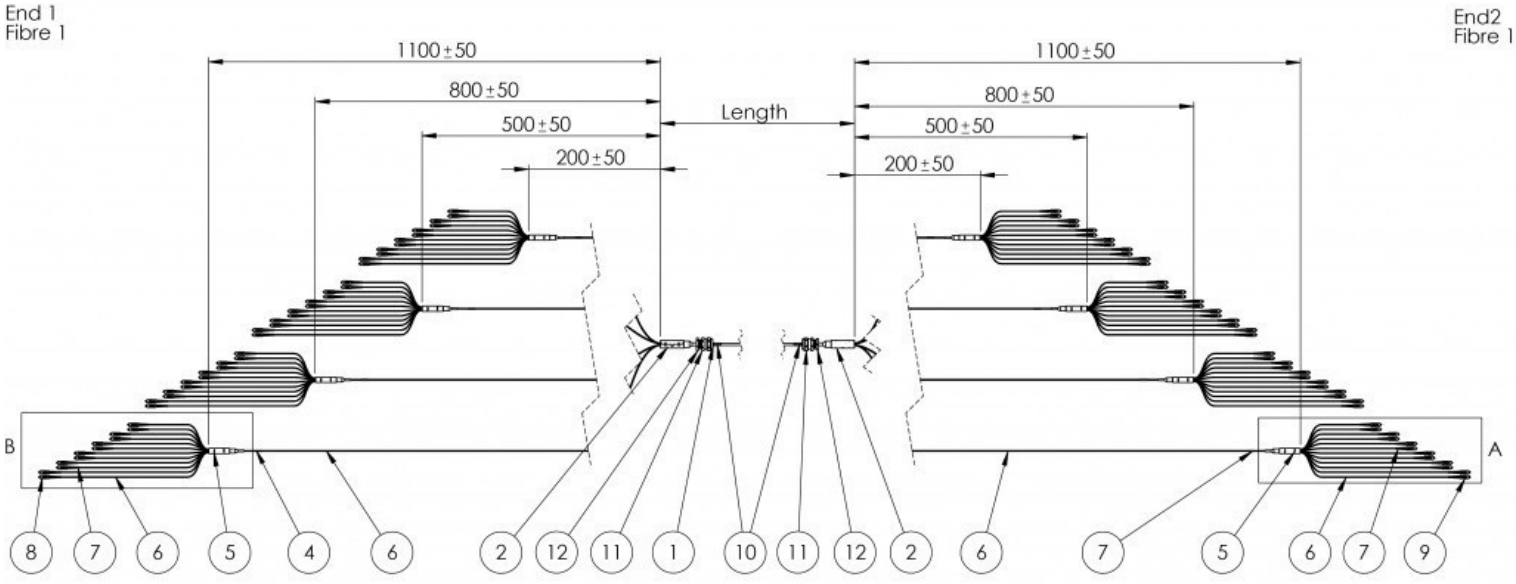
+

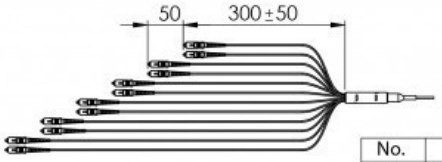
Extra Options	
-	LSZH
R	OFNR
P	OFNP
E	PE
A	Polarity A (use it only with MTP®)
B	Polarity B (use it only with MTP®)
C	Polarity C (use it only with MTP®)

Example:

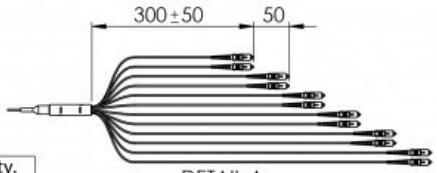
P-00003LT12-70 – LC/UPC – LC/UPC 12 Core Pre-Terminated Loose Tube Cable LSZH OM 3with 900µm Tails 70m
P-20204LR-70-AR- MTP® Male to MTP® Male Polarity A 12 core Pre-Terminated Loose Tube Cable OM4 with 2mm Tails OFNR

Technical Drawing





DETAIL B
SCALE 1 : 6



DETAIL A
SCALE 1 : 6

No.	Description	Qty.
1	Multi sub unit Loose Tube Cable	1
2	ø22mm Breakout Module Assembly	2
3	ø3mm O.D M2FX Tubing	8
4	Subunit Identification Label (Wrap-around)	8
5	ø15mm Breakout Module	8
6	2mm Furcation tubing	96
7	Fibre Identification Marker (C-Clip)	174
8	Connector Assembly - End 1	48
9	Connector Assembly - End 2	48
10	Serial Number Label (Wrap-around)	2
11	M25 Compression Gland	2
12	M25 Compression Gland Nut	2

MTP® is a registered trademark of US Conec Ltd.

Multifibre Tight Buffered Cable Assemblies

Tight buffered multi-fibre cable assemblies are designed and manufactured for short internal optical links. The 900um cable subunits are ideal for use within patch panels, optical distribution frames and wall boxes. These assemblies are shipped with protective tube that assures the protection of the cable tails and a pulling element that provides high tensile strength, allowing safe and effective pulling action.

Applications

- Data centres
- Telecommunication networks
- Internal horizontal and backbone cabling
- Installation inside patch panels, ODFs or wall boxes

Features

- 2 to 24 core tight buffered cable
- Available with various types of optical connectors
- Factory terminated and tested
- Available with OM1, OM2, OM3, OM4 and OS1/OS2 fibres
- LSZH, OFNP, OFNR cable types
- Crush resistant protection tube
- High tensile strength pulling element
- Light and compact assembly
- User friendly link loss test certificate
- 900um tails for installation inside fibre management
- 100% factory terminated and tested

Specifications

SPECIFICATION	VALUE
Fibre	OS1/OS2, G.657A1, OM1, OM2, OM3, OM4
Tail Dimensions	900µm Simplex Tails Staggered Configuration
Cable Construction	Tight buffer 4, 8, 12 and 24 cores (IEC 60974)
Terminations	SC, LC, FC, ST, E2000
Cable Diameter	4 Core Max OD 4.8 ± 0.3mm, 8 Core Max OD 5.8 ± 0.3mm, 12 Core Max OD 6.5 ± 0.3mm, 24 Core Max OD 8.9 ± 0.3mm
Crush Resistance	1000N / 100mm
Cable Tensile Strength	4 Core (Short/Long) 600N/300N, 8 Core (Short/Long) 750N/375N, 12 Core (Short/Long) 750N/375N, 24 Core (Short/Long) 900N/450N
Cable Strength Member	E-Glass
Storage Temperature	-20~+60°C
Installation Temperature	-20~+60°C
Operating Temperature	-20~+60°C
Tail Protection	Crush Resistance Tube – OD MAX 25mm (24x900mm)
Pulling Element	Standard Assembly Length Above 20m
Packaging	Length ≤ 100 – Coil in heavy duty polymer bag, Length >100m - Drum

Connector Performance

OPTICAL PERFORMANCE*	MM PREMIUM	MM STANDARD	SM PREMIUM	SM STANDARD	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	0.25dB	0.15dB	0.25dB	IEC 61300-3-4
Ave/Master	0.08dB	0.15dB	0.12dB	0.18dB	IEC 61300-3-4
Ave/Random	0.10dB	0.20dB	0.12dB	0.18dB	IEC 61300-3-34
RL (Min Acceptance)	NA	NA	55/65**	55/65**	IEC 61300-3-6

*Connector Performance table does not to E2A terminations. **UPC/APC

Cable Performance

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient (dB/km)	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm) ≤0.34 Typ (1310nm) ≤0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≥200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	N/A	N/A	≥ 2000 (850nm)	≥ 4700 (850nm)

Multi Fibre Assemblies

Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- ISO/IEC 60793 and ISO/IEC 60794
- ISO/IEC 61753, IEC 61754 and IEC 61755
- ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

P
Fibre Pre-terminated Cable

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1

Cable Type	
TB	Tight Buffered

Fibre Count	
02	2
04	4
06	6
08	8
12	12
16	16
24	24

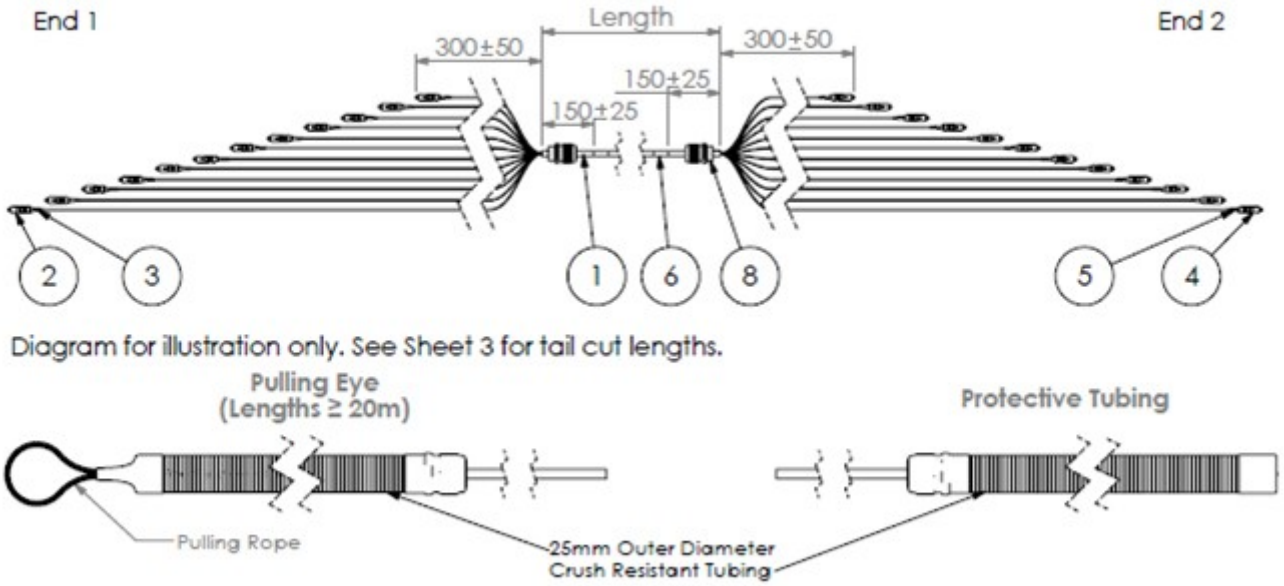
+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

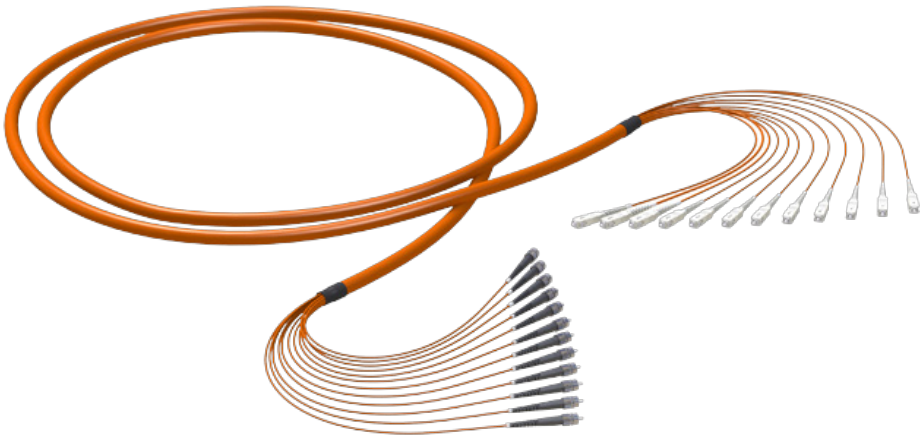
Example:

P-00003TB12-70 – LC/UPC – LC/UPC 12 Core Pre-terminated Tight Buffered Cable LSZH OM 3 70m

Technical Drawing



Multi Fibre Assemblies



Multi-fibre Full Breakout Cable Assemblies

Full breakout multi-fibre cable assemblies are designed for applications where direct connection of panels or equipment is required. The ruggedised cable subunits are patch cord style with a 2mm cable diameter so that these assemblies can be used outside the patch panels, ODF or wall boxes. The use of these multi-fibre assemblies provides improved cable management and reduces installation costs. Being 100% factory terminated and tested ensures network performance in critical fibre applications.

Applications

- Data centres
- Telecommunication networks
- Direct connection to equipment/panel
- Internal Short Links
- Front Panel/Equipment Connection

Features

- 2 to 24 full breakout cable
- 2mm ruggedised tails
- Factory terminated and tested
- Available with various types of optical connectors
- Available with OM1, OM2, OM3, OM4 and OS1/OS2 fibres
- Low Smoke Zero Halogen (LSZH) cable jacket
- TIA/EIA, ISO/IEC and Telcordia compliant
- RoHS, REACH, SvHC compliant
- Saves installation time and costs
- 100% factory terminated and tested

Specifications

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Tail Dimensions	2mm Simplex Tails Fanout Configuration, 2mm Simplex Tails Staggered Configuration
Cable Construction	Full Breakout 4, 8, 12 and 24 Cores (ISO/IEC 60794)
Cable Colour	OS1/OS2 – Yellow, OM1/OM2 – Orange, OM3/OM4 – Aqua
Terminations	SC, LC, FC, ST, E2000
Cable Diameter	4 Core OD Max 7.0 ± 0.3mm, 8 Core OD Max 9.4 ± 0.3mm, 12 Core OD Max 11.8 ± 0.3mm, 24 Core OD Max 14.1 ± 0.3mm
Crush Resistance	1000N / 100mm
Cable Tensile Strength	4 Core (Short/Long) 500N/270N, 8 Core (Short/Long) 1100N/700N, 12 Core (Short/Long) 1400N/800N, 24 Core (Short/Long) 1400N/800N
Cable Strength Member	FRP/Aramid
Storage Temperature	-20~+60°C
Installation Temperature	0~+50°C
Operating Temperature	-20~+60°C
Tail Protection	Fanout Configuration – Bubble Wrap, Staggered Configuration – Crush Resistance tube OD Max 27mm
Pulling Element	Staggered Configuration – Pulling eye attached to FRP Rod
Packaging	Length <50mtr: HD PE, Bag Length >50mtr: Drum

Connector Performance

OPTICAL PERFORMANCE*	MM PREMIUM	MM STANDARD	SM PREMIUM	SM STANDARD	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	0.25dB	0.15dB	0.25dB	IEC 61300-3-4
Ave/Master	0.08dB	0.15dB	0.12dB	0.18dB	IEC 61300-3-4
Ave/Random	0.10dB	0.20dB	0.12dB	0.18dB	IEC 61300-3-34
RL (Min Acceptance)	NA	NA	55/65**	55/65**	IEC 61300-3-6

*Connector Performance table does not to E2A terminations. **UPC/APC

Cable Performance

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient (dB/km)	≤ 0.38 Max (1300nm) ≤ 0.25 Max (1300nm) ≤0.34 Typ (1550nm) ≤0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≥200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	N/A	N/A	≥ 2000 (850nm)	≥ 4700 (850nm)

Multi Fibre Assemblies

Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- ISO/IEC 60793 and ISO/IEC 60794
- ISO/IEC 61753, IEC 61754 and IEC 61755
- ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

P
Fibre Pre-terminated Cable

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1

Cable Type	
BO	Breakout

Fibre Count	
02	2
04	4
06	6
08	8
12	12
16	16
24	24

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

P-00003BO12-70 – LC/UPC – LC/UPC 12 Core Pre-terminated Breakout Cable LSZH OM 3 70m

Technical Drawing

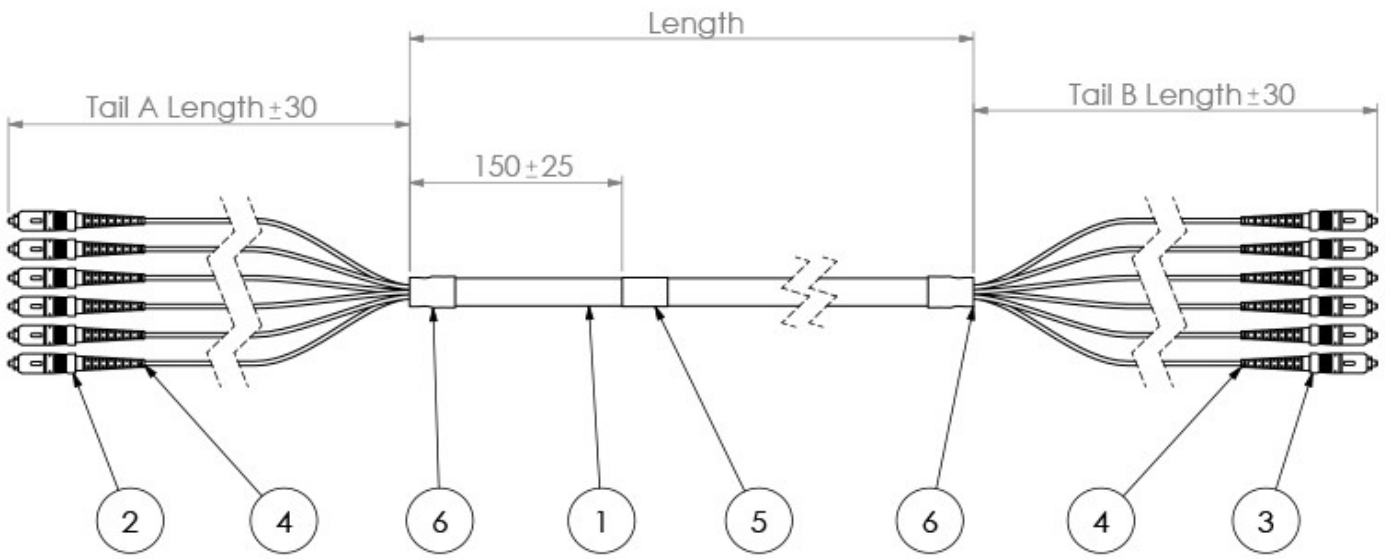


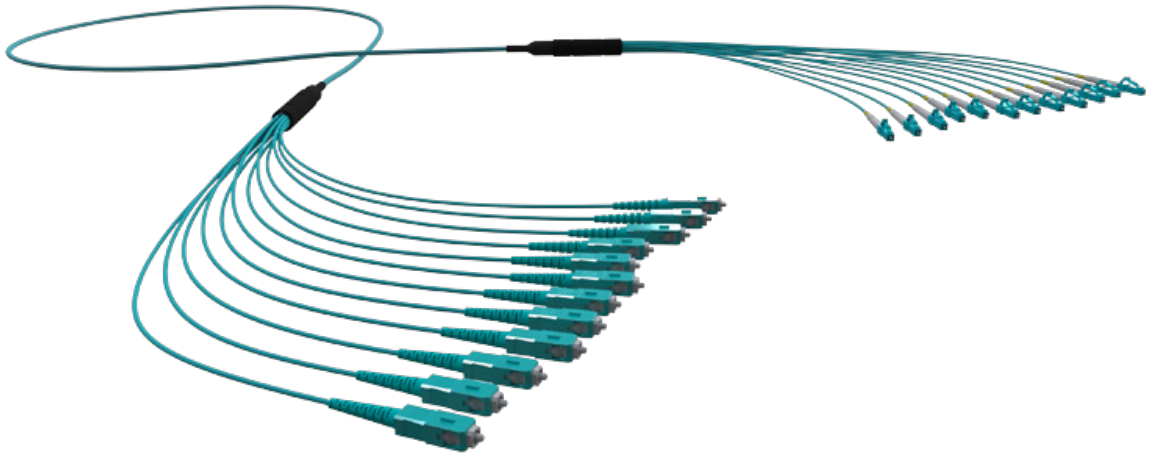
Diagram is for illustration. Fibre count can be 2, 4, 6, 8, 12, 16 or 24 fibre.

Typical configuration has 1m fanout tails at both ends and no glands or pulling device.

Tails packaged in bubblewrap bags.

No.	Description	Qty.
1	Ruggedised Breakout Cable (See Sheet 2)	1
2	Connector Assembly End A(See Sheet 2)	-
3	Connector Assembly End B (See Sheet 2)	-
4	Channel Identification Marker (C-Clip)	-
5	Serial Number Label (Sheath)	1
6	Split Retainer (Black)	2
	Gland*	-

Multi Fibre Assemblies



Multi-Fibre Micro Cable Assemblies with 2mm Tails

Micro cable ruggedised pre-terminated assemblies with 2mm tails. They feature low loss optical performance, while the 2mm tail structure is ideal for applications where the cable is non-protected, ex. outside patch panels, ODFs and wall boxes. The overall small and compact size of these assemblies improves cable management and airflow in rack systems.

Applications

- Data centres
- FTTx
- Telecommunication networks
- Internal short links
- Ideal for drop cable and high density applications
- Outside panels, ODFs and wall boxes applications

Features

- Compact size and low weight
- Improved cable management
- Low loss performance
- 2mm tails
- Up to 144 fibres
- Available with various optical connectors
- Available in standard and reduced bend sensitivity OM1, OM2, OM3, OM4 and OS1/OS2(G.652.D, G.657A1) fibre
- LSZH, OFNP or OFNR jacket option
- 100% Factory terminated and tested

Specifications

ELEMENT	CHARACTERISTIC
Fibre	G.652D, G.657A1, OM1, OM2, OM3, OM4
Tail Dimensions	2mm Simplex Tails Fanout (Standard), 2mm Simplex Tails Staggered configuration with Pulling Element (Optional)
Terminations	LC, SC, ST, FC, E2000
Cable Construction	Double Jacket 12-24 Core Micro Cable
Cable Diameter	24 Core Max 4.5 ± 0.3mm
Crush Resistance	1000N/100mm
Cable Tensile Strength	(Short/Long) 400N/150N
Cable Strength Member	Aramid
Storage Temperature	-20 ~ +60°C
Installation Temperature	-5 ~ +50°C
Operating Temperature	-20 ~ +60°C
Tail Protection	Bubble Wrap (Standard), Reusable Sock/Protection tube (Optional)
Packaging	Length ≤100mtr: HD Bag Length >100mtr: Drum

Connector Performance

OPTICAL PERFORMANCE*	MM PREMIUM	MM STANDARD	SM PREMIUM	SM STANDARD	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	0.25dB	0.15dB	0.25dB	IEC 61300-3-4
Ave/Master	0.08dB	0.15dB	0.12dB	0.18dB	IEC 61300-3-4
Ave/Random	0.10dB	0.20dB	0.12dB	0.18dB	IEC 61300-3-34
RL (Min Acceptance)	NA	NA	55/65**	55/65**	IEC 61300-3-6

*Connector Performance table does not refer to E2A terminations. **UPC/APC

Cable Performance

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient (dB/km)	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm) ≤0.34 Typ (1310nm) ≤0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≤ 200 (850nm) ≤ 500 (1300nm)	≤ 500 (850nm) ≤ 500 (1300nm)	≤ 1500 (850nm) ≤ 500 (1300nm)	≤ 3500 (850nm) ≤ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	N/A	N/A	≤ 2000 (850nm)	≤ 4700 (850nm)

Multi Fibre Assemblies

Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- ISO/IEC 60793 and ISO/IEC 60794
- ISO/IEC 61753, IEC 61754 and IEC 61755
- ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

P
Fibre Pre-terminated Micro Cable

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1

Cable Type	
M2	Micro Cable with 2mm tails LSZH

Fibre Count	
12	12
24	24
48	48
72	72

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

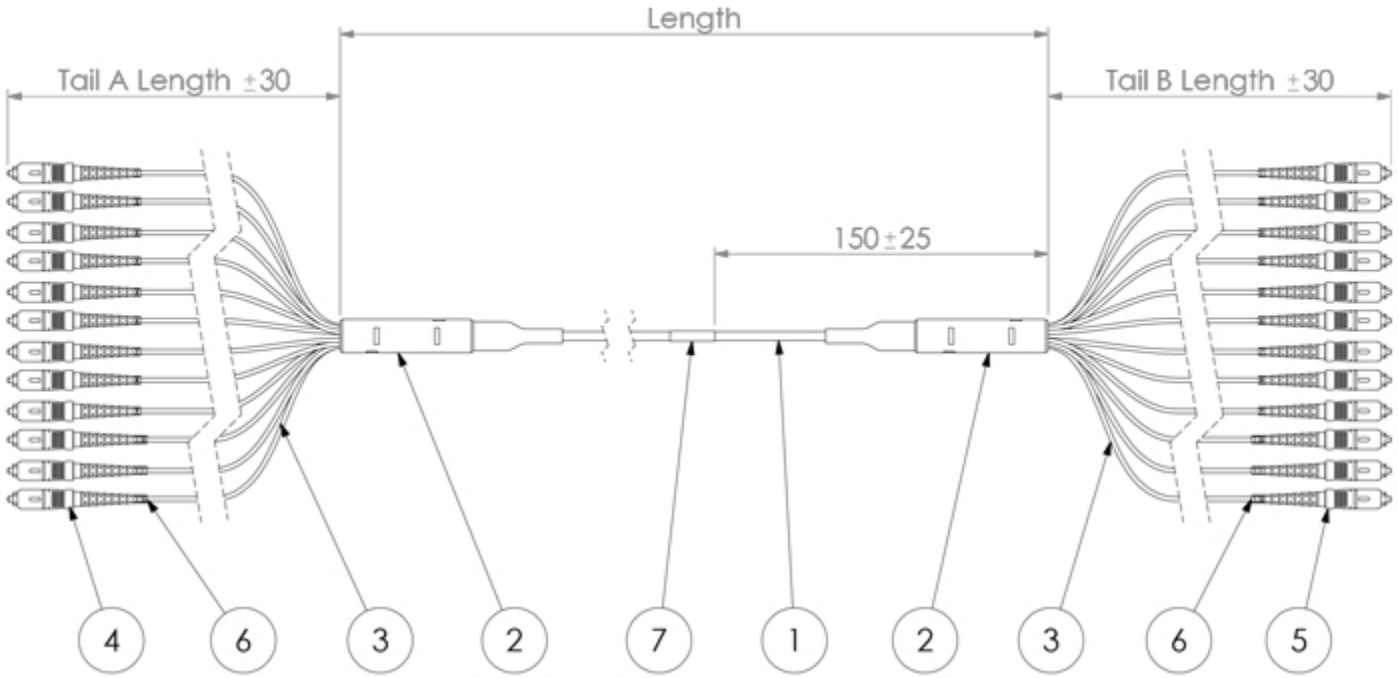
+

Extra Options	
-	LSZH
R	OFNR
P	OFNP

Example:

P-0000A1M212-100-NR – LC/UPC – LC/UPC 12 Core Pre-Terminated Micro Cable with 2mm Tails, Singlemode G.657.A1 100m

Technical Drawing



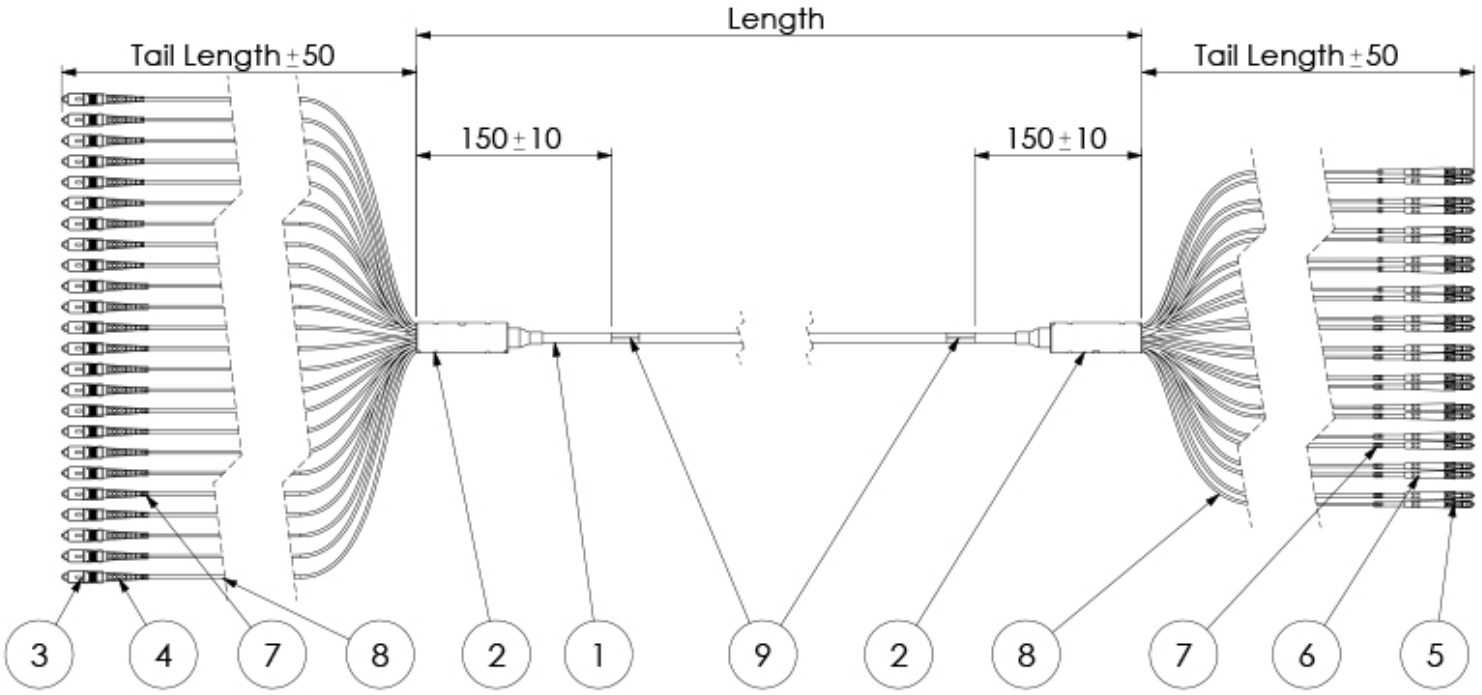
Typical tail length 1000mm

No.	Description	Qty.
1	12 Fibre Micro Cable (See Sheet 2)	1
2	Ruggedised Breakout Module	2
3	2mm Furcation Tubing (See Sheet 2)	24
4	Connector Assembly End 1 (See Sheet 2)	12
5	Connector Assembly End 2 (See Sheet 2)	12
6	Channel Identification Marker (C-Clip)	30
7	Serial Number Label (Wrap Around)	1

Length Tolerances:

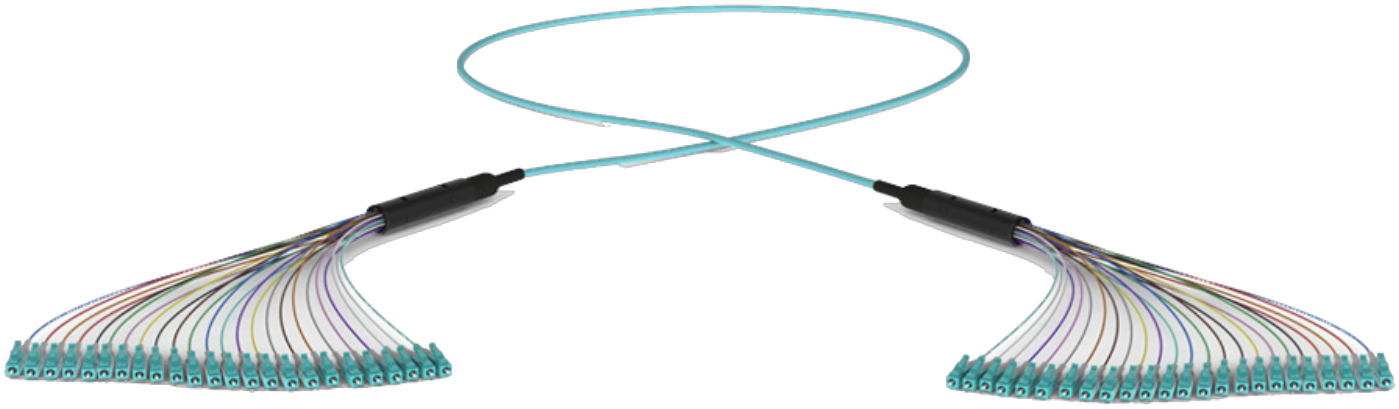
-0/+100mm (Length<0.5m)
-0/+150mm (0.5m≤Length<5m
-0/+200mm (5m≤Length<20m)
±1% (Length≥20m)

Multi Fibre Assemblies



Typical Tail Length: 1000mm

No.	Description	Qty.
1	24f Double Jacketed Micro Cable (See Sheet 2)	1
2	ø22mm Breakout Module	2
3	End 1 Connector (See Sheet 2)	24
4	End 1 Boot (See Sheet 2)	24
5	End 2 Connector (See Sheet 2)	24
6	End 2 Boot (See Sheet 2)	24
7	Tail Identification Marker (C-Clip)	78
8	2mm Furcation Tubing (See Sheet 2)	48
9	Serial Number Label (Wrap-around)	2



Multi-Fibre Micro Cable Assemblies with 900um Tails

Micro cable ruggedised pre-terminated assemblies with 900um tails. They feature low loss optical performance, while the 900um tail structure is ideal for applications inside patch panels, ODFs and wall boxes. The overall small and compact size of these assemblies improves cable management and airflow in rack systems.

Applications

- Data centres
- FTTx
- Telecommunication networks
- Internal short links
- Ideal for drop cable and high density applications
- Outside panels, ODFs and wall boxes applications

Features

- Compact size and low weight
- Improved cable management
- Low loss performance
- 900um tails
- Up to 144 fibres
- Available with various optical connectors
- Available in standard and reduced bend sensitivity OM1, OM2, OM3, OM4 and OS1/OS2 (G.652.D, G.657.A1) fibre
- LSZH, OFNP or OFNR jacket option
- 100% Factory terminated and tested

Multi Fibre Assemblies

Specifications

ELEMENT	CHARACTERISTIC
Fibre	G.652D, G.657A1, OM1, OM2, OM3, OM4
Tail Dimensions	900µm Simplex Tails Staggered
Terminations	LC, SC, ST, FC, E2000
Cable Construction	Double Jacket 12-24 Core Micro Cable
Cable Diameter	24 Core Max 4.5 ± 0.3mm
Crush Resistance	1000N/100mm
Cable Tensile Strength	(Short/Long) 400N/150N
Cable Strength Member	Aramid
Storage Temperature	-20 ~ +60°C
Installation Temperature	-5 ~ +50°C
Operating Temperature	-20 ~ +60°C
Tail Protection	Crush Resistance tube OD Max 25mm (24 x 900µm), RPS Reusable Sock End A (Assembly length above 20 meters)
Gland	PG 13.5 End A/B (24 x 900µm)
Packaging	Length ≤100mtr: HD Bag Length >100mtr: Drum

Connector Performance

OPTICAL PERFORMANCE*	MM PREMIUM	MM STANDARD	SM PREMIUM	SM STANDARD	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	0.25dB	0.15dB	0.25dB	IEC 61300-3-4
Ave/Master	0.08dB	0.15dB	0.12dB	0.18dB	IEC 61300-3-4
Ave/Random	0.10dB	0.20dB	0.12dB	0.18dB	IEC 61300-3-34
RL (Min Acceptance)	NA	NA	55/65**	55/65**	IEC 61300-3-6

*Connector Performance table does not refer to E2A terminations. **UPC/APC

Cable Performance

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient (dB/km)	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm) ≤0.34 Typ (1310nm) ≤0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≤ 200 (850nm) ≤ 500 (1300nm)	≤ 500 (850nm) ≤ 500 (1300nm)	≤ 1500 (850nm) ≤ 500 (1300nm)	≤ 3500 (850nm) ≤ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	N/A	N/A	≤ 2000 (850nm)	≤ 4700 (850nm)

Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- ISO/IEC 60793 and ISO/IEC 60794
- ISO/IEC 61753, IEC 61754 and IEC 61755
- ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

P
Fibre Pre-terminated Cable

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1

Cable Type	
M9	Micro Cable with 900µm tails LSZH

Fibre Count	
12	12
24	24
48	48
72	72
96	96
144	144

+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

+

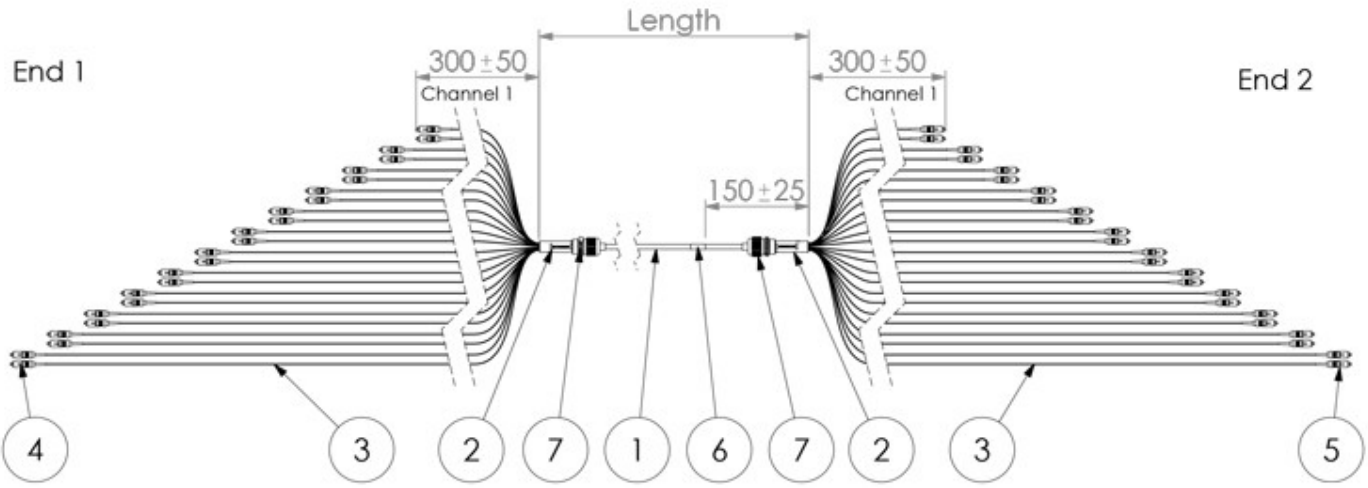
Extra Options	
-	LSZH
R	OFNR
P	OFNP

Example:

P-0000A1M9144-100 – LC/UPC – LC/UPC 144 Core Pre-terminated Micro Cable with 900µmTails, Singlemode G.657.A1 100m

Multi Fibre Assemblies

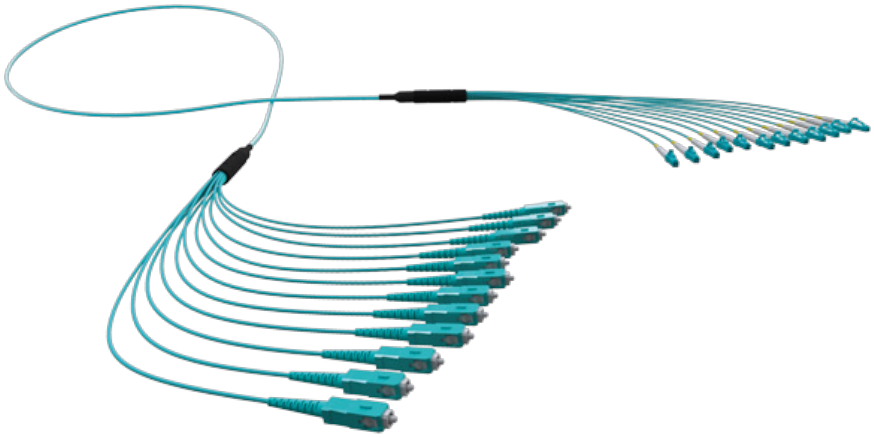
Technical Drawing



No.	Description	Qty.
1	4.5mm Double Jacketed Micro Cable (See Sheet 2)	1
2	Ø15mm Breakout Module	2
3	900µm Solid Coloured Oversleeve Tubing	-
4	900µm Connector Assembly End 1 (See Sheet 2)	-
5	900µm Connector Assembly End 2 (See Sheet 2)	-
6	Serial Number Label (Wrap Around)	1
7	PG13.5 Gland	2

Length Tolerances:

-0/+100mm (Length<0.5m)
-0/+150mm (0.5m≤Length<5m)
-0/+200mm (5m≤Length<20m)
±1% (Length≥20m)



Multi-Fibre Nano Cable Assemblies with 2mm Tails

Nano cable pre-terminated assemblies with 2mm tails. They feature high crush resistance and low loss optical performance. These assemblies benefit from a small, compact ruggedised nano cable and they are an ideal solution for drop cable and high density internal applications. The 2mm patch cord style tails secure the optical fibre in applications where the cable is non-protected, ex. outside parch panels, ODFs and wall boxes. The overall small and compact size of these assemblies improves cable management and airflow in rack systems.

Applications

- Data centres
- FTTx
- Telecommunication networks
- Internal short links
- Ideal for drop cable and high density applications
- Front panel/equipment connections

Features

- Compact size and low weight
- Improved cable management
- Low loss performance
- 2mm tails
- Up to 24 fibres
- Available with various optical connectors
- Available in standard and reduced bend sensitivity OM1, OM2, OM3, OM4 and OS1/OS2(G.652.D, G.657A1) fibre
- LSZH jacket
- 100% Factory terminated and tested

Multi Fibre Assemblies

Specifications

ELEMENT	CHARACTERISTIC
Fibre	G.657A1, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable	Nanocable: 12, 24 cores MAX OD: 12 cores 3mm, 24 cores 5mm Material: PA12 (LSZH) Colour: Black, Yellow, Aqua
Packaging	Length ≤100mtr: HD Bag Length >100mtr: Drum
Operating Temperature	-40 ~ +70°C (GR326)
Installation Temperature	-10 ~ +70°C (GR326)

Connector Performance

	MULTIMODE	SINGLEMODE
IL Average Standard	0.15dB	0.18dB
IL Max Standard	0.30dB	0.30dB
IL Average Premium	0.08dB	0.12dB
IL Max Premium	0.15dB	0.15dB
Return Loss	N/A	>55/65dB (UPC/APC)

Fibre Performance

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient (dB/km)	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm) ≤0.34 Typ (1310nm) ≤0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	N/A	N/A	N/A	≥ 4700 (850nm)

Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- ISO/IEC 60793
- ISO/IEC 61753, IEC 61754 and IEC 61755
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

P
Fibre Pre-terminated Cable

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

+

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1

Cable Type	
N2	Nano Cable Rugged with 2mm tails LSZH

Fibre Count	
12	12
24	24

+

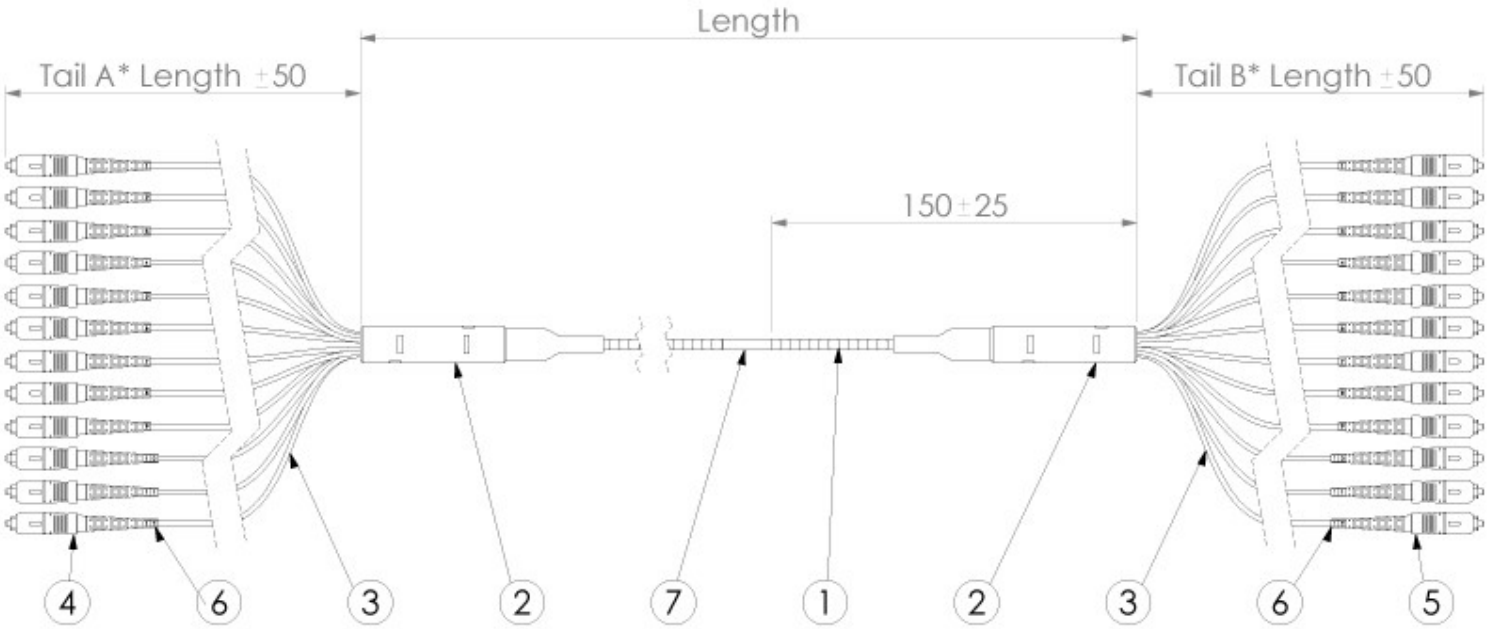
Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

Example:

P-0000A1N212-100 – LC/UPC – LC/UPC 12 Core Pre-terminated Nano Ruggedised Cable with 2mm Tails, Singlemode G.657.A1 100m

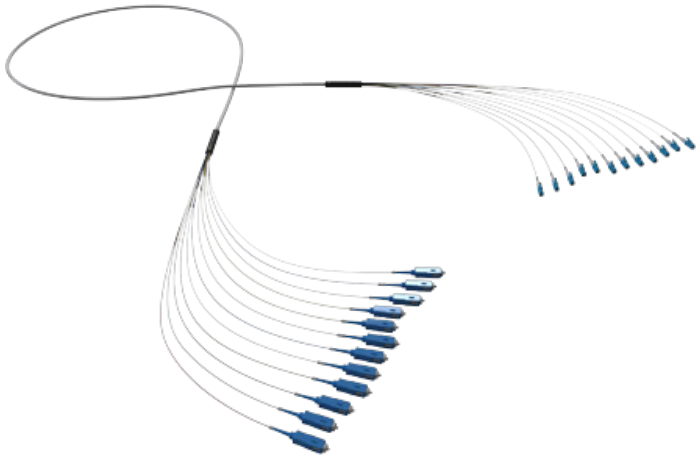
Multi Fibre Assemblies

Technical Drawing



1. **Ø3mm Miniflex 12 Fibre LSZH Cable**
2. Ø15mm Ruggedised Breakout Module
3. 2mm Furcation Tubing
4. Connector Assembly - End 1
5. Connector Assembly - End 2
6. **Channel Identification Marker (C-Clip)**
7. Serial Number Label (Wrap Around)

* Typical tail length: 1 metre



Multi-Fibre Nano Cable Assemblies with 900um Tails

Nano cable pre-terminated assemblies with 900um tails. They feature high crush resistance and low loss optical performance. These assemblies benefit from a small, compact ruggedised nano cable and they are an ideal solution for drop cable and high density internal applications.

Applications

- Data centres
- FTTx
- Telecommunication networks
- Internal short links
- Ideal for drop cable and high density applications
- Inside panels, ODFs and wall boxes applications

Features

- Compact size and low weight
- Improved cable management
- High crush resistance
- Low loss performance
- 900um tails
- Up to 24 fibres
- Available with various optical connectors
- Available in standard and reduced bend sensitivity OM1, OM2, OM3, OM4 and OS1/OS2 (G.652.D, G.657.A1) fibre
- 100% Factory terminated and tested

Multi Fibre Assemblies

Specifications

ELEMENT	CHARACTERISTIC
Fibre	G.657A1, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable	Nanocable: 12, 24 cores MAX OD: 12 cores 3mm, 24 cores 5mm Material: PA12 (LSZH) Colour: Black, Yellow, Aqua
Packaging	Length ≤100mtr: HD Bag Length >100mtr: Drum
Operating Temperature	-40 ~ +70°C
Installation Temperature	-10 ~ +70°C

Connector Performance

	MULTIMODE	SINGLEMODE
IL Average Standard	0.15dB	0.18dB
IL Max Standard	0.30dB	0.30dB
IL Average Premium	0.08dB	0.12dB
IL Max Premium	0.15dB	0.15dB
Return Loss	N/A	>55/65dB (UPC/APC)

Fibre Performance

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient (dB/km)	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm) ≤0.34 Typ (1310nm) ≤0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max(1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	N/A	N/A	≥2000 (850nm)	≥ 4700 (850nm)

Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- ISO/IEC 60793
- ISO/IEC 61753, IEC 61754 and IEC 61755
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

P
Fibre Pre-terminated Cable

Connector A	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Connector B	
00	LC
01	LCA
02	SC
03	SCA
04	ST
05	FC
06	FCA
07	E2
08	E2A

Fibre Type	
9	G.652.D
1	OM1
2	OM2
3	OM3
4	OM4
A1	G.657.A1

Cable Type	
N9	Nano Cable Rugged with 900µm tails LSZH

Fibre Count	
12	12
24	24
48	48
72	72
96	96
144	144

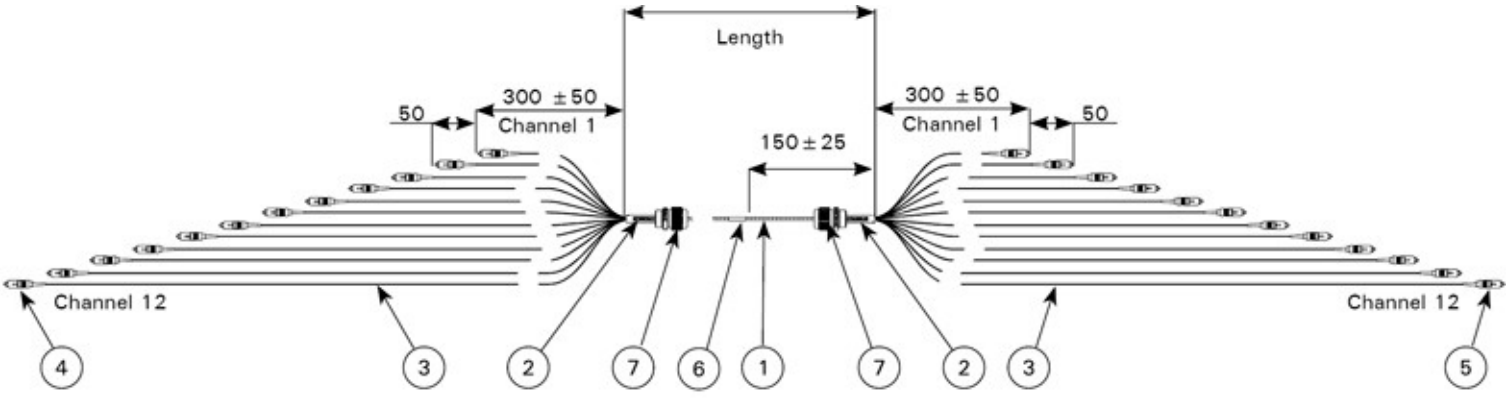
+

Length	
01	1m
02	2m
03	3m
05	5m
10	10m
...	...
xx	Specify

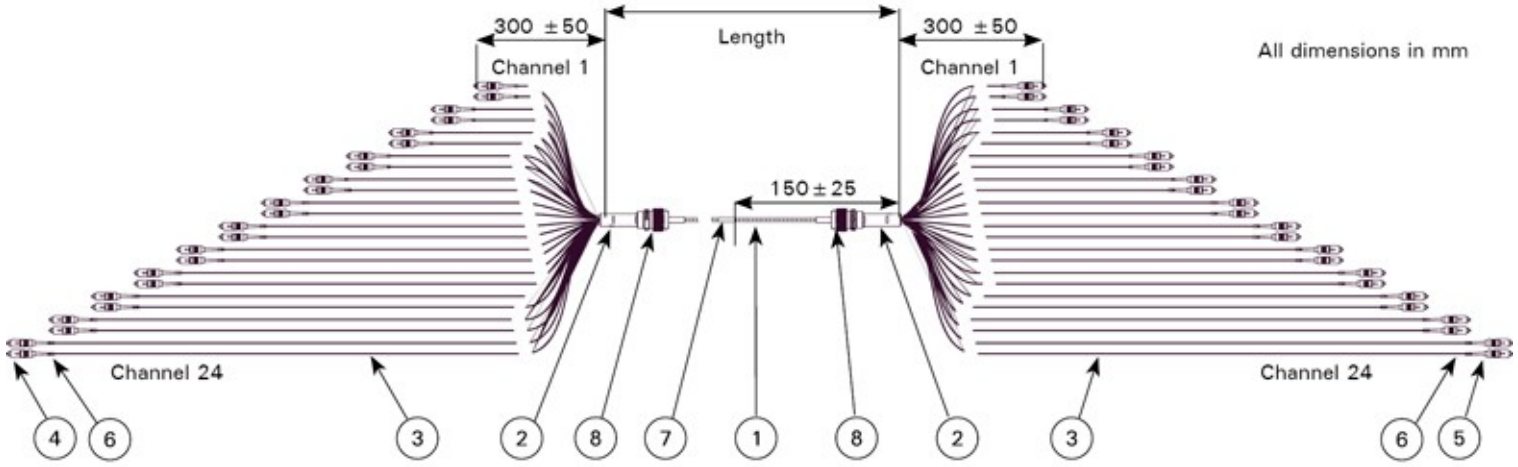
Example:

P-0000A1N9144-100 – LC/UPC – LC/UPC 12 Core Pre-terminated Nano Ruggedised Cable with 900µm Tails, Singlemode G.657.A1 100m

Technical Drawing



1. Ø3mm Nano 12 Fibre LSZH Cable
2. Ø9mm Breakout Module
3. 900µm Solid Coloured Over Sleeve Tubing
4. 900µm Connector Assembly - End A
5. 900µm Connector Assembly - End B
6. Serial Number Label (Wrap Around)
7. PG13.5 Gland

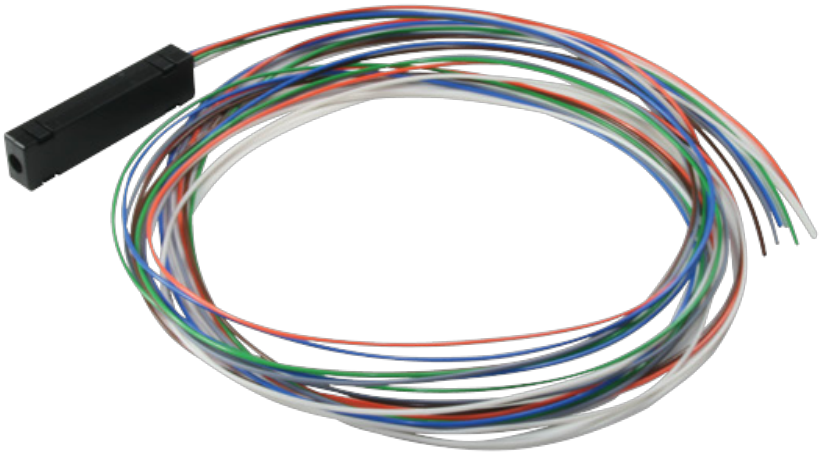


1. Ø5mm Nano 24 Fibre LSZH Cable
2. Ø15mm Breakout Module
3. 900µm Solid Coloured Over Sleeve Tubing
4. 900µm Connector Assembly - End A
5. 900µm Connector Assembly - End B
6. Channel Identification Marker (C-Clip)
7. Serial Number Label (Wrap Around)
8. PG13.5 Gland

Optical Fibre Assemblies

Fan Out Kits

Fanout Kits



Fan Out Kits

6 and 12 fibre indoor buffer tube fan-out kits 1.2m, designed for the termination of 6 and 12 fibre loose tube cables. They feature an easy-to-install 900µm fan -out colour coded assembly, ideal for the termination of field installable connectors.

Applications

- Internal/External applications
- Field termination of loose tube cables into indoor cross-connects

Features

- 900µm tails
- Bend radius protection
- Coloured fan-out tubing
- Easy-to-install and time saving solution
- Compact design
- Cost effective solution
- Makes loose tube fibre easier to work with

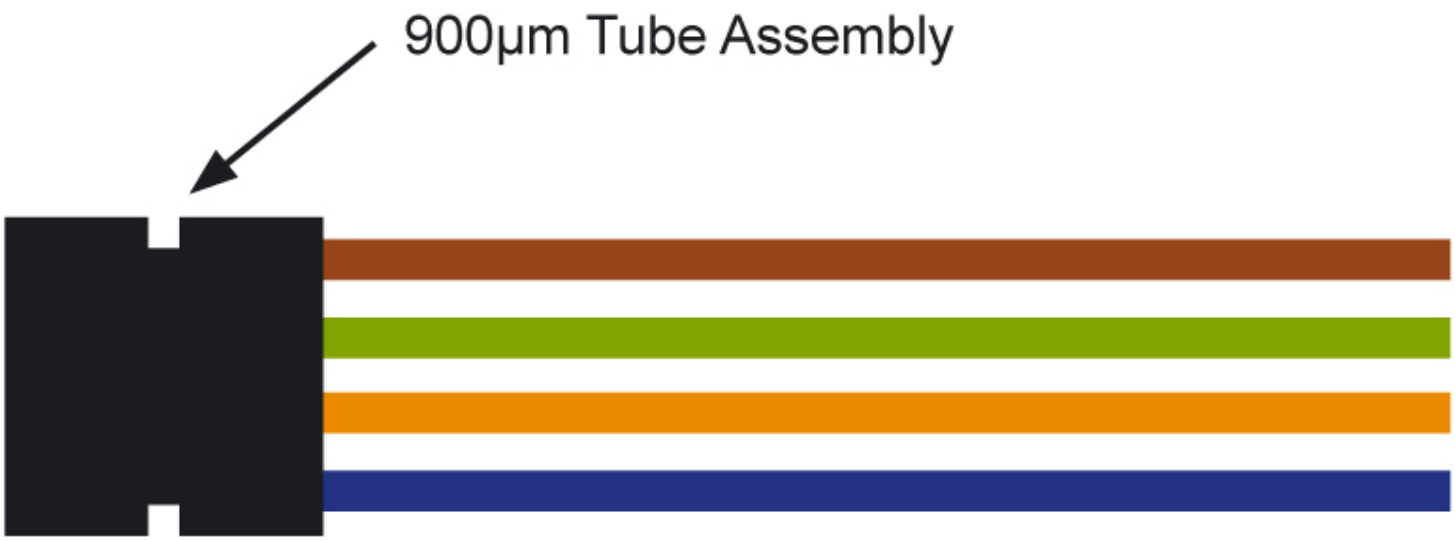
Specification

TUBLING SPECIFICATION	
I.D	0.5 +/- 0.05mm
O.D	0.9 +/- 0.05mm
Max Tensile Load	45N
Min Bend Radius	13mm
Crush Resistance	52N/cm Max
Temperature Range	-45°C to +85°C
Pulling Element	Rope Attached to Aramid

Ordering Information

DESCRIPTION	PART NO
Fan Out Kit Loose Tube. 6 Fibre 1.2m	LTFOK12-06
Fan Out Kit Loose Tube. 12 Fibre 1.2m	LTFOK12-12

Technical Drawing



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