THE FOSS SYSTEM ™

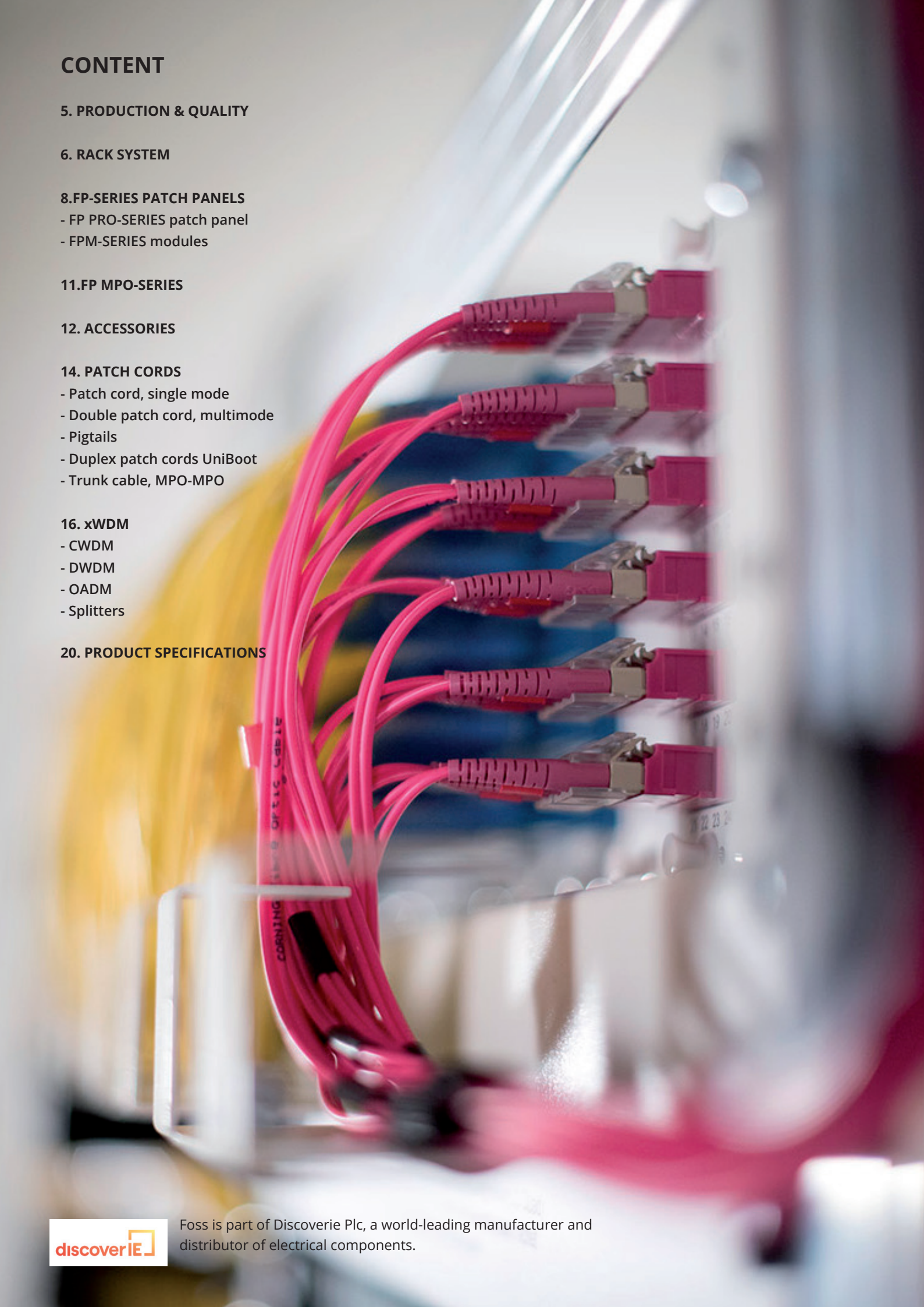
CONNECTIVITY. ENGINEERED.

Racks, patch panels, MPOs, patch cords and
cables, all tried and tested under tough nordic conditions.
Powering critical industries like telecom, offshore and the military.

foss

www.fossfiberoptics.com

CONTENT



Foss is part of Discoverie Plc, a world-leading manufacturer and distributor of electrical components.

OUR PHILOSOPHY
YOUR BENEFIT.

At Foss we have delivered fiber-optic solutions and built fiber-optic infrastructure since 1984. From the very beginning, locally produced products have been at the heart of our business. It is a philosophy and practice that enables us to deliver faster than international players and enables us to tailor the solutions to your needs. At Foss you can always be rest assured that you will get high-quality solutions based on long-life components. This ensures your investments - and meets future bandwidth needs.

We supply a wide range of industries, with Telecom being our largest business sector. Through the years we have supplied equipment to all the Norwegian telecom operators. In recent years we have expanded our market to include industries such as railway, offshore installations and military.

Today, totalling more than 120 employees with offices and production capacity in Norway and Slovakia, we can offer 2200 square meters of production facilities enabling a production capacity of more than 1 million connector terminations annually.


foss

PRODUCTION AND QUALITY CONTROL

Production in Norway and Slovakia places high focus on efficiency without impacting quality. Having theselocal production facilities gives us full control over quality processes, while also enabling us to offer our customers flexibility with regards to their ability to deliver custom solutions on-time, which otherwise would not be possible.

We terminate single and multi-mode fiber with most standardized contacts such as FC, SC, ST, LC, E2000, MT-RJ and DIN. In addition, we have complete solutions for critical environments in defense and industry based on lensed contacts and fiber optic field cables. We supply pre-terminated cables or fiber shells mounted in panels, in fiber cabinets, wall boxes etc.

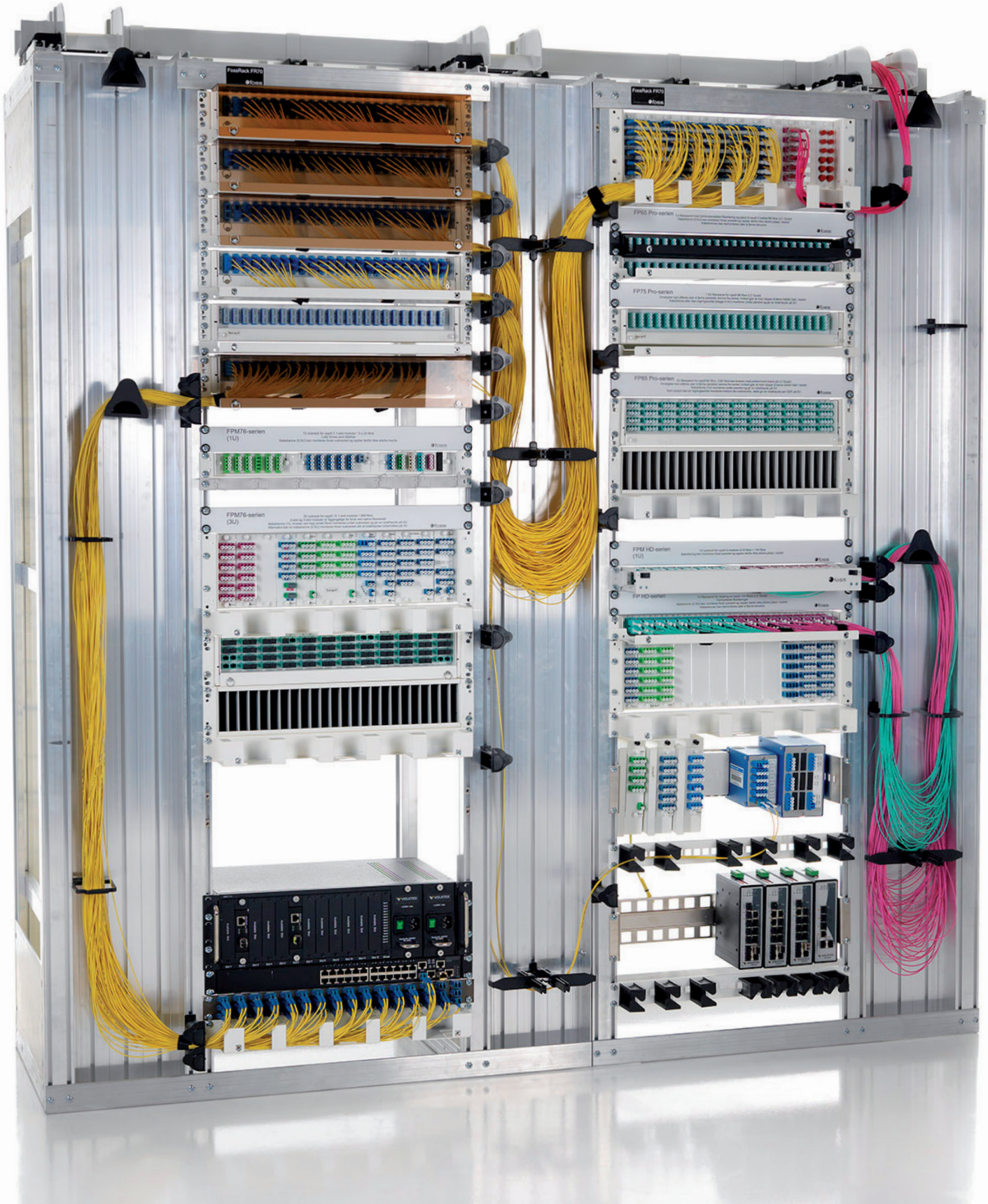
The advantage of such factory-mounted solutions is that the work is done in a controlled environment by trained installers, and that the products are tested before they are sent out.

In addition to standard products, we can offer customized products or products made according to the customer's wishes and needs.

All products are tested according to international standards before they are sent to customers.

RACK

Foss-rack is designed for durability, easy transportation, installation, scaling and management. This multi-purpose rack comprises a lightweight aluminum frame with a variety of accessories for the termination of optical fibres. The Foss-rack system is affordable with low to virtually zero maintenance costs.

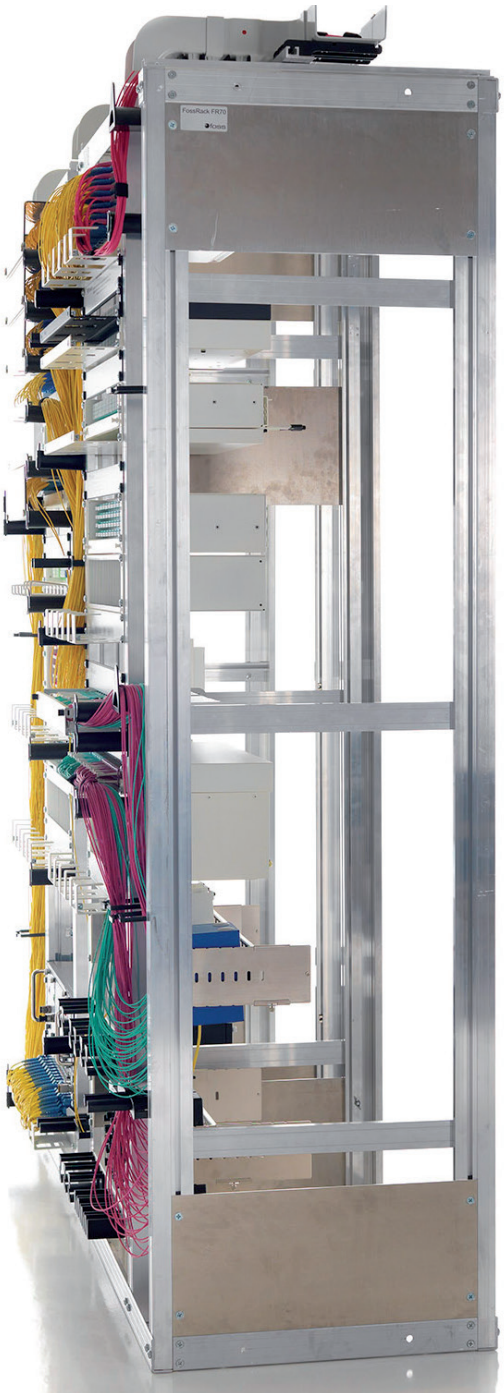


FOSS FP 70

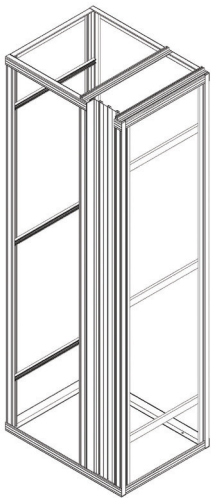
The multi-purpose rack comprises a lightweight aluminum frame with a variety of accessories for the termination of optical fibres.

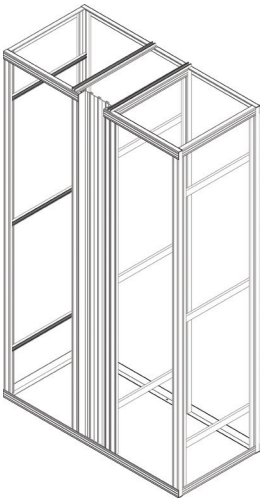
The rack allows for effective installation and management of cables, pigtails and patch cords. The rack can be set up as side by side sections or optionally back to back. Both wall-mounted and stand-alone versions are available. Integrated vertical ducts simplify routing and storage of patch cords.

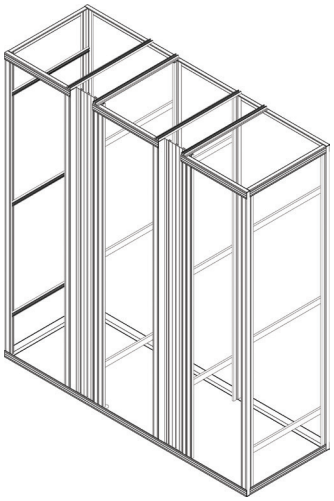
The rack is easy to assemble and delivered flat packed and divided in several packages.

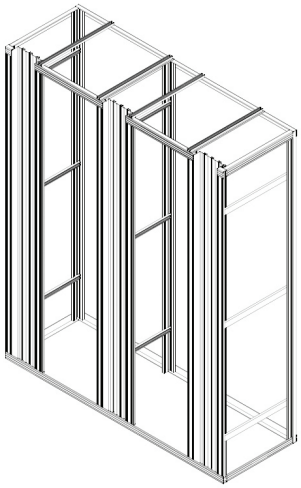


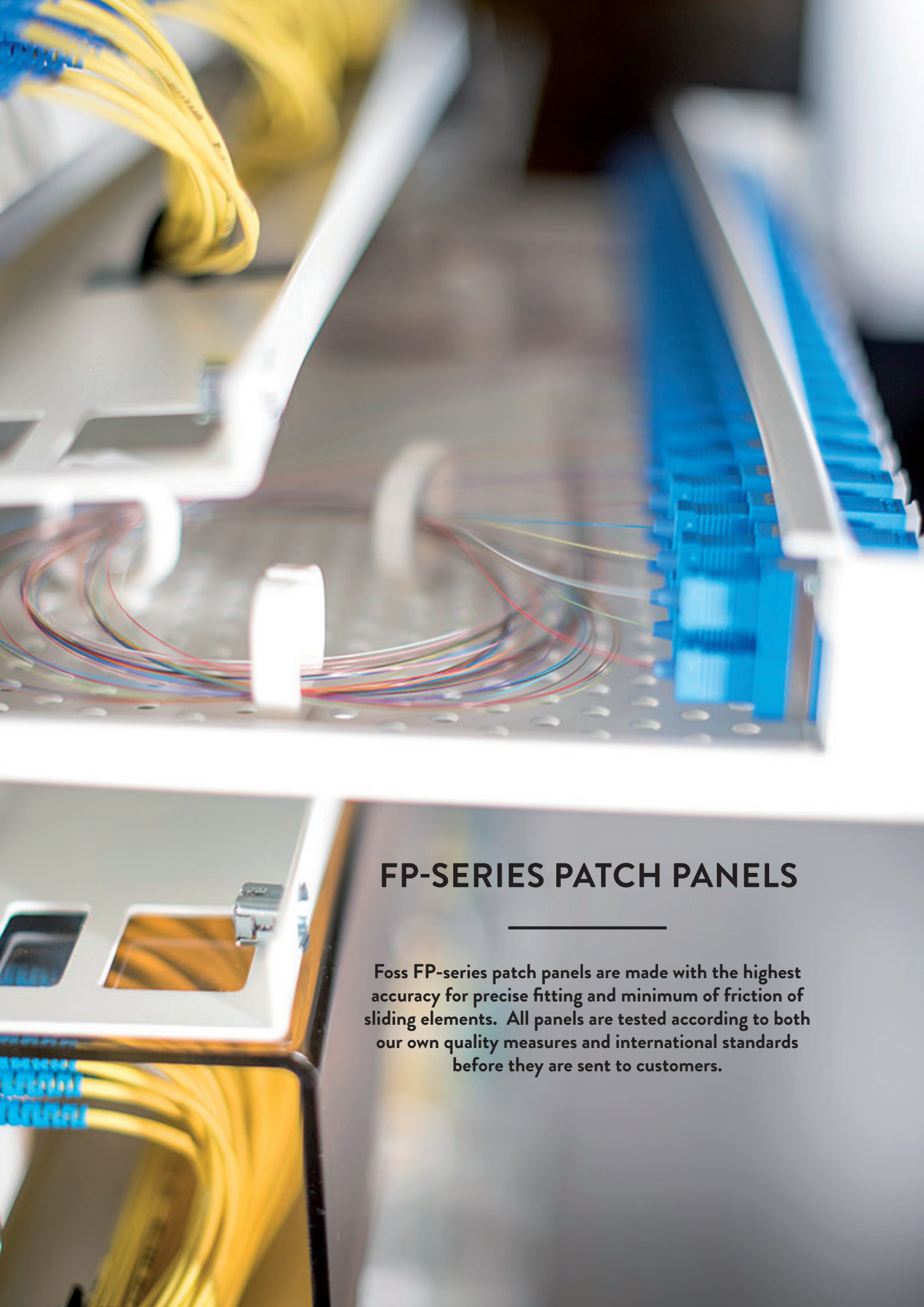
- 19” aluminum frame-work
- Side by side mounting
- Back to back solutions
- Vertical side ducts
- Top mounted ducts
- Wall mounted or stand-alone











FP-SERIES PATCH PANELS

Foss FP-series patch panels are made with the highest accuracy for precise fitting and minimum of friction of sliding elements. All panels are tested according to both our own quality measures and international standards before they are sent to customers.

FP PRO-SERIES PATCH PANEL

The FP-PRO range of patch panels are available in three different heights, 1U, 1.5U and 2U.

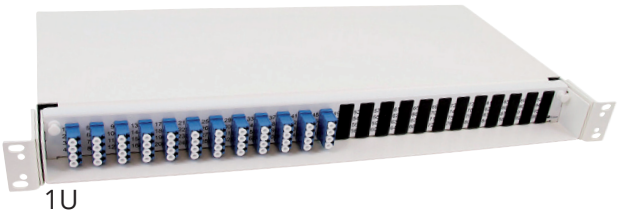
The 1U patch panel is targeting the high density datacom networks and offers up to 144 LC terminations.

The 1.5U and 2U panels are designed for the telecom networks and include a drawer for easy access to the splicing and fibre storage area.

- White aluminium

Delivered with:

- adapters
- adapters and pigtails
- pre-terminated cable



1U

1.5U

2U

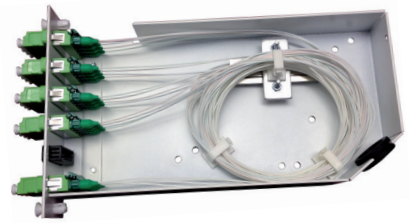
FPM-SERIES MODULES

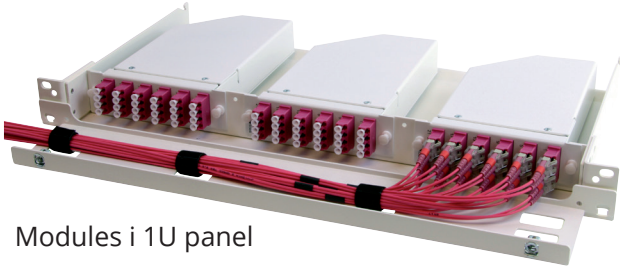
The FPM-series comprises a 1U or 3U frame with pluggable modules. The 1U frame can hold 3 modules, the 3U can hold 12. This gives a total capacity of 72 or 288 LC terminations.

- White aluminium
- 3 modules in 1U frame or 12 modules in 3U frame

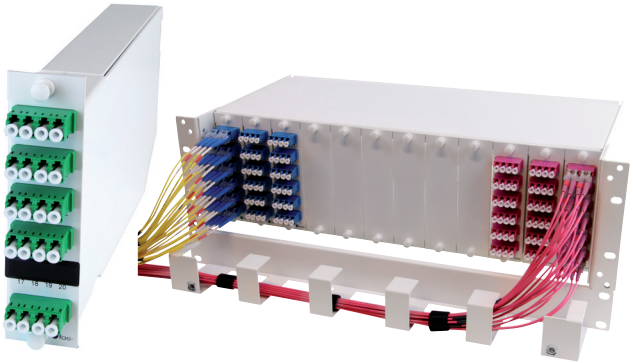
Delivered with:

- adapters
- adapters and pigtails
- pre-terminated cable





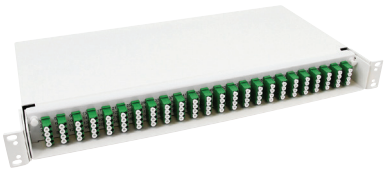
Modules i 1U panel



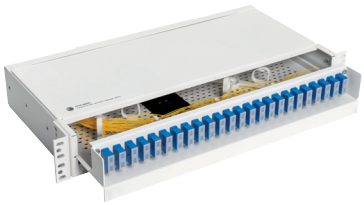
Modules in a 2U panels

PATCH PANEL CONFIGURATION

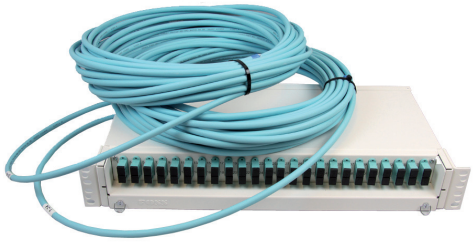
All panels in the FP PRO and FPM series can be delivered in three different configurations:



WITH ADAPTERS
Supplied with mounted adapters and installation kits.



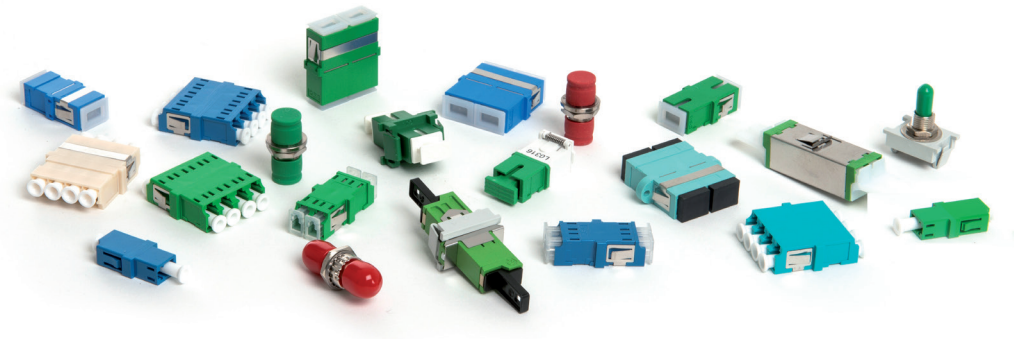
WITH PIGTAILS
Supplied with mounted adapters, pigtails and installation kits.



WITH CABLE
Supplied with pre-assembled cable of the desired type and length.

PATCH PANEL ADAPTERS

The FP PRO and FPM series are offered with most types of adapters,all utilising a high quality zirconia guide sleeve.



PATCH PANEL PRE-CONNECTED INDOOR / OUTDOOR FIBER-OPTIC CABLE

Cables for combined indoor/ outdoor use. The cables are particularly well suited as introduction lead cable from the last connection box to the ODF, and for area cabling. It comes with both single mode and multi-mode fiber.

- **In/outdoor fibre optic cable AXXI is commonly used for area cabling (between buildings) and installation on cable bridges.**
- **In/outdoor fibre cable with loose cladding QXXI is usually used as an entry cable and for area cabling.**
- **Indoor cable with fixed cladding AXAI is used as lead cable and structured cabling.**

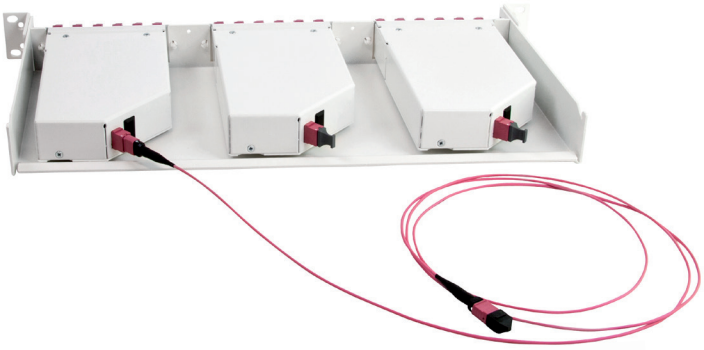
	FEATURES	NO. OF FIBRES	LOOSE TUBE/TIGHT BUFFER	DIAMETER	**DIAMETER 24-FIBRES**	STRENGTH MEMBER	WATER TIGHTNESS	OPERATIONAL TEMP. (°C)	CPR
QXAI HD	Ultra-compact cable for data centres.	12 - 144	Loose	5.1 - 9	6.1	Aramid yarn	No	-10 - 70	Dcas2d2a1
QXAI MT	Cable for backbone, drop and access.	2 - 24	Loose	7.5 - 8	8	Glass yarn	Swellable materiale + gel-filled tubes	-30 - 70	Eca
AXAI	Well suited for indoor cabling. May be used for short lengths in outdoor ducts, e.g. to first splice closure.	2 - 24	Tight	4.6 - 8.5	8.5	Glass yarn	Swellable materiale	-40 - 70	Dca-s2d2a1
AXXI	Well suited for outdoor cabling between buildings. May also be used indoor.	4 - 24	Tight	9.6 - 11.3	11.3	2 FRP-rods in jacket	Swellable materiale	-40 - 70	Eca
QXXI	Suited for cabling between outdoor splice closure and indoor ODF.	12 - 144	Loose	10.5 - 15	10.5	Centre FRP-rod	Swellable materiale + grease-filled tubes	-40 - 70	Eca

FP MPO-SERIES

The MPO to LC plug and play solutions are offered as pluggable modules for a 1U or 3U frame.

The 3U solution has a capacity of 288 connections, the 1U offers 72. All LC connectors are presented at the front, MPO at the rear. Trunk cables are available with 12 or 24 fibers and are delivered in customized lengths.

The system can be specified with single-mode fibers or multi-mode category OM-3 and OM-4.



- LC at the front
- MPO12(M) or MPO24(M) at the rear
- Plug and play
- Single mode, multi-mode 50/125 OM-3 and OM-4

ACCESSORIES

The growth in optical fiber communication has led to an increased number of optical cables in the ODF. To preserve the intrinsic high quality of the optical fibres, a range of accessories are available. These include bend limiters to avoid critical bend diameters, horizontal cable guides to lead patch cords either side of the rack, plastic covers to avoid accidental snagging of connectors and many others.

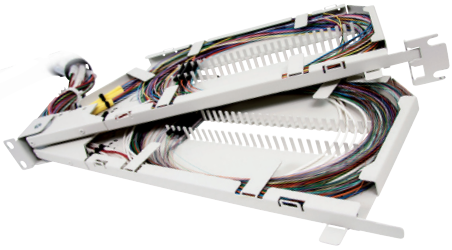
ACCESSORIES RACK

CABLE DISTRIBUTOR
This compact distributor simplifies this function and offers a quick, secure and flexible solution.

ROUTING GUIDE
Click-in mount onto the vertical cord guide's side grooves,keeping cords in securely in their place.

MANDREL
A click-in mount to the post beside the ODF to avoid tight bends on patch cords.

LEG, ADJUSTABLE
Enables easy adjustment of the rack to adapt to uneven floors.



SPLICE MODULE 19"
Using splice cassettes in 19" rack relocates the splicing of optical fibres from the traditional splice enclosure to the ODF-rack.

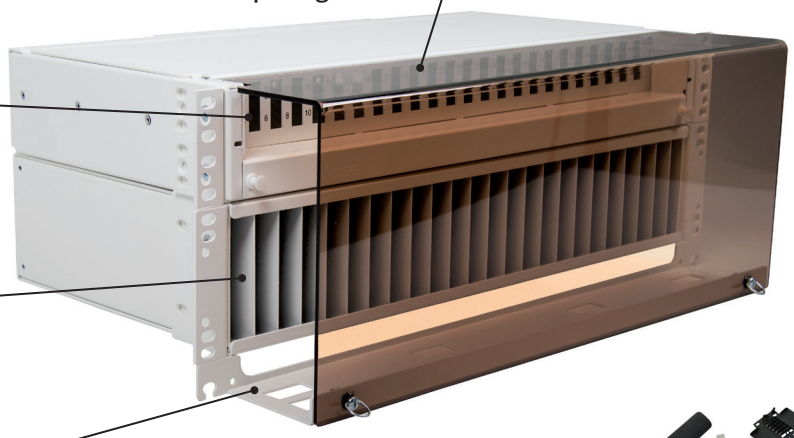
RACEWAY, TOP
Guides patch cords between sections that are located apart from each other.

CABLE LADDER
Used for routing of cables and tubes.

ACCESSORIES ODF

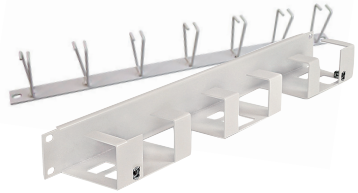
BLIND PLUG
Blind plugs for use in panels with holes for simplex SC adapters and duplex LC adapters.

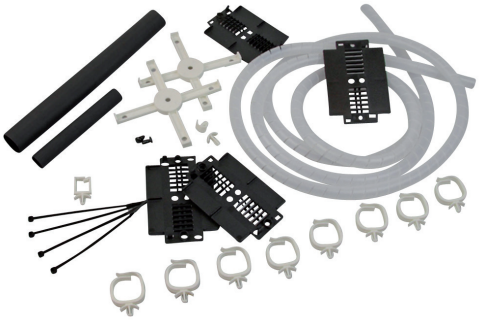
COVER
In order to protect connectors and patch cords against accidental damage, a cover is available in bronze coloured plexi-glass.



STORAGE UNIT
The storage unit is mounted under panel type FP70 and FP80. Used for storing excess lengths of patch cords.

CABLE GUIDE
The cable guide is used with panel for guiding patch cords to the side of the cabinet.





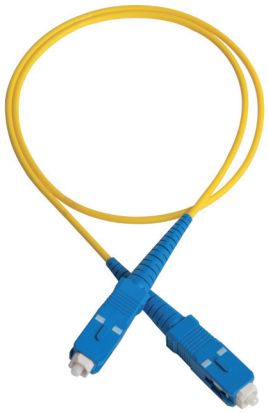
INSTALLATION SET
The installation kit contains the necessary materials for splicing pigtails in the panel.

PATCH CORDS

All Foss patch cords are future proof, extremely precise and of the highest grade. They are available with both single mode and multi-mode optical fibers and are color coded for easy identification. All patch cords are tested according to our own quality measures and international standards before they are sent to customers.

PATCH CORD, SINGLE MODE

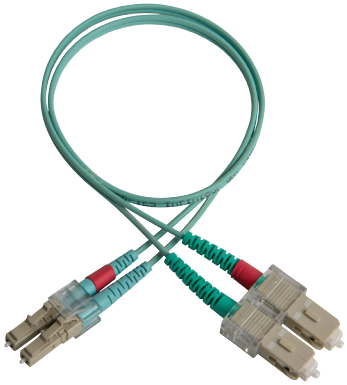
Single mode patch cords are offered both with 1-fiber cable and 2-fiber figure-8 cable. The products are offered in several different configurations with different connectors and lengths. The same product may be delivered in three different colours allowing separation of different services in the ODF.



DOUBLE PATCH CORD, MULTI-MODE

Double multi-mode patch cords are delivered as 2-fiber figure-8 cable. These are offered in several different configurations with different connectors, fibre types and lengths.

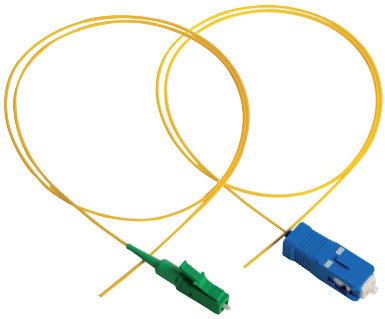
- 2.0 mm 2-fiber figure-8 cable (zip-cord)
- 2.8 mm on request
- Different coloured cable for simple identification



PIGTAILS

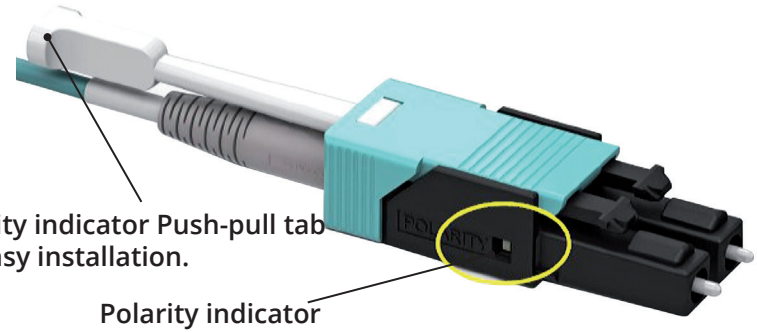
Pigtails for terminating cables with splicing.

- 0.9 mm cable
- Fast cladding (Tight Buffer, TB)
- Tight buffer with easy strip of 100 mm
- Different coloured cable for simple identification



DUPLEX PATCH CORDS UNIBOOT

Demand for increased fibre density requires new high density optical patch cords. Our new patch cords in the UniBoot design, contain 2 fibers in 1 cable and therefore the quantity of cable is cut in half when routing. The construction makes it possible to reverse the polarity from A-B to A-A without the use of tools.

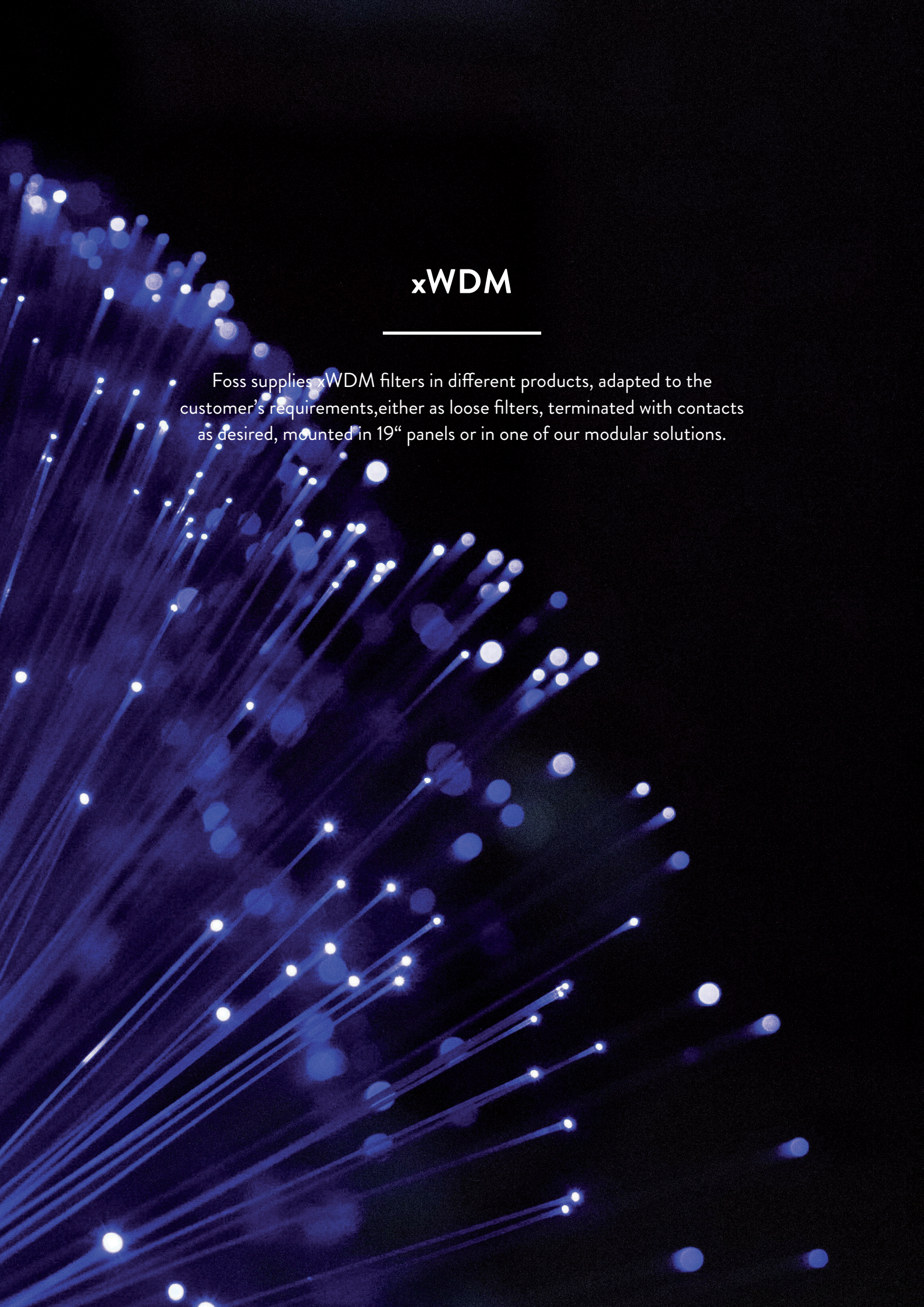


TRUNK CABLE, MPO-MPO

Trunk cables and fan-out cables for indoor use are delivered with 12 or 24 optical fibers. Trunk cables are delivered with MPO at both ends. Fan-outs are used as converters between MPO and LC.

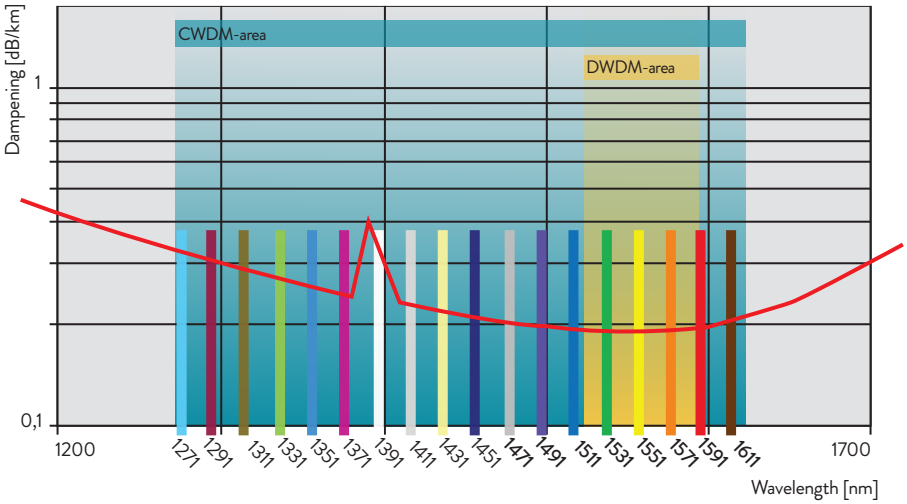
Fan-Out cable, MTP-LC, multimode OM-3.

Single mode Multimode OM3 Multimode OM4



xWDM

Foss supplies xWDM filters in different products, adapted to the customer's requirements,either as loose filters, terminated with contacts as desired, mounted in 19“ panels or in one of our modular solutions.



FIBER OPTIC WAVELENGTH

WDM, Wavelength Division Multiplexing, is the technology that enables multiple parallel signals to be transmitted on one fiber.

With passive filters the light propagates along the fiber in defined wavelength ranges, so called channels. Several wavelengths are combined in the fiber, hence the name wavelength multiplexing. In this way one can significantly increase the capacity of existing fiber installations.

WDM is divided into Coarse WDM and Dense WDM, CWDM and DWDM, which define the spacing in the wavelength range.

CWDM

With CWDM the fiber's wavelength range can be divided into a maximum of 18 channels. CWDM is usually configured over a two-fiber system where a double set of filters and two fibers are used combine, divide and transport the signals each direction.

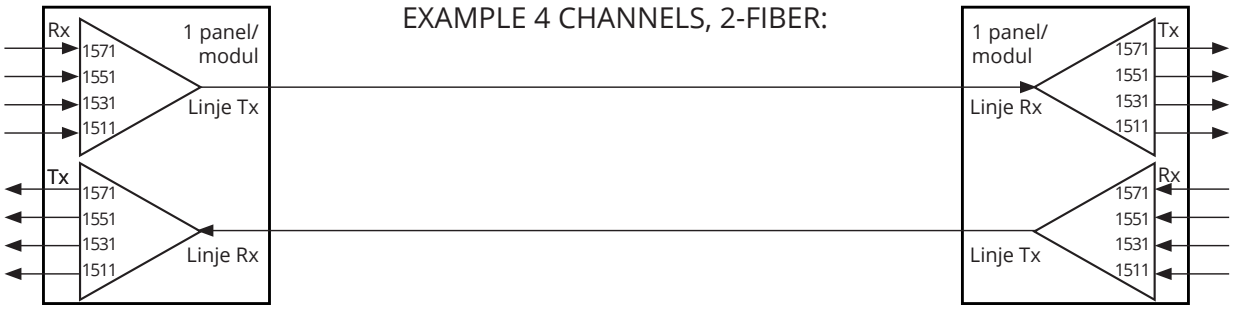
CWDM technology can also be utilized over one fiber. Every other channel in CWDM is used as Tx and Rx. This utilizes the fact that CWDM SFP transceivers transmit (Tx) at a specific wavelength but receive (Rx) all wavelengths. This way, 9 channels can be utilized with standard CWDM SFPs.

- **2-fiber: 4+1, 8+1 or 18 channels**
- **4+1 and 8+1**
  has a broadband channel, for use with 1310nm or later CWDM extension
- **1-fiber: 4 or 9 channels**
- **Plug and play solutions:**
  FPM panel (1U/3U)
  FP Pro panel (1U)
  DIN box, BUDI wall box
  FOSC splicing closures
- **Option: monitor port**

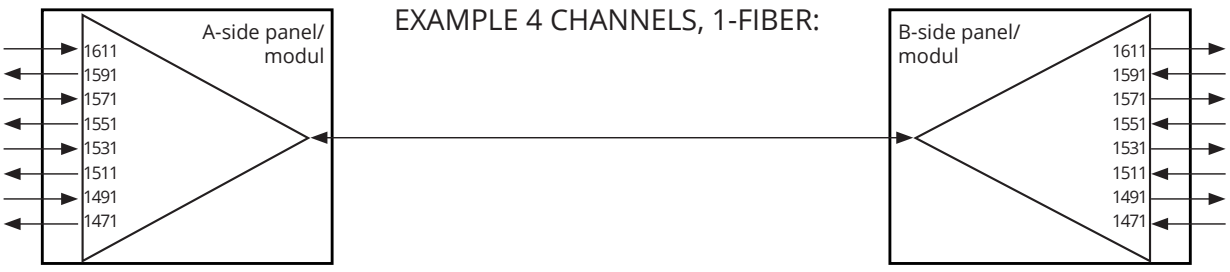
2WL CWDM SFP

- **Unique SFP to multiplex Tx and Rx into one CWDM port**
- **Enables one fiber all the way to the end user**
- **Enables a doubling of channels for 1-fiber and 2-fiber**

EXAMPLE 4 CHANNELS, 2-FIBER:



EXAMPLE 4 CHANNELS, 1-FIBER:



DWDM

Passive DWDM, Dense Wavelength Division Multiplexing, uses similar technology to CWDM, but now even more channels can be utiliyed on on a single fiber pair. 40 and 80 channel systems over two fibers are common. DWDM can also be used to expand a CWDM channel with 8 or 16 DWDM channels. In this way one can expand infrastructure without building large configurations from the beginning.

Active DWDM uses the same building blocks as passive, but now the possibility of amplifiers and transponders are added. Through our trusted partners, we can offer active DWDM solutions tailored your needs.

OADM (OPTICAL ADD-DROP MULTIPLEXER)

Optical Add Drop Multiplexing, or OADM, is a supplement to CWDM. In the configuration example shown, CWDM is configured as a point to point system. With OADM it is possible to remove and/or add wavelengths to the fiber line. In this way, you can build your WDM system by taking out or adding wavelengths at certain locations along the installed fiber.

All FOSS OADM products can be delivered ready for use in the same plug and play solutions as for CWDM; FPM panel (1U/3U), FP Pro panel (1U), DIN box, BUDI wall box and FOSC splicing enclosures.

SPLITTERS

We can provide splitters for many different requirements. You will find plug and play solutions ready assembled in panel and modular boxes. For the FOSC and FIST series, we deliver splitters ready assembled in cassettes.

Splitter Function
A passive splitter distributes the optical signal to several fibers without changing the wavelength. The signal may be sent both ways through the splitter (typically for PON) and may in that way also be used for combining signals on to a fiber. To be able to combine the signals, these must have different wavelengths or be sent at different times (TDM - Time Division Multiplexing) so that they do not corrupt each other.

SPECIFICATIONS

PATCH PANEL

PRODUCT	HEIGHT	H X B X D	CAPASITY	ADAPTER
FP 65	1 U	44 x 19" x 240	144 - LC | 48 - SC, E2000 | 24 -FC, ST	LC, SC, E2000, FC, ST
FP 75	1.5 U	67 x 19" x 240	96 - LC | 48 - SC, E2000 | 24 - FC, ST	LC, SC, E2000, FC, ST
FP 85	2 U	89 x 19" x 240	192 - LC | 96 - SC	LC, SC
FP MPO	1 U	44 x 19" x 240	144 - LC |144 - MPO (backside)	LC, MPO (backside)
FPM	1 U	44 x 19" x 240	72 - LC	LC
FPM	3 U	133 x 19" x 240	288 - LC	LC
FPM MPO	1 U	44 x 19" x 240	72 - LC | 24 - LC per modul	LC, MPO (backside)
FPM MPO	3 U	133 x 19" x 240	288 - LC	LC, MPO (backside)
FPD 76		180 x 57 x 160	24 - LC | 12 - SC, ST	LC, SC, ST
FPD 76, DIN side		180 x 77 x 153	24 - LC | 12 - SC, ST	LC, SC, ST
Wall box Mini		35 x 150 x 110	6 - FC, ST, DIN | 8 - SC, E2000 | 12 - LC	LC, SC, E2000, FC, ST, DIN
Wall box Mini terminated		35 x 150 x 110	16 - LC terminated	LC
Wall box midi		242 x 280 x 68	24 - SC, FC, ST, DIN, E2000 | 48 - LC	LC, SC, E2000, FC, ST, DIN
FOSS24, with lock		300 x 280 x 75	24 - SC, FC, ST, DIN, E2000 | 48 - LC	LC, SC, E2000, FC, ST, DIN

CORDS

	MODE	COLOR	CABLE DIAMETER	CONTACT	POLISH
Pigtail SM	**SM - OS2**	🟡	0,9 mm	LC, SC, E2000, MU, ST, FC	PC, APC
Pigtail MM	**MM - OM-1**	⚫	0,9 mm	LC, SC, E2000, MU, ST, FC	PC
	MM - OM-2	🟠	0,9 mm	LC, SC, E2000, MU, ST, FC	PC
	MM - OM-3	🔵	0,9 mm	LC, SC, E2000, MU, ST, FC	PC
	MM - OM-4	🟣	0,9 mm	LC, SC, E2000, MU, ST, FC	PC
Patch cord	**SM - OS2**	🟡🔴🔵	2 x 4 mm or 2,8 x 5,6 mm	LC, SC, E2000, MU, ST, FC	PC, APC
Double patch cord	**SM - OS2**	🟡🔴🔵	2 x 4 mm or 2,8 x 5,6 mm	LC, SC, E2000, MU, ST, FC	PC, APC
	MM - OM-1	⚫	2 x 4 mm or 2,8 x 5,6 mm	LC, SC, ST, FC	PC
	MM - OM-2	🟠	2 x 4 mm or 2,8 x 5,6 mm	LC, SC, ST, FC	PC
	MM - OM-3	🔵	2 x 4 mm or 2,8 x 5,6 mm	LC, SC, ST, FC	PC
	MM - OM-4	🟣	2 x 4 mm or 2,8 x 5,6 mm	LC, SC, ST, FC	PC
Uniboot cord	**SM - OS2**	🟡	2 mm	LC	PC, APC
	MM - OM-3	🔵	2 mm	LC	
	MM - OM-4	🟣	2 mm	LC	
Subscriber patch cord	**SM - OS2**	⚪*	2,8 mm	LC, SC	PC, APC

	COLOUR	MODE	NUMBER OF MODULES	CABLE ENTRANCES	MOUNTING
	white, black	SM, MM			19” rack, ETSI
	white	SM, MM			19” rack, ETSI
	white	SM, MM			19” rack, ETSI
	white, black	SM, MM			19” rack, ETSI
	white	SM, MM	3		19” rack, ETSI
	white	SM, MM	12		19” rack, ETSI
	white	SM, MM	3		19” rack, ETSI
	white	SM, MM	12		19” rack, ETSI
	white	SM, MM		2 x PG16, 1 included	DIN, wall
	white	SM, MM		3 x PG16, 1 included	DIN, wall
	white	SM, MM		1 x M20, 1 x membrane	wall, DIN (accsessory)
	white	SM, MM		2 x M20, 1 x membrane	wall, DIN (accsessory)
	white	SM, MM		3 x M20, 1 x membrane	wall
	white	SM, MM		8x PG16, 1 x PG29	wall

	TEMPERATURE	INSERTION LOSS @850/1300 nm MM, 1310/1550 nm SM	RETURN LOSS @1310/1550 nm	STANDARD LENGTHS	STANDARD
	-20°C to 60°C	< 0.5 dB	< -45 dB (PC), < -60 dB (APC)	1.5	ITU-T G.657.A1
	-20°C to 60°C	< 0.5 dB (LC, SC, ST og FC)		1.5	
	-20°C to 60°C	< 0.5 dB (LC, SC, ST og FC)		1.5	ITU G.651.1
	-20°C to 60°C	< 0.3 dB (LC og SC)		1.5	ITU G.651.1
	-20°C to 60°C	< 0.3 dB (LC og SC)		1.5	ITU G.651.1
	-20°C to 60°C	< 0.5 dB, < 1.0 dB for ST	< 45 dB (PC) < 60 dB (APC)	1, 2, 3, 5, 8, 10	ITU-T G.657.A1
	-20°C to 60°C	< 0.5 dB, < 1.0 dB for ST	< 45 dB (PC) < 60 dB (APC)	1, 2, 3, 5, 8, 10	ITU-T G.657.A1
	-20°C to 60°C	< 0.5 dB		1, 2, 3, 5, 8, 10	
	-20°C to 60°C	< 0.5 dB		1, 2, 3, 5, 8, 10	ITU G.651.1
	-20°C to 60°C	< 0.5 dB, < 0.3 dB LC og SC		1, 2, 3, 5, 8, 10	ITU G.651.1
	-20°C to 60°C	< 0.5 dB, < 0.3 dB LC og SC		1, 2, 3, 5, 8, 10	ITU G.651.1
	-10°C to 60°C	< 0.5 dB	< 45 dB (PC) < 60 dB (APC)	1, 2, 3, 5, 8, 10	ITU-T G.657.A1
	-10°C to 60°C	< 0.3 dB		1, 2, 3, 5	ITU G.651.1
	-10°C to 60°C	< 0.3 dB		1, 2, 3, 5	ITU G.651.1
	-40°C to 60°C	< 0.5 dB	< 45 dB (PC) < 60 dB (APC)	0.2, 0.3, 0.5, 1, 2, 3, 5	ITU-T G.657.A2

***** UV-stabilised FR-LSZH

● = aqua ○ = white ● = yellow ● = red ● = black
● = grey ● = orange ● = violet ● = blue

SPECIFICATIONS

CABLES

DESCRIPTION	PRODUCT	DIAMETER	MODE	COLOR
Tight buffer in/outdoor	AXAI	5 mm - G4, 6 mm - G8, 6.5 mm- G12, 8 mm - G24	SM - OS2	
	AXAI	5 mm - G4, 6 mm - G8, 6.5 mm- G12, 8 mm - G24	MM - OM-1	
	AXAI	5 mm - G4, 6 mm - G8, 6.5 mm- G12, 8 mm - G24	MM - OM-2	
	AXAI	5 mm - G4, 6 mm - G8, 6.5 mm- G12, 8 mm - G24	MM - OM-3	
	AXAI	5 mm - G4, 6 mm - G8, 6.5 mm- G12, 8 mm - G24	MM - OM-4	
	AXXI	9.6 mm - G4, G8, 9.9 mm - G12, 10.8 mm - G24	SM - OS2	
	AXXI	9.6 mm - G4, G8, 9.9 mm - G12, 10.8 mm - G24	MM - OM-1	
	AXXI	9.6 mm - G4, G8, 9.9 mm - G12, 10.8 mm - G24	MM - OM-2	
	AXXI	9.6 mm - G4, G8, 9.9 mm - G12, 10.8 mm - G24	MM - OM-3	
	AXXI	9.6 mm - G4, G8, 9.9 mm - G12, 10.8 mm - G24	MM - OM-4	
Loose tube	QXXI	10.5 mm - G12, G24, G48 - 12.0 mm - G96	SM - OS2	
Tight buffer, harsh environments	AICI	8.2 mm - G4, 9.4 mm - G8, 10.3 mm - G12, 12.0 mm - G24	SM - OS2	
	AICI	8.2 mm - G4, 9.4 mm - G8, 10.3 mm - G12, 12.0 mm - G24	MM - OM-1	
	AICI	8.2 mm - G4, 9.4 mm - G8, 10.3 mm - G12, 12.0 mm - G24	MM - OM-2	
	AICI	8.2 mm - G4, 9.4 mm - G8, 10.3 mm - G12, 12.0 mm - G24	MM - OM-3	
	AICI	8.2 mm - G4, 9.4 mm - G8, 10.3 mm - G12, 12.0 mm - G24	MM - OM-4	
Loose tube, harsh environments	QFCI	13.5 mm - G4, G8, G12, G24, G48	SM - OS2	
	QFCI	13.5 mm - G4, G8, G12, G24, G48	MM - OM-1	
	QFCI	13.5 mm - G4, G8, G12, G24, G48	MM - OM-2	
	QFCI	13.5 mm - G4, G8, G12, G24, G48	MM - OM-3	

RACK

SECTION	PRODUKTNUMMER	MOUNTING	H X W X D	VERTICAL GUIDE
1	FR701022070	wall	220x79x70	right side
	FR701022070 –2	wall	220x103x70	right, left
	FR701122060	floor	220x79x60	right side
	FR701122060 –2	floor	220x103x60	right, left
2	FR702022070	wall	220x129x70	1
	FR702022070 –2	wall	220x177x70	3
	FR702122060	floor	220x129x60	1
	FR702122060 –2	floor	220x177x60	3
3	FR703022070	wall	220x203x70	2
	FR703022070 –2	wall	220x251x70	4
	FR703122060	floor	220x203x60	2
	FR703122060 –2	floor	220x251x60	4

	INSERTION LOSS @850/1300 nm MM, 1310/1550 nm SM	RETURN LOSS 1310/1550 nm	TEMPERATURE	STANDARD
	< 0.5 dB, < 0.15 dB typical	< 45 dB (PC) < 60 dB (APC)	-40°C to 60°C	ITU-T G.657.A1
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.15 dB typical	< 45 dB (PC) < 60 dB (APC)	-40°C to 60°C	ITU-T G.652.D
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.2 dB typical	< 45 dB (PC) < 60 dB (APC)	-40°C to 60°C	ITU-T G.657.A1
	< 0.5 dB, < 0.15 dB typical	< 45 dB (PC) < 60 dB (APC)	-40°C to 60°C	ITU-T G.652.D
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.15 dB typical	< 45 dB (PC) < 60 dB (APC)	-40°C to 60°C	ITU-T G.652.D
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1
	< 0.5 dB, < 0.2 dB typical		-40°C to 60°C	ITU G.651.1

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RACK

SECTION	PRODUKTNUMMER	MOUNTING	H x W x D	VERTICAL GUIDE
4	FR704022070	wall	220x277x70	3
	FR704022070 –2	wall	220x325x70	5
	FR704122060	floor	220x277x60	3
	FR704122060 –2	floor	220x325x60	5
5	FR705022070	wall	220x351x70	4
	FR705022070-2	wall	220x399x70	6
	FR705122060	floor	220x351x60	4
	FR705122060-2	floor	220x399x60	6
6	FR706022070	wall	220x425x70	5
	FR706022070-2	wall	220x473x70	7
	FR706122060	floor	220x425x60	5
	FR706122060-2	floor	220x473x60	7

THE FOSS SYSTEM™

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