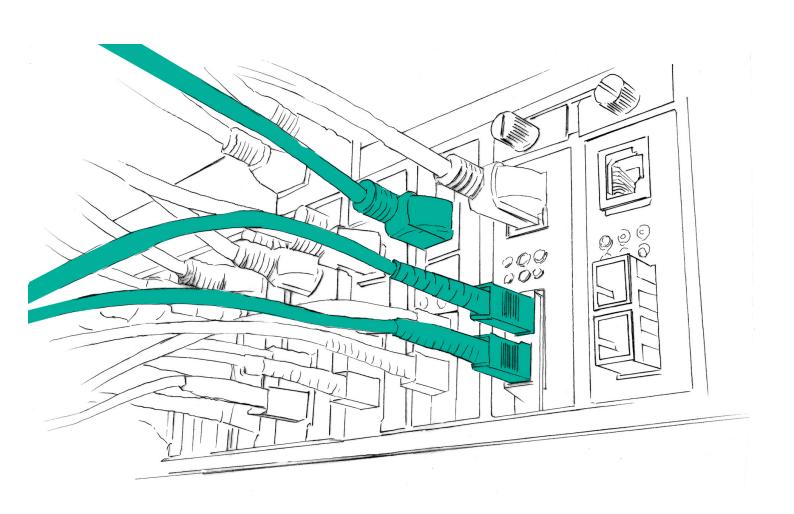


## Passive network technology

**Industry 2021** 





## DOC's passive network technology

Data transmissions are essential for the modern world. Whether your future network is based on optical or electrical signals, we can help you with our wide range of products and passive components.

## This chapter is part of a three series catalogue







#### FTTx products

Fiber to the X stands for communication networks with fiber optic connections all the way to the curb, down to the basement, and into the home

#### **Industrial Networks**

These products are used for networking in industry or, e.g. in ski resorts for access points and require customised solutions for this purpose

Structured cabling

We supply not only twisted pair networks but all products that give you high-speed connections and maximum reliability

#### Content

#### **Industrial networks**

- 1. Fiber optic cables
- 2. Pre-assembled cable
- 3. Splice & breakout box
- 4. Patch cable & pigtails
- 5. Racks
- 6. MPO solutions
- 7. Consumable material



## **Networks for the industry**

Projects for industrial applications are always unique, from special cable applications for internet providers to systems for data centres and network components for ski resorts. We are here to find the right products for your application from our portfolio or develop new solutions.



#### Technology for the industry

Very durable high-speed systems in harsh environments are often associated with special requirements. Network security is also a must these days. Fiber optic technology not only improves speed and capacity, but also security and reliablity.

#### **Product range**

A network usually needs standardized and compatible products. However, sometimes the requirements can be very individual - we are experienced in adapting solutions for every challenge. Download our catalogue or contact us for more information.

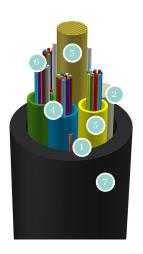




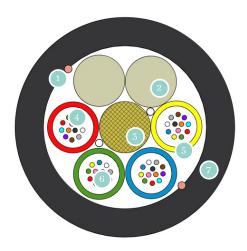
## 1. FO-Minicable

- PE sheath, class Fca
- Can be blown into micro ducts
- 12 576 fibers (selection shown below)
- G.657.A1 fibers with 245μm coating

# Cable cross sections



Type (selection)



Schematic representation: Other color codes and cable types available on request.

96

48

#### Cable design

- Ripcord
- <sup>2</sup> Filler
- 3 FRP
- Gel filling
- 6 Loose tube
- 6 Fiber
- PE sheath

432

576

7							
Structure	4x12	8x12	12x12	16x12	24x12	18x24	24x24
Structure	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE
Diameter [mm]	5.4	6.1	7.9	7.9	9.3	11.4	13.4
Tensile performance [N]	600	800	800	800	1000	1000	1200
Cable weight [kg/km]	26	36	52	52	80	105	140
Crush [N/100mm]	500	500	500	500	500	500	500
Storage temperature [°C]	-30~+70	-30~+70	-30~+70	-30~+70	-30~+70	-30~+70	-30~+70
Installation temperature [°C]	-15~+40	-15~+40	-15~+40	-15~+40	-15~+40	-15~+40	-15~+40
Operating temperature [°C]	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Product-ID G.652.D	LK-MI-PE	LK-MI-PE-UX-[structure]-D-250					
Product-ID G.657.A1	LK-MI-PE	E-UX-[struc	ture]-A1-2	50			

192

144

288

## Pdoduct data & Product-ID

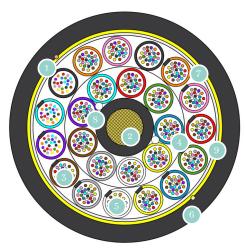
# Cable cross sections

## 1. FO-Outdoor cable

- PE sheath, class Fca
- Fiber optic tube cable with aramid or glass yarns for rodent retardation
- 12 864 fibers (selection shown below)
- G.652.D fibers with 245μm coating



Produkt-ID Glass yarns



Schematic representation: Other color codes and cable types available on request.

#### Cable design

- Ripcord
- 2 FRP
- Gel filling
- 4 Loose tube
- Fiber
- 6 HDPE sheath
- Water-blocking tape
- Water-blocking yarns
- Glass or Aramid yarns

Type (selection)	48	72	96	144	288	432	576
G.							
Structure	4x12	6x12	8x12	12x12	24x12	18x24	24x24
Material outer sheath	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE
Diameter [mm]	9.45	9.45	11.3	13.9	16.2	17.2	19.8
Tensile performance [N]	2500	2500	2500	3000	3000	3000	3000
Cable weight [kg/km]	75	75	95	145	180	225	355
Crush [N/100mm]	1500	1500	1500	1500	1500	1500	1500
Storage temperature [°C]	-30~+70	-30~+70	-30~+70	-30~+70	-30~+70	-30~+70	-30~+70
Installation tempreature [ $^{\circ}$ C]	-15~+40	-15~+40	-15~+40	-15~+40	-15~+40	-15~+40	-15~+40
Operating tempreature [°C]	-20~+70	-20~+70	-20~+70	-20~+70	-20~+70	-20~+70	-20~+70
Produkt-ID Aramid yarns	LK-RO-PE-UA-[structure]-D-250						

## escrip-

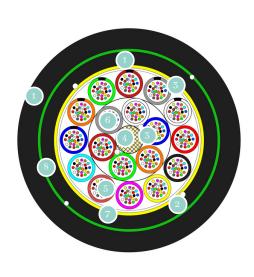
LK-RO-PE-UG-[structure]-D-250

# Cable cross sections

## 1. FO-Outdoor cable with rodent protection

- PE double sheath, class Fca
- Fiber optic tube cable with metal rodent protection
- 12 864 fibers
- G.657.A1 fibers with 245µm coating (LL and 200um also available)





Schematic representation: Other color codes and cable types available on request.

#### Cable design

- PE outer and inner sheath
- 2 Ripcord
- Water blocking yarn and tape
- 4 FRP
- 5 Loose tube with gel filling
- 6 LL-fibers
- 7 Aramid yarn
- Steel reinforcement

Type (selection)	48	72	96	144	288	432	864
Structure	4x12	6x12	8x12	12x12	24x12	36x12	36x24
Material outer sheath	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE
Diameter [mm]	14.6	14.6	15.5	18.4	20.6	23.2	28.2
Tensile performance [N]	2000	2000	3000	4000	4000	4000	4000
Cable weight [kg/km]	175	175	200	270	320	380	540
Crush [N/100mm]	3000	3000	3000	3000	3000	3000	3000
Storage tempreature [°C]	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Installation tempreature [°C]	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Operating tempreature [°C]	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Product-ID with LL-Fiber	LK-RO-PE-UM-[structure]-D-250						

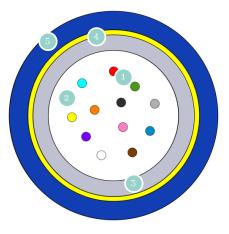


## 1. FO-Universal cable singlemode

- LSZH sheath, class Eca
- Cost-effective and thin cable construction
- 4 24 fiber
- G.657.A1 fiber







Schematic representation: color code according to DIN VDE 0888.

Other color codes and cable types available on request.

#### Cable design

- SM-Fiber
- 2 Gel filling
- 3 Uni tube
- 4 Aramid yarn
- 5 LSZH sheath

Type	4	8	12	24		
Material outer sheath	LSZH	LSZH	LSZH	LSZH		
Diameter [mm]	5.8	5.8	5.8	5.8		
Tensile performance [N]	2000	2000	2000	2000		
Cable weight [kg/km]	40	40	40	40		
Crush [N/100mm]	2000	2000	2000	2000		
Storage temperature [°C]	-40~+60	-40~+60	-40~+60	-40~+60		
Installation temperature [°C]	-30~+40	-30~+40	-30~+40	-30~+40		
Operating temperature [°C]	-30~+60	-30~+60	-30~+60	-30~+60		
Product-ID	LK-UK-LZ-UA-[structure]-A1-250					

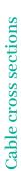
Product data & Product ID

Universal fiber optic indoor/outdoor cables with central loose tubes are used as house entry cables for direct buried or tube laying. It also used as flame retardant indoor riser cables. The central arrangement of the fibers allows a cost-effective and thin cable construction. The cables are UV-resistant, metal-free, tensile proof, halogen-free and flame-retardant.

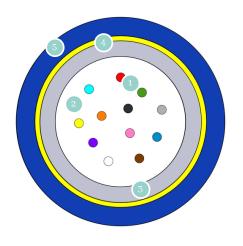


## 1. FO-Universal cable Multimode

- LSZH sheath, class Eca
- Cost-effective and thin cable construction
- 4 24 fiber
- OM3 OM5







Schematic representation: color code according to DIN VDE 0888. Other color codes and cable types available on request.

#### Cable design

- MM-Fiber
- 2 Gel filling
- Uni tube
- Aramid yarn
- 5 LSZH sheath

Туре	4	8	12	24	
Material outer sheath	LSZH	LSZH	LSZH	LSZH	
Diameter [mm]	5.8	5.8	5.8	5.8	
Tensile performance [N]	2000	2000	2000	2000	
Cable weight [kg/km]	40	40	40	40	
Crush [N/100mm]	2000	2000	2000	2000	
Storage temperature [°C]	-40~+60	-40~+60	-40~+60	-40~+60	
Installation temperature [°C]	-30~+40	-30~+40	-30~+40	-30~+40	
Operating temperature [°C]	-30~+60	-30~+60	-30~+60	-30~+60	
Product-ID	LK-UK-LZ-UA-[structure]-[OM3-OM5]				

## Product data & Product ID

Universal fiber optic indoor/outdoor cables with central loose tubes are used as house entry cables for direct buried or tube laying. It also used as flame retardant indoor riser cables. The central arrangement of the fibers allows a cost-effective and thin cable construction. The cables are UV-resistant, metal-free, tensile proof, halogen-free and flame-retardant.

## 2. Pre-assembled cable

- All common connector types available (also hybrid), with number coding
- Standard to be packed in a loop, >50m delivered on a disposable drum
- With self-developed retraction protection on both ends (Ø25mm, Ø32mm [optional Black edition], Ø40mm)
- 2 24 fibers (Breakout cable), 2 48 fibers (Universal cable, Breakout cable, Mini-breakout cabel), OS2/OM2-5

#### Schematic representation: Further product variants available on request.

#### Cable design

1 Pre-assembled drum

2 Fiber protection tube

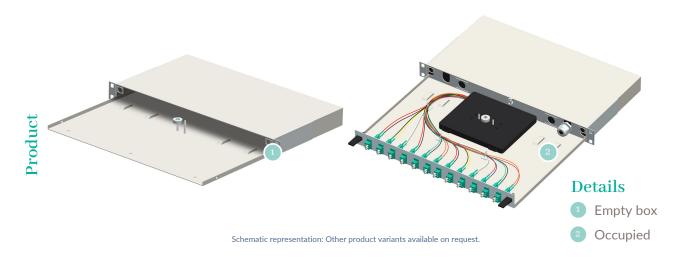
Cable typ	Universal cable	Breakout cable	Mini-Breakout cable		
Number of fiber	2-48	2-24	2-48		
Material outer sheat	LSZH, Class Eca	LSZH, Class Eca	LSZH, Class Eca		
Application	House entry cable, flame retardant riser cable	Data center, distribution cables	Data center, distribution cables		
Tensile (installation)	2000 N	1300-4500 N	1500-2400 N		
Tensile (permanent)	750 N	450-1500 N	500-1500 N		
Crush	2000N/100 mm	1500N/100 mm	3000N/100 mm		
Torsional strength	5 cycles ±1 rotation	5 cycles ±1 rotation	5 cycles ±1 rotation		
Storage temperature	-40°C~+60 °C	-40°C~+70 °C	-30°C~+70 °C		
Installation tempreature	-30°C~+40 °C	-20°C~+70 °C	-20°C~+70 °C		
Operating tempreature	-30°C~+60 °C	-20°C~+70 °C	-20°C~+70 °C		
Product-ID	[OS2-OM4][U/B/FE][2-48]-[E2000-ST]/[E2000-ST]-[length]				

CABLEDOC offers universal cables, breakout cables and mini breakout cables in pre-assembled form. All common connector types can be assembled, incl. in hybrid (e.g. LC/PC-SC/APC). Depending on the length, they are supplied in a loop or on a disposable drum. To protect the connectors, self developed fiber protection tubes by CABLEDOC are included at both ends. For the Ø32mm fiber protection tubes, the premium variant "Black edition" with additional retraction is optionally available.



## 3.19-inch Splice- & Breakout Boxes

- Width x Height x Depth: 443mm x 42mm x 241mm, Weight: 3.1kg, IP20
- Front panel: max. 48 cut-outs, incl. labeling (screen printing)
- Ordering option: 1) as breakout box; 2) option 1 + pigtails enclosed; 3) option 1+2+pigtails detached and inserted



Splicebox	19-inch
Max. number of outbreaks	48 (front panel)
Max. number of cable entries	4 via PG screw connection - PG 16 (M25)
Adjustment range	50 mm
Material	Cold rolled steel
Material thickness	1.2 mm
Coating	Electrostatic powder coating
Color	RAL 7035 grey, RAL 9005 black
Operating tempreature	-40 to +60 °C
Product-ID	FPP2-[2-96]-[E2000-ST]-[OS2-OM5]-[KIT/1]

Product data & Product ID

Descripion The robust snap locks guarantee an easy opening and closing of the box. After mounting in the 19" drawer, the splice box can be opened backwards like a drawer. The drawer can be tilted slightly downwards when extended, thus ensuring better access to the inside of the splice box. There are 4 openings for cable entry. The bottom of the box has small tabs for additional strain relief or attachment. Up to 96 fibers can be accommodated in one splice box.



## 4. Fiber optic patch cable singlemode

- Low insertion and return loss
- High-temperature stability
- Available in various formats



Singlemode	Simplex	Duplex	
Insertion loss	≤0.2 dB	≤0.3 dB	
Return loss	≥55 dB (PC) / ≥75 dB (APC)	≥45 dB (PC) / ≥65 dB (APC)	
Repeatability	≤0.1 dB	≤0.1 dB	
Contact durability	>1000 cycles	>1000 cycles	
Interferometry testing	Regarding IEC 61300-3-17	Regarding IEC 61300-3-17	
Cable-diameter	Standard 2 mm, andere 3 mm	Standard 2 mm, andere 3 mm	
Length [m]	Standard 0.5/1/2/3/5/7.5/10/20/30, other lengths on request	Standard 0.5/1/2/3/5/7.5/10/20/30, other lengths on request	
Fiber	G.652D, G.655, G.657.A1	G.652D, G.655, G.657.A1	
Sheathing	LSZH	LSZH	
Cable variations	Simplex (OS2)	Duplex, duplex flat(OS2)	
Operating tempreature	e -40 to +85 °C	-40 to +85 °C	
Product-ID	FP[S/D/F][cable-diameter][fiber]-[E2000-ST]/[E2000-ST]-[length]		

## Product data & Product ID

## Description

CABLEDOC offers a single-mode patch cable with a variety of termination options, including hybrid connectors. Besides, CABLEDOC has many years of experience in manufacturing high-quality fiber optic cables, which are released only after strict quality control procedures. Each cable is individually packaged with a unique serial number and test result.



## 4 Fiber optic patch cable multimode

- Low insertion and return loss
- High-temperature stability
- Available in various formats



Multimode	OM1 to OM5
Insertion loss	≤0.25 dB
Return loss	≥30 dB
Repeatability	≤0.1 dB
Contact durability	>1000 cycles
Interferometry testing	Regarding IEC 61300-3-17
Cable-diameter	Standard 2 mm, others 3 mm
Length [m]	Standard 0.5/1/2/3/5/7.5/10/20/30, other lengths on request
Sheath	LSZH
Cable variation	Simplex, duplex, duplex flat
Operating temperature	-40 to +85 °C
Product-ID	FP[S/D/F][cable-diameter][fiber]-[E2000-ST]/[E2000-ST]-[length]

## Product data & Product ID

Description CABLEDOC offers multimode patch cable with a variety of termination options, including hybrid connectors. Besides, CABLEDOC has many years of experience in manufacturing high-quality fiber optic cables, which are released only after strict quality control procedures. Each cable is individually packaged with a unique serial number and test result.



## 4. OF-Pigtails

- Low insertion and return loss
- High-temperature stability & small packsize
- Available in various formats



Schematic representation: Further product variants available on request.

#### **Details**



Pigtails (exemplary)

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Pigtails (Example. LC)	Multimode	Singlemode PC	Singlemode APC 8°	
Insertion loss (typ.)	<0.10 dB max:<0.20 dB	<0.10 dB max:<0.20 dB	<0.10 dB max:<0.20 dB	
Return loss	>35 dB	>45 dB	>70 dB	
Repeatability	≤0.1 dB	≤0.1 dB	≤0.1 dB	
Contact durability	>500 cycles at max. 0.20 dB	>500 cycles at max. 0.20 dB	>500 cycles at max. 0.20 dB	
Operating temperature	-40 to +75 °C	-40 to +75 °C	-40 to +75 °C	
Product-ID	FPT9[OS2-OM5][optional multicolor]-[E2000-ST]-[1.5/2m]			

The CABLEDOC pigtails are characterized by low insertion and return loss, good durability, and interchangeability. The new packaging type has an even higher packing density than before. They are used with inserted CABLEDOC splice boxes or installations but are also available separately. The pigtails are available in all common connector types in simplex/duplex variants or PC/APC-ground and various classes and lengths. Each the package is delivered packed with a unique serial number and a test report.



### 5. Outdoor distribution frame

- Simple, practical and functional design with IP65 or IP66 dust and water tightness
- Highest protection against corrosion
- Welded stainless steel housing frame with 25 mm perforation (2 mm material thickness) and polyester powder coating with UV protection
- All removable parts made of aluminum (doors, back/side panels, roof)







#### Details

Standard

<sup>2</sup> Lite

Wall-mount

Product

#### Тур Standard Lite Wall-mount Material Aluminum cover and Aluminum Aluminum roof: Stainless steel frame and plinth Structure Double-walled Double-walled Single-walled **IP-class** IP66 IP65 IP66 Resilience IK10 IK10 **IK10** RAL 7035 for body **RAL 7035 RAL 7035** Color RAL 7046 for roof and plinth **Surface** Powder coated Powder coated Powder coated 600 (12U), bis 1600 500, 600 (12U), 800 300 (6U) to 1200 Height (34U) mm (25U) mm (17U) mm Wide 650 to 1000 mm 400 to 600 mm 200 to 800 mm Depth 400 to 1000 mm 400 to 600 mm 155 to 400 mm Product-ID SK-[SD-WM]-[300-1600]-[200-1000]-[155-1000]-[IP65-IP66]

Schematische Darstellung: Weitere Produktvarianten auf Anfrage erhältlich.

Product data & Product ID

Description

Our single or double-wall outdoor cabinet with removable back walls and ventilated roof in a compact design meets our customers' criteria. With the design already used for years, the outdoor area's extreme temperatures are no longer a big problem.



## 5. Standardracks - 19 inch

- 2 pair 19"-vertical profiles sliding and 1 pair of side walls with lock
- Front door safety glass (EN 12150-1) with swivel lever lock and rear panel with cable entry and lock
- 4 adjustable feet, GND/Grounding Set
- Incl. installation sets





Schematic representation: Further product variants available on request.

#### **Details**

- Front door
- Back wall
- Safety glass (EN 12150-1) with swivelling lever locks
- 4 19 inch-L-profile adjustable

Type 19 inch-cabinet

Height 21, 27, 42 and 45 U Width 600 or 800 mm

Depth 600, 800 and 1000 mm

Structure Welded frame and sheet steel 1.5 mm

Vertical profiles 2 pair 19 inch-vertical profiles movable and adjustable from the inside

IP-protection class Standard: IP30

Front door Safety glass door with swing lever lock or optional sheet steel door

Back wall and side Removable with break-out cable entry and lock and sheet steel door, side

panels panels removable with locks

Color Standard RAL7035 or RAL9005 and optionally other colors

Breakout openings For cable entry and installation of the ventilation unit

Adjustable feet Included

Product-ID SK-SR-19-[21-45]-[600-800]-[600-1000]

Descrip- Product data tion & Product ID

Our rack series offers the customer an unbeatable ratio of price, benefit, and quality. These cabinets are ideal for installers and end customers who value straightforward cabinet ordering. The racks are perfect for network equipment, telecom cabinets, and computer rooms without critical requirements for load capacity, cable entries, or door/wall designs.



## 5. DIN rail splice box

- Width x height x measures: 61mm x 115mm x 113mm, weight: 0.5kg, IP20
- Front panel: max. 48 breakouts, incl. labelling (screen printing)
- Ordering options: 1) as breakout box; 2) option 1 + pigtails enclosed; 3) option 1+2+pigtails detached and inserted





#### **Details**

Simply equipped

2 Triple equipped

Produc

Schematic representation: Further product variants available on request.

Splice box	Details
Max. number of outbreaks	24 (front panel)
Max. number of cable entries	1 via PG screw connection - PG 11 (M20)
Adjustment range	50 mm
Material thickness	1.2 mm
Coating	Electrostatic powder coating
Color	RAL 7035 grey
Operating tempreature	-40 to +60 °C
Product-ID	HPP1-[2-24]-[FC-ST]-[OS2-OM5]-[KIT]

Description

Product data & Product ID

The CABLEDOC DIN rail splice box is a high-quality and solid top-hat rail splice box for fiber optic applications. It is compact, robust, versatile, and can be equipped with various plug combinations. Thanks to the robust sheet steel design, the splice box is excellently suited for an industrial application. Therefore, it can be used in most server cabinets.



## 5. Wall-Mount splice box (WSB)

- A perfect combination of efficiency and safety
- Additional protection with insulating foam (small/medium) or strain relief clamps and guide clamps (large)
- Order options: 1) as breakout box; 2) option 1 + pigtails enclosed; 3) option 1+2+pigtails detached and inserted







#### **Details**

Small

Medium

Large

Mount splice box	Small	Medium	Large	
WxHxL	150 mm x 265 mm x 55 mm	280 mm x 320 mm x 55 mm	455 mm x 450 mm x 55 mm	
Weight	1 kg	2 kg	5.2 kg	
Max. equipping	4 splice cassettes or 1 splice cassette and a distribution plate	8 splice cassettes or 4 splice cassette and a distribution plate	5 splice cassettes and one distribution plate	
Material	Cold rolled steel	Cold rolled steel	Cold rolled steel	
Material thickness	1.2 mm	1.2 mm	1.2 mm	
Coating	Electrostatic powder coating	Electrostatic powder coating	Electrostatic powder coating	
Color	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	
Number of keys	2	2	2x2	
Product-ID	APP[1/2/3]-[2-120]-[E2000-ST]/P[OS2-OM5]-[KIT/1]			

## Product data & Product ID

The CABLEDOC Wall-Mount Splice Box (WSB) is a high-quality, solid, and wall-mountable splice box for fiber optic cables. The box is available in three different variations (small/medium/oarge) depending on your needs. All three options offer a perfect combination of efficiency and safety. The boxes can be inserted in various designs and can also be locked.



## 6.MPO-Patch cable

- Low insertion and return loss
- High-temperature stability
- Telcordia GR-1435-CORE compatible



Туре	SM Standard	SM Low Loss	MM Standard	MM Low Loss
Insertion loss	≤0.5 dB	≤0.3 dB	≤0.35 dB	≤ 0.2 dB
Return loss	≥60 dB (APC)	≥60 dB (APC)	≥35 dB (PC)	≥35 dB (PC)
Repeatability	≤0.1 dB	≤0.1 dB	≤0.1 dB	≤0.1 dB
Contact durability	At least 1000 contacts	At least 1000 contacts	At least 1000 contacts	At least 1000 contacts
Operating temperature	-40 to +85 °C	-40 to +85 °C	-40 to +85 °C	-40 to +85 °C
Tensile performance	>50 N	>50 N	>50 N	>50 N
Product-ID	FTC[cable-diameter][fiber]-[MPO-MPO/MPO-LC]-[12/24]-[length]-[fiber occupancy]			

escripion

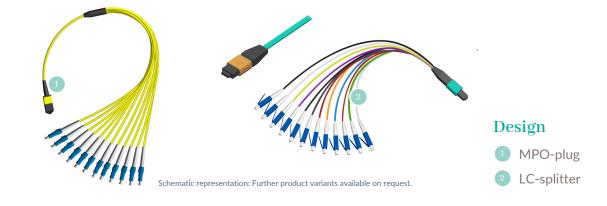
Product data & Product ID

The CABLEDOC MPO patch-cable facilitates rapid, high-density installation in data centers and other FTTx fiber-optic applications. Those applications can save money and time during a new installation or remodel. THE CABLEDOC MPO patch cords have low insertion loss and return loss, as well as excellent durability.



## 6. Fanout cable MPO-LC

- 12 24 fibers
- Singlemode & Multimode (OS2, OM3-OM5)
- Flexible whip and cable lengths possible
- OFNR, OFNP, LSZH compatible



Insertion loss (MPO)≤0.35 dB≤0.35 dBInsertion loss (LC)≤0.3 dB≤0.3 dBReturn loss (MPO)≥60 dB≥30 dBReturn loss (LC)≥50 dB≥30 dBRepeatability≤0.2 dB≤0.2 dBStability>500 cycles>500 cyclesOperating temperature-40 to +85 °C-40 to +85 °CProduct-IDFTC3[OS-OM5]-MP/[MP/LC]-[12/24]-[length]-[fiber occupancy]	Type	SM Low Loss	MM Low Loss
Return loss (MPO) $\geq 60 \text{ dB}$ $\geq 30 \text{ dB}$ Return loss (LC) $\geq 50 \text{ dB}$ $\geq 30 \text{ dB}$ Repeatability $\leq 0.2 \text{ dB}$ $\leq 0.2 \text{ dB}$ Stability $\geq 500 \text{ cycles}$ $\geq 500 \text{ cycles}$ Operating temperature $-40 \text{ to } +85 \text{ °C}$ $-40 \text{ to } +85 \text{ °C}$	Insertion loss (MPO)	≤0.35 dB	≤0.35 dB
Return loss (LC)≥50 dB≥30 dBRepeatability≤0.2 dB≤0.2 dBStability>500 cycles>500 cyclesOperating temperature-40 to +85 °C-40 to +85 °C	Insertion loss (LC)	≤0.3 dB	≤0.3 dB
Repeatability≤0.2 dB≤0.2 dBStability>500 cycles>500 cyclesOperating temperature-40 to +85 °C-40 to +85 °C	Return loss (MPO)	≥60 dB	≥30 dB
Stability >500 cycles >500 cycles  Operating temperature -40 to +85 °C -40 to +85 °C	Return loss (LC)	≥50 dB	≥30 dB
Operating temperature -40 to +85 °C -40 to +85 °C	Repeatability	≤0.2 dB	≤0.2 dB
	Stability	>500 cycles	>500 cycles
Product-ID FTC3[OS-OM5]-MP/[MP/LC]-[12/24]-[length]-[fiber occupancy]	Operating temperature	-40 to +85 °C	-40 to +85 °C
	Product-ID	FTC3[OS-OM5]-MP/[MP/LC]-[12/24]-[length]-[fiber occupancy]	

# Product data & Product ID

CABLEDOC fanout cable MPO-LC can be used to connect a 12 or 24 fiber MPO connector with the LC connector on the trunk cable. In addition to the standard lengths, CABLEDOC also offers individual lengths according to customer requirements. The fanout cable allows flexible design and connection in the data cabinet.

## 7. Consumable material

- Extensive, high-quality consumables on the subject of fiber optics are available
- Orderable in the partner webshop



Schematic representation: Further product variants available on request.

#### Description

Materials and accessories

Example

Fiber protection tubes 32 mm Tube length approx. 86 cm, wire at one end, PG 16 nut at the other end

Fiber protection tubes 40 mm Tube length approx. 86 cm, wire at one end, heat shrink tube at the other end

PG 16-screwing

Available in grey & black, screw connection + nut

Blind plugs

All common plug types, 100 piece packaging, smaller quantity also available

Cable holder

1000 piece packaging, smaller quantity also available

Product-ID

On demand

Descrip-tion

Product data & Product ID

CABLEDOC offers a comprehensive portfolio about the topic of FTTx. Therefore, we also provide various accessories such as couplings, cable ties, or pull-in protection. The high-quality materials, some of which were developed in-house, are used for CABLEDOC products, but they are also available separately in the partner webshop.

## Notes

