Product Catalogue
2025

**CONNECTING PEOPLE
AND THE FUTURE**

SENTAL

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PRODUCT CATALOGUE 2025

SENTAL

A Strong Future with SENTAL
MESSAGE FROM THE MANAGEMENT

Dear Business Partners,

In a world that is becoming increasingly connected, powerful communication networks are the key to progress. At SENTAL, our mission is to provide precisely these solutions – reliable, efficient, and future-oriented.

As an experienced partner in Fibre optic and telecommunications infrastructure, we offer not only high-quality products but also technical expertise, service, and support for your projects. Through strong partnerships with leading manufacturers, we can always deliver optimal solutions tailored to your needs.

This catalog gives you an overview of our current product portfolio – combining proven systems with new, innovative developments.

Let's shape the future together.
We look forward to supporting you again this year with our solutions and dedication.

Sincerely,

Frank Reichenberg
Managing Director, SENTAL Export GmbH

# More Than 40 Years of Experience for a Connected Future

ABOUT SENTAL

Since its foundation in 1977 by the Reichenberg family, SENTAL has stood for reliable and consistent quality. As a third-generation family business, we specialize in Fibre optic network expansion. From our headquarters in Hamburg, we serve customers throughout Germany, supported by strategically located warehouses and a dedicated field team.

Our operations extend beyond Germany's borders: SENTAL is also active in North and South America, contributing to global digital infrastructure.

Our portfolio covers both the trade of high-quality products for Fibre optic network construction and comprehensive technical service and consulting – all from a single source. Our customers benefit from decades of experience and reliability.

With around 30 employees, we are actively shaping Germany's digital future. Our goal is to connect people, companies, and communities through Fibre optic technology. For over 40 years, SENTAL has stood for competence, reliability, and progress.
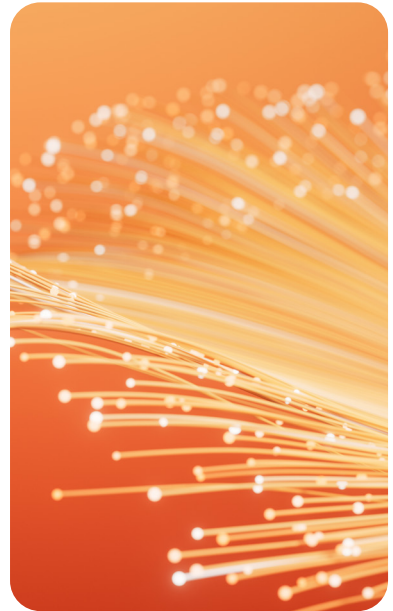
Why SENTAL ?
OUR ADVANTAGES AT A GLANCE

Quality & Innovation
Our products stand for durability, precision, and top performance. Innovative solutions – from easy installation to sustainable materials – guarantee maximum efficiency and reliability.

Variety & Flexibility
SENTAL offers a complete range of Fibre optic solutions for various network levels. Custom-made special products can also be manufactured upon request.

Service & Support
We support our customers throughout the entire process:
- Expert advice from experienced specialists
- Efficient handling and reliable logistics
- On-site and remote support
- Comprehensive technical documentation

Cost Efficiency
Our products combine high quality "Made in Germany" and „Made in Europe" with fair pricing. Due to their longevity and reliability, they provide long-term cost savings.

Technology & Partnerships
Through cooperation with leading manufacturers and partners, SENTAL ensures cutting-edge technology and innovative solutions.

Reliability & Trust
With decades of experience, a strong partner network, and customer-focused service, SENTAL is your dependable partner for all Fibre optic infrastructure projects.

You can rely on us
OUR VALUES – OUR COMMITMENT

OUR CUSTOMERS AND SUPPLIERS

We value reliability, fairness, and partnership-based collaboration. SENTAL products stand for durability and technical precision. All products comply with recognized international standards such as ISO, DIN (German Industrial Standard), and TÜV (Technical Inspection Association) certifications.

TODAY AND TOMORROW

At SENTAL, we develop and distribute Fibre optic solutions that support digital transformation worldwide. Innovation and quality are the foundation of our success.

SOCIETY AND ENVIRONMENT

Sustainability and environmental responsibility guide our daily work. We rely on recyclable materials and long-lasting designs to minimize environmental impact.

Building Entry Points (BEP) & Distribution Systems

Funding Projects
BUILDING ENTRY POINTS (BEP) & DISTRIBUTION SYSTEMS
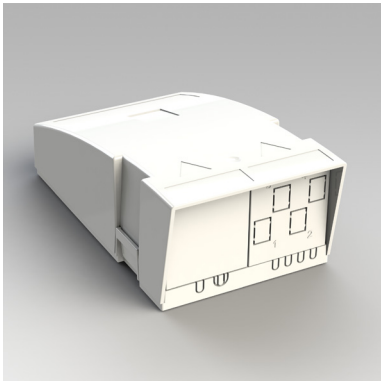
BEP up to 4 LC/APC adapters
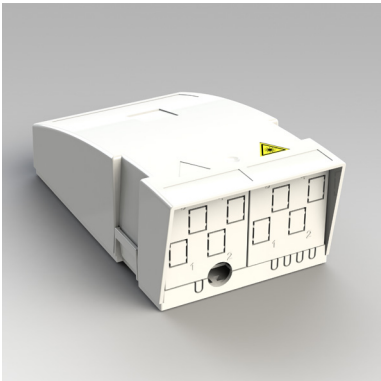
BEP up to 8 LC/APC adapters
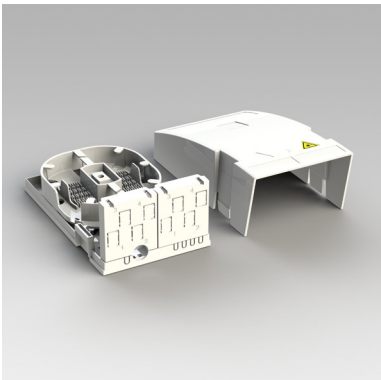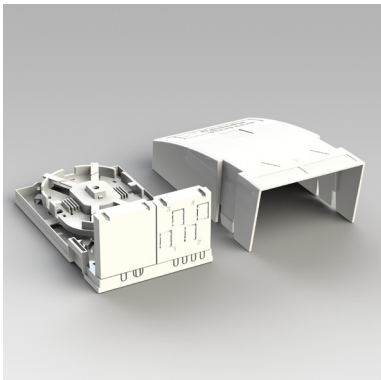
Item no.	Description	Details
0509029223S15	Funding Project BEP 1 Res.unit 10 mm OD, no logo, set incl. 6x pigtails, 1,5 m	CSS with shutter, without protective cap
0509029225S16	Funding Project BEP 2 Res.unit 10 mm OD, no logo, set incl. 10x pigtails, 1,5 m	CSS with shutter, without protective cap
0509029227S17	Funding Project BEP 3 Res.unit 10 mm OD, no logo, set incl. 14x pigtails, 1,5 m	CSS with shutter, without protective cap

Private Deployment
BUILDING ENTRY POINTS (BEP) & DISTRIBUTION

BEP Standard

BEP Standard with protective cap

Item no.	Description	Details
0509029201	DGF BEP for 1 Residential Unit with logo, DX adapter only	AT29201
0509029201S20	DGF BEP for 1 Residential Unit DIN, with logo incl. 1x DX adapter, no shutter, set with 2 pigtails (red/green)	1.5 m and 2x ANT CSS, no protective cap
0509029202	DGF BEP for 2 Residential Units DIN, with logo, 2x DX adapters only, with protective cap	AT29202
0509029202S20	DGF BEP for 2 Residential Units DIN, with logo incl. 2x DX adapters, no shutter, set with 4 pigtails (2x red/green)	1.5 m and 4x ANT CSS, with protective cap
0509029204	DGF BEP for 4 Residential Units with logo, 4x DX adapters only, no shutter, with protective cap	AT29204
0509029204S20	DGF BEP for 4 Residential Units DIN, with logo incl. 4x DX adapters, no shutter, set with 8 pigtails (4x red/green)	1.5 m and 8x ANT CSS, with protective cap
0509029211	BEP neutral, no logo, DX adapter only	AT29211
0509029211S20	BEP Neutral, no logo, DIN, with 1x DX adapter, no shutter, incl. 2x pigtails (1x red/green)	2.5 m, 2x ANT CSS, no protective cap
0509029212	BEP Neutral, no logo, 2x DX adapters only	AT29212
0509029212S20	BEP Neutral, no logo, DIN, with 2x DX adapters, no shutter, incl. 4x pigtails (2x red/green)	1.5 m, 4x ANT CSS
0509029214	BEP Neutral, no logo, 4x DX adapters only	AT29214

BEP Gf-AP 16
BUILDING ENTRY POINTS (BEP) & DISTRIBUTION SYSTEMS
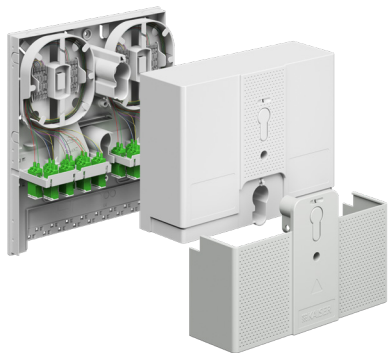
- Delivery includes: Housing

- Distribution of the incoming Fibre Optic Cable to individual residential units

- Separation of provider and customer cable areas via separate covers

- Closure using Torx screws, optionally via profile half-cylinder lock

- Connection for up to 16 residential units in private sector deployments

- Strain relief for microducts, gas blockers, provider and customer cables

BEP Gf-AP 16

Technical Information		
Installation type / Network level	Surface-mount / Level 3/4	
Protection rating	IP54 / IK08	
Fibre count	up to 32	
Splice trays	Quantity: 2	
Adapters	up to 16 LC-DX or SC-SX	
Halogen-free	Yes	
Slack length (splice tray)	250 mm	
Bend radius (splice tray)	30 mm	
Splice protection holder	Crimp or mini heat-shrink splice protection	
Cable / Duct entries	18 entries	Ø2 x 7-12 mm; 16 x 3-7 mm
Dimensions (L × W × D)	230 mm x 200 mm x 70 mm	

Item no.	Description
050903103508	BEP Gf-AP 16, 8 LC/APC-DX adapters and 16 pigtails included
050903103512	BEP Gf-AP 16, 12 LC/APC-DX adapters and 24 pigtails included
050903103516	BEP Gf-AP 16, 16 LC/APC-DX adapters and 32 pigtails included

TECHNICAL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Flexbox Connect
BUILDING ENTRY POINTS (BEP) & DISTRIBUTION

Flexbox Connect

- Modular and expandable Fibre distribution enclosure, pre-mounted

- Can be connected seamlessly in series without loss of IP or IK protection

- Various accessories for flexible configuration in different applications, e.g. optional wall modules, profile half-cylinder lock, or U-shaped connectors for seamless housing extension

- Can also be used as a Fibre termination point / building entry point (BEP)

- Closure via Torx screws, optionally with profile half-cylinder lock

- Includes labeling fields for easy identification

Technical Information	
Installation type / Network level	Surface-mount / Network Level 3/4
Protection class	IP54 / IK08
Fibre capacity	up to 576 Fibres
Splice trays	up to 48
Adapters	up to 48 LC-DX or SC-SX
Halogen-free	Yes
Slack length (splice tray)	300 mm
Bend radius (splice tray)	30 mm
Splice protection holder	CSS crimp or mini heat-shrink sleeve
Cable/duct entry/exit	8× M20 or M25 knockouts
Dimensions (L × W × D)	560 mm × 289 mm × 136 mm

Item no.	Description
05090103505SEN	Gf-GV Flexbox Connect SENTAL Standard
Custom configuration of couplings and pigtails for individual residential units upon request.	

Wall Module Flexbox Connect
BUILDING ENTRY POINTS (BEP) & DISTRIBUTION

Wall module A

Wall module B

Wall module C

Wall module D

Wall module E

Wall module F

Item no.	Description	Details
050901035Z77	Wall module A	M20/M25 knockouts and loop knockout
050901035Z78	Wall module B	M20/M25 knockouts and cable/patch cord entry
050901035Z79	Wall module C	M20/M25 knockouts and 48× 2.8–7.0 mm ducts
050901035Z80	Wall module D	M20/M25 knockouts and 16× 10.0 mm ducts
050901035Z81	Wall module E	Connector for combining housings
050901035Z82	Wall module F	M20/M25 knockouts and 48× SC/SX, LC/DX adapters
0509029004	Splice tray set (4 pcs)	4 mm height
050901035Z50	Relief clamp	Strain relief component for Fibre Optic Cables

Compact Building Distribution Enclosure
BUILDING ENTRY POINTS (BEP) & DISTRIBUTION SYSTEMS

Building distribution enclosure

Item no.	Description	Details
0509029231S	Compact BEP unit V 4F + 1LC Quad, incl. 4× pigtails, CSS	AT29231
0509029232S	Compact BEP unit V 8F + 2LC Quad, incl. 8× pigtails, CSS	AT29232
0509029233S	Compact BEP unit V 12F + 3LC Quad, incl. 12× pigtails, CSS	AT29233
0509029234S	Compact BEP unit V 16F + 4LC Quad, incl. 16× pigtails, CSS	AT29234
0509029235S	Compact BEP unit V 20F + 5LC Quad, incl. 20× pigtails, CSS	AT29235
0509029236S21	Compact BEP unit V 24F + 6LC Quad, incl. 24× pigtails, CSS	AT29236

Aerial and Underground Network Distribution

Plastic Network Distribution Enclosure
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

- Scope of delivery: Gf-NVt housing, Gf-NVt base pedestal, 24× microduct holders, strain relief unit, cable overlength tray, loop

- Self-supporting plastic enclosure made of thermoset polyester

- Swiveling splice tray section

- C-rail integrated in base for strain relief and cable anchoring

- Swivel-turn closure with three-point locking system

- Microduct capacity: up to 48 ducts (7–12 mm)

- Holds up to 48 splice trays (4 mm height)

- Ribbed front surface to prevent poster adhesion

- Housing includes predefined break-off point

GfK Network distribution
cabinet NVt 48

Technical Information	
Fibre capacity	Up to 576 Fibres
Colour	Light grey – RAL 7035
Height incl. base	1600 mm
Width	345 mm
Depth	240 mm
Height above ground level	1000 mm

Item no.	Description	Details
050804231011	GfK enclosure for up to 576 Fibres, with window cutout	48 outputs, IP54 rated

Plastic Network Distribution Enclosure
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

- Scope of delivery: Gf-NVt housing, Gf-NVt base pedestal, 48× microduct holders, strain relief unit, cable overlength tray, Fibre loop, 2 energy chains

- Self-supporting plastic enclosure made of thermoset polyester

- Seamlessly alignable with adjacent enclosures

- Door opening angle adjustable: 90° or 130°

- Swivel-turn closure with three-point locking system

- Microduct capacity: up to 96 ducts (7–12 mm)

- Accommodates up to 144 splice trays (4 mm each)

- Integrated energy chain connection between door and enclosure

- Housing includes predefined break-off point

GfK Network distribution cabinet NVt 96

Technical Information	
Fibre capacity	Up to 1728 Fibres
Colour	Light grey – RAL 7035
Height incl. base	1820 mm
Width	785 mm
Depth	324 mm
Height above ground level	1190 mm

Item no.	Description	Details
050804231012	GfK enclosure for up to 1728 Fibres, with window cutout	96 outputs, IP54 rated

Plastic Network Distribution Enclosure
GF-NVT WITH FMB, LIGHT GREY - RAL 7035
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

GfK Fibre distribution enclosure with Fibre management box

Item no.	Description	Details
0509031001	GfK 96F HS, 10 mm, window cutout	16 outputs, incl. FMB – plastic, IP65 rated
0509031002	GfK 96F HS, Ø3-8 mm	48 outputs, incl. FMB – plastic, IP65 rated
0509031003	GfK 96F CSS, 8 mm	48 outputs, incl. FMB – plastic, IP65 rated
0509031004	GfK 192F HS, 10 mm, window cutout	16 outputs, incl. FMB – plastic, IP65 rated
0509031005	GfK 96F CSS, 10 mm, window cutout	16 outputs, incl. FMB – plastic, IP65 rated
0509031006	GfK 192F CSS, 8 mm, window cutout	48 outputs, incl. FMB – plastic, IP65 rated
0509031007	GfK 192F CSS, 8 mm	48 outputs, incl. FMB – plastic, IP65 rated
0509031008	GfK 48F HS, 8 mm, window cutout	24 outputs, incl. FMB – plastic, IP65 rated

GfK: „Glasfaserverstärkter Kunststoff" – Fibreglass-reinforced plastic

DP Street Cabinet Metal

AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

Gf-NVt Metal network distribution enclosure

Item no.	Description	Details
0509029310	Street cabinet housing, spare part	Empty
0509029311	Street cabinet hybrid (48V) 96F	HS / Ø3–8 mm, Attema 29311, 48 outputs, incl. FMB – metal, IP65 rated
0509029312	Street cabinet hybrid (48V) 96F	CSS / Ø3–8 mm, Attema 29312, 48 outputs, incl. FMB – metal, IP65 rated
0509029313	Street cabinet hybrid (48V) 192F	CSS / Ø3–8 mm, Attema 29313, 48 outputs, incl. FMB – metal, IP65 rated
0509029321	Street cabinet hybrid (48V) 192F, window cutout	CSS / Ø3–8 mm, Attema 29321, 48 outputs, incl. FMB – metal, IP65 rated
0509029326	Street cabinet hybrid (16V) 192F, window cutout	CSS / Ø5.5–10 mm, Attema 29326, 16 outputs, incl. FMB – metal, subsidized project
0509029327	Street cabinet hybrid (16V) 96F, window cutout	CSS / Ø5.5–10 mm, Attema 29327, 16 outputs, incl. FMB – metal, subsidized project
0509029328	Street cabinet hybrid (16V) 96F, window cutout	HS / Ø5.5–10 mm, Attema 29328, 16 outputs, incl. FMB – metal, subsidized project

Splice Closures with Cold-seal Entry
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

040910106

040910103

040910101

040910102

Item no.	Description	Details
040910101	SEN-MUFCC2-AA, **oval** splice closure with 1 oval and 6 round cable entries, length = 380 mm	Max. splice capacity: 288, 24 splice trays
040910102	SEN-MUFCC2-AB, **oval** splice closure with 1 oval and 6 round cable entries, length = 450 mm	Max. splice capacity: 432, 36 splice trays
040910103	SEN-MUFC2-AA, **round** splice closure with 1 oval and 6 round cable entries, length = 390 mm	Max. splice capacity: 576, 56 splice trays
040910106	SEN-MUFC2-AB, **round** splice closure with 1 oval and 6 round cable entries, length = 525 mm	Max. splice capacity: 1344, 56 splice trays

Accessories for Closures
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION
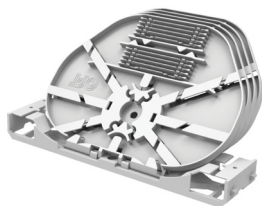
040910123

040910121
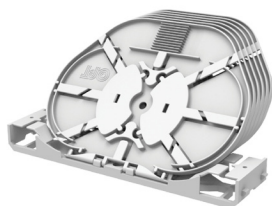
040910122

040910131

040910141

040910142

Item no.	Description	Details
040910123	SEN-KAX-HD4-12C, splice trays (total 48 splices)	Holder with 4 splice trays for crimp splice protection
040910121	SEN-KAX-HD6-12C, splice trays (total 72 splices)	Holder with 6 splice trays for crimp splice protection
040910122	SEN-KAX-HD6-12H, splice trays (total 72 splices)	Holder with 6 splice trays for heat-shrink splice protection

Accessories for Closures
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

Item no.	Description	Details
040910131	SEN-KIT-SO 4x10, cold-seal entry, oval port	up to 4 cables Ø5–10 mm
040910141	SEN-KITSR-1X 12-20, cold-seal entry, round port	for 1 cable Ø12–20 mm
040910142	SEN-KIT-SR-6x 7-8,6, cold-seal entry, round port	up to 6 cables Ø7–8,6 mm
040910143	SEN-KIT-SR-2x 8-12, cold-seal entry, round port	up to 2 cables Ø8–12 mm
040910144	SEN-KIT-SR-8x 4-6,4, cold-seal entry, round port	up to 8 cables Ø4–6,4 mm
040910145	SEN-KIT-SR-6x 5-8, cold-seal entry, round port	up to 6 cables Ø5–8 mm
040910146	SEN-KIT-WMB-Oval	Wall-mount bracket for oval port
040910148	SEN-KIT-WMB-Round	Wall-mount bracket for round port
040910149	SEN-KIT-OVAL-HEAT, heat-shrink seal for oval port	Kit for loose tube cable LT (min d>14 mm)
040910150	SEN-KIT-RUND-HEAT, heat-shrink seal for round port	A-Kit for loose tube cable LT (min d>8 mm)
040910154	MICRO-LT-BASIC*-4T-4B-YG grey, MICRO closure without trays	4x sealing Ø6–8 mm + 4 blind seals, external cable strain relief version, grey
040910161	SEN-SAR-HD4-24H cassette module up to 96F	thermal splice protection
040910171	SEN-KIT-LT entry sealing kit	4x2,5–3,5 mm

Splice Closures with Gel-sealed Cable Entries
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

For installation of the closure, a standard screwdriver is sufficient. An integrated sealing ring reduces the number of components. Each segment is sealed within seconds using a simple lever-spring mechanism.

The closure features eight individually sealable cable entries with gel sealing. Individual cables can be easily added or removed at any time.

Mini cables can be inserted directly or via micro-ducts. Multiple cables per entry are possible. The segments can be repeatedly opened and closed.

FRECAP2 allows seamless integration of splitter and WDM modules, using either single-Fibre (SC) splice trays for 1 slot (5 mm), multi-Fibre (SE) splice trays for 2 slots (10 mm), or a mix of both.

Additional splice trays can be used for optical splitters, water sensors, or mechanical splices. The MAX organizer provides storage for uncut Fibre bundles.

Splice closure with gel-sealed cable

Item no.	Description	Details
040912103	Frecap 2 splice closure size S	Cassette organizer with 2×24 locking positions
040912104	Frecap 2 splice closure size M	Cassette organizer with 2×36 locking positions
040912105	Frecap 2 splice closure size L	Cassette organizer with 2×60 locking positions

Accessories for Splice Closures with Gel Sealing
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION
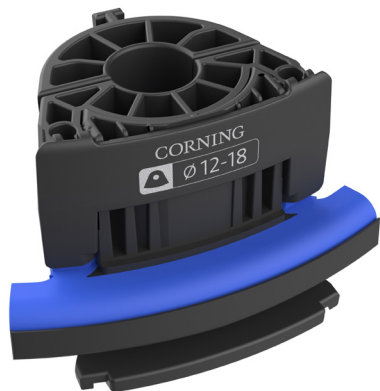
Example closure segment
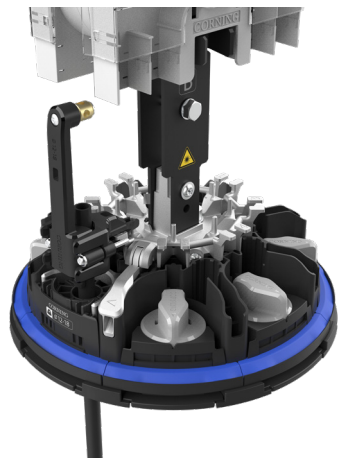
Reusable mechanical sealing elements

Item no.	Description	Details
040912123	FC2-SEG-1x12-18, single cable entry	For 12–18 mm cable or 12, 14, and 16 mm microducts
040912124	FC2-SEG-1x18-25, single cable entry	For 18–25 mm cable incl. strain relief pack
0409121144	SC splice tray, S46998-A002-R497	1 locking position 5 mm, 12× crimp
0409121145	SC splice tray, S46998-A2-R95	2 locking positions 10 mm, 12× crimp

Splice Closures with Gel Sealing
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

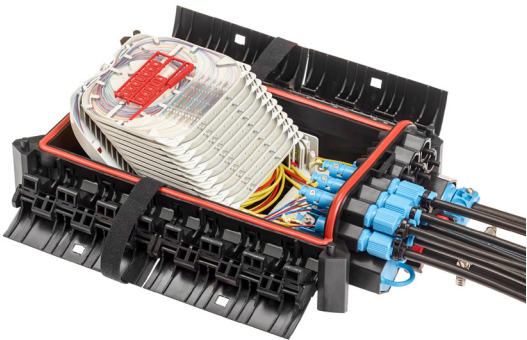|	Size S	Size M	Size L
Dimensions			
Outer diameter (without/with locking ring)	274 mm/316 mm		
Length	530 mm	605 mm	735 mm
Organizer × capacity			
Locking positions	48	72	120
SC trays (5 mm)	48	72	120
SF trays (10 mm)	24	36	60
Cable/microduct length			
Sealing technology	Reusable, gel		
8 separate segment length	Microducts or cut/uncut cables 12–28 mm (12–18, 18–25 oder 25–28 mm)		
Segments compatible with			
2-way entry	Microducts or cut/uncut cables, 7–14 mm		
4-way entry	Microducts or cut/uncut cables, 5–8 mm		
Specifications			
Number of separate segments for cable/microduct entry	8	Number of cable entries per segment	1 to 4
Cable/microduct outer diameter range	5 to 28 mm		
Application areas	Manholes / direct buried / wall or pole mounting		
Operating temperature range	–40° C to + 65° C		
IP rating	IP68 (optionally available: valve for pressure testing)		
Fibre management system	MAX		
Splice tray types	SC (1 locking position, 5 mm) / SE (2 locking positions, 10 mm)		
Heat-shrink / crimp splice protectors per SC tray	6/12	Heat-shrink / crimp splice protectors per SE tray	12

BPEO Splice Closures
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

BPEO closure

- Flexible Fibre management
- Comprehensive range of Fibre splice trays
- Easy opening and closing
- ECAM external cable entry system
- Mounting kits available
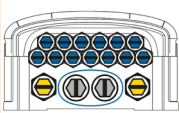
BPEO closures can be installed both above ground (e.g., on poles or facades) and underground (e.g., in manholes). These Fibre optic splice closures are designed for Fibre-to-the-Home (FTTH) deployments as well as various outdoor applications.

The BPEO system can be installed, opened, and sealed watertight without the need for any special tools.

Cable entries are managed using ECAM (External Cable Assembly Module) technology, allowing for cable preparation and strain relief outside the closure. This protects already spliced connections during installation and re-entry.

The flexible Fibre management system supports both single and multiFibre management of loose tubes. It offers a wide range of interchangeable splice trays for 250 µm and 900 µm Fibres, ensuring safe and efficient handling of Fibres.

Item no.	Description	Details
040912201	Splice closure BPEO-S0-FDP-BRANCH	-
040912202	Splice closure BPEO-S1.5-FDP-BRANCH	
040912203	Splice closure BPEO-S2-CDP	-

Accessories for BPEO Splice Closures
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

Easy installation

Cable entry module

Item no.	Description
040912221	Entry BPEO ECAM D18 BODY 6 mm < ROUND < 18 mm
040912222	Entry BPEO ECAM D18 SEALING 9 mm < ROUND < 12 mm
040912223	Entry BPEO ECAM D18 SEALNG 12 mm < ROUND < 15 mm
040912224	Entry BPEO ECAM S18 ROUND
040912225	Entry BPEO ECAM S9.5 ROUND
040912226	BPEO-SD-universal tray, for e.g. 12xCSS
040912241	K7 TRAY-1 SLOT-UNI ZONE-12

DP Distribution Closure and Fibre Management
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

Distribution closure

FMP Splice enclosure

Item no.	Description	Details
0509029030	FttX distribution closure housing, underground	900×350×300 mm Attema 29030
0509029332	Splice distribution housing FMP 96F, window cutout	HS, 24 outputs, 8 splice trays, 8 mm
0509029341	Splice distribution housing FMP 96F	HS, 48 outputs, 8 splice trays, 8 mm
0509029343	Splice distribution housing FMP 96F	ANT, 48 outputs, 8 splice trays, 4 mm
0509029344	Splice distribution housing FMP 192F	ANT, 48 outputs, 16 splice trays, 4 mm
0509029351	Splice distribution housing FMP 192F, window cutout	ANT, 48 outputs, 16 splice trays, 4 mm
0509029352	Splice distribution housing FMP 96F, window cutout	HS, 48 outputs, 8 splice trays, 8 mm
0509029353	Splice distribution housing FMP 96F, window cutout	ANT, 48 outputs, 8 splice trays, 4 mm
0509029354	Splice distribution housing FMP 96F, window cutout	ANT, 48 outputs, 8 splice trays, 8 mm

Closures (Repair / Joint / Distribution)
AERIAL AND UNDERGROUND NETWORK DISTRIBUTION

FDM

MFD

CFD

Item no.	Description	Details
0509029017	Repair closure CFD 5–6,5 mm	IP68
0509029018	Repair closure CFD 7–8 mm	IP68
0509029020	Repair closure CFD 3–6,5 mm	IP68
0509029292	Midi Fibre Dome, HS, Ø2,5–8 mm	IP68
0509029293	Midi Fibre Dome, CSS, Ø2,5–8 mm	IP68
0509029294	Midi Fibre Dome (MFD), HS, output Ø5,5–10,0 mm	IP68, dome closure
0509029295	Midi Fibre Dome (MFD), CSS, output Ø5,5–10,0 mm	IP68, dome closure
040800910	Inline closure FDM 1-FO-VM 2×12, crimp, green	2×M16, Ø4,5–9 mm
040800913	Inline closure FDM 1-FO-VM 2×12, heat-shrink, green	2×M16, Ø4,5–9 mm
040800914	Inline closure FDM 1-FO-VM 2×12, crimp, green	2×M20, Ø7–14 mm
040800912	Branch closure FDM 1-FO-AM 2×12, crimp, green	3×M16, Ø4,5–9 mm
040800911	Branch closure FDM 2-FO-AM 4×12, crimp, green	1×M25 and 2×M20, approx. Ø11–17 mm

Fibre Optic Cable

Micro Cable
FIBRE OPTIC CABLE

Micro cable

Item no.	Description	Details
0301951XXX	Micro cable 4F G.657.A1, Ø2,4 mm, black HDPE, DIN	A-DQ(ZN)2Y, 250 µm disposable drums
0301951XXX	Micro cable 6F G.657.A1, Ø2,5 mm, black HDPE, DIN	A-DQ(ZN)2Y, 250 µm disposable drums
0301951XXX	Micro cable 12F G.657.A1, Ø2,5–3,5 mm, black HDPE, DIN	A-D(ZN)2Y, 250 µm disposable drums
0301951XXX	Micro cable 24F G.657.A1, Ø2,6–4 mm, black HDPE, DIN	A-DQ(ZN)2Y, 200 µm disposable drums
Further configurations available upon customer request.		

Mini Cable
FIBRE OPTIC CABLE

Mini cable

Item no.	Description	Details
0301951XXX	Mini cable 1x12F G.657.A1, Ø5,4 mm, black HDPE, DIN	A-DQ(ZN)2Y, 200-250 µm disposable drums
0301951XXX	Mini cable 2x12F G.657.A1, Ø5,4 mm, black HDPE, DIN	A-DQ(ZN)2Y, 250 µm disposable drums
0301951XXX	Mini cable 4x12F G.657.A1, Ø5,4 mm, black HDPE, DIN	A-DQ(ZN)2Y, 250 µm disposable drums
0301951XXX	Mini cable 6x12F G.652.D, Ø5,4 mm, black HDPE, DIN	A-DQ(ZN)2Y, 250 µm disposable drums
0301951XXX	Mini cable 8x12F G.657.A1, Ø6,2 mm, black HDPE, DIN	A-DQ(ZN)2Y, 250 µm disposable drums
0301951XXX	Mini cable 12x12F G.657.A1, Ø8,0 mm, black HDPE, DIN	A-DQ(ZN)2Y, 250 µm disposable drums
0301951XXX	Mini cable 8x24F G.657.A1, Ø6,7 mm, orange HDPE, DIN	A-DQ(ZN)2Y, 200 µm disposable drums
0301951XXX	Mini cable 24x12F G.657.A1, Ø8,1 mm, black HDPE, DIN	A-DQ(ZN)2Y, 200 µm disposable drums

Other configurations and diameters available upon customer request.
Lengths according to manufacturer specifications.

Fibre Unit/EPFU
FIBRE OPTIC CABLE

Fibre unit

Item no.	Description	Details	Länge
0301951XXX	FU 2, Ø1,2 mm	G.657.A1	6 km
0301951XXX	FU 4, Ø1,2 mm	G.657.A1	6 km
0301951XXX	FU 6, Ø1,4 mm	G.657.A1	4 km
0301951XXX	FU 8, Ø1,4 mm	G.657.A1	4 km
0301951XXX	FU 12, Ø1,6 mm	G.657.A1	4 km

Ducts
& Duct
Accessories

Single Microduct
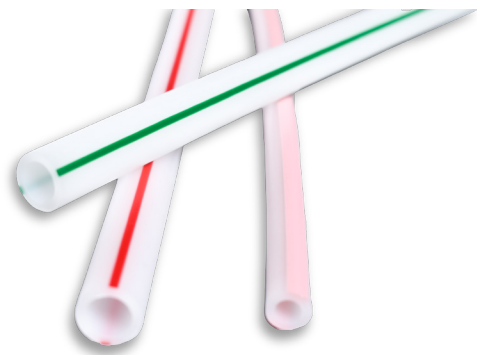
Single microducts

Item no.	Description	Details
06019x0174	ER 1x7/4 mm	HDPE - DIN 0888
06019x1106	ER 1x10/6 mm	HDPE - DIN 0888
06019x1128	ER 1x12/8 mm	HDPE - DIN 0888
06019x1141	ER 1x14/10 mm	HDPE - DIN 0888
06019x1161	ER 1x16/12 mm	HDPE - DIN 0888
06019x1201	ER 1x20/15 mm	HDPE - DIN 0888

**Custom colour and stripe configuration according to DIN standard.
Lengths as specified by the manufacturer.**

Microduct Bundle

Microduct bundles

Item no.	Description	Details
06019x2074x	MRV 2x7/4 mm	HDPE - DIN 0888
06019x2141	MRV 2x14/10 mm	HDPE - DIN 0888
06019x3128x	MRV 3x12/8 mm	HDPE - DIN 0888
06019x7128x	MRV 7x12/8 mm	HDPE - DIN 0888
06019x7141	MRV 7x14/10 mm	HDPE - DIN 0888
06019x7162	MRV 7x16/12 mm	HDPE - DIN 0888
06019x1274	MRV 12x7/4 mm	HDPE - DIN 0888
06019x1216	MRV 12x10/6 mm	HDPE - DIN 0888
06019x1228	MRV 12x12/8 mm	HDPE - DIN 0888
06019x2474	MRV 24x7/4 mm	HDPE - DIN 0888
06019x8711x	MRV 8x7/4 mm with inner tube 1x12/8 mm	HDPE - DIN 0888
06019x2741x	MRV 22x 7/4 mm with inner tube 1x12/8 mm	HDPE - DIN 0888

**Other variants and colour options available according to DIN standard.
Lengths according to manufacturer specifications.**

Connectors
DUCTS & DUCT ACCESSORIES

Microduct connectors

| Item no.	Description	Details
040800824	Connector, 4 mm, transparent incl. locking clip, with internal metal ring	4 mm OD, 2 mm ID
040800210SEN	Connector, 7 mm, transparent incl. locking clip, with internal rubber ring	7 mm OD, 4 mm ID
040800219SEN	Connector, 10 mm, transparent incl. locking clip, with internal rubber ring	10 mm OD, 6 mm ID
040800237SEN	Connector, 12 mm, transparent incl. locking clip, with internal rubber ring	12 mm OD, 8 mm ID
040800211SEN	Connector, 14 mm, transparent incl. locking clip, with internal rubber ring	14 mm OD, 10 mm ID
040800220SEN	Connector, 16 mm, transparent incl. locking clip, with internal rubber ring	16 mm OD, 12 mm ID
040800245	Connector, 20 mm, transparent incl. locking clip, with internal rubber ring	20 mm OD, 15 mm ID
040800845	Connector, 20 mm, transparent incl. locking clip, with internal metal ring	20 mm OD, 15 mm ID

End Caps & Reducers

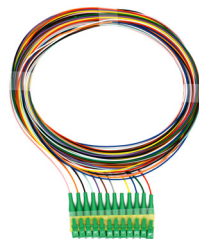| Item no.	Description
040800825	End cap, 4 mm, transparent incl. locking clip, with internal metal ring
040800212SEN	End cap, 7 mm, transparent incl. locking clip, with internal rubber ring
040800221SEN	End cap, 10 mm, transparent incl. locking clip, with internal rubber ring
040800239SEN	End cap, 12 mm, transparent incl. locking clip, with internal rubber ring
040800218SEN	End cap, 14 mm, transparent incl. locking clip, with internal rubber ring
040800222SEN	End cap, 16 mm, transparent incl. locking clip, with internal rubber ring
040800517	Reducer, 7/4–4/2.1 mm, with internal rubber ring
040800290	Reducer, 10/6–7/4 mm, with internal rubber ring
040800816	Reducer, 12/8–7/4 mm, with internal metal ring
040800242	Reducer, 12/8–10/6 mm, with internal rubber ring
040800843	Reducer, 16/12–12/8 mm, with internal metal ring

Accessories

Fibre Patch Cables
ACCESSORIES
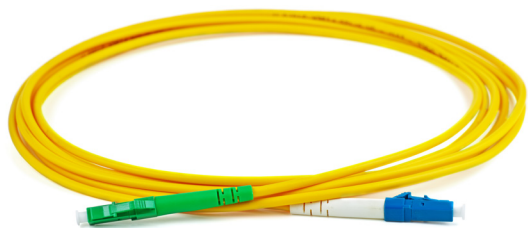
Fibre patch cable

Connector Types	Cable Ø	Details
LC/APC - SC/APC	1,6 mm	G.657.A1 simplex yellow, single mode
LC/APC - SC/APC	3,0 mm	G.657.A1 simplex yellow, single mode
LC/APC - LC/APC	1,2 mm	G.657.A1 simplex yellow, single mode
LC/APC - LC/APC	1,6 mm	G.657.A1 simplex yellow, single mode
LC/APC - LC/APC	3,0 mm	G.657.A1 simplex yellow, single mode
SC/APC - SC/APC	1,2 mm	G.657.A1 simplex yellow, single mode
SC/APC - SC/APC	1,6 mm	G.657.A1 simplex yellow, single mode
LC/APC - LC/PC	1,2 mm	G.657.A1 simplex yellow, single mode

Other versions and lengths available on request.
Please specify connector type, cable diameter, and cable length.

Pigtails & Pigtail Sets
ACCESSORIES

Pigtail sets including Crimp Splice Protector (CSS)

Item no.	Description	Details
040800019	Pigtail set 900µ, 1,5 m, 2x pigtail, 2xCSS, LC APC blue/green	G.657.A1
040800020	Pigtail set 900µ, 1,5 m, 2x pigtail, 2xCSS, LC APC red/green	G.657.A1
040800021	Pigtail set 900µ, 1,5 m, 2x pigtail, 2xCSS, LC APC blue/yellow	G.657.A1
040800022	Pigtail set 900µ, 1,5 m, 2x pigtail, 2xCSS, LC APC white/grey	G.657.A1
040800029	Pigtail set 900µ, 2,5 m, 2x pigtail, 2xCSS, LC APC blue/green	G.657.A1
040800030	Pigtail set 900µ, 2,5 m, 2x pigtail, 2xCSS, LC APC red/green	G.657.A1
040800031	Pigtail set 900µ, 2,5 m, 2x pigtail, 2xCSS, LC APC blue/yellow	G.657.A1
040800032	Pigtail set 900µ, 2,5 m, 2x pigtail, 2xCSS, LC APC white/grey	G.657.A1
040800611	Pigtail set 900µ, 1,5 m, 4x pigtail, 4xCSS, LC/APC 8°	G.657.A1 LSZH, easy strip
040800615	Pigtail set 900µ, 1,5 m, 6x pigtail, 6xCSS, LC/APC 8°	G.657.A1 LSZH, easy strip
040800616	Pigtail set 900µ, 1,5 m, 10x pigtail, 10xCSS, LC/APC 8°	G.657.A1 LSZH, easy strip
040800622	Pigtail set 900µ, 1,5 m, 12x pigtail, 12xCCS, LC/APC 8°	G.657.A1 LSZH, easy strip
040800617	Pigtail set 900µ, 1,5 m, 14x pigtail, 14xCSS, LC/APC 8°	G.657.A1 LSZH, easy strip
040800619	Pigtail set 900µ, 1,5 m, 16x pigtail, 16xCSS, LC/APC 8°	G.657.A1 LSZH, easy strip
040800618	Pigtail set 900µ, 1,5 m, 18x pigtail, 18xCSS, LC/APC 8°	G.657.A1 LSZH, easy strip
040800620	Pigtail set 900µ, 1,5 m, 22x pigtail, 22xCSS, LC/APC 8°	G.657.A1 LSZH, easy strip
040800621	Pigtail set 900µ, 1,5 m, 24x pigtail, 24xCSS, LC/APC 8°	G.657.A1 LSZH, easy strip

Available in other configurations and lengths upon request.

Sealing and Blowing Sleeves
ACCESSORIES

Re-enterable duct seal

Re-enterable single cable seal

Single-cable seal with gas block

Item no.	Description	VPE
040800513	Single-cable seal / gas stop, 7/0.9–4.5	25 pcs
040800531	Single-cable seal / gas stop, 10/3–4.5	25 pcs
040800532	Single-cable seal / gas stop, 14/8–6	25 pcs
040800533	Single-cable seal / gas stop, 16/8–6	25 pcs
040800555	Split single-cable seal, 4 mm / 0.9 mm, violet	100 pcs
040800554	Split single-cable seal, 4 mm / 1.25 mm, red	100 pcs
040800550	Split single-cable seal, 7 mm / 1.25 mm, red	100 pcs
040800553	Split single-cable seal, 7 mm / 0.9 mm, violet	100 pcs
040800557	Split single-cable seal, 10 mm / 1.6 mm, green	100 pcs
040800558	Split single-cable seal, 10 mm / 2.9 mm, orange	100 pcs
040800551	Split duct seal, 14 mm / 6.5–5.0 mm, red	25 pcs
040800552	Split duct seal, 14 mm / 8.0–6.5 mm, blue	25 pcs
040800556	Split duct seal, 16 mm / 8.0–6.5 mm, blue	25 pcs

Wall and Building Entries
ACCESSORIES

Wall entry

Wall entry accessories

Cable duct

Item no.	Description	Details
Multi-Wall Entry		
040800945	MD1-FTTH 4x4–8 mm, Multi Building Entry	Drill hole Ø16–32 mm
040800946	MD1-FTTH 4x12.5 mm / 1x20 mm, Multi Building Entry	Drill hole Ø32–50 mm
Multi-Wall Entry Kit incl. Sealing Compound		
040800947	MD1-FTTH + FTTH 90° angle entry element, 2x7 mm	Drill hole Ø16–32 mm
Single Wall Entry		
040800949	MD1-FTTH 1x4-12 mm	Drill hole Ø16-20 mm, 1 VE/10 pcs.
Single Wall Entry Kit incl. Sealing Compound		
040800948	MD1-FTTH + FTTH 90° angle entry element, 1x4–8 mm	Drill hole Ø16-20 mm
040800951	MD1-FTTH + FTTH 90° angle entry element, 1x10–12 mm	Drill hole Ø16-20 mm
Aerial Building Entry / 90° Angle		
040800950	FTTH 90° angle entry element, 1x4–8 mm	Bend radius 35 mm, Drill hole Ø10–25 mm (PU 25 pcs + 1 cartridge MD+)
040800952	FTTH 90° angle entry element, 1x10–12 mm / 2x7 mm	Bend radius 46 mm, drill hole Ø22–32 mm (PU 6 pcs + 1 cartridge MD+)
Cable Duct		
040800953	Cable duct, aluminum, white	110×3.3×1.8 cm, for cables/ducts Ø4–12 mm

Adapters & Splice Protection
ACCESSORIES

Duplex adapter
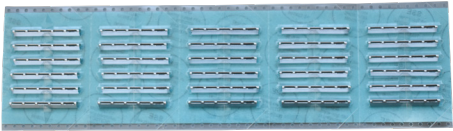
TKM Crimp splice protector

Quad adapter

SENTAL Crimp splice protector

Item no.	Description	VPE
040800300	Duplex LC/APC Adapter with flange	25 pcs
040800320	Duplex LC/APC Adapter with shutter, without flange	25 pcs
040800301	Duplex LC ceramic adapter without flange	25 pcs
040800310	Quad LC/APC Adapter with flange	25 pcs
040800330	Quad LC/UPC Adapter with flange	25 pcs
040800340	Duplex SC/UPC Adapter with flange	25 pcs
040800050	ANT crimp splice protector	120 pcs
040800051	SENTAL crimp splice protector	120 pcs
040800052	TKM crimp splice protector	150 pcs
040800100	Heat shrink splice protector, Fibre optic, 45 mm	100 pcs
040800095	Heat shrink splice protector, Fibre optic, 30/0.5 mm	200 pcs
040800090	Heat shrink splice protector, Fibre optic, 30 mm	100 pcs
051058100	Heat shrink splice protector, 60 mm × 1.2 mm	100 pcs

Labeling Systems

Pin marker 130/100 analog


Ball marker Mar100-LQ

Cable identification loops

Cable route warning tape orange & yellow

Item no.	Description	Details
040800502	Route warning tape, 250 m, yellow	"Caution: Fibre Optic Cable"
040800502a	Route warning tape, 250 m, orange, DGF	"Caution: Fibre Optic Cable"
040800502b	Route warning tape, 250 m, UGG	"Caution: Fibre Optic Cable"
040800502c	Route warning tape, 250 m, GF+	"Caution: Fibre Optic Cable"
040800501xx	Cable identification tags, for cable Ø40–60 mm, text field 60 mm up to two lines	Available colours: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink **PU 100 pcs**
050800509	Pin marker 130/100 analog	101.4 kHz, analog
040800505	Ball marker Mar100-3D, orange	101.4 kHz, analog
040800506	Ball marker Mar100-LQ, orange	101.4 kHz, analog

Network
Level 4

Wall-mounted Fibre Termination Unit
NETWORK LEVEL 4
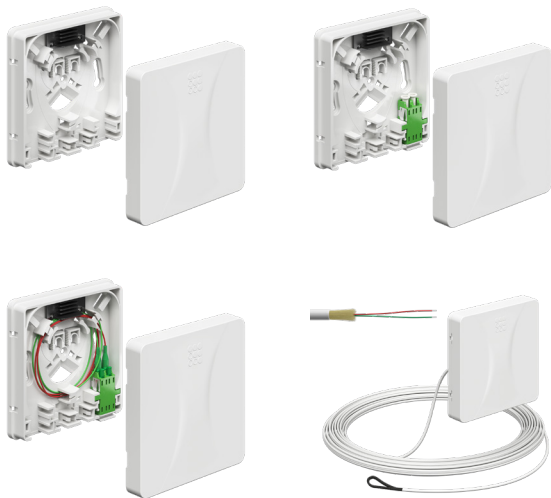
Wall-mounted FTU available in various configurations.

Item no.	Description	Details
050804252001	Fibre termination outlet, surface-mounted, empty	–
050804252002	Fibre termination outlet, surface-mounted, partially assembled	1x LC/APC DX with flange, CSS
050804252004	Fibre termination outlet, surface-mounted, partially assembled	2x LC/APC DX with flange
050804252003	Fibre termination outlet, surface-mounted, splice-ready	1x LC/APC DX with flange, 2x pigtails
050804252005	Fibre termination outlet, surface-mounted, splice-ready	2x LC/APC DX with flange, 4x pigtails
050804252008	Fibre termination outlet, surface-mounted, 2F, 20 m, rear entry, splice-ready	1x LC/APC DX with flange
050804252022	Fibre termination outlet, surface-mounted, 4F, 20 m, rear entry, splice-ready	2x LC/APC DX with flange
050804252015	Fibre termination outlet, surface-mounted, 2F, 20 m, bottom entry, splice-ready	1x LC/APC DX with flange
050804252029	Fibre termination outlet, surface-mounted, 4F, 20 m, bottom entry, splice-ready	2x LC/APC DX with flange

These items are available in lengths of 10 m, 15 m, 20 m, 25 m & 30 m.

Flush-mounted Fibre Termination Outlet
NETWORK LEVEL 4

Flush-mounted Fibre termination outlet in various configurations

Item no.	Description	Details
050904250001	Fibre termination outlet, flush-mounted, partially assembled	1x LC/APC Quad, CSS, with shutter
050804250021	Fibre termination outlet, flush-mounted, 2F, 20 m	1x LC/APC DX with flange, pre-terminated, connection to BEP
050804250026	Fibre termination outlet, flush-mounted, 4F, 20 m	2x LC/APC DX with flange, pre-terminated, connection to BEP
050804264005	System cable 2F, 20 m, connection between Fibre building distributor (Gf-GV) and floor distributor (Gf-EV)	Pre-terminated, LC/APC connector, dispenser box
050804264010	System cable 4F, 20 m, connection between Fibre building distributor (Gf-GV) and floor distributor (Gf-EV)	Pre-terminated, LC/APC connector, dispenser box
These items are available in lengths of 10 m, 15 m, 20 m, 25 m & 30 m.		
050804250007	Fibre termination outlet, 2F, flush-mounted, 20 m, rear entry	1x LC/APC Quad with flange, splice-ready
050804250014	Fibre termination outlet, 4F, flush-mounted, 20 m, rear entry	2x LC/APC Quad with flange, splice-ready
These items are available in lengths of 10 m, 15 m, 20 m, 25 m, 30 m, 50 m & 70 m.		

Pre-terminated Rollerbox

NETWORK LEVEL 4

Rollerbox

Item no.	Description	Details
050252110SEN	Fibre termination outlet, surface-mounted, 4xF, 10 m, pre-terminated, one-sided	1x LC/APC/DX Adapter, 2x LC/APC connectors
050252111SEN	Fibre termination outlet, surface-mounted, 4xF, 20 m, pre-terminated, one-sided	1x LC/APC/DX Adapter, 2x LC/APC connectors
050252112SEN	Fibre termination outlet, surface-mounted, 4xF, 30 m, pre-terminated, one-sided	1x LC/APC/DX Adapter, 2x LC/APC connectors
050252113SEN	Fibre termination outlet, surface-mounted, 4xF, 40 m, pre-terminated, one-sided	1x LC/APC/DX Adapter, 2x LC/APC connectors

Indoor Drop Cable
NETWORK LEVEL 4

Inhouse Drop Cable

Item no.	Description	Details
0301951716	FTTH-Drop cable, 1x4F, G.657.A2, Ø2.65 mm, CPR B2CA s1 d1 a1	I-DQ(ZN)H
0301951783	FTTH-Drop cable, 1x4F, G.657.A2, Ø2.15 mm, CPR B2CA s1 d1 a2	I-DQ(ZN)H
0301951806	FTTH-Drop cable, 1x4F, G.657.A2, Ø2.1 mm, CPR B2CA s1a, d1, a1	J-B(ZN)H, 190 µm
0301951645	FTTH-Drop cable, 1x12F, G.657.A2, Ø6.0 mm, CPR CCA s1,d2,a1	I/A-(CT)Q(ZN)H, 250 µm
0301951694	FTTH-Drop cable, 2x12F, G.657.A2, Ø8.6 mm, CPR CCA s1,d2,a1	I/A-(CT)Q(ZN)H, 250 µm
0301951646	FTTH-Drop cable, 4x12F, G.657.A2, Ø9.2 mm, CPR CCA s1,d2,a1	I/A-(CT)Q(ZN)H, 250 µm

Standard drum length: 1 km

Indoor Duct & Accessories
NETWORK LEVEL 4

Indoor duct

Indoor connector

Bend guide

Item no.	Description	Details
0601925074	Indoor single duct 7/4 mm white	250 m
0601920074	Indoor single duct 7/4 mm white	500 m
0601900074	Indoor single duct 7/4 mm white	1.25 km
0601920106	Indoor single duct 10/6 mm white	500 m
0601900106	Indoor single duct 10/6 mm white	2.5 km
0601920128	Indoor single duct 12/8 mm white	350 m
0601900128	Indoor single duct 12/8 mm white	2 km
040800710	Connector indoor 7/4 mm	50 pcs
040800719	Connector indoor 10/6 mm	50 pcs
040800737	Connector indoor 12/8 mm	25 pcs
040800712	End cap indoor 7 mm	50 pcs
040800721	End cap indoor 10 mm	50 pcs
040800739	End cap indoor 12 mm	25 pcs
040800797	90° bend guide indoor for Ø7 mm	10 pcs
040800790	90° bend guide indoor for Ø10 mm & 12 mm	10 pcs

Fire Protection Systems
NETWORK LEVEL 4

Outlet Firestop DS 90/74 mm

Ceiling Firestop

Outlet Firestop DS 90/120 mm


Conduit sealing system RS 90

Cable sealing system LS 90

Sealing plug for corrugated conduit

Item no.	Description	Details
05080945901	Firestop cable sealing system LS 90 Ø20 mm	for fire-rated walls EI30–EI90 / for cables Ø5–15 mm
05080945902	Firestop conduit sealing system RS 90 / Install Ø35/32 mm	for fire-rated walls EI30–EI90 / for conduits M16–M25
05080945903	Firestop socket sealing system DS 90 / 74 mm	for fire-rated walls EI30–EI90
05080945904	Firestop socket sealing system DS 90 / 120 mm	for fire-rated walls EI30–EI90
05080945906	Firestop ceiling sealing system DS 90 / 120 mm	for fire-rated walls EI30–EI90
05080947391	Firestop marking label	Languages: DE/EN/FR/IT
05080945916	Sealing plug for corrugated conduit ECON M16	Airtight and smoke-tight for metric & imperial conduits
05080945920	Sealing plug for corrugated conduit ECON M20	Airtight and smoke-tight for metric & imperial conduits

Clear Track/Miniduct
NETWORK LEVEL 4
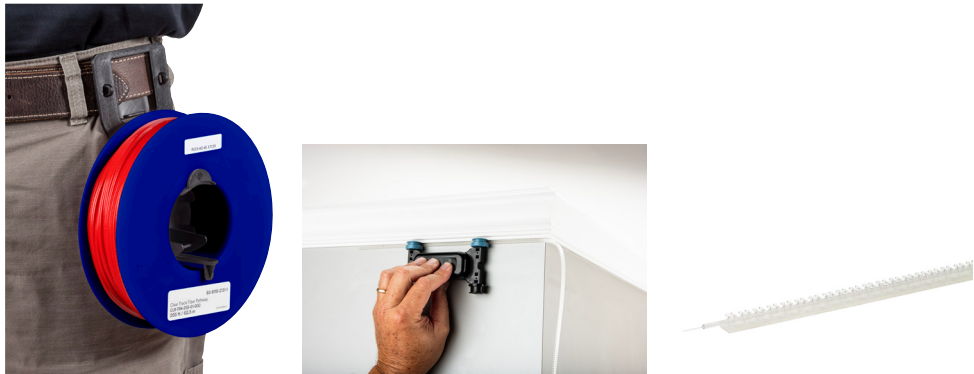
Clear Track Application

Hallway Miniature Duct for Stairwells

Practically invisible and designed to deliver gigabit bandwidth to every multi-dwelling unit (MDU) or usage unit.

In Fibre Network Level 4 (NE4), our unique Hallway Miniature Optical Fibre Raceway is used in combination with Fibre optic indoor cables certified according to the Construction Products Regulation (CPR) DIN EN 50575, class B2ca, such as the J-B(ZN)H indoor cable or a multi-Fibre micro module cable with bend-insensitive 250 μm Fibres.

The Fibre optic cables or micromodules are available in various Fibre counts and lengths, depending on the layout of the hallway, stairwell, or service unit and the number of subscribers to be connected.

The special self-adhesive backing of the Hallway Miniature raceway enables quick and simple installation on almost any surface – no glue, staples, sawing, or crown molding required.

Item no.	Description	Details
0301951785	900 μm clear Fibre, 1 km spool	Living area
040800957	Clear Track ILU miniature cable duct for 900 μm clear Fibre	For indoor use, 62.5 m spool

Interested or Have Questions?

Your direct line to us

Do you have questions about our products or would you like a personalized consultation? Our team is always available to support you. Whether you need product specifications, customized solutions, or assistance with your order – we're here to help!

Get in Touch!

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info@sental.de

Feel free to contact us — our team is happy to assist you with personalized support.

Notes

Images

Our special thanks go to KAISER GmbH & Co. KG, Corning Incorporated, and FILOform GmbH for generously providing their image material. Their support contributes significantly to the quality and clarity of our product catalogue.

CONNECTING PEOPLE AND THE FUTURE