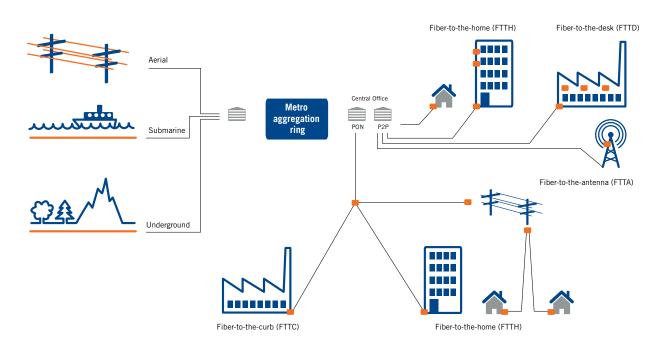


Fiber Solutions for Access and Transport Networks

Fiber Transport Network

Fiber Access Network



A Long Term Investment

The passive infrastructure in any fiber optic network is a long-term investment. It needs to be built on scalable and future-proof technology that is optimized in terms of capacity, quality and operational expenditure.

This catalogue presents an overview of our Passive Fiber Infrastructure offering. All products are designed and tested to meet the highest quality and environmental standards.

The catalogue covers the main areas:

Central Office Related Equipment covers products that are common in any type of network, regardless of application. Equipment racks, Optical Distribution Frames (ODFs), patch cords and other fiber optic accessories are found here.

Fiber Access Network covers the air blown fiber system Ribbonet[®] and the Hexatronic Micronet micro cable systems used for efficient installation of access networks including Fiber-to-the-Home (FTTH) and similar architectures. This section also covers products for scalable campus and metro networks as well as components for efficient splicing and termination of access networks. **Fiber Transport Network** covers products for general network applications such as fiber optic cables for underground and aerial as well as local site cabling installation. This section also includes associated cables and components for splicing and termination of cables.

Submarine Cable Systems

The range of cables for submarine installations is based on extensive experience from several submarine-cable projects.

Local Site Cabling and FTTA covers installation cables for various interconnect applications as well as cables for Fiber To The Antenna (FTTA) systems. This section also includes components used for indoor and outdoor installations.

You can find all our products on www.hexatronic.com.

ONLINE CATALOGUE

Contact the Hexatronic sales team to find your nearest wholesaler +46 (0) 10 - 453 02 00, order@hexatronic.com.



Please find catalogues in digital format and more information about our products and services at: www.hexatronic.com Hexatronic catalogues are also available in: issuu.hexatronicpartners.se

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CENTRAL OFFICE RELATED EQUIPMEN

EQUIPMENT RACK SYSTEMS

The Central Office offering features fiber management systems to efficiently and cost-effectively organize and terminate large quantities of fiber. The application in the central office environment is characterized by a minimum footprint in combination with class-leading capacity that allows well-organized and safe fiber termination to minimize operating errors.

Multifiber Management System

The Multifiber Management System is a highcapacity, telecom grade fiber termination rack for central office applications. The rack is equipped with fiber management through vertical and horizontal cable guides.

TYPE: 19" mounting frame size: 800x1800*x400 mm CAPACITY, EQUIPMENT: 36U CAPACITY, CONNECTIONS: up to 1536 (SC) * Overhead cable channel adds 150mm to height

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|---|
| 5055426 | 1/BFM108213 | Fiber Management System, 19" frame, patch management module and doors |
| | 8/BYB501180 | BYB 501 Rack H=1800 B=450 D=300 19" |
| | 10/BYB501180/1 | Set of Doors |
| | 11/BYB501180 | Set of End Covers |
| | 23/BYB501180 | Back Plate 400 mm |
| | 31/BYB501180/1 | Multipatch handling system |
| | 51/BYB501 | Fasteners |
| | SXA1135667 | Vertical cable guide |



Compact Fiber Management System

This rack system offers unique benefits for high density fiber optic termination applications such as FTTH.

TYPE: 14" frame size: 600x1800 / 2200x300 mm capacity, equipment: 24/36U capacity, connections: 1152/1536 (SC)

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|------------------|---|
| 5001037 | BAB327300/100 | Compact Fiber Management System 14" frame, 1800 mm |
| 5001038 | BAB327300/200 | Compact Fiber Management System 14" frame, 2200 mm |
| 5001033 | 1/BAB327300 | Top mechanic for fiber rack w. Patch guide and wall mount |
| 5001034 | 10/BAB327300/100 | Door for BAB327300/100 |
| 5001036 | 10/BAB327300/200 | Door for BAB327300/200 |

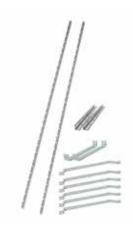


Mounting Frame System

The mounting rack system is a multi-purpose, wall mounted frame system for smaller sites. The frame is designed for 19" equipment. The depth of the frame can be adjusted with brackets.

TYPE: 19" mounting frame, wall mountedSIZE: 500x2200x240x500 mmCAPACITY, EQUIPMENT: 48 U

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|----------------------------|
| 5001010 | NBF11003 | Mounting Frame System, Set |
| 5001050 | N-675073 | Vertical Bar |
| 5001060 | N-675074 | Cable Support |
| 5001135 | N-675075 | Wire Guide |
| 5001055 | N-675076 | Top and Bottom Iron |
| 5001110 | NBH10201 | Mounting Frame |
| 5001015 | NBH10202 | Mounting Set |
| 5001120 | NBH10401 | Mounting Bar |
| 5001030 | NBH10402 | Mounting Set |
| 5001065 | NSD60101 | Fixing Iron |
| 5001067 | NSD60102 | Fixing Iron |
| 5001130 | NSG20701 | Wire Guide |
| 5001165 | NSV45101 | Washer |
| 5001155 | NSV61101 | Screw |
| | | |



Fiber Jointing Cabinet - High Capacity

This high capacity cabinet is intended for handling of cable splices between incoming cables entering the central office and the cables from pre-terminated ODFs. The cabinet can be wall mounted or mounted in a 19" or ETSI rack.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|----------------------------|
| 5055427 | NCD5188005 | Fiber Jointing Cabinet 786 |
| 5060284 | NTM503023 | External strain relief kit |



Fiber Jointing Cabinet - Small

This extra small cabinet is useful for smaller sites. It is intended for wall mounting. The cabinet includes 2 splice trays. To increase the splice capacity, 6 additional trays can be added (optional accessories).

TYPE: Cable installation, wall mount **SIZE:** 350x300x130 mm **CAPACITY:** 24 to 96* splices (single fiber) or 48 to 192* splices (4-f ribbon) * With additional splice trays (optional)

TYPE: Cable installation, 19", ETSI or wall mount

CAPACITY: 768 splices (single fiber) or 2600 spli-

size: 440x600x220 mm

ces (8-f ribbon)

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5055401 | NCD5181098 | Cabinet for fiber splicing only, wall mount, incl. 2 splice trays and solid panel |



OPTICAL DISTRIBUTION FRAMES

Optical Distribution Frames (ODFs) are integrated components in any fiber management system. They are available as rack-mounted units for 14", 19" or ETSI racks, or as wall-mounted cabinets. The ODFs are available in a range of configurations depending on application:

Pre-terminated ODFs with stub cables are pre-installed with connectors and cable for quick and easy installation. Units with pre-terminated cables offer advantages such as faster installation, resulting in shorter time to revenue as well as guaranteed quality and performance. Several cable options are available. ODFs with stub micro cables are especially suitable for high packing density applications such as the Multifiber Management System (MMS).

ODFs for cable installation are intended for installation and termination of all kinds of fiber optic cables. The units are suitable for splicing pigtails or fiber ribbon fanouts as well as field-installable connectors. The ODFs are delivered empty, allowing the customer to order the pigtails/fanouts, adapters, splice protection sleeves and installation kit that best suit the specific application. The units can also be installed with pre-connectorized cable assemblies.

ODFs for air blown fiber are designed to handle termination of microducts for air blown fibers. They are typically used in FTTx applications when blowing fibers directly to a central office or other distribution point. The air blown technology enables incremental installation when needed.

ODF Pre-terminated, with Stub Cable, 2U

Pre-terminated ODF with a capacity from 24 to 96 SC (192 LC) connectors. Options include: halogenfree, flame-retardant, loose tube, ribbon or micro cable. Optional accessories include horizontal patch cord guides for space-saving mounting directly onto the front of the ODF. TYPE: Pre-terminated, 19" or ETSI mount, 2U SIZE: 400x249x86 mm CAPACITY: 24-96 SC, 24-192 LC CABLE OPTIONS: Halogen-free, flame-retardant loose tube, ribbon or micro cable, 10-100 m CONNECTOR OPTIONS: SC, SC/APC, LC, LC/APC



| E-NO. | PRODUCT NO. | PRODUCT NAME | PRODUCT NO.* | PRODUCT NAME |
|---------|-----------------|---|-----------------|--|
| 5029089 | NCD5138051/010D | 48xSC ODF 2U, Micro Cable GNHQBDUV 10m | NCD5138053/aaaD | 24xSC ODF 2U, Micro Cable GNHQBDUV |
| | NCD5138051/020D | 48xSC ODF 2U, Micro Cable GNHQBDUV 20m | NCD5138094/aaaD | 24xSC/APC ODF 2U, Micro Cable GNHQBDUV 1 |
| | NCD5138051/050D | 48xSC ODF 2U, Micro Cable GNHQBDUV 50m | NCD5138095/aaaD | 48xSC/APC ODF 2U, Micro Cable GNHQBDUV 1 |
| | NCD5138051/100D | 48xSC ODF 2U, Micro Cable GNHQBDUV 100m | NCD5138059/aaaD | 72XSC/APC ODF 2U, Micro Cable GNHQBDU 10 |
| 5029088 | NCD5138052/010D | 72xSC ODF 2U, Micro Cable GNHQBDUV 10m | NCD5138049/aaaD | 24xLC ODF 2U, Micro Cable GNHQBDUV 10m |
| | NCD5138052/020D | 72xSC ODF 2U, Micro Cable GNHQBDUV 20m | NCD5138048/aaaD | 48xLC ODF 2U, Micro Cable GNHQBDUV 10m |
| | NCD5138052/050D | 72xSC ODF 2U, Micro Cable GNHQBDUV 50m | NCD5138079/aaaD | 24xSC ODF 2U, Indoor/Outdoor Sheath GRHQBI |
| | NCD5138052/100D | 72xSC ODF 2U, Micro Cable GNHQBDUV 100m | NCD5138078/aaaD | 48xSC ODF 2U, Indoor/Outdoor Sheath GRHQB |
| 5029087 | NCD5138050/010D | 96xSC ODF 2U, Micro Cable GNHQBDUV 10m | NCD5138077/aaaD | 96xSC ODF 2U, Indoor/Outdoor Sheath GRHQBI |
| 5029092 | NCD5138050/020D | 96xSC ODF 2U, Micro Cable GNHQBDUV 20m | NCD5138033/aaaD | 24 SC ODF 2U GASQBDUV 10m |
| 5029093 | NCD5138050/050D | 96xSC ODF 2U, Micro Cable GNHQBDUV 50m | NCD5138034/aaaD | 48 SC ODF 2U GASQBDUV 10m |
| | NCD5138050/100D | 96xSC ODF 2U, Micro Cable GNHQBDUV 100m | NCD5134356/aaaD | 96 SC ODF 2U GASQBDUV 10m |
| 5029090 | NCD5138040/010D | 96xSC/APC ODF 2U, Micro Cable GNHQBDUV 10m | NCD5138091/aaaD | 24 SC/APC ODF 2U GASQBDUV 10m |
| | NCD5138040/020D | 96xSC/APC ODF 2U, Micro Cable GNHQBDUV 20m | NCD5138092/aaaD | 48 SC/APC ODF 2U GASQBDUV 10m |
| | NCD5138040/050D | 96xSC/APC ODF 2U, Micro Cable GNHQBDUV 50m | NCD5134346/aaaD | 96 SC/APC ODF 2U GASQBDUV 10m |
| | NCD5138040/100D | 96xSC/APC ODF 2U, Micro Cable GNHQBDUV 100m | NCD5138093/aaaD | 24 LC ODF 2U GASQBDUV 10m |
| 5029091 | NCD5138047/010D | 96xLC ODF 2U, Micro Cable GNHQBDUV 10m | NCD5138038/aaaD | 48 LC ODF 2U GASQBDUV 10m |
| | NCD5138047/020D | 96xLC ODF 2U, Micro Cable GNHQBDUV 20m | NCD5138037/aaaD | 96 LC ODF 2U GASQBDUV 10m |
| | NCD5138047/050D | 96xLC ODF 2U, Micro Cable GNHQBDUV 50m | NCD5138063/aaaD | 72xLC ODF 2U, Micro Cable GAHQBDU 10m w. |
| | NCD5138047/100D | 96xLC ODF 2U, Micro Cable GNHQBDUV 100m | | Patch Guide type A for general racks |

*aaa indicates the length in m. (aaa = 010, 020, 050, 100 etc)

ODF for Cable Installation, 2U

High capacity ODF with up to 96/192 connectors. Optional accessories include horizontal patch cord guides for space-saving mounting directly onto the front of the ODF, pigtails, fanouts, adapters, splice sleeves, etc.

TYPE: Cable installation, 19" or ETSI mount, 2U **SIZE:** 400x249x86 mm excluding reel **CAPACITY:** 96 SC, 192 LC **CONNECTOR OPTIONS:** SC, SC/APC, LC, LC/APC, E2000, FC, ST

TYPE: Cable installation, 19" or ETSI mount, 1,5U

CONNECTOR OPTIONS: SC, SC/APC, LC, LC/APC,

size: 440x247x66 mm excluding reel

CAPACITY: 48 SC, 96 LC

E2000, FC



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 5055428 | NCD5139215 | ODF box with 24 SC duplex cut out |
| 5055429 | NCD5139217 | ODF box with 36 SC duplex cut out |
| 5010028 | NCD5139216 | ODF box with 48 SC duplex cut out |
| | NCD5139245 | ODF box with 24 slots for E2000-duplex adapters (48-fiber) |
| 5010026 | NCD5139305 | ODF box with 48 slots for FC or ST adapters (48-fiber) |

ODF for Cable Installation, 1.5U

ODF with a capacity of up to 48/96 connectors. Optional accessories include horizontal patch cord guides for rack mounting directly under the ODF, pigtails, fanouts, adapters, splice sleeves etc.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 5010025 | NCD5130303 | ODF box1,5U with 24 slots for FC or ST |
| 5010022 | NCD5130211 | ODF box 1,5U with 12 SC duplex cut out |
| 5055430 | NCD5130212 | ODF box 1,5U with 18 SC duplex cut out |
| 5010023 | NCD5130213 | ODF box 1,5U with 24 SC duplex cut out |
| | NCD5130243 | ODF box 1,5U with 24 E2000 cut out |

ODF for Air Blown Fiber installation, 1U

Compact ODF with front access for simplified incremental installation of air blown fiber. The ODF has a capacity up to 48 SC (96 LC) connectors and clamps for up to 48 microducts. Optional accessories include horizontal patch cord guides, pigtails, fanouts, adapters, splice sleeves etc.

TYPE: 19" mount for air blown fiber installation, front access size: 450x280x44 mm CAPACITY: 48 SC, 96 LC CONNECTOR OPTIONS: SC, SC/APC, LC, LC/APC



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| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 5060051 | NCD5200013 | ODF for microduct access in the front, 24SC duplex cut-out |

ODF Patch Panels

This is a multi-purpose patch panel system when no or limited access from the rear of the rack is allowed. The panel offers total front access for both incoming and outgoing cables. The light-weight panel is divided in a left and right swiveling section. It is designed for pre-connected incoming cable assemblies. **TYPE:** Pre-connected cable assemblies **SIZE:** 485x200x43 mm **CAPACITY:** 6 basic versions with 48 or 32 SC adapters



| PRODUCT NO. | PRODUCT NAME |
|---------------|--|
| NCD5205000/1 | ODF box1U with 48 SC-simplex adapters (included) |
| NCD5205000/2 | ODF box1U with 16 SC-duplex adapters (for 32 connectors, included) |
| NCD5205000/3 | ODF box1U with 48 SC/APC-simplex adapters (included) |
| 1NCD5205000/4 | ODF box1U with 16 SC/APC-duplex adapters (for 32 connnectors, included) |
| NCD5205000/10 | ODF box 1U with 48 slots for SC-simplex |
| NCD5205000/20 | ODF box 1U with 16 slots for SC-duplex |
| | NCD5205000/1 NCD5205000/2 NCD5205000/3 1NCD5205000/4 NCD5205000/10 |

Pre-connected ODF 14"/19"

These compact and pre-connected ODF:s are intended for 14" rack systems such as the BAB327 300. The connectors are teminated to a stub cable consisting of 8-f ribbons. Two versions are available: 1U with 48 SC or 2U with 96 SC. TYPE: Pre-terminated, 14" mount, 1U or 2U SIZE: 310x220x44/88 mm CAPACITY: 48 or 96 SC CABLE OPTIONS: Halogen-free, flame-retardant ribbon cable, 15-150 m CONNECTOR OPTIONS: SC



| 5026005 NCD5200072/15M 48xSC 14" 1U ODF GAQQBDU Ribbon 15 m |
|---|
| |
| 5026006 NCD5200072/30M 48xSC 14" 1U ODF GAQQBDU Ribbon 30 m |
| 5026007 NCD5200072/50M 48xSC 14" 1U ODF GAQQBDU Ribbon 50 m |
| 5026008 NCD5200072/70M 48xSC 14" 1U ODF GAQQBDU Ribbon 70 m |
| 5026004 NCD5200072/100M 48xSC 14" 1U ODF GAQQBDU Ribbon 100 m |
| 5026057 NCD5200075/15M 96xSC 14" 2U ODF GAQQBDU Ribbon 15 m |
| 5026058 NCD5200075/30M 96xSC 14" 2U ODF GAQQBDU Ribbon 30 m |
| 5026059 NCD5200075/50M 96xSC 14" 2U ODF GAQQBDU Ribbon 50 m |
| 5026060 NCD5200075/70M 96xSC 14" 2U ODF GAQQBDU Ribbon 70 m |
| 5026056 NCD5200075/100M 96xSC 14" 2U ODF GAQQBDU Ribbon 100 m |

ODF for Cable Installation, Wall Mounted

Two-sided wall mounted ODF with a capacity of up to 48 SC or 96 LC connectors. The ODF consists of two compartments with separate locks and is therefore suitable as a demarcation cabinet between different network owners. The cabinet can also be used as a jointing box. Optional accessories include patch panels for different adapter types. TYPE: Cable installation, wall mount SIZE: 475x300x130 mm CAPACITY: 48 SC, 96 LC CONNECTOR OPTIONS: SC, SC/APC, LC, LC/APC, ST, FC



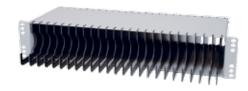
| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 5055437 | NCD5181200 | ODF Cabinet for fiber termination, panel 24 SC-Duplex cutout, side section, 4 splice trays |

Patch Handling Unit Wall Mounted

This patch handling unit stores excess lengths of patch cords connected to ODF:s. 24 slots provide storage of up to 6 m of cable in each slot.

 E-NO.
 PRODUCT NO.
 PRODUCT NAME

 5055439
 NBL32301
 Storage unit ETSI/19" (vertical storage)



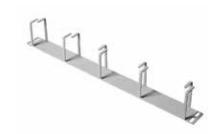
Horizontal Cable Guide

There are a number of accessories available for handling of patch cables in rack systems. This guide is mounted under ODF:s to guide patch cords to the side of the rack. **TYPE:** 19" mount patch cord guide, 1U **size:** 482x70x41 mm

TYPE: 19" mount patch cord storage unit

size: 482x234x88 mm

CAPACITY: 24 slots



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 5055408 | NTM504036 | Horizontal cable guide for mounting in 19"/ETSI rack, 1U |

PATCH CORDS, PIGTAILS AND CABLE ASSEMBLIES

The range of fiber optic patch cords, pigtails and cable assemblies cover all interconnect needs in any kind of environment. We provide virtually any type of fiber optic connector. Some examples are shown below.



Supported fiber types are singlemode G.657 (compatible to G.652), and multimode $50\mu m$ OM3and OM4. The product range is divided into four main categories:

Patch cords that are used for quick and easy interconnect between line equipment or for cross connection between network interface equipment such as ODFs. Patch cords are available as simplex (1 fiber), duplex (2 fiber).

Pigtails, stub fibers with a fitted connector on one end, are normally spliced towards a cable or other type of fiber unit inside an ODF, wall outlet or other type of network equipment. The standard pigtail is made of a 0.9mm tight secondary protected fiber. Pigtails are available for all connector options.

Fanouts, fiber ribbons that are branched out in one end and fitted with connectors, enable ribbon-fiber splicing, minimize splice cost and increase packing density in network equipment.

Multifiber cable assemblies, or fiber optic patch cables, for interconnect applications are preferred when a high number of interconnections and a high packing density is required. The cable assemblies are available with 4-48 fibers and are delivered pre-terminated in one or both ends. To facilitate installation and to maximize packing density, the multifiber cable assemblies use extra-slim micro cables, typically 6-8mm in diameter.



Patch Cords, Pigtails and Fanouts, Blue Grade

A series of patch cords, pigtails and fanouts for demanding telecom applications with high requirements for low-loss and stability. The products are made of highly bend resistant G657A2 fibers to minimize operating errors and enable highest packing density in interconnect applications. CONNECTOR OPTIONS: SC, SC/APC, LC, LC/APC PERFORMANCE: IL* \leq 0.30, RL (PC) \geq 50, RL (APC) \geq 60

 $\textbf{standard length:} 1, 2, 3, 5, 7, 10 \ m$

* Insertion Loss according to IEC 61300-3-4 method B



| E+N0.PRODUCT NO.PRODUCT NAMEPachCords, Surplex (J-IDE)PachCords, Surplex (J-IDE)HTSR395024/1000Pachcord SM, SC - SC, G657A2, Blue, 1 mHTSR395024/2000Pachcord SM, SC - SC, G657A2, Blue, 2 mHTSR395024/2000Pachcord SM, SC - SC, G657A2, Blue, 3 mHTSR395024/1000Pachcord SM, SC - SC, G657A2, Blue, 1 mHTSR395024/1000Pachcord SM, SC - SC, G657A2, Blue, 1 mHTSR395024/1000Pachcord SM, SC/APC - SC/APC, G657A2, Blue, 1 mHTSR395024/1000Pachcord SM, SC/APC - SC/APC, G657A2, Blue, 1 mHTSR395027/1000Pachcord SM, SC/APC - SC/APC, G657A2, Blue, 1 mHTSR395027/1000Pachcord SM, SC/APC - SC/APC, G657A2, Blue, 1 mHTSR395021/1000Pachcord SM, LC + LC, G657A2, Blue, 1 mHTSR395021/1000Pachcord SM, LC + LC + CA/APC, G657A2, Blue, 1 mHTSR395021/1000Pachcord SM, LC + LC + CA/APC, G657A2, Blue, 1 mHTSR395021/1000Pachcord SM, LC + LC + CA/APC, G657A2, Blue, 1 mHTSR395021/10 |
|--|
| HTSR3952024/1000 Patchcord SM, SC - SC, G657A2, Blue, 1 m HTSR3952024/2000 Patchcord SM, SC - SC, G657A2, Blue, 2 m HTSR3952024/3000 Patchcord SM, SC - SC, G657A2, Blue, 3 m HTSR3952024/7000 Patchcord SM, SC - SC, G657A2, Blue, 5 m HTSR3952024/1000 Patchcord SM, SC - SC, G657A2, Blue, 7 m HTSR3952024/1000 Patchcord SM, SC - SC, G657A2, Blue, 10 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 2 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 5 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, IC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, IC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, IC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, IC - LC, G657A2, Blue, 2 m HTSR3952012/1000 Patchcord SM, IC - LC, G657A2, Blue, 3 m HTSR3952012/1000 Patchcord SM, IC - LC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, IC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/1000 Patchco |
| HTSR3952024/2000 Patchcord SM, SC - SC, G657A2, Blue, 2 m HTSR3952024/3000 Patchcord SM, SC - SC, G657A2, Blue, 3 m HTSR3952024/7000 Patchcord SM, SC - SC, G657A2, Blue, 5 m HTSR3952024/1000 Patchcord SM, SC - SC, G657A2, Blue, 7 m HTSR3952024/1000 Patchcord SM, SC - SC, G657A2, Blue, 10 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 2 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 5 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcor |
| HTSR3952024/3000 Patchcord SM, SC - SC, G657A2, Blue, 3 m HTSR3952024/5000 Patchcord SM, SC - SC, G657A2, Blue, 5 m HTSR3952024/7000 Patchcord SM, SC - SC, G657A2, Blue, 7 m HTSR3952024/1000 Patchcord SM, SC - SC, G657A2, Blue, 1 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 2 m HTSR3952027/5000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/5000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 5 m HTSR3952027/5000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952034/1000 P |
| HTSR3952024/5000 Patchcord SM, SC - SC, G657A2, Blue, 5 m HTSR3952024/7000 Patchcord SM, SC - SC, G657A2, Blue, 7 m HTSR3952024/10M Patchcord SM, SC - SC, G657A2, Blue, 10 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952027/2000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 2 m HTSR3952027/2000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/5000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 5 m HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 10 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/1000 |
| HTSR3952024/7000 Patchcord SM, SC - SC, G657A2, Blue, 7 m HTSR3952024/10M Patchcord SM, SC - SC, G657A2, Blue, 10 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952027/2000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 2 m HTSR3952027/2000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/2000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 5 m HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC - LC/APC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 1 m HTSR3952034/1 |
| HTSR3952024/10M Patchcord SM, SC - SC, G657A2, Blue, 10 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952027/2000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 2 m HTSR3952027/3000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/5000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/10M Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 10 m HTSR3952027/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, |
| HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952027/2000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 2 m HTSR3952027/3000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/5000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/1000 Patchco |
| HTSR3952027/2000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 2 m HTSR3952027/3000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 5 m HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 5 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952034/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 1 m Patch Cords, Single Mode, |
| HTSR3952027/3000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 3 m HTSR3952027/5000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 5 m HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 10 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/5000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC - LC/APC, G657A2, Blue, 10 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 |
| HTSR3952027/5000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 5 m HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/1000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 1 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 5 m HTSR3952012/5000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m Patch Cords, Single Mode, Duplex (2-fiber SM) Pat |
| HTSR3952027/7000 Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 7 m HTSR3952027/10M Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 10 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/5000 Patchcord SM, LC - LC, G657A2, Blue, 5 m HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/10M Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 1 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m Patch Cords, Single Mode, Duplex (2-fiber SM) Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 |
| HTSR3952027/10M Patchcord SM, SC/APC - SC/APC, G657A2, Blue, 10 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952034/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m |
| HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 1 m HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/5000 Patchcord SM, LC - LC, G657A2, Blue, 5 m HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue1 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m |
| HTSR3952012/2000 Patchcord SM, LC - LC, G657A2, Blue, 2 m HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/5000 Patchcord SM, LC - LC, G657A2, Blue, 5 m HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m Patch Cords, Single Mode, Duplex (2-fiber SM) Puplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m |
| HTSR3952012/3000 Patchcord SM, LC - LC, G657A2, Blue, 3 m HTSR3952012/5000 Patchcord SM, LC - LC, G657A2, Blue, 5 m HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m Patch Cords, Single Mode, Duplex (2-fiber SM) Puplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m Patch Cords, Single Mode, Duplex (2-fiber SM) Puplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/3000 Duplex-Patchc |
| HTSR3952012/5000 Patchcord SM, LC - LC, G657A2, Blue, 5 m HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m Patch S3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/2000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| HTSR3952012/7000 Patchcord SM, LC - LC, G657A2, Blue, 7 m HTSR3952012/10M Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952032/1000 Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m HTSR3952034/5000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/2000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| HTSR3952012/10M Patchcord SM, LC - LC, G657A2, Blue, 10 m HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue1 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m PatSh39024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m |
| HTSR3952034/1000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue1 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/5000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m HTSR3952034/100M Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m |
| HTSR3952034/2000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 2 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 m HTSR3952034/3000 Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 m HTSR3952034/100M Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 m Patch Cords, Single Mode, Duplex (2-fiber SM) Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/2000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| HTSR3952034/3000Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 3 mHTSR3952034/5000Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 mHTSR3952034/100MPatchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 mPatch Cords, Single Mode, Duplex (2-fiber SM)Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 mHTSR3953024/1000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 mHTSR3953024/2000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 mHTSR3953024/2000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 mHTSR3953024/5000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 mHTSR3953024/5000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| HTSR3952034/5000Patchcord SM, LC/APC - LC/APC, G657A2, Blue, 5 mHTSR3952034/10MPatchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 mPatch Cords, Single Mode, Duplex (2-fiber SM)Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 mHTSR3953024/1000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 mHTSR3953024/2000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 mHTSR3953024/3000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 mHTSR3953024/5000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m |
| HTSR3952034/10MPatchcord SM, LC/APC - LC/APC, G657A2, Blue, 10 mPatch Cords, Single Mode, Duplex (2-fiber SM)HTSR3953024/1000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 mHTSR3953024/2000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 mHTSR3953024/2000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 mHTSR3953024/2000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 mHTSR3953024/2000Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m |
| Patch Cords, Single Mode, Duplex (2-fiber SM) HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/2000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| HTSR3953024/1000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 1 m HTSR3953024/2000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| HTSR3953024/2000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 2 m HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| HTSR3953024/3000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 3 m HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| HTSR3953024/5000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 5 m |
| |
| HTSR3953024/7000 Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 7 m |
| |
| HTSR3953024/10M Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A2, Blue, 10 m |
| HTSR3953027/1000 Duplex-Patchcord 2xSM, SC/APC - SC/APC, Blue, 1 m |
| HTSR3953027/2000 Duplex-Patchcord 2xSM, SC/APC - SC/APC, Blue, 2 m |
| HTSR3953027/3000 Duplex-Patchcord 2xSM, SC/APC - SC/APC, Blue, 3 m |
| HTSR3953027/5000 Duplex-Patchcord 2xSM, SC/APC - SC/APC, Blue, 5 m |
| HTSR3953027/7000 Duplex-Patchcord 2xSM, SC/APC - SC/APC, Blue, 7 m |
| HTSR3953027/10M Duplex-Patchcord 2xSM, SC/APC - SC/APC, Blue, 10 m |
| HTSR3953012/1000 Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A2, Blue, 1 m |
| HTSR3953012/2000 Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A2, Blue, 2 m |
| HTSR3953012/3000 Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A2, Blue, 3 m |
| HTSR3953012/5000 Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A2, Blue, 5 m |
| HTSR3953012/7000 Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A2, Blue, 7 m |
| HTSR3953012/10M Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A2, Blue, 10 m |
| TSR3950234/1000 Duplex-Patchcord 2xSM, LC/APC-LC/APC, G657A, Yellow, 1 r |
| TSR3950234/2000 Duplex-Patchcord 2xSM, LC/APC-LC/APC, G657A, Yellow, 2 r |
| TSR3950234/3000 Duplex-Patchcord 2xSM, LC/APC-LC/APC, G657A, Yellow, 3 r |
| TSR3950234/5000 Duplex-Patchcord 2xSM, LC/APC-LC/APC, G657A, Yellow, 5 r |
| TSR3950234/10M Duplex-Patchcord 2xSM, LC/APC-LC/APC, G657A, Yellow, 10 m |

| E-NO. | PRODUCT NO. | PRODUCT NAME |
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| | HTSR3953015/1000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A2, Blue, 1 m |
| | HTSR3953015/2000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A2, Blue, 2 m |
| | HTSR3953015/3000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A2, Blue, 3 m |
| | HTSR3953015/5000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A2, Blue, 5 m |
| | HTSR3953015/7000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A2, Blue, 7 m |
| | HTSR3953015/10M | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A2, Blue, 10 m |
| Patch Cords, | , Single Mode, Duplex (2-fibe | r SM) |
| | HTSR3953044/1000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC/APC, G657A2, Blue, 1 m |
| | HTSR3953044/2000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC/APC, G657A2, Blue, 2 m |
| | HTSR3953044/3000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC/APC, G657A2, Blue, 3 m |
| | HTSR3953044/5000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC/APC, G657A2, Blue, 5 m |
| | HTSR3953044/7000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC/APC, G657A2, Blue, 7 m |
| | HTSR3953044/10M | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC/APC, G657A2, Blue, 10 m |
| Pigtails, Sing | gle Mode | |
| | HTSR3950423/2000 | Pigtail SM (0.9 mm), SC - open end, G657A2, 2 m |
| | HTSR3950426/2000 | Pigtail SM (0.9 mm), SC/APC - open end, G657A2, 2 m |
| | HTSR3950414/2000 | Pigtail SM (0.9 mm), LC - open end, G657A2, 2 m |
| | HTSR3950433/2000 | Pigtail SM (0.9 mm), LC/APC - open end, G657A2, 2 m |
| Fanouts, Sin | gle Mode | |
| | HTSR3950623/2800 | Fanout tail SM, 4 SC , G657A2, 2.8 m |
| | HTSR3950626/2800 | Fanout tail SM, 4 SC/APC, G657A2, 2.8 m |
| | HTSR3950614/2800 | Fanout tail SM, 4 LC, G657A2, 2.8 m |
| | | |

HTSR3950633/2800 Fanout tail SM, 4 LC/APC, G657A2, 2,8 m

Patch Cords, Pigtails and Fanouts, Standard Grade

A series of patch cords, pigtails and fanouts that offers best price/performance ratio for access networks as well as general data communication applications. The products are made of bend resistant G657A fibers to minimize operating errors and enable high packing density in interconnect applications. connector options: SC, SC/APC, LC, LC/APC performance: IL* \leq 0.35, RL (PC) \geq 50, RL (APC) \geq 60

standard length: 1, 2, 3, 5, 10 m

 * Insertion Loss according to IEC 61300-3-4 method B.



| E-NO. | PRODUCT NO. | PRODUCT NAME |
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| atch Cords, | Single Mode, Simplex (1-fib | er SM) |
| 035100 | TSR3950124/1000 | Patchcord SM, SC - SC, G657A, Yellow, 1 m |
| 035101 | TSR3950124/2000 | Patchcord SM, SC - SC, G657A, Yellow, 2 m |
| 035102 | TSR3950124/3000 | Patchcord SM, SC - SC, G657A, Yellow, 3 m |
| 5035103 | TSR3950124/5000 | Patchcord SM, SC - SC, G657A, Yellow, 5 m |
| 5035104 | TSR3950124/10M | Patchcord SM, SC - SC, G657A, Yellow, 10 m |
| 5035110 | TSR3950127/1000 | Patchcord SM, SC/APC - SC/APC, G657A, Yellow, 1 m |
| 5035111 | TSR3950127/2000 | Patchcord SM, SC/APC - SC/APC, G657A, Yellow, 2 m |
| 5035112 | TSR3950127/3000 | Patchcord SM, SC/APC - SC/APC, G657A, Yellow, 3 m |
| 5035113 | TSR3950127/5000 | Patchcord SM, SC/APC - SC/APC, G657A, Yellow, 5 m |
| 5035114 | TSR3950127/10M | Patchcord SM, SC/APC - SC/APC, G657A, Yellow, 10 m |
| 5035105 | TSR3950112/1000 | Patchcord SM, LC - LC, G657A, Yellow, 1 m |
| 5035106 | TSR3950112/2000 | Patchcord SM, LC - LC, G657A, Yellow, 2 m |
| 5035107 | TSR3950112/3000 | Patchcord SM, LC - LC, G657A, Yellow, 3 m |
| 5035108 | TSR3950112/5000 | Patchcord SM, LC - LC, G657A, Yellow, 5 m |
| 5035109 | TSR3950112/10M | Patchcord SM, LC - LC, G657A, Yellow, 10 m |
| 5035135 | TSR3950134/1000 | Patchcord SM, LC/APC - LC/APC, G657A, Yellow1 m |
| 5035136 | TSR3950134/2000 | Patchcord SM, LC/APC - LC/APC, G657A, Yellow, 2 m |
| 5035137 | TSR3950134/3000 | Patchcord SM, LC/APC - LC/APC, G657A, Yellow, 3 m |
| 5035139 | TSR3950134/5000 | Patchcord SM, LC/APC - LC/APC, G657A, Yellow, 5 m |
| 5035140 | TSR3950134/10M | Patchcord SM, LC/APC - LC/APC, G657A, Yellow, 10 m |
| Patch Cords | Single Mode, Duplex (2-fibe | er SM) |
| 5035115 | TSR3950224/1000 | Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A, Yellow, 1 m |
| 5035116 | TSR3950224/2000 | Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A, Yellow, 2 m |
| 5035117 | TSR3950224/3000 | Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A, Yellow, 3 m |
| 5035118 | TSR3950224/5000 | Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A, Yellow, 5 m |
| 5035119 | TSR3950224/10M | Duplex-Patchcord 2xSM, 2 SC - 2 SC, G657A, Yellow, 10 m |
| 5035130 | TSR3950227/1000 | Duplex-Patchcord 2xSM, SC/APC - SC/APC, Yellow, 1 m |
| 5035131 | TSR3950227/2000 | Duplex-Patchcord 2xSM, SC/APC - SC/APC, Yellow, 2 m |
| 5035132 | TSR3950227/3000 | Duplex-Patchcord 2xSM, SC/APC - SC/APC, Yellow, 3 m |
| 5035133 | TSR3950227/5000 | Duplex-Patchcord 2xSM, SC/APC - SC/APC, Yellow, 5 m |
| 5035134 | TSR3950227/10M | Duplex-Patchcord 2xSM, SC/APC - SC/APC, Yellow, 10 m |
| 5035125 | TSR3950212/1000 | Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A, Yellow, 1 m |
| 035126 | TSR3950212/2000 | Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A, Yellow, 2 m |
| 5035127 | TSR3950212/3000 | Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A, Yellow, 3 m |
| 5035128 | TSR3950212/5000 | Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A, Yellow, 5 m |
| | | Duplex-Patchcord 2xSM, 2 LC - 2 LC, G657A, Yellow, 10 m |
| 5035129 | TSR3950212/10M | |
| 5035129 | | Duplay Patchcord 2vSM 1C/ADC 1C/ADC C657A Vallow 1 m |
| 5068805 | TSR3950234/1000 | Duplex-Patchcord 2xSM, LC/APC-LC/APC, G657A, Yellow, 1 m |
| 5068805 5068807 | TSR3950234/1000 TSR3950234/2000 | Duplex-Patchcord 2xSM, LC/APC-LC/APC, G657A, Yellow, 2 m |
| 5068805 | TSR3950234/1000 | |

| E-NO. | PRODUCT NO. | PRODUCT NAME | |
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| 5035120 | TSR3950215/1000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A, Yellow, 1 m | |
| 5035121 | TSR3950215/2000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A, Yellow, 2 m | |
| 5035122 | TSR3950215/3000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A, Yellow, 3 m | |
| 5035123 | TSR3950215/5000 | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A, Yellow, 5 m | |
| 5035124 | TSR3950215/10M | Duplex-Patchcord 2xSM, 2 LC - 2 SC, G657A, Yellow, 10 m | |
| 5035170 | TSR3950237/1000 | Duplex-Patchcord 2xSM, 2 SC - 2 SC/APC, G657A, Yellow, 1 m | |
| 5035171 | TSR3950237/2000 | Duplex-Patchcord 2xSM, 2 SC - 2 SC/APC, G657A, Yellow, 2 m | |
| 5035172 | TSR3950237/3000 | Duplex-Patchcord 2xSM, 2 SC - 2 SC/APC, G657A, Yellow, 3 m | |
| 5035173 | TSR3950237/5000 | Duplex-Patchcord 2xSM, 2 SC - 2SC/APC, G657A, Yellow, 5 m | |
| 5035144 | TSR3950237/10M | Duplex-Patchcord 2xSM, 2 SC - 2SC/APC, G657A, Yellow, 10 m | |
| Patch Cords, Sing | gle Mode, Duplex (2-fiber | SM) | |
| 5035175 | TSR3950243/1000 | Duplex-Patchcord 2xSM, 2 SC - 2 LC/APC, G657A, Yellow, 1 m | |
| 5035176 | TSR3950243/2000 | Duplex-Patchcord 2xSM, 2 SC - 2 LC/APC, G657A, Yellow, 2 m | |
| 5035177 | TSR3950243/3000 | Duplex-Patchcord 2xSM, 2 SC - 2 LC/APC, G657A, Yellow, 3 m | |
| 5035178 | TSR3950124/5000 | Duplex-Patchcord 2xSM, 2 SC - 2 LC/APC, G657A, Yellow, 5 m | |
| 5035179 | TSR3950243/10M | Duplex-Patchcord 2xSM, 2 SC - 2 LC/APC, G657A, Yellow, 10 m | |
| 5035180 | TSR3950240/1000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC, G657A, Yellow, 1 m | |
| 5035181 | TSR3950240/2000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC, G657A, Yellow, 2 m | |
| 5035182 | TSR3950240/3000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC, G657A, Yellow, 3 m | |
| 5035183 | TSR3950240/5000 | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC, G657A, Yellow, 5 m | |
| 5035184 | TSR3950240/10M | Duplex-Patchcord 2xSM, 2 SC/APC - 2 LC, G657A, Yellow, 10 m | |
| Pigtails, Single Mode | | | |
| 5035148 | TSR3950423/2000 | Pigtail SM (0.9 mm), SC - open end, G657A, 2 m | |
| 5075685 | TSR3950426/2000 | Pigtail SM (0.9 mm), SC/APC - open end, G657A, 2 m | |
| 5035149 | TSR3950414/2000 | Pigtail SM (0.9 mm), LC - open end, G657A, 2 m | |
| 5075686 | TSR3950433/2000 | Pigtail SM (0.9 mm), LC/APC - open end, G657A, 2 m | |
| Fanouts, Single N | Node | | |
| 5035145 | TSR3950623/2800 | Fanout tail SM, 4 SC, G657A, 2.8 m | |
| 5075687 | TSR3950626/2800 | Fanout tail SM, 4 SC/APC, G657A, 2.8 m | |
| 5035146 | TSR3950614/2800 | Fanout tail SM, 4 LC, G657A, 2.8 m | |
| 5075688 | TSR3950633/2800 | Fanout tail SM, 4 LC/APC, G657A, 2.8 m | |

Patch Cords, Pigtails and Fanouts

Multimode patch cords, pigtails and fanouts for various applications such as telecommunication equipment, and data communication networks.

TYPES: Multimode 50 μ m OM3 or OM4 CONNECTOR OPTIONS: SC, LC PERFORMANCE: IL Max* \leq 0.3, RL \geq 30 * Insertion Lossaccording to IEC 61300-3-4 method B.



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|-----------------|-----------------------------|--|
| Patch Cords, | Multimode, Simplex (1-fiber | r MM) |
| 5069739 | TSR3941106/020 | Optical Fiber Patchcord 50µm OM2, SC - SC, 2 m |
| 5069740 | TSR3941107/2000 | Optical Fiber Patchcord 50µm OM2, SC - ST, 2 m |
| 5069743 | TSR3941206/020 | Optical Fiber Patchcord 62.5µm OM2, SC - SC, 2 m |
| 5069745 | TSR3941203/020 | Optical Fiber Patchcord 62.5µm OM2, FC - SC, 2 m |
| 5069747 | TSR3940309/2000 | Optical Fiber Patchcord 62.5µm OM2, (0.9mm), ST - ST, 2 m |
| Patch Cords, | Multimode, Duplex (2-fiber | MM) |
| 5069748 | TSR3942122/2000 | Optical Fiber Duplex-Patchcord 2x50µm OM2, 2 LC - 2 LC, 2m |
| 5069749 | TSR3942135/900 | Optical Fiber Duplex-Patchcord 2x50µm OM2, 2 LC - LCD (angled), 0.9 m |
| 5069750 | TSR3942135/1300 | Optical Fiber Duplex-Patchcord 2x50µm OM2, 2 LC - LCD (angled), 1.3 m |
| 5069751 | TSR3942135/1700 | Optical Fiber Duplex-Patchcord 2x50µm OM2, 2 LC - LCD (angled), 1.7 m |
| 5069752 | TSR3942419/020 | Optical Fiber Duplex-Patchcord 2x50µm OM2, MT-RJ - 2 SC, 2 m (Fig 8 - 1.8 mm) |
| 5069753 | TSR3942420/020 | Optical Fiber Duplex-Patchcord 2x50µm OM2, MT-RJ - MT-RJ, 2 m (Fig 8 - 1.8 mm) |
| 5069754 | TSR3942107/2000 | Optical Fiber Duplex-Patchcord 2x50µm OM2, 2 SC - 2 ST , 2 m |
| 5069755 | TSR3942106/020 | Optical Fiber Duplex-Patchcord 2x50µm OM2, SCD - SCD, 2 m |
| 5069757 | TSR3942223/2000 | Optical Fiber Duplex-Patchcord 2x62.5µm OM2, LCD - LCD, 2 m |
| 5069758 | TSR3942215/2000 | Optical Fiber Duplex-Patchcord 2x62.5µm OM2, 2 LC - SCD, 2 m |
| 5069759 | TSR3942209/2000 | Optical Fiber Duplex-Patchcord 2x62.5µm OM2, 2 ST - 2 ST, 2 m |
| Pigtails, Multi | mode | |
| 5074220 | TSR3940205/020 | Optical Fiber Pigtail 50µm OM2 Gigabit (0.9 mm OM2), SC - open end, 2 m |
| 5074222 | TSR3946321/0600 | Optical Fiber Duplex-Pigtail 50µm OM2 OM2, MT-RJ (no pin), 0.6 m |
| 5074224 | TSR3940305/2000 | Optical Fiber Pigtail 62.5µm OM2 (0.9 mm OM2), SC - open end, 2 m |
| 5074225 | TSR3940308/020 | Optical Fiber Pigtail 62.5µm OM2 (0.9 mm OM2), ST - open end, 2 m |
| 5074228 | TSR3941201/3000 | Optical Fiber Pigtail 62.5µm OM2, FC - open end, (2 mm) OM2, 3 m |
| 5074229 | TSR3941208/2000 | Optical Fiber Pigtail 62.5µm OM2, ST - open end, (2 mm) OM2, 2 m |
| Fanouts, Mult | imode | |
| 5075350 | TSR3945305/028 | Optical Fiber Fanout tail (0.9 mm OM2) 50µm OM2, 4 SC, 2.8 m |
| 5075351 | TSR3945324/2800 | Optical Fiber Fanout tail (0.9 mm OM2) 50µm OM2, 4 LC, 2.8 m |
| 5075352 | TSR3945308/2800 | Optical Fiber Fanout tail (0.9 mm OM2) 50µm OM2, 4 ST, 2.8 m |
| 5075353 | TSR3945205/2800 | Optical Fiber Fanout tail (0.9 mm OM2) 50µm OM2, 2 SC, 2.8 m |
| 5075354 | TSR3945224/2800 | Optical Fiber Fanout tail (0.9 mm OM2) 50µm OM2, 2 LC, 2.8 m |
| 5075355 | TSR3945208/2800 | Optical Fiber Fanout tail (0.9 mm OM2) 50µm OM2, 2 ST, 2.8 m |
| 5077470 | TSR3945605/2800 | Optical Fiber Fanout tail (0.9 mm OM2) 62.5µm OM2, 4 SC, 2.8 m |
| 5077471 | TSR3945608/2800 | Optical Fiber Fanout tail (0.9 mm OM2) 62.5µm OM2, 4 ST, 2.8 m |
| 5075356 | TSR3945105/2800 | Optical Fiber Fanout tail (0.9 mm OM2) 62.5µm OM2, 2 SC, 2.8 m |
| 5075357 | TSR3945108/2800 | OOptical Fiber Fanout (0.9 mm OM2) 62.5µm OM2, 2 ST, 2.8 m |

Multifiber Cable Assemblies

Patch cables with 4 to 48 fibers, for high density interconnect applications. All cable assemblies are manufactured from ultra slim micro cables.

connector options: SC, SC/APC, LC, LC/APC, FC, E2000

PERFORMANCE: IL*≤0.30, RL (PC)≥50, RL (APC)≥60 * Insertion Loss according to IEC 61300-3-4 method B



| E-NO. | PRODUCT NO. | PRODUCT NAME | | | | | |
|--|--------------------------------|---|--|--|--|--|--|
| Cable Assemblies, Slim and flexible, Singlemode 4F | | | | | | | |
| 5069761 | RPM2533138/10M | Optical Multifiber cable (slim) SM, 4 LC - 4 SC , 10 m | | | | | |
| 5069762 | RPM2531038/10M | Optical Multifiber cable (slim) SM, 4 LC - 4 FC, 10 m | | | | | |
| 5069763 | RPM2531238/10M | Optical Multifiber cable (slim) SM, 4 LC - 4 E2000, 10 m | | | | | |
| 5069764 | RPM2530938/010 | Optical Multifiber cable (slim) SM, 4 SC - 4 E2000, 10 m | | | | | |
| 5069765 | RPM2531538/10M | Optical Multifiber cable (slim) SM, 4 SC - 4 E2000/APC, 10 m | | | | | |
| 5069766 | RPM2530838/010 | Optical Multifiber cable (slim) SM, 4 SC - 4 FC, 10 m | | | | | |
| 5069767 | RPM2530738/010 | Optical Multifiber cable (slim) SM, 4 SC - 4 SC, 10 m | | | | | |
| Cable Assemb | olies, Slim and flexible, G65. | 2D | | | | | |
| | RPM2533085/4000 | Optical Cable Assembly 2xG652D LC-LC 4 m for MMS | | | | | |
| | RPM2533085/6000 | Optical Cable Assembly 2xG652D LC-LC 6 m for MMS | | | | | |
| 5069770 | RPM2530769/10M | Multifiber Patch Cable (C) 24F SC-SC SM 10 m (1500/700) for MMS | | | | | |
| 5069771 | RPM2530769/15M | Multifiber Patch Cable (C) 24F SC-SC SM 15 m (1500/700) for MMS | | | | | |
| 5069772 | RPM2530769/20M | Multifiber Patch Cable (C) 24F SC-SC SM 20 m (1500/700) for MMS | | | | | |
| | RPM2530769/30M | Multifiber Patch Cable (C) 24F SC-SC SM 30 m (1500/700) for MMS | | | | | |
| 5068769 | RPM2533069/10M | Multifiber Patch Cable (C) 24F LC-LC SM 10 m (1500/700) for MMS | | | | | |
| 5068770 | RPM2533069/15M | Multifiber Patch Cable (C) 24F LC-LC SM 15 m (1500/700) for MMS | | | | | |
| 5068771 | RPM2533069/20M | Multifiber Patch Cable (C) 24F LC-LC SM 20 m (1500/700) for MMS | | | | | |
| 5068772 | RPM2533069/30M | Multifiber Patch Cable (C) 24F LC-LC SM 30 m (1500/700) for MMS | | | | | |
| 5068773 | RPM253509/10M | Multifiber Patch Cable (C) 48F SC-SC SM 10 m (1500/700) for MMS | | | | | |
| 5068774 | RPM253509/15M | Multifiber Patch Cable (C) 48F SC-SC SM 15 m (1500/700) for MMS | | | | | |
| 5068775 | RPM253509/20M | Multifiber Patch Cable (C) 48F SC-SC SM 20 m (1500/700) for MMS | | | | | |
| 5068776 | RPM253509/30M | Multifiber Patch Cable (C) 48F SC-SC SM 30 m (1500/700) for MMS | | | | | |
| 5068777 | RPM253519/10M | Multifiber Patch Cable (C) 48F LC-LC SM 10 m (1500/700) for MMS | | | | | |
| 5068778 | RPM253519/15M | Multifiber Patch Cable (C) 48F LC-LC SM 15 m (1500/700) for MMS | | | | | |
| 5068779 | RPM253519/20M | Multifiber Patch Cable (C) 48F LC-LC SM 20 m (1500/700) for MMS | | | | | |
| 5068780 | RPM253519/30M | Multifiber Patch Cable (C) 48F LC-LC SM 30 m (1500/700) for MMS | | | | | |

SPLITTERS AND OTHER PASSIVE OPTICAL DEVICES

Fiber optic splitters or couplers provide division of optical power from one or two input ports into several output ports. Symmetric optical power splitters are used for fiber optic communication systems such as PON FTTx networks. Asymmetric power splitters are used for monitoring of transmission signals in fiber networks.

Fiber Optic Splitter Shelf

Splitter shelf for 19" rack mounting with pre-installed fiber optic splitters. The shelves are available in different configurations with split ratios of 1x2 to 1x64. The standard connector option is SC/APC. Available in both standard and high grade.

TYPE: Splitter Shelf, 19", 1U CONNECTOR OPTIONS: SC/APC, SC SIZE: 410x195x44 mm SPLIT RATIO: 1x2 to 1x64

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|--|
| 5079271 | NCD5200022/10 | Splitter shelf 19" 1x16 SC/APC standard grade |
| 5079272 | NCD5200023/10 | Splitter shelf 19" 1x32 SC/APC standard grade |
| 5079273 | NCD5200024/10 | Splitter shelf 19" 8x(1x4) SC/APC standard grade |
| 5079274 | NCD5200025/10 | Splitter shelf 19" 4x(1x4) SC/APC standard grade |
| 5079275 | NCD5200026/10 | Splitter shelf 19" 16x(1x2) SC/APC standard grade |
| 5079276 | NCD5200027/10 | Splitter shelf 19" 8x(1x2) SC/APC standard grade |
| 5079277 | NCD5200028/10 | Splitter shelf 19" 4x(1x8) SC/APC standard grade |
| 5079278 | NCD5200029/10 | Splitter shelf 19" 1x64 SC/APC standard grade |
| | NCD5200042/10 | Splitter shelf 19" 2x16 SC/APC standard grade |
| | NCD5200043/10 | Splitter shelf 19" 2x32 SC/APC standard grade |
| | NCD5200044/10 | Splitter shelf 19" 8x(2x4) SC/APC standard grade |
| | NCD5200045/10 | Splitter shelf 19" 4x(2x4) SC/APC standard grade |
| | NCD5200046/10 | Splitter shelf 19" 16x(2x2) SC/APC standard grade |
| | NCD5200047/10 | Splitter shelf 19" 8x(2x2) SC/APC standard grade |
| | NCD5200048/10 | Splitter shelf 19" 4x(2x8) SC/APC standard grade |
| | NCD5200049/10 | Splitter shelf 19" 1x(2x64) SC/APC standard grade |
| | 1/NCD5200022/10 | Splitter shelf 19" 1x16 SC/APC high grade |
| | 1/NCD5200023/10 | Splitter shelf 19" 1x32 SC/APC high grade |
| | 1/NCD5200024/10 | Splitter shelf 19" 8x(1x4) SC/APC high grade |
| | 1/NCD5200025/10 | Splitter shelf 19" 4x(1x4) SC/APC high grade |
| | 1/NCD5200026/10 | Splitter shelf 19" 16x(1x2) SC/APC high grade |
| | 1/NCD5200027/10 | Splitter shelf 19" 8x(1x2) SC/APC high grade |
| | 1/NCD5200028/10 | Splitter shelf 19" 4x(1x8) SC/APC high grade |
| | 1/NCD5200029/10 | Splitter shelf 19" 1x64 SC/APC high grade |
| | 1/NCD5200022/11 | Splitter shelf 19" 1x16 SC high grade |
| | 1/NCD5200023/11 | Splitter shelf 19" 1x32 SC high grade |
| | 1/NCD5200024/11 | Splitter shelf 19" 8x(1x4) SC high grade |
| | 1/NCD5200025/11 | Splitter shelf 19" 4x(1x4) SC high grade |
| | 1/NCD5200026/11 | Splitter shelf 19" 16x(1x2) SC high grade |
| | 1/NCD5200027/11 | Splitter shelf 19" 8x(1x2) SC high grade |
| | 1/NCD5200028/11 | Splitter shelf 19" 4x(1x8) SC high grade |
| | 1/NCD5200029/11 | Splitter shelf 19" 1x64 SC high grade |
| | | |



Splitter Frames

The splitter frames are designed for compact mounting of splitter modules in 19" racks. The most common use is for central office applications or larger distributed PON sites. There are two frame heights available.

PRODUCT NAME

Splitter Frame 1U (9 positions)

Splitter Frame 4U (35 positions)

PRODUCT NO.

NBA30104

NBA30105

TYPE: (04) Splitter frame 1U for up to 9 splitter modules (05) Splitter frame 4U for up to 35 splitter modules **MOUNTING:** 19" or ETS



Splitter Modules

Splitters to be used for splitter frames. The splitters are pre-terminated with protected fanouts and with fitted connectors. The splitters can also be installed in ODFs or other compartments. Available in both high grade and standard grade and with different connector options. SPLIT RATIO: 1x4 to 1x64, 2x4 to 2x64 INPUT/OUTPUT: 2 mm patch, G657A1 TYPE: Optical splitters, PLC SPLIT RATIO: 1x2 to 1x64, 2x2 to 2x64 INPUT/OUTPUT: 2 mm patch, G657A1 CONNECTOR OPTIONS: SC/APC, SC, LC, LC/APC



| PRODUCT NO. | PRODUCT NAME | PRODUCT NO. | PRODUCT NAME |
|--------------|----------------------------|--------------|-----------------------|
| RDJ901200/85 | SPLM 1:2, SC/APC, 900/1500 | RDJ901200/53 | 2:8 splitter, SC/APC |
| RDJ901200/86 | 1:2 splitter, SC | RDJ901200/54 | 2:8 splitter, SC |
| RDJ901200/87 | 1:2 splitter, LC/APC | RDJ901200/55 | 2:8 splitter, LC/APC |
| RDJ901200/88 | 1:2 splitter, LC/AP | RDJ901200/56 | 2:8 splitter, LC |
| RDJ901200/1 | 1:4 splitter, SC/APC* | RDJ901200/61 | 2:16 splitter, SC/APC |
| RDJ901200/2 | 1:4 splitter, SC* | RDJ901200/62 | 2:16 splitter, SC |
| RDJ901200/3 | 1:4 splitter, LC/APC* | RDJ901200/63 | 2:16 splitter, LC/APC |
| RDJ901200/4 | 1:4 splitter, LC* | RDJ901200/64 | 2:16 splitter, LC |
| RDJ901200/9 | 1:8 splitter, SC/APC* | RDJ901200/69 | 2:32 splitter, SC/APC |
| RDJ901200/10 | 1:8 splitter, SC* | RDJ901200/70 | 2:32 splitter, SC |
| RDJ901200/11 | 1:8 splitter, LC/APC* | RDJ901200/71 | 2:32 splitter, LC/APC |
| RDJ901200/12 | 1:8 splitter, LC* | RDJ901200/72 | 2:32 splitter, LC |
| RDJ901200/17 | 1:16 splitter, SC/APC | RDJ901200/77 | 2:64 splitter, SC/APC |
| RDJ901200/18 | 1:16 splitter, SC | RDJ901200/78 | 2:64 splitter, SC |
| RDJ901200/19 | 1:16 splitter, LC/APC | RDJ901200/79 | 2:64 splitter, LC/APC |
| RDJ901200/20 | 1:16 splitter, LC | RDJ901200/80 | 2:64 splitter, LC |
| RDJ901200/25 | 1:24 splitter, SC/APC | | |
| RDJ901200/26 | 1:24 splitter, SC | | |
| RDJ901200/27 | 1:24 splitter, LC/APC | | |
| RDJ901200/28 | 1:24 splitter, LC | | |
| RDJ901200/33 | 1:32 splitter, SC/APC | | |
| RDJ901200/34 | 1:32 splitter, SC | | |
| RDJ901200/35 | 1:32 splitter, LC/APC | | |
| RDJ901200/36 | 1:32 splitter, LC | | |
| RDJ901200/41 | 1:64 splitter, SC/APC | | |
| RDJ901200/42 | 1:64 splitter, SC | | |
| RDJ901200/43 | 1:64 splitter, LC/APC | | |
| RDJ901200/44 | 1:64 splitter, LC | | |
| RDJ901200/93 | 2:2 splitter, SC/APC | | |
| RDJ901200/94 | 2:2 splitter, SC | | |
| RDJ901200/95 | 2:2 splitter, LC/APC | | |
| RDJ901200/96 | 2:2 splitter, LC | | |
| RDJ901200/45 | 2:4 splitter, SC/APC | | |
| RDJ901200/46 | 2:4 splitter, SC | | |
| RDJ901200/47 | 2:4 splitter, LC/APC | | |
| RDJ901200/48 | 2:4 splitter, LC | | |

Asymmetric Fiber Optic Splitter Shelf

The asymmetric division of the signal power is in a proportion of 10:90 split ratio which gives the ability to monitor or measure the transmission signal. The optical power splitter is mounted in a standard 2U ODF chassis and fits both 19" and ETSI rack systems. It is designed for both the 1550nm and 1310 nm wavelength band. The unit has 24 channels and is equipped with SC/APC connectors for minimum back reflections. TYPE: Monitor splitter size: 440x249x86 mm split ratio: 10:90 connector options: SC/APC



 PRODUCT NO.
 PRODUCT NAME

 NBA1020001/023
 Monitor Splitter 3

Monitor Splitter Shelf, 2U 24x10/90

FIBER OPTIC ACCESSORIES

Typical accessories for fiber optic interconnect and splicing applications include various essential and optional products such as fiber optic adapters for Optical Distribution Frames (ODFs), splice sleeves and connector cleaners.

Adapters

Fiber optic adapters for ODFs and termination units, all of premium grade to fit any kind of application. Simplex, duplex and quadruplex connector options.

CONNECTOR OPTIONS: SC, SC/APC, SC/MM (simplex, duplex), LC, LC/APC (simplex, duplex, quad) E2000, E2000/APC (simplex, duplex) FC



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|--|
| 5064014 | RNT99210/12 | Adapter SC, ceramic, snap-in and flange mount, Blue |
| 5040286 | RNT99211/12 | Adapter SC duplex, ceramic, snap-in and flange mount, Blue |
| 5063104 | RNT99211/13 | Adapter SC duplex, ceramic, without flange, Blue |
| 5063105 | RNT99211/23 | Adapter SC duplex, ceramic, without flange, Green |
| 5064015 | RNT99210/22 | Adapter SC/APC, ceramic, snap-in and flange mount, Green |
| 5040287 | RNT99211/22 | Adapter SC/APC duplex, ceramic, snap-in and flange mount, Green |
| 5040288 | RNT99215/11 | Adapter SC duplex, MM, metallic, snap-in and flange mount, beige |
| 5064024 | RNT99210/13 | Adapter SC, no flange |
| 5064025 | RNT99210/23 | Adapter SC/APC, no flange |
| 5064026 | RNT99210/14 | Adapter SC with shutter, no flange |
| 5064027 | RNT99210/24 | Adapter SC/APC with shutter, no flange |
| 5064019 | RNT99222/13 | Adapter LC/APC, duplex, Green, no flange (SC cut-out) |
| 5063106 | RNT99222/15 | Adapter LC quad (LP), Blue, no Flange |
| 5063107 | RNT99222/16 | Adapter LC quad (LP), Green, no Flange |
| 5064011 | RNT99222/2 | Adapter LC, duplex, low profile, no flange Blue (SC cut-out) |
| 5075692 | RNT99222/4 | Adapter LC, duplex, low profile, snap-in, Blue, (SC cut-out) |
| 5064013 | RNT99222/5 | Adapter LC, quadruplex, low profile, flange and snap-in, Blue, (SC-Duplex cut-out) |
| 5064021 | RNT99222/9 | Adapter LC/APC, quadruplex, low profile, flange and snap-in, Green (SC-Duplex cut-out) |
| 5064022 | RNT99222/14 | Adapter LC duplex (SC cut-out) with shutter, no flange (SC cut-out) |
| 5064023 | RNT99222/12 | Adapter LC/APC duplex (SC cut-out) with shutter, no flange (SC cut-out) |
| 5064060 | RNT99220/2 | Adapter MU, duplex, snap-in and flange mount, brown, (SC cut-out) |
| | RNT99294/4 | Adapter E2000, duplex, Blue |
| | RNT99295/4 | Adapter E2000/APC, duplex, Blue |
| 5064065 | RNT99290/1 | Adapter St |
| 5040039 | 12/RNT99281/3 | Adapter MT-RJ duplex, snap-in, Black, (SCD cut-out) (12 pcs/pack) |
| 5064063 | RNT99201/1 | Adapter FC (D-shape cut-out) |
| 5064064 | RNT99201/2 | Adapter FC/APC, D-shape, Ceramic |

End Plugs

Plugs to cover unused slots in ODF panels.

| slot options: SC, SC-duplex, FC, ST cut-out

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5084188 | NDM501901 | 6 x plugs for SC slots |
| 5084187 | NDM501902 | 6 x plugs for SCD slots |
| 5084189 | NDM501903 | $6\ensuremath{\mathrm{x}}$ plugs for FC, ST slots |



Splice Protection Sleeves

Sleeves for protection of fiber optic fusion splices, available as single fiber sleeves or as fiber ribbon sleeves.

SLEEVE TYPES: Single fiber 40 mm Single fiber 40 mm or 60 mm Ribbon 2-12 fiber

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--------------------------------|
| 5084197 | NTA16212/22 | 100xSplice Sleeve 1f, I=60 mm |
| 5084198 | NTA16212/41 | 50xSplice Sleeve 2-8f, I=40 mm |
| 5084199 | NTA16212/72 | 100xSplice Sleeve 1f, I=40 mm |
| 5084200 | NTA16212/82 | 100xSplice Sleeve 2f ABF |
| | | |



Cleaning Sticks

Dust-free, high-grade cleaning sticks specially developed to minimize the risk of cotton nap getting onto connectors during cleaning. The sticks are suitable for 2.5 mm respectively 1.25 mm adapter types.

APPLICATION: SC, FC, ST, E2000 (101) or LC, MU (102) connector and adapter cleaning **TYPE:** High-grade, dust-free

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 1649696 | LFS150101 | 200xCleaning stick 2,5 mm for SC, FC or ST connectors |
| 5062076 | LFS150102 | 200xCleaning stick 1,25 mm for LC, E200 or MU connectors |



Connector Cleaner

This handy tool contains a dust-removing tape for quick and easy cleaning of connector tips. For each cleaning cycle, a new section of tape is dispensed. Refill tapes are available. **APPLICATION:** Connector top cleaning **TYPE:** High-grade, dust-free

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--------------------------------|
| 1649693 | LTT179001 | Connector cleaner |
| 1649694 | 1/LTT179001 | 6 x Clean refill for LTT179001 |



FIBER ACCESS NETWORK

Hexatronic's solutions for Access Networks consist of the air blown microduct systems Micronet and Ribbonet[®] as well as traditional fiber optic cables. The products are specially developed for access networks with the highest requirements for scalability, performance and reliability.

tions to individual homes. FTTH networks are deployed either as a passive optical network (PON) with a partially shared fiber infrastructure, or as a point-to-point network (P2P) with dedicated fibers to each end user. Regardless of network type, the chosen technology must be able to support a variety of changes in the future as capacity and services evolve.

Fiber-to-the-Home (FTTH) refers to fiber optic broadband connec-

TO BUILD FOR THE FUTURE

Scalability

The access networks built today must be scalable, not just regarding capacity, but also regarding topology. Typical examples of scalable technologies are the Ribbonet® and Micronet air-blown fiber and micro cable systems, where incremental installation of fiber, easy repair and upgrade are key elements. The system scalability minimizes the total cost of ownership.

Versatility

It is not possible to predict all technological changes in the future. Therefore, network components are designed for any topology or combination of topologies, for example PON and P2P. They will also support a full transformation from PON to P2P (or vice versa) without the need for additional civil works. All of our major network components can handle any cabling type, for example air-blown fiber, micro cable, drop cables or traditional cable (a mix of the above).

Sustainability

All products are designed to minimize the environmental impact, from the manufacturing phase and through the whole lifecycle of the products. Total RoHS compliance and halogen-free materials are features of the entire product range. Packing materials are minimized or fully recyclable.



MICRONET MICRO CABLE SYSTEM

Feeder Network and Distribution Network

The Feeder and Distribution Network is the foundation of any fiber access network. The feeder network connects any central office to Fiber Distribution Hubs (FDHs). Passive fiber optic devices such as fiber optic splitters and/or cross connection facilities are located in the FDH. The distribution network distributes fiber from the FDH to the drop network. Air blown micro cable technology offers great benefits when deploying the feeder and distribution network. A microduct system enables quick, easy installation and minimizes the number of fiber splice joints in the network compared to traditional solutions. The network capacity can quickly be increased by inserting new cables in the spare microducts. As an alternative, traditional loose tube and ribbon cables can be used for the feeder and distribution networks, see section Fiber Transport Network Solutions.

MICRONET MICRO CABLE

Micro Cable

Micro cable based on a slim loose tube design with up to eight tubes per cable. The design facilitates fiber preparation and mid-span access. The cable is suitable for long-distance, air blown installation in microducts, with an inner diameter of as little as 8 mm. The cable has excellent bend performance and extremely wide operational temperature range. DESIGN: Loose tube TYPE: Dielectric, slim DIMENSIONS: Ø5.7 - 8.1 mm CAPACITY: 12 - 192 fibers



| E-NO. | PRODUCT NO. | PRODUCT NAME | E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------------|-----------------|-------------------------------|----------------|------------------|-----------------------------------|
| Standard Cold | or Code | | S12 Color Code | | |
| 4979600 | TOL4019017/12A | Micro Cable 12f GNHLDV G652D | | TOL4019028/12AH | Micro Cable 12f GNHLDV G652D S12 |
| 4979610 | TOL4019017/24A | Micro Cable 24f GNHLDV G652D | | T0L4019028/24AH | Micro Cable 24f GNHLDV G652D S12 |
| | TOL4019017/36A | Micro Cable 36f GNHLDV G652D | | TOL4019028/48AH | Micro Cable 48f GNHLDV G652D S12 |
| 4979620 | TOL4019017/48A | Micro Cable 48f GNHLDV G652D | | TOL4019028/72AH | Micro Cable 72f GNHLDV G652D S12 |
| 4979630 | TOL4019017/72A | Micro Cable 72f GNHLDV G652D | | TOL4019028/96AH | Micro Cable 96f GNHLDV G652D S12 |
| 4979640 | TOL4019017/96A | Micro Cable 96f GNHLDV G652D | | TOL4019028/144AH | Micro Cable 144f GNHLDV G652D S12 |
| 4980030 | TOL4019017/144A | Micro Cable 144f GNHLDV G652D | | TOL4019030/192AH | Micro Cable 192f GNHLDV G652D S12 |
| | | | | | |

Micro Cable, Indoor

E-NO.

4981070

4981080

4981090

4981100

Standard Color Code 4981060 TO

Micro cable based on a slim loose tube design with up to eight tubes per cable. The design facilitates fiber preparation and mid-span access. The cable is designed for indoor installation and has excellent bend performance.

PRODUCT NAME

Micro cable 12f for indoor applications G652D

Micro cable 24f for indoor applications G652D

Micro cable 48f for indoor applications G652D

Micro cable 72f for indoor applications G652D

Micro cable 96f for indoor applications G652D

PRODUCT NO.

TOI 4059011/12A

TOI 4059011/24A

TOI 4059011/48A

TOL4059011/72A

TOL4059011/96A

DESIGN: Loose tube **TYPE:** Halogen-free, flame-retardant **DIMENSIONS:** Ø 8.3 - 8.6 mm **CAPACITY:** 12 - 96 fibers



| Micro | Cable, | Aerial | Applications |
|-------|--------|--------|--------------|

Micro cable based on a slim loose tube design with up to eight tubes per cable. The design is optimized for the maximum strength required for air blown aerial applications. The cable is specially designed for long-distance, air blown installation in microducts with an inner diameter of as little as 8 mm.

DESIGN: Loose tube TYPE: Dielectric, extra slim for aerial applications DIMENSIONS: Ø 5.7 - 6.7 mm CAPACITY: 12 - 96 fibers



| E-NO. | PRODUCT NO. | PRODUCT NAME | | E-NO. | PRODUCT NO. | PRODUCT NAME | | |
|---------------------|----------------|---|--|----------------|-----------------|---|--|--|
| Standard Color Code | | | | S12 Color Code | | | | |
| 4988170 | TOL4019024/12A | Micro cable 12f for aerial applications G652D | | | TOL4019029/12AH | Micro cable 12f for aerial applications G652D | | |
| 4988180 | TOL4019024/24A | Micro cable 24f for aerial applications G652D | | | TOL4019029/29AH | Micro cable 24f for aerial applications G652D | | |
| 4988190 | TOL4019024/48A | Micro cable 48f for aerial applications G652D | | | TOL4019029/48AH | Micro cable 48f for aerial applications G652D | | |
| 4988200 | TOL4019024/72A | Micro cable 72f for aerial applications G652D | | | TOL4019029/72AH | Micro cable 72f for aerial applications G652D | | |
| 4988210 | TOL4019024/96A | Micro cable 96f for aerial applications G652D | | | TOL4019029/96AH | Micro cable 96f for aerial applications G652D | | |
| | | | | | | | | |

MICRODUCTS AND MULTIDUCTS FOR MICRO CABLES

Microducts and microduct assemblies are available for several installation environments such as direct buried installation, into existing pipes or indoor installation. Ducts for aerial applications are presented in the section Ribbonet[®] Air Blown Fiber System.

Protected Microducts for Direct Buried Installation

Ducts composed of 10/8 mm or 12/10 mm microducts with a heavy-duty HDPE sheath that enables direct installation in the ground. The microducts have a solid, low-friction inner surface coating for best installation performance. **TYPE:** Direct buried installation **DIMENSIONS, MICRODUCTS:** Ø 10/8 mm or 12/10 mm **CAPACITY:** 1, 4, 7-way



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|--------------------|--------------------------------|--|
| Standard Colo | | |
| 5040330 | MPB30270/1 | Microduct 10/8 mm for installation direct in the ground, Orange |
| | NMPB30270/2 | Multiduct 10/8 mm consist of 2 microducts for installation direct in the ground, Orange |
| 5040334 | MPB30270/4 | Multiduct 10/8 mm consist of 4 microducts for installation direct in the ground, Orange |
| 5040337 | MPB30270/7 | Multiduct 10/8 mm consist of 7 microducts for installation direct in the ground, Orange |
| 5040437 | MPB30272/1 | Microduct 12/10 mm for installation direct in the ground, Orange |
| | MPB30272/2 | Multiduct 12/10 mm consist of 2 microducts for installation direct in the ground, Orange |
| 5040438 | MPB30272/4 | Multiduct 12/10 mm consist of 4 microducts for installation direct in the ground, Orange |
| 5040439 | MPB30272/7 | SMultiduct 12/10 mm consist of 7 microducts for installation direct in the ground, Orange |
| S12 Color Cod | de | |
| 5041159 | MPB30272/1M | Microduct 12/10 mm for installation direct in the ground, S12 , Orange |
| 5041061 | MPB30272/4M | Multiduct 12/10 mm consist of 4 microducts for installation direct in the ground, S12 , Orange |
| 5041062 | MPB30272/7M | Multiduct 12/10 mm consist of 7 microducts for installation direct in the ground, S12 , Orange |
| 5041106 | 1/MPB30272/1M | Microduct 12/10 mm for installation direct in the ground, S12 , Green |
| 5041107 | 1/MPB30272/4M | Multiduct 12/10 mm consist of 4 microducts for installation direct in the ground, S12 , Green |
| 5041108 | 1/MPB30272/7M | Multiduct 12/10 mm consist of 7 microducts for installation direct in the ground, S12 , Green |
| 5041120 | 2/MPB30272/1M | Microduct 12/10 mm for installation direct in the ground, S12 , Red |
| 5041120 | 2/MPB30272/4M | Multiduct 12/10 mm consist of 4 microducts for installation direct in the ground, S12 , Red |
| 5041122 | 2/MPB30272/7M | Multiduct 12/10 mm consist of 7 microducts for installation direct in the ground, S12 , Red |
| | | |
| 5041133 | 3/MPB30272/1M 3/MPB30272/4M | Microduct 12/10 mm for installation direct in the ground, S12, Blue |
| 5041134 5041135 | | Multiduct 12/10 mm consist of 4 microducts for installation direct in the ground, S12, Blue |
| 0041150 | 3/MPB30272/7M | Multiduct 12/10 mm consist of 7 microducts for installation direct in the ground, S12 , Blue |
| | 4/MPB30272/1M | Microduct 12/10 mm for installation direct in the ground, S12 , Yellow |
| | 4/MPB30272/4M | Multiduct 12/10 mm consist of 7 microducts for installation direct in the ground, S12, Yellow |
| | 4/MPB30272/7M | Multiduct 12/10 mm consist of 7 microducts for installation direct in the ground, S12 , Yellow |
| | 5/MPB30272/1M | Microduct 12/10 mm for installation direct in the ground, S12 , White |
| | 5/MPB30272/4M | Multiduct 12/10 mm consist of 4 microducts for installation direct in the ground, S12 , White |
| | 5/MPB30272/7M | Multiduct 12/10 mm consist of 7 microducts for installation direct in the ground, S12 , White |
| | 6/MPB30272/1M | Microduct 12/10 mm for installation direct in the ground, S12 , Violet |
| | 6/MPB30272/4M | Multiduct 12/10 mm consist of 4 microducts for installation direct in the ground, S12 , Violet |
| | 6/MPB30272/7M | Multiduct 12/10 mm consist of 7 microducts for installation direct in the ground, S12 , Violet |
| Skanova Shea | ath Marking | |
| | MPB30272/1S | Microduct 12/10mm for installation direct in the ground, S12, Skanova , Orange |
| | MPB30272/4S | Multiduct 12/10mm consist of 4 microducts for installation direct in the ground, S12, Skanova , Orange |
| | MPB30272/7S | Multiduct 12/10mm consist of 7 microducts for installation direct in the ground, S12, Skanova , Orange |
| | 1/MPB30272/1S | Microduct 12/10mm for installation direct in the ground, S12, Skanova , Green |
| | 1/MPB30272/4S | Multiduct 12/10mm consist of 4 microducts for installation direct in the ground, S12, Skanova , Green |
| | 1/MPB30272/7S | Multiduct 12/10mm consist of 7 microducts for installation direct in the ground, S12, Skanova , Green |
| | 2/MPB30272/1S | Microduct 12/10mm for installation direct in the ground, S12, Skanova , Red |
| | 2/MPB30272/4S | Multiduct 12/10mm consist of 4 microducts for installation direct in the ground, S12, Skanova , Red |
| | 2/MPB30272/7S | Multiduct 12/10mm consist of 7 microducts for installation direct in the ground, S12, Skanova , Red |
| | 3/MPB30272/1S | Microduct 12/10mm for installation direct in the ground, S12, Skanova , Blue |
| | 3/MPB30272/15 | Multiduct 12/10/mm consist of 4 microducts for installation direct in the ground, S12, Skanova , Blue |
| | 3/MPB30272/7S | Multiduct 12/10/mm consist of 7 microducts for installation direct in the ground, S12, Skanova , Blue |
| | | |
| | 4/MPB30272/1S | Microduct 12/10mm for installation direct in the ground, S12, Skanova , Yellow |
| | 4/MPB30272/4S | Multiduct 12/10mm consist of 4 microducts for installation direct in the ground, S12, Skanova , Yellow |
| | 4/MPB30272/7S | Multiduct 12/10mm consist of 7 microducts for installation direct in the ground, S12, Skanova , Yellow |

| | PRODUCT NO. | PRODUCT NAME |
|----------------|---------------|--|
| Skanova Sheath | Marking | |
| | 5/MPB30272/1S | Microduct 12/10mm for installation direct in the ground, S12, Skanova , White |
| | 5/MPB30272/4S | Multiduct 12/10mm consist of 4 microducts for installation direct in the ground, S12, Skanova , White |
| | 5/MPB30272/7S | Multiduct 12/10mm consist of 7 microducts for installation direct in the ground, S12, Skanova , White |
| | | |
| | 6/MPB30272/1S | Microduct 12/10mm for installation direct in the ground, S12, Skanova , Violet |
| | 6/MPB30272/4S | Multiduct 12/10mm consist of 4 microducts for installation direct in the ground, S12, Skanova , Violet |
| | 6/MPB30272/7S | Multiduct 12/10mm consist of 7 microducts for installation direct in the ground, S12, Skanova , Violet |
| | | |

Microducts for Duct Installation

Ducts composed of 10/8 mm or 12/10 mm microducts. The ducts are designed for installation in existing pipes or cable shafts. The microducts have a solid, low-friction inner surface coating for best installation performance. TYPE: Installation in existing pipes DIMENSIONS, MICRODUCTS: Ø 10/8 mm or 12/10 mm



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|--------------|--|
| 5040300 | MPB30260/BU1 | Microduct 10/8 mm outdoor installation in existing ducts, Blue |
| 5041053 | MPB30260/BK1 | Microduct 10/8 mm outdoor installation in existing ducts, Black |
| 5040301 | MPB30260/0G1 | Microduct 10/8 mm outdoor installation in existing ducts, Orange |
| 5040302 | MPB30260/GN1 | Microduct 10/8 mm outdoor installation in existing ducts, Green |
| 5040303 | MPB30260/BN1 | Microduct 10/8 mm outdoor installation in existing ducts, Brown |
| 5040304 | MPB30260/GY1 | Microduct 10/8 mm outdoor installation in existing ducts, Grey |
| 5040305 | MPB30260/WH1 | Microduct 10/8 mm outdoor installation in existing ducts, White |
| 5041054 | MPB30260/PK1 | Microduct 10/8 mm outdoor installation in existing ducts, Pink |
| 5041055 | MPB30260/TQ1 | Microduct 10/8 mm outdoor installation in existing ducts, Turquoise |
| 5040306 | MPB30260/RD1 | Microduct 10/8 mm outdoor installation in existing ducts, Red |
| 5040669 | MPB30260/YE1 | Microduct 10/8 mm outdoor installation in existing ducts, Yellow |
| 5041056 | MPB30260/VT1 | Microduct 10/8 mm outdoor installation in existing ducts, White |
| 5040440 | MPB30262/BU1 | Microduct 12/10 mm outdoor installation in existing ducts, Blue |
| 5041057 | MPB30262/BK1 | Microduct 12/10 mm outdoor installation in existing ducts, Black |
| 5040441 | MPB30262/0G1 | Microduct 12/10 mm outdoor installation in existing ducts, Orange |
| 5040442 | MPB30262/GN1 | Microduct 12/10 mm outdoor installation in existing ducts, Green |
| 5040443 | MPB30262/BN1 | Microduct 12/10 mm outdoor installation in existing ducts, Brown |
| 5040444 | MPB30262/GY1 | Microduct 12/10 mm outdoor installation in existing ducts, Grey |
| 5040445 | MPB30262/WH1 | Microduct 12/10 mm outdoor installation in existing ducts, White |
| 5041058 | MPB30262/PK1 | Microduct 12/10 mm outdoor installation in existing ducts, Pink |
| 5041059 | MPB30262/TQ1 | Microduct 12/10 mm outdoor installation in existing ducts, Turquoise |
| 5040446 | MPB30262/RD1 | Microduct 12/10 mm outdoor installation in existing ducts, Red |
| 5040668 | MPB30262/YE1 | Microduct 12/10 mm outdoor installation in existing ducts, Yellow |
| 5041060 | MPB30262/VT1 | Microduct 12/10 mm outdoor installation in existing ducts, White |

Protected Microducts for Duct Installation

Ducts based on 10/8 mm or 12/10 mm microducts with a single HDPE sheath for easy installation of microduct bundles into existing pipes or cable shafts. The microducts have a solid low friction inner surface coating for best installation performance.

DESIGN: Installation in existing pipes **DIMENSIONS, MICRODUCTS:** Ø 10/8 mm or 12/10 mm **CAPACITY:** 4, 7-way



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------------|---------------|---|
| Standard Cold | or Code | |
| 5040365 | MPB30290/4 | Multiduct 10/8 mm consist of 4 microducts for installation in existing ducts, Black |
| 5040366 | MPB30290/7 | Multiduct 10/8 mm consist of 7 microducts for installation in existing ducts, Black |
| 5041087 | MPB30292/2 | Multiduct 12/10 mm consist of 2 microducts for installation in existing ducts, Black |
| 5041088 | MPB30292/4 | Multiduct 12/10 mm consist of 4 microducts for installation in existing ducts, Black |
| 5041090 | MPB30292/7 | Multiduct 12/10 mm consist of 7 microducts for installation in existing ducts, Black |
| S12 Color Co | de | |
| 5041089 | MPB30292/4M | Multiduct 12/10 mm consist of 4 microducts for installation in existing ducts S12, Black |
| 5041091 | MPB30292/7M | Multiduct 12/10 mm consist of 7 microducts for installation in existing ducts S12, Black |
| | 2/MPB30292/4M | Multiduct 12/10 mm consist of 4 microducts for installation in existing ducts S12, Red |
| | 2/MPB30292/7M | |
| | 4/MPB30292/4M | Multiduct 12/10 mm consist of 4 microducts for installation in existing ducts S12, Yellow |
| | 4/MPB30292/7M | Multiduct 12/10 mm consist of 7 microducts for installation in existing ducts S12, Yellow |
| | 5/MPB30292/4M | Multiduct 12/10 mm consist of 4 microducts for installation in existing ducts S12, White |
| | 5/MPB30292/7M | Multiduct 12/10 mm consist of 7 microducts for installation in existing ducts S12, White |
| | 7/MPB30292/4M | Multiduct 12/10 mm consist of 4 microducts for installation in existing ducts S12, Orange |
| | 7/MPB30292/7M | Multiduct 12/10 mm consist of 7 microducts for installation in existing ducts S12, Orange |
| Skanova Shea | ath Marking | |
| | MPB30292/4S | Multiduct 12/10mm consist of 4 microducts for installation in existing ducts S12, Skanova, Black |
| | MPB30292/7S | Multiduct 12/10mm consist of 7 microducts for installation in existing ducts S12, Skanova, Black |
| | 2/MPB30292/4S | Multiduct 12/10mm consist of 4 microducts for installation in existing ducts S12, Skanova, Red |
| | 2/MPB30292/7S | Multiduct 12/10mm consist of 7 microducts for installation in existing ducts S12, Skanova, Red |
| | 4/MPB30292/4S | Multiduct 12/10mm consist of 4 microducts for installation in existing ducts S12, Skanova, Yellow |
| | 4/MPB30292/7S | Multiduct 12/10mm consist of 7 microducts for installation in existing ducts S12, Skanova, Yellow |
| | 5/MPB30292/4S | Multiduct 12/10mm consist of 4 microducts for installation in existing ducts S12, Skanova, White |
| | 5/MPB30292/7S | Multiduct 12/10mm consist of 7 microducts for installation in existing ducts S12, Skanova, White |
| | 7/MPB30292/4S | Multiduct 12/10mm consist of 4 microducts for installation in existing ducts S12, Skanova, Orange |
| | 7/MPB30292/7S | Multiduct 12/10mm consist of 7 microducts for installation in existing ducts S12, Skanova, Orange |

Thick Walled Microduct Assemblies

These thick walled ducts are made of 14/10 mm microducts. Compared to conventional tight protected duct assemblies, thick walled microducts offer lower splicing and branching cost.

TYPE: Direct buried installation or installation in existing pipes **DIMENSIONS, MICRODUCTS:** Ø 14/10 mm **CAPACITY:** 2, 4, 7-way



| E-NO. | PRODUCT NO. | PRODUCT NAME | E-NO. | | PRODUCT NO. |
|-------------|---------------|---|--------------|-------------|----------------------------|
| 040501 | MPB30281/2M | TWD 2x14/10mm S12, Orange | Special Appl | i | ications (Available on Rec |
| 0516 | MPB30277/4M | TWD 4x14/10mm Micronet S12, Orange | 5040515 | | MPB30277/1 |
| 0517 | MPB30277/7M | TWD 7x14/10mm Micronet S12, Orange | 5040502 | | MPB30281/7 |
| 1190 | 1/MPB30281/2M | TWD 2x14/10mm S12, Green | 5040503 | | MPB30282/13 |
| 1193 | 1/MPB30277/4M | TWD 4x14/10mm Micronet S12, Green | 5040504 | | MPB30282/14 |
| 41194 | 1/MPB30277/7M | TWD 7x14/10mm Micronet S12, Green | 5040505 | | MPB30279/14 |
|)41195 | 2/MPB30281/2M | TWD 2x14/10mm S12, Red | 5040506 | | MPB30279/25 |
| 41123 | 2/MPB30277/4M | TWD 4x14/10mm Micronet S12, Red | 5040507 | | MPB30279/26 |
| 41125 | 2/MPB30277/7M | TWD 7x14/10mm Micronet S12, Red | | Ν | MPB30283/1 |
| | | | | 1/M | PB30281/2 |
| 041196 | 3/MPB30281/2M | TWD 2x14/10mm S12, Blue | | MPB3 | 0283/4 |
| 041197 | 3/MPB30277/4M | TWD 4x14/10mm Micronet S12, Blue | | MPB3028 | 83/7 |
| 5041198 | 3/MPB30277/7M | TWD 7x14/10mm Micronet S12, Blue | | 1/MPB30281 | 1/7 |
| 041144 | 4/MPB30281/2M | TWD 2x14/10mm S12, Yellow | | MPB30287/14 | |
| 041139 | 4/MPB30277/4M | TWD 4x14/10mm Micronet S12, Yellow | | MPB30287/25 | |
| 041140 | 4/MPB30277/7M | TWD 7x14/10mm Micronet S12, Yellow | | MPB30287/26 | |
| 5041199 | 5/MPB30281/2M | TWD 2x14/10mm S12, White | | MPB30288/12 | |
| 041148 | 5/MPB30277/4M | TWD 4x14/10mm Micronet S12, White | | MPB30289/13 | |
| 5041200 | 5/MPB30277/7M | TWD 7x14/10mm Micronet S12, White | | MPB30289/14 | |
| | MPB30279/14M | TWD 2x14/10mm+12x7/3,5mm Hybrid, Orange | | | |
| Skanova She | ath Marking | | | | |
| | MPB30281/2S | TWD 2x14/10mm Skanova, Orange | | | |
| | MPB30277/4S | TWD 4x14/10mm Micronet Skanova, Orange | | | |
| | MPB30277/7S | TWD 7x14/10mm Micronet Skanova, Orange | | | |
| | | | | | |
| | 1/MPB30281/2S | TWD 2x14/10mm Skanova, Green | | | |
| | 1/MPB30277/4S | TWD 4x14/10mm Micronet Skanova, Green | | | |
| | 1/MPB30277/7S | TWD 7x14/10mm Micronet Skanova, Green | | | |
| | 2/MPB30281/2S | TWD 2x14/10mm Skanova, Red | | | |
| | 2/MPB30277/4S | TWD 4x14/10mm Micronet Skanova, Red | | | |
| | 2/MPB30277/7S | TWD 7x14/10mm Micronet Skanova, Red | | | |
| | 3/MPB30281/2S | TWD 2x14/10mm Skanova, Blue | | | |
| | 3/MPB30277/4S | TWD 4x14/10mm Micronet Skanova, Blue | | | |
| | 3/MPB30277/7S | TWD 7x14/10mm Micronet Skanova, Blue | | | |
| | 4/MPB30281/2S | TWD 2x14/10mm Skanova, Yellow | | | |
| | 4/MPB30277/4S | TWD 4x14/10mm Micronet Skanova, Yellow | | | |
| | 4/MPB30277/7S | TWD 7x14/10mm Micronet Skanova, Yellow | | | |
| | | , , | | | |
| | 5/MPB30281/2S | TWD 2x14/10mm Skanova, White | | | |
| | 5/MPB30277/4S | TWD 4x14/10mm Micronet Skanova, White | | | |
| | 5/MPB30277/7S | TWD 7x14/10mm Micronet Skanova, White | | | |
| | 6/MPB30281/2S | TWD 2x14/10mm Skanova, Violet | | | |
| | 6/MPB30277/4S | TWD 4x14/10mm Micronet Skanova, Violet | | | |
| | 6/MPB30277/7S | TWD 7x14/10mm Micronet Skanova, Violet | | | |

Thick Walled Microducts

Thick walled microducts, 14/10 mm to be used in combination with thick walled microduct assemblies.

TYPE: Direct buried installation or installation in existing pipes DIMENSIONS, MICRODUCTS: Ø 14/10 mm



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------------------|-------------|---------------------------------------|
| Standard Color Code | | |
| 5041080 | MPB30285/0G | TWD 1x14/10 mm Singel tube, Orange |
| 5041086 | MPB30285/YE | TWD 1x14/10 mm Singel tube, Yellow |
| 5041084 | MPB30285/WH | TWD 1x14/10 mm Singel tube, White |
| 5041082 | MPB30285/RD | TWD 1x14/10 mm Singel tube, Red |
| 5041077 | MPB30285/BU | TWD 1x14/10 mm Singel tube, Blue |
| 5041078 | MPB30285/GN | TWD 1x14/10 mm Singel tube, Green |
| 5041085 | MPB30285/VT | TWD 1x14/10 mm Singel tube, Violet |
| 5041076 | MPB30285/BN | TWD 1x14/10 mm Singel tube, Brown |
| 5041083 | MPB30285/TQ | TWD 1x14/10 mm Singel tube, Turquoise |
| 5041079 | MPB30285/GY | TWD 1x14/10 mm Singel tube, Grey |
| 5041081 | MPB30285/PK | TWD 1x14/10 mm Singel tube, Pink |
| 5041075 | MPB30285/BK | TWD 1x14/10 mm Singel tube, Black |

Protected Microducts for Indoor Use

Microduct with a sheath made of halogen-free, flame-retardant material that enables installation of outdoor rated micro cables in indoor environments. Fiber splicing between indoor and outdoor environments can therefore be eliminated. TYPE: Indoor Installations dimensions, microducts: Ø 10/8 mm or 12/10 mm capacity: 1, 4, 7-way



| 5040447MPB30271/1Microduct, single, indoor use with extra protection. 10/8 mm5040448MPB30271/4Multiduct 10/8 mm consist of 4 microducts for indoor installation5040449MPB30271/7Multiduct 10/8 mm consist of 7 microducts for indoor installation5040450MPB30273/1Microduct, single, indoor use with extra protection. 12/10 mm5040451MPB30273/4Multiduct 12/10 mm consist of 4 microducts for indoor installation5040452MPB30273/7Multiduct 12/10 mm consist of 7 microducts for indoor installation | E-NO. | PRODUCT NO. | PRODUCT NAME |
|---|---------|-------------|--|
| 5040449MPB30271/7Multiduct 10/8 mm consist of 7 microducts for indoor installation5040450MPB30273/1Microduct, single, indoor use with extra protection. 12/10 mm5040451MPB30273/4Multiduct 12/10 mm consist of 4 microducts for indoor installation | 5040447 | MPB30271/1 | Microduct, single, indoor use with extra protection. 10/8 mm |
| S040450 MPB30273/1 Microduct, single, indoor use with extra protection. 12/10 mm 5040451 MPB30273/4 Multiduct 12/10 mm consist of 4 microducts for indoor installation | 5040448 | MPB30271/4 | Multiduct 10/8 mm consist of 4 microducts for indoor installation |
| 5040451 MPB30273/4 Multiduct 12/10 mm consist of 4 microducts for indoor installation | 5040449 | MPB30271/7 | Multiduct 10/8 mm consist of 7 microducts for indoor installation |
| | 5040450 | MPB30273/1 | Microduct, single, indoor use with extra protection. 12/10 mm |
| 5040452 MPB30273/7 Multiduct 12/10 mm consist of 7 microducts for indoor installation | 5040451 | MPB30273/4 | Multiduct 12/10 mm consist of 4 microducts for indoor installation |
| | 5040452 | MPB30273/7 | Multiduct 12/10 mm consist of 7 microducts for indoor installation |

DUCT JOINTS AND OTHER DUCT EQUIPMENT

MPB 306 01/142 and /152 Straight Connector

Microduct snap-in connectors for quick and easy splicing of microducts. The body is transparent for easy fault location during installation. The connector is available for 12/10 mm and 10/8 mm ducts.

TYPE: Straight connector, Easy Connect **DIMENSIONS, MICRODUCTS:** Ø10/8mm or 12/10 mm



| | PRODUCT NO. | PRODUCT NAME |
|---------|--------------|-------------------------------------|
| 5040888 | MPB30601/142 | 100xConnector,10/8 mm Easy Connect |
| 5040889 | MPB30601/152 | 100xConnector,12/10 mm Easy Connect |

PRODUCT NAME

MPB 306 05/142 Straight Connector

Microduct snap-in connectors for quick and easy splicing of microducts. The connector is available for 14/10 mm ducts and can be direct buried. It is equipped with safety locks for unaccidental opening during installation. TYPE: Straight connector DIMENSIONS, MICRODUCTS: Ø14/10 mm



| 5040519 MPB30605/142 100xConnector,14/10 mm DI | 3 |
|--|---|
|--|---|

MPB 306 07+ Gas Block Connector

PRODUCT NO.

E-NO.

Gas block microduct snap-in connectors are used to seal around cables at the end of the duct. After cable installation, the connector can be gas sealed by pushing the connector ends together. TYPE: Gas block straight connector DIMENSIONS, MICRODUCTS: \emptyset 10/8 mm, 12/10 mm or 14/10 mm

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|---|
| 5040906 | MPB30607/10A2 | 100xGas Block Connector 10/8 mm 5.5 - 6.6 mm |
| 5040907 | MPB30607/10B2 | 100xGas Block Connector 10/8 mm 6.5 - 7.2 mm |
| 5040908 | MPB30607/12A2 | 100xGas Block Connector 12/10 mm 5.5 - 6.6 mm |
| 5040909 | MPB30607/12B2 | 100xGas Block Connector 12/10 mm 6.5 - 7.2 mm |
| 5040910 | MPB30607/12C2 | 100xGas Block Connector 12/10 mm 7.2 - 8.2 mm |
| 5040911 | MPB30607/14A2 | 100xGas Block Connector 14/10 mm 6.5 - 7.2 mm |
| 5040912 | MPB30607/14B2 | 100xGas Block Connector 14/10 mm 7.6 - 8.2 mm |



SXA 113 9137/142 and /152 End Stop Connector

Microduct snap-in, end-stop connectors for permanent or temporarily sealing of unused microducts to prevent water and dust getting into the duct.

TYPE: End stop DIMENSIONS, MICRODUCTS: Ø10/8 mm, or 12/10 mm



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|---|
| 5040994 | SXA1139137/142 | 100xEndstop Connector, 10 mm Easy Conenct |
| 5041164 | SXA1139137/152 | 100xEndstop Connector, 12 mm Easy Connect |

End Stop Connector

Microduct snap-in, end-stop connectors for permanent or temporarily sealing of unused microducts to prevent water and dust getting into the duct. This type is intended for thick walled ducts. TYPE: End stop for TWD dimensions, microducts: Ø 14/10 mm



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|--------------|---------------------------------|
| 5040904 | MPB30606/142 | 100xEndstop Connector, 14 mm DB |

Divisible Seals

The divisible seals for microducts provide a gas and watertight seal for open duct ends installed with micro cables. The seals are designed to be installed after the fiber or cable has been blown in to the microduct. **TYPE:** Divisible seal for micro cables **DIMENSIONS, MICRODUCTS:** Ø 10/8, 12/10 or 14/10 mm, cables Ø2.5 - 3.9 mm, 5.0 - 6.5 mm, or 6.5 - 8 mm



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|------------------------------------|
| 5040716 | MPB30608/10A1 | 25x10mm Divisible Seal 2.5-3.9 mm |
| 5040717 | MPB30608/10B1 | 25x10mm Divisible Seal 5.0-6.5 mm |
| 5040718 | MPB30608/10C1 | 25x10mm Divisible Seal 6.5-8.0 mm |
| 5040719 | MPB30608/12A1 | 25x12mm Divisible Seal 2.5-3.9 mm |
| 5040720 | MPB30608/12B1 | 25x12mm Divisible Seal 5.0-6.5 mm |
| 5040721 | MPB30608/12C1 | 25x12mm Divisible Seal 6.5-8.0 mm |
| 5040722 | MPB30608/12D1 | 25x12mm Divisible Seal 7.0-8.5 mm |
| 5040723 | MPB30608/14A1 | 25x14mm Divisible Seal 5.8-6.5 mm |
| 5040724 | MPB30608/14B1 | 25x14mm Divisible Seal 8.0-10.0 mm |

Duct Joint Closure

A series of straight duct closures for maximum protection of duct joints for direct buried applications. Heat shrink technology is used for maximum protection. The closure is available in three different sizes and includes microduct snap-in connectors for 1, 4 or 7 microducts. Connectors for 10/8 mm ducts are included.

TYPE: Heath shrink, straight joint **SEALING:** IP class 68 **CAPACITY:** 1, 4, or 7



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5040372 | NDE45115/4 | Straight jointing kit for micronet ducts (1 duct) |
| 5040373 | NDE45115/5 | Straight jointing kit for micronet ducts (4 duct) |
| 5040374 | NDE45115/6 | Straight jointing kit for micronet ducts (7 duct) |

Duct Joint Closure

A series of straight duct closures for quick and easy installation without the need for heat. The closure is available in several sizes. Microduct snap-in connectors are not included. **TYPE:** Cold seal, re-enterable straight joint **SEALING:** IP class 68 **CAPACITY:** 1, 4, or 7



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|--------------|------------------------------|
| 5084249 | NDE45125/111 | 10xStraight Joint 8-12.5 mm |
| 5040914 | NDE45125/131 | 10xStraight Joint 14.9-18 mm |
| 5084256 | NDE45125/141 | 10xStraight Joint 19-24 mm |
| 5084257 | NDE45125/151 | 10xStraight Joint 26.5-29 mm |
| 5084263 | NDE45125/161 | 10xStraight Joint 31-33 mm |
| 5084266 | NDE45125/171 | 10xStraight Joint 36.7-40 mm |
| 5084269 | NDE45125/181 | 10xStraight Joint 44-46 mm |
| 5040915 | NDE45125/191 | 10xStraight Joint 40-41 mm |
| | | |

Duct Joint and Branch Closures

E-NO.

Closure suitable for branching as well as jointing ducts. The closure provides mechanical protection of the duct joints.

PRODUCT NO.

NDE45126/101

NDE45126/102

NDE45126/103

NDE45126/104

NDE45126/105

NDE45126/108 NDE45126/109

NDE45126/115

NDE45126/116

NDE45126/119

TYPE: Cold seal, re-enterable branch joint **sEALING:** Mechanical protection only

PRODUCT NAME

8xClosure Straight 25-25

8xClosure Straight 32-32

8xClosure Straight 50-50

8xClosure Straight 25-32

8xClosure Straight 32-50 8xClosure Branch-Off 50-50-25

4xClosure Fork 50-32-25

4xClosure Fork 50-32-32

4xClosure Fork 50-50-50

PRODUCT NAME

8xClosure Branch-Off 32-32-25



| Duct Joint | and | Branch | Kit |
|-------------------|-----|---------------|-----|
|-------------------|-----|---------------|-----|

Flexible kit including materials and tools for jointing, branching and mid-span of microducts/multiducts. A vulcanizing cloth is used for sealing, and strong and flexible PVC tape provides mechanical protection. Refill kits are available. Microduct snap-in connectors are not included. NDE 451 40/2 is a kit without tools.

PRODUCT NO.

TYPE: Cold seal, branch joint SEALING: IP class 68 CAPACITY: approx. 10 joints/kit



| 5040029 | NDE45140/1 | Joint kit for ducts with tool kit and material for 10 pcs of joints |
|---------|------------|---|
| 5040030 | NDE45140/2 | Joint kit for 10 pcs of joints (without tools) |
| | | |

End Caps

E-NO.

Rubber covers used for temporary sealing of unused multiducts to prevent water and dust from getting into the ducts. The caps are available in several versions for different types of ducts. TYPE: Rubber duct end caps

PRODUCT NO. PRODUCT NAME E-NO. 5040177 SRS10617/01 100xEnd Sleeve for 10-16 mm 5040178 SRS10617/02 100xEnd Sleeve for 15-21 mm 5040179 SRS10617/03 50xEnd sleeve for 21-29 mm 5040180 SRS10617/04 20xEnd Sleeve for 29-38 mm 5040992 SRS10617/05 10xEnd Sleeve for 38-45 mm



FIBER DISTRIBUTION HUBS

The Fiber Distribution Hub (FDH) is the location of passive fiber optic devices such as fiber optic splitters and/or cross connection facilities. In this section, FDHs for cable and microduct systems are presented with associated accessories.

For a complete list of all products for fiber distribution, see also section Drop and Premises Networks/Fiber Access Terminals.

Fiber Distribution Hub, Outdoor

This FDH combines unique features in a compact cabinet. The FDH handles in-cabinet splicing of cable as well as incremental installation of air blown micro cable or air blown fiber. The FDH is designed for both PON and P2P FTTx connections and is designed for the RDJ 901 + splitter modules. **TYPE:** Outdoor pad or pole mount **CAPACITY:** up to 288 end users **SIZE:** 830 (1080*)x700x426 mm

* Height including pad

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|---|
| 5060052 | 2/NBD116200/1 | FDH Street cabinet, basic empty |
| 5060053 | 2/NBD116200/2 | FDH Streeet cabinet pre-connected 288 SC/APC, 20 m stub cable |
| | 2/NBD116200/100 | FDH OD 288 TWD |



Fiber Distribution Hub, Indoor

The indoor FDH, for up to 64 end-users, is designed to handle fiber optic terminations and passive optical splitters in PON FTTx networks but can also be used for Point to Point (P2P) applications or combinations of the both. The FDH can handle airblown fiber in microducts, micro cables as well as drop cables and other fiber optic cables. It can also be used as a medium sized fiber optic splice box for various applications.

TYPE: Indoor closure, wall mount. size: 500x 76x182mm sealing: IP class 54 capacity: 64 end users (SC)



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|------------------------------------|
| 5055441 | 1/NBD116200/1 | FDH cabinet basic, empty |
| 5055442 | 1/NBD116200/2 | FDH cabinet prepared 64 + 8 SC/APC |
| 5055443 | 1/NBD116200/3 | FDH cabinet prepared 64 + 8 SC |
| 5055444 | 1/NBD116200/4 | FDH cabinet prepared 64 + 8 LC/APC |
| 5055445 | 1/NBD116200/5 | FDH cabinet prepared 64 + 8 LC |

Fiber Distribution Hub/Access Terminal

The main application for this closure is fiber distribution in PON networks with optical splitters, but it can also be used in a P2P system as a cross connection distribution point. The closure is designed for outdoor, underground installation in manholes, above ground installation on poles or installations inside pedestals. The closure can handle air-blown fibers in microducts, micro cables and traditional cables. The closure is equipped with a holder for up to three RDJ 901+ splitter modules.

PRODUCT NO.

NCD507500

TYPE: Outdoor, underground use CAPACITY: 96 end-users DIMENSIONS: 520x280 mm



PRODUCT NAME FAT/FDH for underground use

Splitter Modules

Splitters to be used in the FDH. The splitters are pre-terminated with protected fanouts and with fitted connectors. Available in both high grade and standard grade and with different connectors. These splitter modules also fits in splitter frames. TYPE: Optical splitters, PLC SPLIT RATIO: 1x2 to 1x64, 2x2 to 2x64 INPUT/OUTPUT: 2 mm patch, G657A1 CONNECTOR OPTIONS: SC/APC, SC, LC, LC/APC



| PRODUCT NO. | PRODUCT NAME |
|--------------|-----------------------|
| RDJ901200/81 | 1:2 splitter, SC/APC |
| RDJ901200/82 | 1:2 splitter, SC |
| RDJ901200/83 | 1:2 splitter, LC/APC |
| RDJ901200/84 | 1:2 splitter, LC |
| RDJ901200/5 | 1:8 splitter, SC/APC |
| RDJ901200/6 | 1:8 splitter, SC |
| RDJ901200/7 | 1:8 splitter, LC/APC |
| RDJ901200/8 | 1:8 splitter, LC |
| RDJ901200/13 | 1:8 splitter, LC |
| RDJ901200/14 | 1:16 splitter, SC/APC |
| RDJ901200/15 | 1:16 splitter, SC |
| RDJ901200/16 | 1:16 splitter, LC/APC |
| RDJ901200/21 | 1:24 splitter, SC/APC |
| RDJ901200/22 | 1:24 splitter, SC |
| RDJ901200/23 | 1:24 splitter, LC/APC |
| RDJ901200/24 | 1:24 splitter, LC |
| RDJ901200/29 | 1:32 splitter, SC/APC |
| RDJ901200/30 | 1:32 splitter, SC |
| RDJ901200/31 | 1:32 splitter, LC/APC |
| RDJ901200/32 | 1:32 splitter, LC |
| RDJ901200/37 | 1:64 splitter, SC/APC |
| RDJ901200/38 | 1:64 splitter, SC |
| RDJ901200/39 | 1:64 splitter, LC/APC |
| RDJ901200/40 | 1:64 splitter, LC |
| RDJ901200/89 | 2:2 splitter, SC/APC |
| RDJ901200/90 | 2:2 splitter, SC |
| RDJ901200/91 | 2:2 splitter, LC/APC |
| RDJ901200/92 | 2:2 splitter, LC |
| RDJ901200/49 | 2:8 splitter, SC/APC |
| RDJ901200/50 | 2:8 splitter, SC |
| RDJ901200/51 | 2:8 splitter, LC/APC |
| RDJ901200/52 | 2:8 splitter, LC |
| RDJ901200/57 | 2:16 splitter, SC/APC |
| RDJ901200/58 | 2:16 splitter, SC |
| RDJ901200/59 | 2:16 splitter, LC/APC |
| RDJ901200/60 | 2:16 splitter, LC |
| RDJ901200/65 | 2:32 splitter, SC/APC |
| RDJ901200/66 | 2:32 splitter, SC |
| RDJ901200/67 | 2:32 splitter, LC/APC |
| RDJ901200/68 | 2:32 splitter, LC |
| RDJ901200/73 | 2:64 splitter, SC/APC |
| RDJ901200/74 | 2:64 splitter, SC |
| RDJ901200/75 | 2:64 splitter, LC/APC |
| RDJ901200/76 | 2:64 splitter, LC |
| | |

RIBBONET® AIR BLOWN FIBER SYSTEM

Drop and Premises Network

The Drop Network connects end users to splicing and branching points, or Fiber Access Terminals (FATs) where the ducts or cables are connected to the feeder and distribution network. The Ribbonet[®] Air Blown Fiber (ABF) system or the Hexatronic offering of drop cables are two options for connecting fibers from end users to the FAT.

The Premises Network refers to the network within a customer's premises such as a home or office environment. Typical products within the premises network are Fiber Access Terminals (FATs) and Fiber Termination Units Boxes (FTBs).

The Ribbonet[®] system, consisting of ducts forming the infrastructure into which the fiber units are blown, can be used outdoors, indoors and underground, as well as in aerial applications. The Ribbonet[®] system covers both the Drop Network and the Premises Network. The system consists of air blown fibers, ducts, duct joints

and accessories and Hexatronic's patented lightweight air blowing tool. The Ribbonet installation comes with a 20 year system warranty.



RIBBONET® AIR BLOWN FIBER

Pre-connected Air Blown Fiber

DDODUCT NO

E-N0

Pre-connected air blown fiber (ABF), consisting of fibers encapsulated in a round multi-layer, highperformance coating. The connected ABF is delivered on lightweight reels, optimized for use with the Ribbonet[®] fiber blowing tool. The ABF is made of bend-resistant G657A2 fiber. The pre-connected ABF is available with 2 or 4 fibers.

| | E-NO. | PRODUCT NO. | PRODUCT NAME |
|---|---------|-------------------|----------------------|
| | 5040947 | RPM258020/30M | ABF 1SC 2G657A2 REEL |
| | 5040951 | RPM258020/50M | ABF 1SC 2G657A2 REEL |
| | 5040954 | RPM258020/70M | ABF 1SC 2G657A2 REEL |
| | 5040942 | RPM258020/100M | ABF 1SC 2G657A2 REEL |
| | 5040943 | RPM258020/150M | ABF 1SC 2G657A2 REEL |
| | 5040944 | RPM258020/200M | ABF 1SC 2G657A2 REEL |
| | 5040945 | RPM258020/250M | ABF 1SC 2G657A2 REEL |
| | 5040946 | RPM258020/300M | ABF 1SC 2G657A2 REEL |
| | 5040948 | RPM258020/350M | ABF 1SC 2G657A2 REEL |
| | 5040949 | RPM258020/400M | ABF 1SC 2G657A2 REEL |
| | 5040950 | RPM258020/500M | ABF 1SC 2G657A2 REEL |
| | 5040952 | RPM258020/600M | ABF 1SC 2G657A2 REEL |
| | 5040953 | RPM258020/700M | ABF 1SC 2G657A2 REEL |
| | 5040955 | RPM258020/800M | ABF 1SC 2G657A2 REEL |
| | 5040956 | RPM258020/900M | ABF 1SC 2G657A2 REEL |
| | 5040941 | RPM258020/1000M | ABF 1SC 2G657A2 REEL |
| l | 5040644 | RPM258005/30M | ABF 2SC 2G657A2 REEL |
| | 5040696 | RPM258005/50M | ABF 2SC 2G657A2 REEL |
| | 5040697 | RPM258005/70M | ABF 2SC 2G657A2 REEL |
| | 5040698 | RPM258005/100M | ABF 2SC 2G657A2 REEL |
| | 5040699 | RPM258005/150M | ABF 2SC 2G657A2 REEL |
| | 5040917 | RPM258005/200M | ABF 2SC 2G657A2 REEL |
| | 5040918 | RPM258005/250M | ABF 2SC 2G657A2 REEL |
| | 5040919 | RPM258005/300M | ABF 2SC 2G657A2 REEL |
| | 5040920 | RPM258005/350M | ABF 2SC 2G657A2 REEL |
| | 5040921 | RPM258005/400M | ABF 2SC 2G657A2 REEL |
| | 5040922 | RPM258005/500M | ABF 2SC 2G657A2 REEL |
| | 5040923 | RPM258005/600M | ABF 2SC 2G657A2 REEL |
| | 5040924 | RPM258005/700M | ABF 2SC 2G657A2 REEL |
| | 5040925 | RPM258005/800M | ABF 2SC 2G657A2 REEL |
| | 5040926 | RPM258005/900M | ABF 2SC 2G657A2 REEL |
| | | DD11050005/100011 | |
| | 5040916 | RPM258005/1000M | ABF 2SC 2G657A2 REEL |

TYPE: 2 or 4 fibers, G657A2 **CONNECTOR OPTIONS:** SC, SC/APC, LC, LC/APC **STANDARD LENGTHS:** 30, 50, 70, 100, 150, 200, 250, 300, 350, 400, 500...1000 m



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|--------------------------|
| 5040645 | RPM258006/30M | ABF 2LC 2G657A2 REEL |
| 5040700 | RPM258006/50M | ABF 2LC 2G657A2 REEL |
| 5040701 | RPM258006/70M | ABF 2LC 2G657A2 REEL |
| 5040702 | RPM258006/100M | ABF 2LC 2G657A2 REEL |
| 5040703 | RPM258006/150M | ABF 2LC 2G657A2 REEL |
| 5040928 | RPM258006/200M | ABF 2LC 2G657A2 REEL |
| 5040929 | RPM258006/250M | ABF 2LC 2G657A2 REEL |
| 5040930 | RPM258006/300M | ABF 2LC 2G657A2 REEL |
| 5040931 | RPM258006/350M | ABF 2LC 2G657A2 REEL |
| 5040932 | RPM258006/400M | ABF 2LC 2G657A2 REEL |
| 5040933 | RPM258006/500M | ABF 2LC 2G657A2 REEL |
| 5040934 | RPM258006/600M | ABF 2LC 2G657A2 REEL |
| 5040935 | RPM258006/700M | ABF 2LC 2G657A2 REEL |
| 5040936 | RPM258006/800M | ABF 2LC 2G657A2 REEL |
| 5040937 | RPM258006/900M | ABF 2LC 2G657A2 REEL |
| 5040927 | RPM258006/1000M | ABF 2LC 2G657A2 REEL |
| 5040646 | RPM258007/30M | ABF 2SC/APC 2G657A2 REEL |
| 5040704 | RPM258007/50M | ABF 2SC/APC 2G657A2 REEL |
| 5040705 | RPM258007/70M | ABF 2SC/APC 2G657A2 REEL |
| 5040706 | RPM258007/100M | ABF 2SC/APC 2G657A2 REEL |
| 5040707 | RPM258007/150M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/200M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/250M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/300M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/350M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/400M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/500M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/600M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/700M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/800M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/900M | ABF 2SC/APC 2G657A2 REEL |
| | RPM258007/1000M | ABF 2SC/APC 2G657A2 REEL |
| | | |

| 0. | PRODUCT NO. | PRODUCT NAME | PRODUCT NO. | PRODUCT NAME |
|--------|-----------------|---------------------------------|-----------------|--|
| 40647 | RPM258008/30M | ABF 2LC/APC 2G657A2 REEL | RPM258029/30M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| 040708 | RPM258008/50M | ABF 2LC/APC 2G657A2 REEL | RPM258029/50M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| 040709 | RPM258008/70M | ABF 2LC/APC 2G657A2 REEL | RPM258029/70M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| 040710 | RPM258008/100M | ABF 2LC/APC 2G657A2 REEL | RPM258029/100M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| 040711 | RPM258008/150M | ABF 2LC/APC 2G657A2 REEL | RPM258029/150M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/200M | ABF 2LC/APC 2G657A2 REEL | RPM258029/200M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/250M | ABF 2LC/APC 2G657A2 REEL | RPM258029/250M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/300M | ABF 2LC/APC 2G657A2 REEL | RPM258029/300M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/350M | ABF 2LC/APC 2G657A2 REEL | RPM258029/350M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/400M | ABF 2LC/APC 2G657A2 REEL | RPM258029/400M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | | | | ABF1SC/APC 2G657A2 TIA-598 REEL ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/500M | ABF 2LC/APC 2G657A2 REEL | RPM258029/500M | |
| | RPM258008/600M | ABF 2LC/APC 2G657A2 REEL | RPM258029/600M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/700M | ABF 2LC/APC 2G657A2 REEL | RPM258029/700M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/800M | ABF 2LC/APC 2G657A2 REEL | RPM258029/800M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/900M | ABF 2LC/APC 2G657A2 REEL | RPM258029/900M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| | RPM258008/1000M | ABF 2LC/APC 2G657A2 REEL | RPM258029/1000M | ABF1SC/APC 2G657A2 TIA-598 REEL |
| 40972 | RPM258028/30M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/30M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 40976 | RPM258028/50M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/50M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 40979 | RPM258028/70M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/70M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
|)40967 | RPM258028/100M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/100M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| | RPM258028/150M | ABF 1SC 1SC/AFC 2G657A2 REEL | RPM258026/150M | ABF 2SC/APC 2G657A2 TIA-598 REEL ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040968 | | | | |
| 040969 | RPM258028/200M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/200M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040970 | RPM258028/250M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/250M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040971 | RPM258028/300M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/300M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040973 | RPM258028/350M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/350M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040974 | RPM258028/400M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/400M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040975 | RPM258028/500M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/500M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040977 | RPM258028/600M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/600M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040978 | RPM258028/700M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/700M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 40980 | RPM258028/800M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/800M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
|)40981 | RPM258028/900M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/900M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| 040966 | RPM258028/1000M | ABF 1SC 1SC/APC 2G657A2 REEL | RPM258026/1000M | ABF 2SC/APC 2G657A2 TIA-598 REEL |
| .0300 | | | | |
| | RPM258018/30M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/30M | ABF 4SC/APC 4G657A2 TIA598 REEL |
| | RPM258018/50M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/50M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/70M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/70M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/100M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/100M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/150M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/150M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/200M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/200M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/250M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/250M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/300M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/300M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/350M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/350M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/400M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/400M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/500M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/500M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | | | | |
| | RPM258018/600M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/600M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/700M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/700M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/800M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/800M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/900M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/900M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258018/1000M | ABF 2LC/APC 2G657A2 TIA598 REEL | RPM258027/1000M | ABF4SC/APC 4G657A2 TIA-598 REEL |
| | RPM258021/30M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/50M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/70M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/100M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | | | | |
| | RPM258021/150M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/200M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/250M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/300M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/350M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/400M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/500M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/600M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/700M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/800M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | RPM258021/900M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |
| | | | | |
| | RPM258021/1000M | ABF 2LC/APC 4G657A2 TIA598 REEL | | |

Air Blown Fiber, in Pan

Air blown fiber (ABF), consisting of fibers encapsulated in a round multi-layer, high-performance coating. The ABF is delivered in pans in lengths from 1000 to 6000 m and is available in configurations from 2 to 12 fibers, in bend resistant G657A2 fiber or multimode 50 μ m OM3 or OM4 fiber. **TYPE:** 2, 4, 8 or 12 fibers, G657A2 or 50 μm OM3, OM4 **STANDARD LENGTHS:** 1000, 2000, 4000, 6000 m



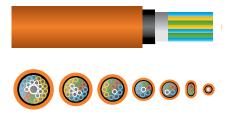
| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|------------------------|
| 5040648 | RPM258013/2000M | ABF 2G657A2 PAN |
| 5040649 | RPM258013/4000M | ABF 2G657A2 PAN |
| 5040650 | RPM258013/6000M | ABF 2G657A2 PAN |
| | RPM258019/2000M | ABF 2G657A2 TIA598 PAN |
| | RPM258019/4000M | ABF 2G657A2 TIA598 PAN |
| | RPM258019/6000M | ABF 2G657A2 TIA598 PAN |
| 5040729 | RPM258014/2000M | ABF 4G657A2 PAN |
| 5040730 | RPM258014/4000M | ABF 4G657A2 PAN |
| 5040731 | RPM258014/6000M | ABF 4G657A2 PAN |
| | RPM258022/2000M | ABF 4G657A2 TIA598 PAN |
| | RPM258022/4000M | ABF 4G657A2 TIA598 PAN |
| | RPM258022/6000M | ABF 4G657A2 TIA598 PAN |
| 5041262 | RPM258016/1000M | ABF 8G657A2 PAN |
| 5041263 | RPM258016/2000M | ABF 8G657A2 PAN |
| 5041264 | RPM258016/4000M | ABF 8G657A2 PAN |
| 5040938 | RPM258017/1000M | ABF 12G657A2 PAN |
| 5040939 | RPM258017/2000M | ABF 12G657A2 PAN |
| 5040940 | RPM258017/4000M | ABF 12G657A2 PAN |
| 5040963 | RPM258025/2000M | ABF 20M3 50µm PAN |
| 5040964 | RPM258025/4000M | ABF 20M3 50µm PAN |
| 5040965 | RPM258025/6000M | ABF 20M3 50µm PAN |
| 5040960 | RPM258024/2000M | ABF 40M3 50µm PAN |
| 5040961 | RPM258024/4000M | ABF 40M3 50µm PAN |
| 5040962 | RPM258024/6000M | ABF 40M3 50µm PAN |
| 5040957 | RPM258023/1000M | ABF 120M3 50µm PAN |
| 5040958 | RPM258023/2000M | ABF 120M3 50µm PAN |
| 5040959 | RPM258023/4000M | ABF 120M3 50µm PAN |

MICRODUCTS AND MULTIDUCTS FOR AIR BLOWN FIBER

Protected Microducts, Direct Buried

Ducts composed of 5/3.5 mm microducts with a heavy-duty HDPE sheath that enables direct buried installation. The ducts are available dielectric or with a moisture barrier of aluminum foil to prevent water diffusion when permanently submersed. The microducts have a solid, low-friction inner surface coating for best installation performance.

TYPE: Direct buried installation, dielectric or metallic moisture barrier DIMENSIONS, MICRODUCTS: Ø 5/3.5 mm CAPACITY: 1, 2, 4, 7, 12, 19, 24, 26-way



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|------------------|----------------|---|
| Standard Color (| Code | |
| 5040378 | MPB30244/1 | Microduct, single for direct buried installation, dielectric, Orange |
| 5040431 | MPB30244/2 | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, Orange |
| 5040432 | MPB30244/4 | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, Orange |
| 5040433 | MPB30244/7 | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, Orange |
| 5040434 | MPB30244/12 | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, Orange |
| 5040435 | MPB30244/19 | Multiducts, consisting of 19 microducts for direct buried installation, dielectric, Orange |
| 5040436 | MPB30244/24 | Multiducts, consisting of 24 microducts for direct buried installation, dielectric, Orange |
| S12 Color Code | | |
| 5040378 | MPB30244/1 | Microduct, single for direct buried installation, dielectric, Orange |
| 5041038 | MPB30244/2M | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Orange |
| 5041039 | MPB30244/4M | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Orange |
| 5041040 | MPB30244/7M | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Orange |
| 5041035 | MPB30244/12M | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Orange |
| 5041101 | 1/MPB30244/2M | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Green |
| 5041103 | 1/MPB30244/4M | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Green |
| 5041104 | 1/MPB30244/7M | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Green |
| 5041105 | 1/MPB30244/12M | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Green |
| 5041111 | 2/MPB30244/2M | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Red |
| 5041112 | 2/MPB30244/4M | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Red |
| 5041113 | 2/MPB30244/7M | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Red |
| 5041114 | 2/MPB30244/12M | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Red |
| 5041129 | 3/MPB30244/2M | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, \$12, Blue |
| 5041130 | 3/MPB30244/4M | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Blue |
| 5041131 | 3/MPB30244/7M | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Blue |
| 5041132 | 3/MPB30244/12M | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Blue |
| | 4/MPB30244/2M | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Yellow |
| | 4/MPB30244/4M | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Yellow |
| | 4/MPB30244/7M | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Yellow |
| | 4/MPB30244/12M | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Yellow |
| | 5/MPB30244/2M | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, White |
| | 5/MPB30244/4M | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, White |
| | 5/MPB30244/7M | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, White |
| | 5/MPB30244/12M | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, White |
| | 6/MPB30244/2M | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Violet |
| | 6/MPB30244/4M | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Violet |
| | 6/MPB30244/7M | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Violet |
| | 6/MPB30244/12M | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Violet |

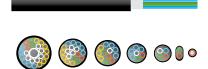
... more information on next page

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|----------------|----------------|--|
| Skanova Sheatl | n Marking | |
| | MPB30244/2S | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Skanova, Orange |
| | MPB30244/4S | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Skanova, Orange |
| | MPB30244/7S | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Skanova, Orange |
| | MPB30244/12S | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Skanova, Orange |
| | 1/MPB30244/2S | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Skanova, Green |
| | 1/MPB30244/4S | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Skanova, Green |
| | 1/MPB30244/7S | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Skanova, Green |
| | 1/MPB30244/12S | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Skanova, Green |
| | 2/MPB30244/2S | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Skanova, Red |
| | 2/MPB30244/4S | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Skanova, Red |
| | 2/MPB30244/7S | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Skanova, Red |
| | 2/MPB30244/12S | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Skanova, Red |
| | 3/MPB30244/2S | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Skanova, Blue |
| | 3/MPB30244/25 | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Skanova, Blue Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Skanova, Blue |
| | 3/MPB30244/7S | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, 512, Skanova, Blue |
| | 3/MPB30244/12S | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Skanova, Blue Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Skanova, Blue |
| | | |
| | 4/MPB30244/2S | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Skanova, Yellow |
| | 4/MPB30244/4S | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Skanova, Yellow |
| | 4/MPB30244/7S | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Skanova, Yellow |
| | 4/MPB30244/12S | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Skanova, Yellow |
| | 5/MPB30244/2S | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Skanova, White |
| | 5/MPB30244/4S | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Skanova, White |
| | 5/MPB30244/7S | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Skanova, White |
| | 5/MPB30244/12S | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Skanova, White |
| | 6/MPB30244/2S | Multiducts, consisting of 2 microducts for direct buried installation, dielectric, S12, Skanova, Violet |
| | 6/MPB30244/4S | Multiducts, consisting of 4 microducts for direct buried installation, dielectric, S12, Skanova, Violet |
| | 6/MPB30244/7S | Multiducts, consisting of 7 microducts for direct buried installation, dielectric, S12, Skanova, Violet |
| | 6/MPB30244/12S | Multiducts, consisting of 12 microducts for direct buried installation, dielectric, S12, Skanova, Violet |
| Standard Color | Code | |
| 5040019 | MPB30230/1 | Microduct, single for direct buried installation, Orange |
| 5040020 | MPB30231/2 | Multiducts, consisting of 2 microducts for direct buried installation, Orange |
| 5040021 | MPB30232/4 | Multiducts, consisting of 4 microducts for direct buried installation, Orange |
| 5040022 | MPB30233/7 | Multiducts, consisting of 7 microducts for direct buried installation, Orange |
| 5040023 | MPB30234/12 | Multiducts, consisting of 12 microducts for direct buried installation, Orange |
| 5040024 | MPB30235/19 | Multiducts, consisting of 19 microducts for direct buried installation, Orange |
| 5040025 | MPB30236/24 | Multiducts, consisting of 24 microducts for direct buried installation, Orange |
| S12 Color Code | | |
| | MPB30230/1M | Microduct, single for direct buried installation, S12, Orange |
| | MPB30231/2M | Multiducts, consisting of 2 microducts for direct buried installation, S12, Orange |
| | MPB30232/4M | Multiducts, consisting of 4 microducts for direct buried installation, S12 , Orange |
| | MPB30233/7M | Multiducts, consisting of 7 microducts for direct buried installation, S12 , Orange |
| | MPB30234/12M | Multiducts, consisting of 12 microducts for direct buried installation, S12, Orange |
| | MPB30235/19M | Multiducts, consisting of 19 microducts for direct buried installation, \$12, Orange |
| | MPB30236/24M | Multiducts, consisting of 24 microducts for direct buried installation, S12 , Orange |

Microduct for Installation in Existing Pipes

Ducts composed of 5/3.5 mm microducts. The ducts are designed for installation in existing pipes or cable shafts. The ducts are available dielectric or with a moisture barrier of aluminum foil to prevent water diffusion when permanently submersed. The microducts have a solid, low-friction inner surface coating for best installation performance.

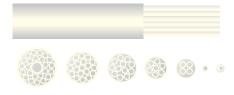
TYPE: Installation in existing pipes, metallic moisture barrier **DIMENSIONS, MICRODUCTS:** Ø 5/3.5 mm **CAPACITY:** 1, 2, 4, 7, 12, 19, 24, 26-way



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|------------------|--------------------------------|---|
| Standard Color (| Code | |
| 5040012 | MPB30210/1 | Ribbonet 1x5/3.5 mm DI, Black |
| 5040013 | MPB30211/2 | Ribbonet 2x5/3.5 mm DI, Black |
| 5040014 | MPB30212/4 | Ribbonet 4x5/3.5 mm DI, Black |
| 5040015 | MPB30213/7 | Ribbonet 7x5/3.5 mm DI, Black |
| 5040016 | MPB30214/12 | Ribbonet 12x5/3.5 mm DI, Black |
| 5040017 | MPB30215/19 | Ribbonet 19x5/3.5 mm DI, Black |
| 5040018 | MPB30216/24 | Ribbonet 24x5/3.5 mm DI, Black |
| 5041026 | MPB30216/26 | Ribbonet 26x5/3.5 mm DI, Black |
| Microducts for E | Duct Installation - Dielectric | |
| Standard Color (| Code | |
| 5041041 | MPB30245/1 | Ribbonet 1x5/3.5 mm DI Dielectric, Black |
| 5041046 | MPB30245/2 | Ribbonet 2x5/3.5 mm DI Dielectric, Black |
| 5041049 | MPB30245/4 | Ribbonet 4x5/3.5 mm DI Dielectric, Black |
| 5041051 | MPB30245/7 | Ribbonet 7x5/3.5 mm DI Dielectric, Black |
| 5041042 | MPB30245/12 | Ribbonet 12x5/3.5 mm DI Dielectric, Black |
| 5041044 | MPB30245/19 | Ribbonet 19x5/3.5 mm DI Dielectric, Black |
| 5040328 | MPB30245/24 | Ribbonet 24x5/3.5 mm DI Dielectric, Black |
| S12 Color Code | 111 2002 10/21 | |
| 5041041 | MPB30245/1M | Ribbonet 1x5/3.5 mm DI Dielectric S12 Color, Black |
| 5041048 | MPB30245/2M | Ribbonet 2x5/3.5 mm DI Dielectric S12 Color, Black |
| 5041050 | MPB30245/4M | Ribbonet 4x5/3.5 mm DI Dielectric S12 Color, Black |
| 5041052 | MPB30245/7M | Ribbonet 7x5/3.5 mm DI Dielectric S12 Color, Black |
| 5041043 | MPB30245/12M | Ribbonet 12x5/3.5 mm DI Dielectric S12 Color, Black |
| 5041045 | | |
| | 2/MPB30245/1M | Ribbonet 1x5/3.5 mm DI Dielectric S12 , Red |
| | 2/MPB30245/2M | Ribbonet 2x5/3.5 mm DI Dielectric S12 , Red |
| | 2/MPB30245/4M | Ribbonet 4x5/3.5 mm DI Dielectric S12 , Red |
| | 2/MPB30245/7M | Ribbonet 7x5/3.5 mm DI Dielectric S12 , Red |
| | 2/MPB30245/12M | Ribbonet 12x5/3.5 mm DI Dielectric S12 Color, Red |
| | 4/MPB30245/1M | Ribbonet 1x5/3.5 mm DI Dielectric S12 , Yellow |
| | 4/MPB30245/2M | Ribbonet 2x5/3.5 mm DI Dielectric S12 , Yellow |
| | 4/MPB30245/4M | Ribbonet 4x5/3.5 mm DI Dielectric S12 , Yellow |
| | 4/MPB30245/7M | Ribbonet 7x5/3.5 mm DI Dielectric S12 , Yellow |
| | 4/MPB30245/12M | Ribbonet 12x5/3.5 mm DI Dielectric S12 , Yellow |
| | 5/MPB30245/1M | Ribbonet 1x5/3.5mm DI Dielectric S12 , White |
| | 5/MPB30245/2M | Ribbonet 2x5/3.5mm DI Dielectric S12, White |
| | 5/MPB30245/4M | Ribbonet 4x5/3.5mm DI Dielectric S12 , White |
| | 5/MPB30245/7M | Ribbonet 7x5/3.5mm DI Dielectric S12 , White |
| | 5/MPB30245/12M | Ribbonet 12x5/3.5mm DI Dielectric S12, White |
| | 7/MPB30247/1M | , |
| | | Ribbonet 1x5/3.5mm DI Dielectric S12 , Orange |
| | | Dibbonat 2x5/2 5mm DI Dialastria \$12 Orango |
| | 7/MPB30247/2M | Ribbonet 2x5/3.5mm DI Dielectric S12, Orange |
| | | Ribbonet 2x5/3.5mm DI Dielectric S12 , Orange Ribbonet 4x5/3.5mm DI Dielectric S12 , Orange Ribbonet 7x5/3.5mm DI Dielectric S12 , Orange |

Microducts, Indoor, High Grade or UL Riser

Microducts with a sheath made of halogen-free, flame-retardant material. The ducts are also available in a UL Riser rated series. The microducts have a solid, low-friction inner surface coating for best installation performance. There is also a single microduct available with an extra protection sheath for mounting directly onto walls with cable clamps. **TYPE:** Indoor Installation, High Grade, IEC 60332-3-24 or UL 1666 OFNR **DIMENSIONS, MICRODUCTS:** Ø 5/3.5 mm **CAPACITY:** 1, 2, 4, 7, 12, 19, 24-way



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|--------------------|-------------------------------|---|
| Microducts for Inc | loor Installation - High Grad | le IEC 60332-3-24 |
| 5040298 | MPB30201/1 | Microduct, single indoors with extra protection. Outer diameter 6mm. Halogen-free |
| 5040007 | MPB30202/1 | Microduct, consisting of 1-microduct, single indoors. Halogen-free |
| 5040008 | MPB30203/4 | Multiducts, consisting of 4 microducts, Indoors. Halogen-free |
| 5040009 | MPB30204/7 | Multiducts, consisting of 7 microducts, Indoors. Halogen-free |
| 5040010 | MPB30205/12 | Multiducts, consisting of 12 microducts, Indoors. Halogen-free |
| 5040011 | MPB30206/19 | Multiducts, consisting of 19 microducts, Indoors. Halogen-free |
| 5040004 | MPB30207/24 | Multiducts, consisting of 24 microducts, Indoors. Halogen-fre |
| Microducts for Inc | loor Installation, UL-1666 R | iser Rated |
| | MPB30208/1U | Microduct, single indoors. Halogen-free, UL Riser |
| | MPB30208/2U | Multiducts, consisting of 2 microducts, Indoors. Halogen-free, UL Riser |
| | MPB30208/4U | Multiducts, consisting of 4 microducts, Indoors. Halogen-free, UL Riser |
| | MPB30208/7U | Multiducts, consisting of 7 microducts, Indoors. Halogen-free, UL Riser |
| | MPB30208/12U | Multiducts, consisting of 12 microducts, Indoors. Halogen-free, UL Riser |
| | | |

Microducts for Indoor Installation, Standard Grade

Microducts with a sheath made of halogen-free, flame-retardant material with Standard Grade classification for installations with normal fire requirements.

E-NO. PRODUCT NO. PRODUCT NAME

TYPE: Indoor installation, Standard Grade, IEC 60332-1 DIMENSIONS, MICRODUCTS: 5/3.5 mm CAPACITY: 1, 2, 4, 7, 12, 19, 24-way



| 5041025 | MPB30209/2 | Multiducts, consisting of 2 microducts, Indoors. Halogen-free |
|---------|-------------|--|
| 5040484 | MPB30209/4 | Multiducts, consisting of 4 microducts, Indoors. Halogen-free |
| 5040485 | MPB30209/7 | Multiducts, consisting of 7 microducts, Indoors. Halogen-free |
| 5040486 | MPB30209/12 | Multiducts, consisting of 12 microducts, Indoors. Halogen-free |
| 5040487 | MPB30209/19 | Multiducts, consisting of 19 microducts, Indoors. Halogen-free |
| 5040488 | MPB30209/24 | Multiducts, consisting of 24 microducts, Indoors. Halogen-free |
| | | |

Nano-ducts Microducts for Indoor Installation, Standard Grade

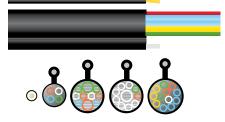
Microducts with a sheath made of halogen-free, flame-retardant material with Standard Grade classification for installations with normal fire requirements. These ducts are made of ultra-slim 3 mm microducts that enable easier installation in narrow shafts and is the preferred option for most multi dwelling units. TYPE: 3 mm, Indoor installation, Standard Grade, IEC 60332-1 DIMENSIONS, MICRODUCTS: 3/2 mm CAPACITY: 1, 7, 12-way



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 5040550 | MPB30243/01 | Ribbonet 1x3.0/2.1 mm Outdoor,unsheathed |
| 5040551 | MPB30243/1 | Ribbonet 1x3/2.1 mm Indoor std Grade |
| 5040552 | MPB30243/7 | Ribbonet 7x3/2.1 mm Indoor std Grade |
| 5040553 | MPB30243/12 | Ribbonet 12x3/2.1 mm Indoor std Grade |
| | | |

Protected Microducts, Aerial

Microducts for aerial installation on poles that are self-supporting, non-metallic and lightweight to ensure quick and easy installation. The tubes include a stabilized sheath to resist the aging effects of UV radiation. The ducts are part of the Hexatronic's Aerial Air Blown Fiber System and include both 5 mm and 10 mm ducts. TYPE: Aerial Installation DIMENSIONS, MICRODUCTS: 5/3.5 mm and 10/8 mm CAPACITY: 1, 4, 12, 8+2, 19, 9+1-way



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------------------|--------------|--|
| Standard Color Code |) | |
| 5040400 | MPB30222/1 | Microduct for aerial installation self supporting, single tube |
| 5041028 | MPB30222/4 | Multiduct, square profile, self supporting, of 4 microducts aerial |
| 5040401 | MPB30224/4 | Multiduct of figure-8 type self supporting, of 4 microducts aerial |
| 5040402 | MPB30224/12 | Multiduct of figure-8 type self supporting, of 12 microducts aerial |
| 5040403 | MPB30225/8 | Multiduct of figure-8 type self supporting, of 2x10/8 mm and 8x5/3,5 mm aerial |
| 5040404 | MPB30225/9 | Multiduct of figure-8 type self supporting, of 1x10/8 mm and 9x5/3,5 mm aerial |
| S12 Color Code | | |
| 5041027 | MPB30222/1M | Microduct for aerial installation self supporting, single tube S12 |
| 5041029 | MPB30222/4M | Multiduct, square profile, self supporting, of 4 microducts aerial S12 |
| 5041031 | MPB30224/4M | Multiduct of figure-8 type self supporting, of 4 microducts aerial S12 |
| 5041030 | MPB30224/12M | Multiduct of figure-8 type self supporting, of 12 microducts aerial S12 |
| 5041032 | MPB30225/8M | Multiduct of figure-8 type self supporting, of 2x10/8 mm and 8x5/3,5 mm aerial S12 |
| 5041033 | MPB30225/9M | Multiduct of figure-8 type self supporting, of 1x10/8 mm and 9x5/3,5 mm aerial S12 |

Thick Walled Microduct Assemblies

These thick walled ducts are made of 7/3.5 mm microducts. Compared to conventional tight protected duct assemblies, thick walled microducts offer lower splicing and branching cost.

TYPE: Direct buried installation or installation in existing pipes

DIMENSIONS, MICRODUCTS: Ø 7/3.5 mm **CAPACITY:** 1, 2, 4, 7, 12, 19, 24-way



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|--------------------|----------------|---|
| S12 Color Code | | |
| 5040510 | MPB30278/4M | TWD 4x7/3,5mm Ribbonet S12 , Orange |
| 5040511 | MPB30278/7M | TWD 7x7/3,5mm Ribbonet S12 , Orange |
| 5040512 | MPB30278/12M | TWD 12x7/3,5mm Ribbonet S12 , Orange |
| 5041171 | 1/MPB30278/4M | TWD 4x7/3,5mm Ribbonet S12 , Green |
| 5041109 | 1/MPB30278/7M | TWD 7x7/3,5mm Ribbonet S12, Green |
| 5041172 | 1/MPB30278/12M | TWD 12x7/3,5mm Ribbonet S12 , Green |
| 5041125 | 2/MPB30278/4M | TWD 4x7/3,5mm Ribbonet S12, Red |
| 5041126 | 2/MPB30278/7M | TWD 7x7/3,5mm Ribbonet S12, Red |
| 5041127 | 2/MPB30278/12M | TWD 12x7/3,5mm Ribbonet S12 , Red |
| 5041173 | 3/MPB30278/4M | TWD 4x7/3,5mm Ribbonet S12, Blue |
| 5041175 | 3/MPB30278/7M | TWD 7x7/3,5mm Ribbonet S12, Blue |
| 5041179 | 3/MPB30278/12M | TWD 12x7/3,5mm Ribbonet S12 , Blue |
| 5041141 | 4/MPB30278/4M | TWD 4x7/3,5mm Ribbonet S12, Yellow |
| 5041142 | 4/MPB30278/7M | TWD 7x7/3,5mm Ribbonet S12, Yellow |
| 5041143 | 4/MPB30278/12M | TWD 12x7/3,5mm Ribbonet S12, Yellow |
| 5041149 | 5/MPB30278/4M | TWD 4x7/3,5mm Ribbonet S12, White |
| 5041150 | 5/MPB30278/7M | TWD 7x7/3,5mm Ribbonet S12, White |
| 5041151 | 5/MPB30278/12M | TWD 12x7/3,5mm Ribbonet S12, White |
| 5041182 | 6/MPB30278/4M | TWD 4x7/3,5mm Ribbonet S12, Violet |
| 5041152 | 6/MPB30278/7M | TWD 7x7/3,5mm Ribbonet S12, Violet |
| 5041183 | 6/MPB30278/12M | TWD 12x7/3,5mm Ribbonet S12, Violet |
| 5041196 | 3/MPB30281/2M | |
| 5041190 | 3/MPB30277/4M | TWD 2x14/10mm S12, Blue TWD 4x14/10mm Micronet S12, Blue |
| 5041198 | 3/MPB30277/7M | TWD 7x14/10mm Micronet S12, Blue |
| 3041130 | | · · · · · · |
| | MPB30279/14M | TWD 2x14/10mm+12x7/3,5mm Hybrid, Orange |
| Skanova Sheath Mar | | |
| | MPB30278/4S | TWD 4x7/3,5mm Ribbonet Skanova , Orange |
| | MPB30278/7S | TWD 7x7/3,5mm Ribbonet Skanova , Orange |
| | MPB30278/12S | TWD 12x7/3,5mm Ribbonet Skanova , Orange |
| | 1/MPB30278/4S | TWD 4x7/3,5mm Ribbonet Skanova , Green |
| | 1/MPB30278/7S | TWD 7x7/3,5mm Ribbonet Skanova, Green |
| | 1/MPB30278/12S | TWD 12x7/3,5mm Ribbonet Skanova , Green |
| | 2/MPB30278/4S | TWD 4x7/3,5mm Ribbonet Skanova, Red |
| | 2/MPB30278/7S | TWD 7x7/3,5mm Ribbonet Skanova, Red |
| | 2/MPB30278/12S | TWD 12x7/3,5mm Ribbonet Skanova , Red |
| | 3/MPB30278/4S | TWD 4x7/3,5mm Ribbonet Skanova, Blue |
| | 3/MPB30278/7S | TWD 7x7/3,5mm Ribbonet Skanova, Blue |
| | 3/MPB30278/12S | TWD 12x7/3,5mm Ribbonet Skanova , Blue |
| | 4/MPB30278/4S | TWD 4x7/3,5mm Ribbonet Skanova, Yellow |
| | 4/MPB30278/7S | TWD 7x7/3,5mm Ribbonet Skanova, Yellow |
| | 4/MPB30278/12S | TWD 12x7/3,5mm Ribbonet Skanova, Yellow |
| | 5/MPB30278/4S | TWD 4x7/3,5mm Ribbonet Skanova, White |
| | 5/MPB30278/7S | TWD 7x7/3,5mm Ribbonet Skanova, White |
| | 5/MPB30278/12S | TWD 12x7/3,5mm Ribbonet Skanova, White |
| | 6/MPB30278/4S | TWD 4x7/3,5mm Ribbonet Skanova, Violet |
| | 6/MPB30278/7S | TWD 7x7/3,5mm Ribbonet Skanova, Violet |
| | 6/MPB30278/12S | TWD 12x7/3,5mm Ribbonet Skanova, Violet |
| | | |

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------------------|----------------------------|--|
| Special Application | ons (Available on Request) | |
| 5040508 | MPB30278/1 | TWD 1x7/3,5mm Sheathed, Orange |
| 5040509 | MPB30278/2 | TWD 2x7/3,5mm, Orange |
| 5040513 | MPB30278/19 | TWD 19x7/3,5mm, Orange |
| 5040514 | MPB30278/24 | TWD 24x7/3,5mm, Orange |
| 5040500 | MPB30280/12 | TWD 12x7/3,5mm, Orange |
| 5040503 | MPB30282/13 | TWD 1x14/10mm+12x7/3,5mm Microtrench, Orange |
| 5040504 | MPB30282/14 | TWD 2x14/10mm+12x7/3,5mm Microtrench, Orange |
| 5040505 | MPB30279/14 | TWD 2x14/10mm+12x7/3,5mm Hybrid, Orange |
| 5040506 | MPB30279/25 | TWD 1x14/10mm+24x7/3,5mm Hybrid, Orange |
| 5040507 | MPB30279/26 | TWD 2x14/10mm+24x7/3,5mm Hybrid, Orange |
| - | MPB30286/1 | TWD 1x7/3,5mm Tracer, Orange |
| - | MPB30286/2 | TWD 2x7/3,5mm Tracer, Orange |
| - | MPB30286/4 | TWD 4x7/3,5mm Tracer, Orange |
| - | MPB30286/7 | TWD 7x7/3,5mm Tracer, Orange |
| - | MPB30286/12 | TWD 12x7/3,5mm Tracer, Orange |
| - | MPB30286/19 | TWD 19x7/3,5mm Tracer, Orange |
| - | MPB30286/24 | TWD 24x7/3,5mm Tracer, Orange |
| - | MPB30287/14 | TWD2x14/10mm+12x7/3,5mm Tracer, Orange |
| - | MPB30287/25 | TWD1x14/10mm+24x7/3,5mm Tracer, Orange |
| - | MPB30287/26 | TWD2x14/10mm+24x7/3,5mm Tracer, Orange |
| - | MPB30288/12 | TWD 12x7/3,5mm M-trench Tracer, Orange |
| - | MPB30289/13 | TWD1x14/10mm+12x7/3,5mm Tracer, Orange |
| - | MPB30289/14 | TWD2x14/10mm+12x7/3,5mm Tracer, Orange |
| | | |

Thick Walled Microducts

Thick walled microducts,7/3.5 mm to be used in combination with thick walled microduct assemblies.

TYPE: Direct buried installation or installation in existing pipes **DIMENSIONS, MICRODUCTS:** Ø 7/3.5 mm

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| E-NO. | PRODUCT NO. | PRODUCT NAME | |
|------------|-------------|-------------------------------------|--|
| Microducts | | | |
| 5041068 | MPB30284/0G | TWD 1x7/3,5mm Singeltube, Orange | |
| 5041074 | MPB30284/YE | TWD 1x7/3,5mm Singeltube, Yellow | |
| 5041072 | MPB30284/WH | TWD 1x7/3,5mm Singeltube, White | |
| 5041070 | MPB30284/RD | TWD 1x7/3,5mm Singeltube, Red | |
| 5041065 | MPB30284/BU | TWD 1x7/3,5mm Singeltube, Blue | |
| 5041066 | MPB30284/GN | TWD 1x7/3,5mm Singeltube, Green | |
| 5041073 | MPB30284/VT | TWD 1x7/3,5mm Singeltube, Violet | |
| 5041064 | MPB30284/BN | TWD 1x7/3,5mm Singeltube, Brown | |
| 5041071 | MPB30284/TQ | TWD 1x7/3,5mm Singeltube, Turquoise | |
| 5041067 | MPB30284/GY | TWD 1x7/3,5mm Singeltube, Grey | |
| 5041069 | MPB30284/PK | TWD 1x7/3,5mm Singeltube, Pink | |
| 5041063 | MPB30284/BK | TWD 1x7/3,5mm Singeltube, Black | |

1

DUCT JOINTS AND OTHER DUCT EQUIPMENT

Straight Connector

Microduct snap-in connectors for quick and easy splicing of microducts. The body is transparent for easy fault location during installation. The connector is available for 5/3.5 mm and 3/2 mm ducts.

TYPE: Straight connector, Slim DIMENSIONS, MICRODUCTS: Ø 5/3.5 mm or 3/2 mm



 E-NO.
 PRODUCT NO.
 PRODUCT NAME

 5040580
 MPB30601/32
 100xConnector, 3/2 mm Slim

 5040887
 MPB30601/132
 100xConnector, 5/3.5 mm Slim

Straight Connector for Thick Walled Ducts

Microduct snap-in connectors for quick and easy splicing of microducts. The connector is available for 7/3.5 mm ducts and can be direct buried. It is equipped with safety locks for unaccidental opening during installation.

TYPE: Straight connector **DIMENSIONS, MICRODUCTS:** Ø 7/3.5 mm

TYPE: Gas block straight connector

DIMENSIONS, MICRODUCTS: 5/3.5 mm

E-NO. PRODUCT NO. 5040518 MPB30605/72

100xConnector,7/3.5 mm DB

PRODUCT NAME

Gas Block Connector 5 mm

The gas block microduct snap-in connector is normally used between indoor and outdoor environments to prevent air flow that may result in condensed water getting into in ducts. After cable installation, the connector can be gas sealed by turning a ring on the body.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5040353 | MPB30602/1 | 100xGas Block Connector 5/3.5 mm 1.0 - 1.6 mm |



Gas Block Connector 7 mm

The gas block microduct snap-in connector is normally used between indoor and outdoor environments to prevent air flow that may result in condensed water getting into in ducts. After cable installation, the connector can be gas sealed by Pushing the connector ends together. This version is intended for 7 mm thick walled ducts.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5040913 | MPB30607/72 | 100xGas Block Connector 7/3.5 mm 1.0 - 1.6 mm |

TYPE: Gas block straight connector **DIMENSIONS, MICRODUCTS:** 7/3.5 mm



End stop Connector

Microduct snap-in end stop connectors for permanent or temporarily sealing of unused microducts to prevent water and dust from getting into the duct. TYPE: End stop DIMENSIONS, MICRODUCTS: Ø 5/3.5 mm



 E-NO.
 PRODUCT NO.
 PRODUCT NAME

 5040993
 SXA1139137/132
 100xMicroduct End Stop, 5 mm Easy Connect

End Stop Connector for Thick Walled Ducts

Microduct snap-in, end-stop connectors for permanent or temporarily sealing of unused microducts to prevent water and dust getting into the duct. This type is intended for thick walled ducts. TYPE: End stop for TWD DIMENSIONS, MICRODUCTS: Ø 7/3.5 mm

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 E-NO.
 PRODUCT NO.
 PRODUCT NAME

 5040905
 MPB30606/72
 100xEndstop Connector, 7 mm DB

Divisible Seals

E-NO.

5040725

5040726

The divisible seals for microducts provide a gas and watertight seal for open duct ends installed with air blown fiber. The seals are designed to be installed after the fiber or cable has been blown in to the microduct.

PRODUCT NO.

MPB30608/5A1

MPB30608/5B1

TYPE: Divisible seal for micro cables **DIMENSIONS, MICRODUCTS:** Ø 5/3.5 or 7/3.5 mm



| 5040727 | MPB30608/7A1 | 500x7 mm Miniduct Seal 1.0-1.40 mm |
|---------|--------------|------------------------------------|
| 5040728 | MPB30608/7B1 | 500x7 mm Miniduct Seal 2.1-2.5 mm |
| | | |

PRODUCT NAME

500x5 mm Miniduct Seal 1.0-1.40 mm

500x5 mm Miniduct Seal 2.1-2.5 mm

Microduct End Caps

End caps for microducts to prevent dirt and moisture entering the tubes. The end cap also locks the installed fiber to prevent it from moving in the tube. End caps should be used for all open ends in 5 mm microduct installations. The end cap is made of rubber and has a slit that allows the fiber unit to pass through.

DIMENSIONS, MICRODUCTS: Ø 5/3.5 mm

TYPE: End cap with strain relief



 E-NO.
 PRODUCT NO.
 PRODUCT NAME

 5040876
 NDK12103
 100xMicroduct End Caps, Strain Relief, 5 mm

Duct Joint Closure

A series of straight duct closures for maximum protection of duct joints for direct buried applications. Heat shrink technology is used for maximum protection. The closure is available in five different sizes and includes microduct snap-in connectors for 1 to 24 microducts. TYPE: Heat shrink, straight joint SEALING: IP class 68 CAPACITY: 1 to 24 microducts

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5040372 | NDE45115/4 | Straight jointing kit for micronet ducts (1 duct) |
| 5040373 | NDE45115/5 | Straight jointing kit for micronet ducts (4 duct) |
| 5040374 | NDE45115/6 | Straight jointing kit for micronet ducts (7 duct) |



Duct Joint Closure

E-NO.

5084249

5040914

5084256

5084257

5084263

5084266

5084269

5040915

E-NO. 5040029

5040030

A series of straight duct closures for quick and easy installation without the need for heat. The closure is available in several sizes. Microduct snap-in connectors are not included.

PRODUCT NAME

10xStraight Joint 8-12.5 mm

10xStraight Joint 14.9-18 mm

10xStraight Joint 26.5-29 mm

10xStraight Joint 19-24 mm

10xStraight Joint 31-33 mm

10xStraight Joint 36.7-40 mm

10xStraight Joint 44-46 mm

10xStraight Joint 40-41 mm

PRODUCT NAME

PRODUCT NO.

NDE45125/111

NDE45125/131

NDE45125/141

NDE45125/151

NDE45125/161

NDE45125/171

NDE45125/181

NDE45125/191

TYPE: Cold seal, re-enterable straight joint **SEALING:** IP class 68 **CAPACITY:** 1 to 26 microducts



| Duct Joint and Branch Kit |
|----------------------------------|
|----------------------------------|

Flexible kit including materials and tools for jointing, branching and mid-span of microducts/multiducts. A vulcanizing cloth is used for sealing, and strong and flexible PVC tape provides mechanical protection. Microduct snap-in connectors are not included. NDE 451 40/2 is a kit without tools. **TYPE:** Cold seal, branch joint **SEALING:** IP class 68 **CAPACITY:** Approx. 10 joints/kit

Joint kit for ducts with tool kit and material for 10 pcs of joints

Joint kit for 10 pcs of joints (without tools)

| Pulkdak | |
|---------|--|
| | |

Duct Branch Closure - Compact

PRODUCT NO.

NDE45140/1

NDE45140/2

The closure is intended for fast and easy branching of direct buried microduct assemblies for air-blown fiber. The typical application is to branch out 1 to 4 drop ducts to connect single family units from a main duct assembly. The closure is intended for mounting directly into the ground or in manholes, but can also be installed above ground.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--------------------------------|
| 5040497 | 3/NDE451200 | Duct branch off closure, small |

Duct Branch Closure - High Capacity

Branch joint closure suitable for multiducts in direct buried applications. It can be used for a large number of duct branches. The box has alternative entrances, allowing a large number of possible joint combinations, as well as mid-span access.

PRODUCT NO.

TYPE: Cold seal, re-enterable branch closure **SEALING:** IP class 68 **CAPACITY:** 1-24 way ducts, up to 4x1-way branch off



TYPE: Cold seal, re-enterable branch joint SEALING: IP class 68 CAPACITY: 1-24 way ducts, up to 12x1-way branch off



 5040351
 NDE451100
 Duct branch off closure, Universal configuration

 5040352
 NDE451100/1
 Duct branch off closure, Modular 12 configuration

PRODUCT NAME

Duct Branch Closure, Gel

E-NO.

Easy-to-use fast to install closure, intended for Hexatronic's Aerial Air Blown Fiber System, and for underground branching of ducts. The closure uses "gel-seal" technology for quick and safe installation.

| PRODUCT NO. | PRODUCT NAME |
|-------------|----------------------|
| NDE45122/3 | 12xDuct Joint 350 mm |

TYPE: Cold seal, re-enterable branch joint for
aerial or underground applicationsSEALING: IP class 67CAPACITY: Up to 4x1-way branch off



End Caps

Rubber covers used for temporarily sealing of unused multiducts to avoid water and dust from getting into the ducts. The caps are available in several versions for different types of ducts. TYPE: Rubber end caps

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|-----------------------------|
| 5040177 | SRS10617/01 | 100xEnd Sleeve for 10-16 mm |
| 5040178 | SRS10617/02 | 100xEnd Sleeve for 15-21 mm |
| 5040179 | SRS10617/03 | 50xEnd sleeve for 21-29 mm |
| 5040180 | SRS10617/04 | 20xEnd Sleeve for 29-38 mm |
| 5040992 | SRS10617/05 | 10xEnd Sleeve for 38-45 mm |



Anchoring Clamp

Designed for ducts with a Fiber Reinforced Plastic (FRP) messenger figure-8 shaped duct assembly. The 701 can also be mounted directly on aerial drop ducts.

TYPE: Anchoring Clamp **CAPACITY:** (601) 8-10 mm FRP or (701) 6-8 mm FRP or reinforced duct

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5060042 | NSF151601 | Anchoring Clamp For FRP messenger figure-8 fiber |
| 5060044 | NSF151701 | Anchoring Clamp For FRP messenger figure-8 or self supporting single duct |

PRODUCT NAME

Suspension Clamp for figure-8 cable

Suspension Clamp

Designed for ducts with a Fiber Reinforced Plastic (FRP) messenger figure-8 shaped duct assembly.

 E-NO.
 PRODUCT NO.

 5040893
 NSF151502

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TYPE: Suspension Clamp

CAPACITY: 7-11 mm FRP



Hook for Suspension Clamp

This hook is designed for the NSF 151 502 suspension clamp and enables a secure fastening of the clamp when mounted on wooden poles..

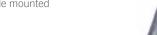
TYPE: Hook for suspension clamp, pole mounted

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---------------------------|
| 5040892 | NSF151100 | Hook for suspension clamp |

Universal Pole Bracket

Designed for securing cable or ducts on wooden, concrete or metallic poles.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5060041 | NSF151611 | Univesal Pole Bracket, for all types of poles |







FIBER ACCESS TERMINALS AND FIBER TERMINATION BOXES

Fiber Access Terminals (FAT) are designed for Ribbonet[®] Air Blown Fiber and for changeover from fibers emerging from microducts or drop cables to all types of fiber optic distribution cables. The FATs consist of jointing cabinets and joint closures that are designed for easy access and good protection of fibers. Products for direct splicing of distribution and drop cabling sections as well as closure with connection panels are available.

FAT Fiber Jointing Cabinet

Small sized cabinet intended for fiber splicing and termination of up to 48 microducts (subscribers) or drop cables. The supplied fiber organizers can typically handle up to 96 fibers.

TYPE: Indoor cabinet, 19", ETSI or wall mount SIZE: 350x300x120 mm SEALING: IP class 45 CAPACITY: 96 splices, 48 microducts

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 5040031 | NCD5188002 | Fiber Jointing Cabinet for up to 48 microducts |

FAT Fiber Jointing Cabinet

FAT Fiber Jointing Cabinet

Large cabinet suitable for fiber splicing and termination of up to 192 microducts (5 mm) or drop cables. The supplied fiber organizers can typically handle up to 384 fibers. TYPE: Indoor cabinet, 19", ETSI or wall mount size: 440x600x220 mm sealing: IP class 45 capacity: 384 splices, 192 microducts

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--|
| 5040033 | NCD5188003 | Fiber Jointing Cabinet for up to 192 microducts, wall mounting or 19* rack |

FAT Fiber Jointing Cabinet

This is a medium sized cabinet for both traditional 5 mm microducts and 7 mm thick walled ducts. The closure is intended for mounting inside an outer protective cabinet or for indoor use.

| TYPE: Indoor or protected outdoor use, |
|--|
| wall mount |
| SIZE: 289x493x140 mm |
| CAPACITY: 96 (single)/192 (ribbon) splices |
| 96 microducts |

| | 90 microducts |
|-------------|--|
| PRODUCT NO. | PRODUCT NAME |
| NCD5188006 | Fiber jointing cabinet for up to 96 microducts, for cabinet or wall mounting |



E-NO. 5060070

Fiber Access Terminal, Indoor or Outdoor

FATs for indoor or outdoor applications with up to 24 end-user connections. It can handle air-blown fiber in microducts, micro cables as well as drop cables and other fiber optic cables. It can also be used as a fiber optic splice box for various applications.

TYPE: Indoor closure, wall mount. Outdoor closure, wall or pole mount SIZE: 368x275x114 mm SEALING: (indoor) IP class 54, (outdoor) IP class 56 CAPACITY: 24 connectors (SC)



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|-------------------------------------|
| 5060060 | 1/NCD507200/1 | FAT Indoor excluding adapters |
| 5060061 | 1/NCD507200/2 | FAT Indoor with 24 SC/APC adapters |
| 5060062 | 2/NCD507200/1 | FAT Outdoor excluding adapters |
| 5060063 | 2/NCD507200/2 | FAT Outdoor with 24 SC/APC adapters |
| | | |

Fiber Access Terminal, Indoor

FAT for indoor applications with up to 96 end-user connections. It can handle air-blown fiber in microducts, micro cables as well as drop cables and other fiber optic cables. It can also be used as a fiber optic splice box for various applications. TYPE: Indoor closure, wall mount. Outdoor closure, wall or pole mount SIZE: 500x76x182 mm SEALING: IP class 54 CAPACITY: 96 connectors (SC)

size: 430x250x860 mm (above ground)

CAPACITY: 96 (single)/192 (ribbon) splices,

TYPE: Outdoor cabinet

SEALING: IP class 54

96 microducts



| PRODUCT NO. | PRODUCT NAME |
|-------------|----------------------|
| NCD507201/1 | FAT 96B with keylock |

FAT Fiber Jointing Cabinet

Outdoor street cabinet designed for blown fiber or cable splicing. It consists of an outer cabinet and an inner splicing compartment. The cabinet is made of aluminum. The cabinet can be used with traditional microducts, thick walled ducts or any type of fiber optic cables.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5084141 | NBD116501 | Outdoor cabinet, Midi, Slim, for up to 96 subscribers |



Fiber Joint Closure - High Capacity

This compact, high capacity joint closure handles up to 576 fiber splices. The closure is designed for outdoor underground installation in manholes but can also be mounted above ground on poles or inside pedestals. The closure can handle air-blown fibers in microducts, micro cables and traditional cable. TYPE: Outdoor, underground use SEALING: IP class 68 CAPACITY: 576 splices DIMENSIONS: 520x280 mm

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---------------------------------------|
| 5060283 | NCD507550 | Fiber Joint Closure 576 |
| | NSD515201 | Swing-up arm for NCD507500/550 |
| | NDM11016/1 | 10 x Round Micro cable cable entrance |
| | NDM11017/1 | 5 x Oval Micro cable entrance kit |
| | NDM11018/1 | 10 x Round Microducts entrance |



Fiber/Duct Joint Closure

Plastic joint closure for outdoor, direct buried installations. The closure is designed for outdoor, underground installation in manholes. It can handle air-blown fibers in microducts, micro cables as well as traditional cables. TYPE: Outdoor, plastic closure for cables and microducts CAPACITY: 96 (single)/192 (ribbon) splices, 24 microducts SIZE: 342x262x140 mm SEALING: IP class 68



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5060065 | NCD5045202 | Cable/Duct Joint Closure, closed inlets |
| 5060066 | NCD5046202 | Cable/Duct Joint Closure, single cable inlet open |
| 5060067 | NCD5047202 | Cable/Duct Joint Closure, multi cable inlet open |
| 5060068 | NCD5048202 | Cable/Duct Joint Closure, all inlets open |

Fiber Termination Box

The fiber termination box (FTB) designed for termination of fibers outside premises in FTTx applications. The box terminates and protects fiber or duct connections for the final drop cabling. It can also be used as a multi-purpose outdoor fiber optic wall outlet. The box is suitable for both air blown fiber installations and drop cables. TYPE: FTTH Fiber Optic Termination Box, Outdoor/indoor use DIMENSIONS: 190x130x45 mm SEALING: IP class 54 CAPACITY: 4xSC, 4xLC TYPE: Outdoor plastic closure for cables and microducts



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5060064 | 5/NEG203200 | Fiber Termination Box, Indoor/Outdoor for up to 2xSC Duplex cut-out |

INSTALLATION TOOLS AND ACCESSORIES

Air Blown Fiber (ABF) Installation Tool

The Air Blown Fiber Installation Tool is used for the installation of Air Blown Fibers into microducts. This unique, easy-to-handle and lightweight tool is designed for optimal performance in combination with all available fiber units and microducts in the Ribbonet® Air Blown Fiber System. The tool uses both compressed air and an electric motor to feed the fiber. An adjustable magnetic coupling limits feeding force on fiber to avoid damage in case of a sudden stop. The motor speed and direction is controlled by a trigger switch on the handle.

The tool is delivered with a case including nozzles for 3/2 mm, 5/3.5 mm and 7/3.5 mm microducts.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|------------------|
| 1623603 | LTT1792011 | ABF Blowing Tool |

TYPE: Air blown fiber (ABF) installation **SUPPORTED PRODUCTS:** Hexatronic ABF 2 - 12 fiber, 3 - 7 mm microducts **CAPACITY:** ≤150 m/min



Blowing Beads

Beads that can be mounted on the tip of the air blown fiber unit for optimal blowing. This is recommended for long installation distances with many duct connectors or sharp bends. The beads come in two different sizes to suit the different blown fiber units.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|--------------------------|
| 5040890 | NTK102245/1 | 100xBlowing Beads, 1-4f |
| 5040891 | NTK102245/2 | 100xBlowing Beads, 8-12f |

Cleaning Sponges

Cleaning sponges are used when cleaning dust or moisture from a microduct. The sponge is simply blown through the microduct by the air pressure from the installation tool. **TYPE:** Cleaning sponge for 5/3,5 mm ducts

TYPE: Blowing bead for air blown fiber, 1 - 4f

or 12f versions



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|-----------------------------|
| 5040291 | NTM50207 | 100xCleaning Sponges 3.5 mm |
| 5040896 | NTM50207/1 | 100xCleaning Sponges 10 mm |
| 5040897 | NTM50207/2 | 100xCleaning Sponges 8 mm |

Duct Sheath Cutter

Used for quick and easy removal of any sheath from multiducts, this is an excellent tool for performing mid-span access on ducts.

TYPE: Sheath cutter for microduct assemblies **CAPACITY:** 1-26-way Ribbonet[®] 1 - 7-way Micronet

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 1649216 | LDK19502 | Sheath cutter for multiduct and midspann access |



Double Sheath Cutter

Cutter to use when dismantling the outer sheath of a double-sheathed HDPE multiduct (direct buried).

TYPE: Sheath cutter for microduct assemblies **CAPACITY:** 1-26-way Ribbonet[®] 1 - 7-way Micronet



 E-NO.
 PRODUCT NO.
 PRODUCT NAME

 1649217
 LDK19501
 Double sheath cutter for microduct assemblies

Single Sheath Cutter

| A small and single-sheath | handy tool primar ed ducts. | ily for removing | TYPE: Single sheath cutte |
|---------------------------|--------------------------------|----------------------|---------------------------|
| E-NO. | PRODUCT NO. | PRODUCT NAME | |
| 1649690 | LDK1951 | Sheath cutter for mu | tiduct, small |

TYPE: Micro cable sheath cutter

Micro Cable Sheath Cutter

Used for removal of the sheath on micro cables. The tool is delivered with three straight and one round blade. Cutting depth is adjustable.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|-------------------------------|
| 1649218 | LDK19503 | Sheath cutter for micro cable |

Microduct Cutter

Provides a clean and straight cut necessary to perform a smooth duct splice prior to the mounting of microduct snap-in connectors.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|----------------------------------|
| 1649028 | LDK20803 | Microduct cutter 3-12 mm |
| | LDK19501/03 | Microduct cutter, pliers 3-20 mm |

PRODUCT NAME

Toolkit microduct, TKM200, with box

TYPE: ABF stripper

Toolkit for Microducts

The toolkit contains all necessary tools for removal of sheath on microduct assemblies as well as for cutting assemblies and microducts. Included in the kit is also a pair of pliers for removal of duct connectors. The tools are delivered in a protective hard case.

PRODUCT NO.

LTT179003

TYPE: Toolkit for preparation of microducts and microduct assemblies

ABF Stripping Scissors

E-NO.

1649025

Used for removal of the acrylate coating on air blown fiber (ABF). The scissors are also a handy tool for various applications.

 PRODUCT NO.
 PRODUCT NAME

 LDK1951/07
 ABF Scissors





| TYPE: | Microduct cutter |
|-------|------------------|
| | |

DROP CABLES

Designed for quick and easy installation Hexatronic's Drop Cables connect end users in FTTx networks to a nearby Fiber Access Terminal. Drop cables are usually a good choice for shorter distances and where there is easy access for the cable installation. To facilitate installation and minimize attenuation when cable is installed around sharp corners, all Hexatronic's drop cables are based on extra bend resistant G657A2 fiber. The fiber is compatible with standard G652D fiber used in feeder and distribution cables.

Drop Cable for Indoor and Outdoor Use

Halogen-free, flame-retardant drop cables with tight secondary coated fiber for quick and easy splicing and fitting of connectors. The cable is designed with G657A2 extra high bend-resistant fiber and a robust design to facilitate mounting with brackets directly on the wall. The cable has a flame retardant and UV protected sheath and is suitable for both indoor and outdoor use.

TYPE: Indoor and outdoor use, HFFR, IEC60332-3 CAPACITY: 1 - 4 fibers DIAMETER: 4.8mm to be used with cable clamps FIBER TYPE: G657A2

TYPE: Indoor use, HFFR, IEC60332-3

FIBER TYPE: G657A2 (G652D compatible)

TYPE: Indoor use, HFFR, IEC60332-3

FIBER TYPE: G657A2 (G652D compatible)

CAPACITY: 1 - 4 fibers

DIAMETER: 4.8 mm

CAPACITY: 1 fiber

DIAMETER: 2.9 mm

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|---|
| 4979680 | TOL4063007/1A | Drop Cable, Indoor/Outdoor, 4.8 mm HFFR, Tight sec, G657A2, 1-fiber |
| 4979690 | TOL4063007/2A | Drop Cable, Indoor/Outdoor, 4.8 mm HFFR, Tight sec, G657A2, 2-fiber |
| 4979700 | TOL4063007/4A | Drop Cable, Indoor/Outdoor, 4.8 mm HFFR, Tight sec, G657A2, 4-fiber |

Drop Cable, Indoor

Halogen-free, flame-retardant drop cable for FTTx applications. The cable is used for both vertical (riser) and horizontal installations in buildings. To facilitate installation, G657A2 extra high bendresistant fiber is used.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|-------------------|
| 4979650 | T0L4063006/1A | GNGQQBDU 1x10/125 |
| 4979660 | T0L4063006/2A | GNGQQBDU 2x10/125 |
| 4979670 | T0L4063006/4A | GNGQQBDU 4x10/125 |

Drop Cable, Indoor

Extra slim drop cable with excellent bend-performance, for indoor installations in cable chutes or directly on the wall with cable clamps. Fits easily to standard connectors bend protection.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|--|
| 4979710 | TOL4063005/1A | Drop Cable, Indoor, 2.8 mm HFFR, Tight sec, G657B, 1-fiber |

Drop Cable, Outdoor, Duct or Direct Buried

Durable loose tube drop cable for outdoor installation in ducts or direct-buried applications. Two fiber reinforced glass rods guarantee highest crush performance. The cable is longitudinally water blocked. **TYPE:** Duct or direct-buried **CAPACITY:** 1 - 12 fibers **DIAMETER:** 6.1x3.3 mm **FIBER TYPE:** G657A2

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|--|
| 4979780 | TOL4069001/1A | Drop Cable, Outdoor, 6.1x3.3 mm Loose tube, G657A2, 1-fiber |
| 4979790 | TOL4069001/2A | Drop Cable, Outdoor, 6.1x3.3 mm Loose tube, G657A2, 2-fiber |
| 4979800 | TOL4069001/4A | Drop Cable, Outdoor, 6.1x3.3 mm Loose tube, G657A2, 4-fiber |
| 4979820 | TOL4069001/12A | Drop Cable, Outdoor, 6.1x3.3 mm Loose tube, G657A2, 12-fiber |



Drop Cable, Aerial

Self-supporting figure-8 drop cable with loose tube design for aerial installation.

TYPE: Aerial figure-8 CAPACITY: 1 - 12 fibers DIAMETER: 4x8 mm FIBER TYPE: G657A2



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|---|
| 4988300 | TOL4069002/1A | Aerial drop cable for outdoor use, 2 G 657. A2 |
| 4988310 | T0L4069002/2A | Aerial drop cable for outdoor use, 2 G 657. A2 |
| 4988320 | TOL4069002/4A | Aerial drop cable for outdoor use, 4 G 657. A2 |
| 4988330 | T0L4069002/8A | Aerial drop cable for outdoor use, 8 G 657. A2 |
| 4988290 | TOL4069002/12A | Aerial drop cable for outdoor use, 12 G 657. A2 |

FIBER TRANSPORT NETWORK

Fiber optic cables for trunk networks. The fiber transport site related offering includes a range of fiber optic cables, joint closures and accessories for all kinds of installation environments such as installation in conduits, direct installation in ground as well as aerial installation.

All products have been designed and tested for optimal installation properties, as well as resistance to fire, chemicals and environmental damage.

CABLES FOR DUCT INSTALLATION

The range of cables for duct installation includes all our five basic designs: concentric core, slotted core, slotted core ribbon, DryTech and ribbon in loose tubes.

The duct installation cables include both metallic and dielectric cables with fiber counts of up to several hundred fibers. The fibers

can be of different types and different types of fiber can be mixed in the same cable. The duct cables can be supplied with aluminum foil as a moisture barrier. Aramid or glass yarn can be added for extra axial pulling strength. Glass yarn or polyamide can be used as protection against rodents.

GRCLDV DryTech

Slim loose tube cable with concentric core design, with up to six tubes per cable. The cable is all dielectric. DryTech filling compound is used in the cable core.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|-----------------|
| 4988130 | TOL4012084/12A | GRCLDV 12 G652D |
| 4988150 | TOL4012084/36A | GRCLDV 36 G652D |
| 4988140 | TOL4012084/24A | GRCLDV 24 G652D |
| 4988160 | TOL4012084/48A | GRCLDV 48 G652D |
| 4988140 | TOL4012084/24A | GRCLDV 24 G652D |

GRCLDV DryTech

Slim loose tube cable with concentric core design, with up to six tubes per cable. The cable is all dielectric. DryTech filling compound is used in the cable core.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|------------------|
| 4982900 | TOL4012098/12A | GRCLDV 12 G652D |
| 4982910 | TOL4012098/24A | GRCLDV 24 G652D |
| 4982920 | TOL4012098/48A | GRCLDV 48 G652D |
| 4982930 | TOL4012098/72A | GRCLDV 72 G652D |
| 4982940 | TOL4012098/96A | GRCLDV 96 G652D |
| 4982950 | TOL4012098/144A | GRCLDV 144 G652D |
| 4982960 | TOL4012098/192A | GRCLDV 192 G652D |

DESIGN: Concentric core, extra slim TYPE: Dielectric, DryTech CAPACITY: 12 - 192 fibers DIAMETER: 11 - 18.5 mm

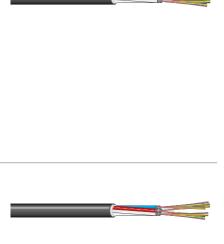
DESIGN: Concentric core, extra slim

TYPE: Dielectric. DrvTech

CAPACITY: 1 - 48 fibers

DIAMETER: 10 mm





GRCLDV DryTech

Loose tube cable with concentric core design, resulting in a cost-effective solution. The cable is all dielectric. DryTech filling compound is used in the cable core. Maximum capacity is 16 tubes with 4-12 fibers in each.

E-NO. PRODUCT NO. PRODUCT NAME 4984810 TOL4012017/8A GRCLDV 8 G652D 4984820 TOL4012017/12A GRCLDV 12 G652D 4984830 TOL4012017/24A GRCLDV 24 G652D 4984840 TOL4012017/36A GRCLDV 36 G652D TOL4012017/48A GRCLDV 48 G652D 4984850 4984860 TOL4012017/72A GRCLDV 72 G652D 4984870 TOL4012017/96A GRCLDV 96 G652D 4984880 TOL4012017/144A GRCLDV 144 G652D 4984890 TOL4012017/192A GRCLDV 192 G652D DESIGN: Concentric core TYPE: Dielectric, DryTech CAPACITY: 2 - 192 fibers DIAMETER: 11 - 23 mm



1

| GRCALV | DryTech |
|--------|----------------|
| | 2., |

Loose tube cable with concentric core design and aluminum foil, which provides an excellent moisture barrier, making the cable suitable for humid environments. DryTech filling compound is used in the cable core. Maximum capacity is 16 tubes with 12 fibers in each. **DESIGN:** Concentric core **TYPE:** Aluminum barrier, DryTech **CAPACITY:** 2 - 192 fibers

| PRODUCT NO. | PRODUCT NAME |
|-----------------|------------------|
| T0L4012064/12A | GRCALV 12 G652D |
| T0L4012064/24A | GRCALV 24 G652D |
| T0L4012064/36A | GRCALV 36 G652D |
| T0L4012064/48A | GRCALV 48 G652D |
| T0L4012064/72A | GRCALV 72 G652D |
| T0L4012064/96A | GRCALV 96 G652D |
| T0L4012064/144A | GRCALV 144 G652D |
| T0L4012064/192A | GRCALV 192 G652D |
| | |

GRHLDV

Loose tube cable with concentric core design, resulting in a cost-effective solution. The cable is dielectric, making it suitable for environments with a high risk of electrical interference. Maximum capacity is 12 tubes with 12 fibers in each. **DESIGN:** Concentric core **TYPE:** Dielectric, slim, low weight **CAPACITY:** 2 - 144 fibers

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|---------------------------|
| | TOL4012012/4A | GRHLDV 4 G652D |
| | TOL4012012/8A | GRHLDV 8 G652D (2x4f) |
| 4979540 | TOL4012012/12A | GRHLDV 12 G652D (3x4f) |
| 4979550 | TOL4012012/24A | GRHLDV 24 G652D (6x4f) |
| 4979560 | TOL4012012/48A | GRHLDV 48 G652D (6x8f) |
| | TOL4012012/72A | GRHLDV 72 G652D (6x12f) |
| 4979570 | TOL4012012/96A | GRHLDV 96 G652D (8x12f) |
| 4979580 | TOL4012012/120A | GRHLDV 120 G652D (10x12f) |
| 4979590 | TOL4012012/144A | GRHLDV 144 G652D (12x12f) |

GNGQBDU Drop Cable, Outdoor

Durable loose tube drop cable for outdoor installation in ducts or direct-buried applications. Two fiber reinforced glass rods guarantee highest crush performance.The cable is longitudinally water blocked. TYPE: Duct or direct-buried CAPACITY: 2 - 12 fibers DIAMETER: 6.1x3.3mm FIBER TYPE: G657A2

| 4979780 TOL4069001/1A Drop Cable, Outdoor, 6.1x3.3mm Loose tube, G657A2, 1-fiber |
|--|
| |
| 4979790 TOL4069001/2A Drop Cable, Outdoor, 6.1x3.3mm Loose tube, G657A2, 2-fiber |
| 4979800 TOL4069001/4A Drop Cable, Outdoor, 6.1x3.3mm Loose tube, G657A2, 4-fiber |
| 4979820 T0L4069001/12A Drop Cable, Outdoor, 6.1x3.3mm Loose tube, G657A2, 12-fiber |

GNHLDV Micro Cable

Micro cable based on a slim loose tube design with up to eight tubes per cable. The design facilitates fiber preparation and mid-span access. The cable is suitable for long-distance, air blown installation in microducts, with an inner diameter of as little as 8 mm. The cable has excellent bend performance and extremely wide operational temperature range. DESIGN: Loose tube TYPE: Dielectric, slim DIMENSIONS: Ø5.7 - 8.1 mm CAPACITY: 12 - 192 fibers



| NO. | PRODUCT NO. | PRODUCT NAME | E-NO. | PRODUCT NO. | PRODUCT NAME |
|----------------|-----------------|-------------------------------|----------------|------------------|-----------------------------------|
| Standard Color | r Code | | S12 Color Code | | |
| 4979600 | TOL4019017/12A | Micro Cable 12f GNHLDV G652D | | TOL4019028/12AH | Micro Cable 12f GNHLDV G652D S12 |
| 4979610 | TOL4019017/24A | Micro Cable 24f GNHLDV G652D | | TOL4019028/24AH | Micro Cable 24f GNHLDV G652D S12 |
| | TOL4019017/36A | Micro Cable 36f GNHLDV G652D | | TOL4019028/48AH | Micro Cable 48f GNHLDV G652D S12 |
| 4979620 | TOL4019017/48A | Micro Cable 48f GNHLDV G652D | | TOL4019028/72AH | Micro Cable 72f GNHLDV G652D S12 |
| 4979630 | TOL4019017/72A | Micro Cable 72f GNHLDV G652D | | TOL4019028/96AH | Micro Cable 96f GNHLDV G652D S12 |
| 4979640 | TOL4019017/96A | Micro Cable 96f GNHLDV G652D | | TOL4019028/144AH | Micro Cable 144f GNHLDV G652D S12 |
| 4980030 | TOL4019017/144A | Micro Cable 144f GNHLDV G652D | | TOL4019030/192AH | Micro Cable 192f GNHLDV G652D S12 |

GASLDV

4-fiber ribbon cable using slotted core design. The design reduces installation costs and gives superior fiber protection. The cable is dielectric, making it suitable for installation where there is electrical interference.

DESIGN: Slotted core ribbon TYPE: Dielectric CAPACITY: Ø 9.5 mm 4 - 48 fibers Ø 12.5 mm 4 - 48 fibers Ø 14 mm 48 - 96 fibers

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|----------|----------------|-----------------------|
| 14988110 | TOL4011013/4A | GASLDV-SLIM 4x10/125 |
| 4988120 | TOL4011013/8A | GASLDV-SLIM 8x10/125 |
| 4984750 | TOL4011013/12A | GASLDV-SLIM 12x10/125 |
| 4984760 | TOL4011013/24A | GASLDV-SLIM 24x10/125 |
| | TOL4011013/36A | GASLDV-SLIM 36x10/125 |
| 4984770 | TOL4011013/48A | GASLDV-SLIM 48x10/125 |
| 4984110 | TOL4011001/4A | GASLDV 4x10/125 |
| 4982990 | T0L4011001/8A | GASLDV 8x10/125 |
| 4983000 | TOL4011001/12A | GASLDV 12x10/125 |
| 4983010 | TOL4011001/24A | GASLDV 24x10/125 |
| 4983020 | T0L4011001/36A | GASLDV 36x10/125 |
| 4983030 | TOL4011001/48A | GASLDV 48x10/125 |
| | TOL4011001/64A | GASLDV 64x10/125 |
| 4983040 | TOL4011001/72A | GASLDV 72x10/125 |
| 4983050 | TOL4011001/96A | GASLDV 96x10/125 |



GASLDV

8-fiber ribbon cable using slotted core design. The design allows high packing density that reduces installation costs and gives superior fiber protection. Water-blocking filling compound in the TOL 401 1002 cable and dry water-blocking tape in the TOL 410 1020 cable prevents water penetration along the cables. The cable is dielectric, making it suitable for installation where there is electrical interference.

DESIGN: Slotted core ribbon TYPE: Dielectric CAPACITY: Ø 15.5 mm 8 - 192 fibers Ø 20 - 22.5 mm 288 - 640 fibers

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|-----------------------------|
| 4984120 | TOL4011002/144A | GASLDV 144 G652D |
| 4984100 | TOL4011002/192A | GASLDV 192 G652D |
| 4979850 | TOL4011020/384A | GASLDV 384 G.652.D (24x12f) |
| 4982970 | TOL4011020/480A | GASLDV 480 G652D |
| 4982980 | TOL4011020/640A | GASLDV 640 G652D |

GASALV

4-fiber ribbon cable using slotted core design, which reduces installation costs and gives superior fiber protection. The cable uses 4-fiber ribbons. Aluminum foil provides an excellent moisture barrier, making the cable suitable for humid environments. **DESIGN:** Slotted core ribbon **TYPE:** Aluminum barrier **CAPACITY:** 4 - 96 fibers Ø 12 - 14.5 mm

| PRODUCT NO. | PRODUCT NAME |
|----------------|-----------------|
| TOL4011018/24A | GASALV 24 G652D |
| TOL4011018/48A | GASALV 48 G652D |
| TOL4011018/72A | GASALV 72 G652D |
| TOL4011018/96A | GASALV 96 G652D |

GASALV

8-fiber ribbon cable with slotted core design, which reduces installation costs and gives superior fiber protection. The cable uses 8-fiber ribbons. Aluminum foil provides an excellent moisture barrier, making the cable suitable for humid environments.

DESIGN: Slotted core ribbon TYPE: Aluminum barrier CAPACITY: 8 - 192 fibers Ø 17 mm

| PRODUCT NO | . PRODUCT NAME |
|------------|------------------------|
| TOL4011019 | /48A GASALV 48 G652D |
| T0L4011019 | /96A GASALV 96 G652D |
| TOL4011019 | /144A GASALV 144 G652D |
| T0L4011019 | /192A GASALV 192 G652D |



CABLES FOR DIRECT BURIED INSTALLATION

The range of cables for direct buried installation includes all our five basic designs: concentric core, slotted core, slotted core ribbon, DryTech and ribbon in loose tubes. The cables are reinforced with corrugated steel tape, steel wire, or foamed thermoplastic

elastomer, providing excellent mechanical protection. The range of cables includes both metallic and dielectric cables and covers fiber counts up to several hundred fibers.

GRCLWLV, DryTech

Slim loose tube cable with concentric core design, a corrugated steel tape layer and a second outer sheath. The corrugated steel tape reinforcement provides good mechanical protection, but the cable is still easy to install. DryTechTM filling compound is used in the cable core. Maximum capacity is 6 tubes with 4 or 8 fibers in each. DESIGN: Concentric core TYPE: Corrugated steel tape reinforced, DryTech CAPACITY: 24 - 48 fibers DIAMETER: 16 - 24 mm

| PRODUCT NO. | PRODUCT NAME |
|---------------|-------------------------|
| TOL4022038/24 | GRCLWLV 24 G652D (6x4f) |
| T0L4022038/48 | GRCLWLV 48 G652D (6x8f) |

GRCLWLV, DryTech

Slim loose tube cable with concentric core design, a corrugated steel tape layer and a second outer sheath. The corrugated steel tape reinforcement provides good mechanical protection, but the cable is still easy to install. DryTech[™] filling compound is used in the cable core. Maximum capacity is 16 tubes with 12 fibers in each.

| DESIGN: Concentric core |
|---|
| TYPE: Corrugated steel tape reinforced, DryTech |
| CAPACITY: 72 - 192 fibers |
| DIAMETER: 16 - 24 mm |
| |



| PRODUCT NO. | PRODUCT NAME |
|----------------|-------------------|
| T0L4022039/72 | GRCLWLV 72 G652D |
| TOL4022039/96 | GRCLWLV 96 G652D |
| TOL4022039/144 | GRCLWLV 144 G652D |
| TOL4022039/192 | GRCLWLV 192 G652D |

GRCLWLV, DryTech

Slim loose tube cable with concentric core design, a corrugated steel tape layer and a second outer sheath. The corrugated steel tape reinforcement provides good mechanical protection, but the cable is still easy to install. DryTech[™] filling compound is used in the cable core. Maximum capacity is 24 tubes with 12 fibers in each.

| PRODUCT NO. | PRODUCT NAME |
|----------------|-------------------|
| TOL4022040/288 | GRCLWLV 288 G652D |

DESIGN: Concentric core TYPE: Dielectric, thermoplastic cushion layer, DryTech CAPACITY: 288 fibers DIAMETER: 24.5 mm



GRCLLDV, DryTech

Slim loose tube cable with concentric core design, a thermoplastic cushion layer and a second outer sheath. The thermoplastic cushion layer makes the non-metallic cable suitable for installation along power lines, e.g. railway embankments. DryTech™ filling compound is used in the cable core. Maximum capacity is 6 tubes with 4 or 8 fibers in each. **DESIGN:** Concentric core **TYPE:** Dielectric, thermoplastic cushion layer, DryTech **CAPACITY:** 24 - 48 fibers



| PRODUCT NO. | PRODUCT NAME |
|---------------|-------------------------|
| T0L4022041/24 | GRCLLDV 24 G652D (6x4f) |
| TOL4022041/48 | GRCLLDV 48 G652D (6x8f) |

GRCLLDV, DryTech

Slim loose tube cable with concentric core design, a thermoplastic cushion layer and a second outer sheath. The thermoplastic cushion layer makes the non-metallic cable suitable for installation along power lines, e.g. railway embankments. DryTech™ filling compound is used in the cable core. Maximum capacity is 16 tubes with 12 fibers in each.

| D | esign: Concentric core |
|---|---|
| Т | YPE: Dielectric, thermoplastic cushion layer, |
| Ľ | DryTech |
| С | APACITY: 72-192 fibers |



| PRODUCT NO. | PRODUCT NAME |
|----------------|-------------------|
| T0L4022042/72 | GRCLLDV 72 G652D |
| T0L4022042/96 | GRCLLDV 96 G652D |
| TOL4022042/144 | GRCLLDV 144 G652D |
| TOL4022042/192 | GRCLLDV 192 G652D |

GRCLLDV, DryTech

Slim loose tube cable with concentric core design, a thermoplastic cushion layer and a second outer sheath. The thermoplastic cushion layer makes the non-metallic cable suitable for installation along power lines, e.g. railway embankments. DryTech™ filling compound is used in the cable core. Maximum capacity is 24 tubes with 12 fibers in each tube.

DESIGN: Concentric core TYPE: Dielectric, thermoplastic cushion layer CAPACITY: 288 fibers DIAMETER: 27.5 mm



| PRODUCT NO. | PRODUCT NAME |
|----------------|-------------------|
| T0L4022043/288 | GRCLLDV 288 G652D |

GASQWQBUV

Ribbon cable with slotted core design and corrugated steel tape protection providing superior fiber protection against rodents. Ideal for duct and direct buried installation in tunnels. The cable comes in two configurations; up to 96 fibers with 4-fiber ribbons and more than 96 fibers with 8-fiber ribbons. **DESIGN:** Slotted core ribbon **TYPE:** Corrugated steel tape reinforce, high crush resistance, flame retardant **CAPACITY:** 96 - 640 fibers



| PRODUCT NO. | PRODUCT NAME |
|-----------------|---------------------|
| T0L4021014/72A | GASQWQBUV 72 G652D |
| T0L4021014/96A | GASQWQBUV 96 G652D |
| TOL4021014/144A | GASQWQBUV 144 G652D |
| TOL4021014/192A | GASQWQBUV 192 G652D |

GASLLDV

4-fiber ribbon cable with slotted core design, a thermoplastic cushion layer and a second outer sheath. The thermoplastic cushion layer makes the non-metallic cable suitable for installation along power lines, e.g. railway embankments.

| DESIGN: Slotted core ribbon |
|---|
| TYPE: Dielectric, thermoplastic cushion layer |
| CAPACITY: 24-96 fibers |
| DIAMETER: 19.5 - 21 mm |



E-NO. PRODUCT NO. PRODUCT NAME 4980700 TOL4021001/4A GASLLDV 4 G652D 4980710 TOL4021001/8A GASLLDV 8 G652D 4980720 TOL4021001/12A GASLLDV 12 G652D 4980730 TOL4021001/24A GASLLDV 24 G652D 4980740 TOL4021001/36A GASLLDV 36 G652D 4980750 TOL4021001/48A GASLLDV 48 G652D 4980790 TOL4021001/72A GASLLDV 72 G652D GASLLDV 96 G652D 4980770 TOL4021001/96A

GASLLDV

8-fiber ribbon cable with slotted core design, a thermoplastic cushion layer and a second outer sheath. The thermoplastic cushion layer makes the non-metallic cable suitable for installation along power lines, e.g. railway embankments.

DESIGN: Slotted core ribbon TYPE: Dielectric, thermoplastic cushion layer CAPACITY: 192 fibers DIAMETER: 23 mm



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|-------------------|
| 4980780 | TOL4021005/144A | GASLLDV 144 G652D |
| 4980760 | T0L4021005/192A | GASLLDV 192 G652D |

CABLES FOR AERIAL INSTALLATIONS

Self-supporting aerial fiber cables. Hexatronic's range of Fiber Optic Cables for aerial installation includes self-supporting All Dielectric Self Support (ADSS) and figure-8 types, designed for pole installation.

The cables come in different types for different span lengths.

All ADSS and figure-8 cables can be supplied with bulletproof material (aramid tape), or with extra protection against rodents (nylon sheath). Hexatronic also offers a complete range of installation support material for aerial cables.

GRHSLDV

ADSS, non-metallic cable with concentric core design. This extremely slim and low-weight cable, which can be ordered with 4 to 144 fibers, is suitable for span lengths from 60-170 m. It can be installed adjacent to power lines with up to 120 kV. It contains standard filling compound and utilizes aramid yarn to increase strength.

DESIGN: ADSS, concentric core **TYPE:** Dielectric **CAPACITY:** 4 - 144 fibers

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|---------------------------------------|
| 4979460 | T0L4032003/8A | GRHSLDV (<75 m) 8 G652D 4 kN-11.5 mm |
| 4979470 | T0L4032003/12A | GRHSLDV (<75 m) 12 G652D 4 kN-11.5 mm |
| 4979480 | T0L4032003/24A | GRHSLDV (<75 m) 24 G652D 4 kN-11.5 mm |
| 4979490 | T0L4032003/36A | GRHSLDV (<75 m) 36 G652D 4 kN-11.5 mm |
| 4979500 | T0L4032003/48A | GRHSLDV (<75 m) 48 G652D 4 kN-11.5 mm |
| 4979510 | T0L4032003/72A | GRHSLDV (<75 m) 72 G652D 4 kN-15.5 mm |
| 4979520 | TOL4032003/96A | GRHSLDV (<75 m) 96 G652D 4 kN-19 mm |
| 4979530 | TOL4032003/144A | GRHSLDV (<75 m) 144 G652D 4 kN-19 mm |
| | | |

GRHSLLDV

ADSS, non-metallic cable with concentric core design that utilizes aramid yarn and a second outer sheath for an extra robust cable design. It is suitable for installation in harsh climates with high ice loads, and for span lengths of 100-250 m. Like the GRHSLDV, this cable contains standard filling compound and can be ordered with 4 to 144 fibers.

DESIGN: ADSS, concentric core **TYPE:** Dielectric **CAPACITY:** 4 - 144 fibers, max 7 kN



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|--|
| 4979380 | T0L4032002/8A | GRHSLLDV (<100 m) 8 G652D, 7kN-14.0 mm |
| 4979390 | T0L4032002/12A | GRHSLLDV (<100 m) 12 G652D, 7kN-14.0 mm |
| 4979400 | T0L4032002/24A | GRHSLLDV (<100 m) 24 G652D, 7kN-14.0 mm |
| 4979410 | T0L4032002/36A | GRHSLLDV (<100 m) 36 G652D, 7kN-14.0 mm |
| 4979420 | T0L4032002/48A | GRHSLLDV (<100 m) 48 G652D, 7kN-14.0 mm |
| 4979430 | T0L4032002/72A | GRHSLLDV (<100 m) 72 G652D, 8kN-15.5 mm |
| 4979440 | TOL4032002/96A | GRHSLLDV (<100 m) 96 G652D, 8kN-15.5 mm |
| 4979450 | TOL4032002/144A | GRHSLLDV (<100 m) 144 G652D, 8kN-15.5 mm |
| | | |

GRHSLLDV

ADSS, non-metallic cable with concentric core design that utilizes aramid yarn and a second outer sheath for an extra robust cable design. It is suitable for installation in harsh climates with high ice loads, and for span lengths of 200-500 m. Like the GRHSLDV, this cable contains standard filling compound and can be ordered with 4 to 144 fibers.

DESIGN: ADSS, concentric core TYPE: Dielectric CAPACITY: 4 - 144 fibers, max 14.5 kN



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|--|
| 4979310 | T0L4032008/12A | GRHSLLDV (<200 m) 12 G652D, 14.5kN-15.0 mm |
| 4979320 | TOL4032008/24A | GRHSLLDV (<200 m) 24 G652D, 14.5kN-15.0 mm |
| 4979330 | TOL4032008/36A | GRHSLLDV (<200 m) 36 G652D, 14.5kN-15.0 mm |
| 4979340 | T0L4032008/48A | GRHSLLDV (<200 m) 48 G652D, 14.5kN-15.0 mm |
| 4979350 | TOL4032008/72A | GRHSLLDV (<200 m) 72 G652D, 14.5kN-16.5 mm |
| 4979360 | TOL4032008/96A | GRHSLLDV (<200 m) 96 G652D, 16kN-19 mm |

GRCLCV

Self-supporting figure-8 cable with concentric core design. The cable has patented DryTech filling compound and includes suspension steel wire integrated into the sheath.

The cable is suitable for span lengths up to 75 m. The GRCLCV can be ordered with 4 to 192 fibers.

DESIGN: Fig-8, concentric core TYPE: DryTech CAPACITY: 4 - 192 fibers



| PRODUCT NO. | PRODUCT NAME |
|-----------------|------------------|
| TOL4032024/12A | GRCLCV 12 G652D |
| TOL4032024/24A | GRCLCV 24 G652D |
| T0L4032024/36A | GRCLCV 36 G652D |
| TOL4032024/48A | GRCLCV 48 G652D |
| TOL4032024/72A | GRCLCV 72 G652D |
| T0L4032024/96A | GRCLCV 96 G652D |
| TOL4032024/144A | GRCLCV 144 G652D |
| TOL4032024/192A | GRCLCV 192 G652D |

GRCLCDV

Non-metallic figure-8 cable using concentric core design, with a glass-fiber reinforced plastic rod integrated into the sheath. The self-supporting cable is suitable for span lengths of up to 75m. Being dielectric, the cable can be installed adjacent to power lines with up to 120kV. The GRCLCDV can be ordered with 4 to 192 fibers.

DESIGN: Fig-8, concentric core **TYPE:** Dielectric **CAPACITY:** 4 - 192 fibers



| PRODUCT NO. | PRODUCT NAME |
|-----------------|-------------------|
| TOL4032010/12A | GRCLCDV 12 G652D |
| TOL4032010/24A | GRCLCDV 24 G652D |
| TOL4032010/36A | GRCLCDV 36 G652D |
| T0L4032010/48A | GRCLCDV 48 G652D |
| TOL4032010/72A | GRCLCDV 72 G652D |
| TOL4032010/96A | GRCLCDV 96 G652D |
| TOL4032010/144A | GRCLCDV 144 G652D |
| TOL4032010/192A | GRCLCDV 192 G652D |
| | |

JOINT CLOSURES FOR FIBER OPTIC CABLES

Joint closures for optimal protection. Hexatronic has developed a range of cost-effective joint closures for every installation environment.

The offering, for both indoor and outdoor installation, includes boxes optimized for virtually all conditions, and for small, medium and large fiber counts. Made in a variety of materials to suit environments ranging from simple to very demanding, the boxes are designed to join most types of fiber cables.

Hexatronic offers a complete line of accessories, including tool kits, protection sleeves, shrink-on hoses, mounting brackets and expansion kits, suitable for various types of installation.

Fiber Joint Closure

Versatile fiber closure made of durable plastic to meet most environmental demands. The standard box can handle up to 96 single fibers or 48 ribbon sleeves, and is expandable to manage higher fiber counts and a greater number of entrances. The closure can also handle mid-span access. **TYPE:** Underground, plastic **SEALING:** IP class 68 **CAPACITY:** 96 single fiber splices or 48 ribbon fiber splices with 4 extra cassettes. Up to 144 single splices with extension ring and 8 extra cassettes.

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| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---|
| 5060021 | NCD5045004 | Plastic Joint Closure, no open entrance, 4 organizers |
| 5060022 | NCD5046004 | Plastic Joint Closure, 2xØ24 entrances opened+1xMulti entrance not opened, 4 organizers |
| 5060023 | NCD5047004 | Plastic Joint Closure, 2xØ24 entrances not opened+1xMulti entrance opened, 4 organizers |
| 5060024 | NCD5048004 | Plastic Joint Closure, 2xØ24 entrances opened+1xMulti entrance opened, 4 organizers |
| | | |

Fiber Joint Closure - High Capacity

This compact, high capacity joint closure handles up to 576 fiber splices. The closure is designed for outdoor underground installation in manholes but can also be mounted above ground on poles or inside pedestals. The closure can handle air-blown fibers in microducts, micro cables and traditional cable. TYPE: Outdoor, underground use SEALING: IP class 68 CAPACITY: 576 splices DIMENSIONS: 520x280 mm



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-------------|---------------------------------------|
| 5060283 | NCD507550 | Fiber Joint Closure 576 |
| | NSD515201 | Swing-up arm for NCD507500/550 |
| | NDM11016/1 | 10 x Round Micro cable cable entrance |
| | NDM11017/1 | 5 x Oval Micro cable entrance kit |
| | NDM11018/1 | 10 x Round Microducts entrance |

Fiber Joint Closure, Stainless Steel

Closure for higher fiber counts in harsh outdoor environments. The generous size of the fiber organizers makes installation fast and trouble free. The design is compact but easy to expand to accommodate very large fiber counts. The closure can also handle mid-span access. Several versions and accessories are available resulting in a total capacity of 144 fibers to more than 2000 fibers depending on configuration. TYPE: Underground, stainless steel SEALING: IP class 68 CAPACITY: ≤576 single fiber splices ≤288 ribbon fiber splices



| E-NO. | PRODUCT NO. | PRODUCT NAME | |
|---------|-------------|---|--|
| 5040185 | NCD5061050 | Joint closure L 240/50 | |
| 5040186 | NCD5061070 | Joint closure L 240/70 | |
| 5040187 | NCD5061150 | Joint closure L 240/150 | |
| 5040189 | NCD5062050 | Joint closure LM 240/50 | |
| 5040190 | NCD5062070 | Joint closure LM 240/70 | |
| 5040191 | NCD5062150 | Joint closure LM 240/150 | |
| 5040193 | NCD5063050 | Joint closure LMB 240/50 | |
| 5040194 | NCD5063070 | Joint closure LMB 240/70 | |
| 5040297 | NCD5065050 | Joint Closure LD3M 240/50, for multiducts | |

Fiber Joint Closure - Indoor, Wall Mount

Compact indoor closure that provides mechanical protection in situations where jointing and branching of cables needs to be carried out costeffectively. It can be mounted inside a cabinet, container or directly on a wall. **TYPE:** Indoor, alu-zinc **SIZE:** 369x185x40 mm **CAPACITY:** 24 single fiber splices 12 ribbon fiber splices



E-NO. PRODUCT NO. PRODUCT NAME NCD5025000 Fiber Joint Closure, wall mount 24 splices

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SUBMARINE CABLE SYSTEMS

Hexatronic's range of cables for submarine installation is based on extensive experience in submarine-cable projects, including design, project management and installation. The offering comprises cables using unitube loose tube as well as ribbon fiber design for depth down to 3000 m.

LOOSE TUBE CABLES

Hexatronic's submarine loose tube cables provide superior mechanical protection, easy handling and reliable performance. All cables have steel wire armoring in one or several layers and/or stainless steel tube to provide the highest protection and water blocking properties. The cables are resistant to tensile forces and impact caused by anchoring, recovery operations and handling. All loose tube cables and joints are built with the highest quality protection to ensure a long life span for maximum efficiency over long distances.

Single Armored

GJMLTV, 10-ton SA

Single-armored, unitube cable where moderate protection is required in submarine applications. This design includes a hermetically sealed stainless tube (3.7 mm outer diameter). Inside the tube the fibers are free to move in the thixotropic water blocking compound. The tube is protected by a polyethylene sheath, one layer of galvanized steel wires and wrapped in a layer of polypropylene yarn.

The unitube technique results in a high packing density. This permits a small outer diameter and easy handling.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|---------------------------|
| 4988440 | T0L4041050/24A | GJMLTV 24 G652D 10 TON SA |
| 4988450 | TOL4041050/48A | GJMLTV 48 G652D 10 TON SA |

DESIGN: Loose tube, single armor **TYPE:** 10 ton, \leq 3000 m **CAPACITY:** 12 - 96 fibers



Double Armored

GJMLTV, 15-ton DAL

Double-layer armored, unitube cable where high protection is required in submarine applications. This design includes a hermetically sealed stainless tube (3.7 mm outer diameter). Inside the tube the fibers are free to move in the thixotropic water blocking compound. The tube is protected by a polyethylene sheath, two layers of galvanized steel wires and wrapped in a layer of polypropylene yarn. **DESIGN:** Loose tube, double armor **TYPE:** 15 ton, \leq 3000 m **CAPACITY:** 12 - 96 fibers



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|----------------------------|
| 4988420 | TOL4041051/24A | GJMLTV 24 G652D 15 TON DAL |
| 4988430 | TOL4041051/48A | GJMLTV 24 G652D 15 TON DAL |

GJMLTV, 25-ton DA

Double-layer armored, unitube cable with the same principal design as the GJMLTV, 15-ton DA.

| PRODUCT NO. | PRODUCT NAME |
|----------------|---------------------------|
| TOL4041062/24A | GJMLTV 24 G652D 25 TON DA |
| T0L4041062/48A | GJMLTV 48 G652D 25 TON DA |

GJMLTV, 40-ton DAH

Double-layer armored with the same principal design as the GJMLTVa, 15-ton DA.

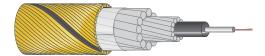
| PRODUCT NO. | PRODUCT NAME |
|----------------|----------------------------|
| TOL4041054/24A | GJMLTV 24 G652D 40 TON DAH |
| TOL4041054/48A | GJMLTV 24 G652D 40 TON DAH |

DESIGN: Loose tube, double armor **TYPE:** 40 ton, ≤ 3000 m **CAPACITY:** 12 - 96 fibers

DESIGN: Loose tube, double armor

TYPE: 25 ton, ≤ 3000 m

CAPACITY: 12 - 96 fibers



Electroding / Toning – Single Armored

GJMMLTV, 10-ton SA

Double-layer armored with the same principal design as the GJMLTV, 10-ton DA. The cable incorporates a copper layer wrapped around the stainless tube for electroding and toning.

DESIGN: Loose tube, single armor, electroding **TYPE:** 10 ton, \leq 3000 m **CAPACITY:** 12 - 96 fibers



| PRODUCT NO. | PRODUCT NAME |
|----------------|----------------------------|
| TOL4041080/24A | GJMMLTV 24 G652D 10 TON SA |
| TOL4041080/48A | GJMMLTV 48 G652D 10 TON SA |

Electroding / Toning – Double Armored

GJMMLTV, 25-ton DA

Double-layer armored with the same principal design as the GJMLTV, 25-ton DA. The cable incorporates a copper layer wrapped around the stainless tube for electroding and toning.

DESIGN: Loose tube, double armor, electroding **TYPE:** 25 ton, \leq 3000 m **CAPACITY:** 12 - 96 fibers



| | PRODUCT NO. | PRODUCT NAME |
|--|----------------|---------------------------|
| | TOL4041082/24A | GJMMLTV 24 652D 25 TON DA |
| | TOL4041082/48A | GJMMLTV 48 652D 25 TON DA |
| | | |

GJMMLTV, 40-ton DAH

Double-layer armored with the same principal design as the GJMLTV, 15-ton DA.

DESIGN: Loose tube, double armor, electroding TYPE: 40 ton, ≤ 3000 m CAPACITY: 12 - 96 fibers



| PRODUCT NO. | PRODUCT NAME |
|----------------|-----------------------------|
| TOL4041083/24A | GJMMLTV 24 G652D 40 TON DAH |
| TOL4041083/48A | GJMMLTV 48 G652D 40 TON DAH |

Submarine Joints for Loose Tube Cables

NCD 601 0014 Submarine Joint Closure

Closure made of heavy-duty stainless steel and hermetically sealed cable joints for loose tube fiber optic submarine cables. The joint can host up to 48 fibers. **DESIGN:** Straight joint for GJMLTV **CAPACITY:** 1 - 48 fibers

| PRODUCT NO. | PRODUCT NAME | |
|--------------|---------------------------|--|
| NCD6010014 | Straight joint for GJMLTV | |
| NCD6010014/1 | Armor Kit SA & DAL | |
| NCD6010014/2 | Armor Kit DA & DAH | |
| NCD60100xx | Straight joint for GJMLTV | |
| NCD60100xx/1 | Armor Kit SA & DAL | |
| NCD60100xx/2 | Armor Kit DA & DAH | |

NCD 601+ Universal Joint for Submarine Cables

Universal Joint is a technology developed by the Universal Joint Consortium to facilitate efficient maintenance of installed submarine cable systems. Most of Hexatronic's submarine cables are qualified for this technology and for some cable types this joint type is used in installation projects of new systems. **DESIGN:** UJ for 10-, 25-, 40 ton submarine cables **CAPACITY:** 1 - 96 fibers



| PRODUCT NO. | PRODUCT NAME |
|-------------|-----------------------------|
| NCD6010036 | UJ for GJM(M)LTV SA to SA |
| NCD6010038 | UJ for GJM(M)LTV DA to DA |
| NCD6010039 | UJ for GJM(M)LTV DAH to DAH |
| NCD6010041 | UJ for GJM(M)LTV SA to DA |
| NCD6010042 | UJ for GJM(M)LTV SA to DAH |
| NCD6010045 | UJ for GJM(M)LTV DA to DAH |
| | |

| PRODUCT NO. | PRODUCT NAME |
|-------------|----------------------------------|
| NCD6010053 | UQJ HexatronicGJM(M)LTV Tool Kit |
| NCD6010054 | UQJ for GJM(M)LTV SA to SA |
| NCD6010055 | UQJ for GJM(M)LTV DAL to DAL |
| NCD6010056 | UQJ for GJM(M)LTV DA to DA |
| NCD6010057 | UQJ for GJM(M)LTV DAH to DAH |
| NCD6010058 | UQJ for GJM(M)LTV SA to DAL |
| NCD6010059 | UQJ for GJM(M)LTV SA to DA |
| NCD6010060 | UQJ for GJM(M)LTV SA to DAH |
| NCD6010061 | UQJ for GJM(M)LTV DAL to DA |
| NCD6010062 | UQJ for GJM(M)LTV DAL to DAH |
| NCD6010063 | UQJ for GJM(M)LTV DA to DAH |

RIBBON CABLES

Hexatronic's submarine ribbon cables offer high packing density and efficient fiber management as well as high protection for fiber in the harsh conditions under the sea. Exceptional mechanical and water blocking properties are provided by a slotted cable core design, protected by a copper tube and with steel wire armoring. This combination has a good resistance to crushing and heavy impacts, such as anchoring, recovery operations or manhandling. Protection from the water is achieved by the copper tube acting as a water barrier.

The cable core is also filled with a water repelling compound for extra reassurance. The cable design enables extremely long delivery length with a minimum number of bulky joint closures.

Single Armored

GASLMLTV Submarine Cables 5 ton SAL Single Armored

GASLMLTV, 5-ton SAL is a single armored light fiber ribbon cable for submarine installations where light to moderate protection is required. This submarine cable is based on our wellproven 4- or 8-fiber ribbon cable design. Added on to the inner PE-jacket is a waterproof copper tube, followed by a second outer polyethylene jacket and a layer of galvanized steel wires. The complete cable is wrapped with a layer of polypropylene yarn. **DESIGN:** Slotted core ribbon, single armor **TYPE:** 5 ton, \leq 500 m **CAPACITY:** 12 - 192 fibers



| PRODUCT NO | PRODUCT NAME |
|-----------------|------------------------------|
| T0L4041010/24A | GASLMLTV 24 G652D 5 TON SAL |
| TOL4041010/48A | GASLMLTV 48 G652D 5 TON SAL |
| T0L4041010/96A | GASLMLTV 96 G652D 5 TON SAL |
| TOL4041038/144A | GASLMLTV 144 G652D 5 TON SAL |
| TOL4041038/192A | GASLMLTV 192 G652D 5 TON SAL |

GASLMLTV Submarine Cables 10 ton SA Single Armored

Single-layer armored with the same principal design as the GASLMLTV, 5-ton SAL.

DESIGN: Slotted core ribbon, single armor **TYPE:** 10 ton, \leq 500 m **CAPACITY:** 12 - 192 fibers



| PRODUCT NO | PRODUCT NAME |
|-----------------|------------------------------|
| TOL4041016/24A | GASLMLTV 24 G652D 10 TON SA |
| T0L4041016/48A | GASLMLTV 48 G652D 10 TON SA |
| TOL4041016/96A | GASLMLTV 96 G652D 10 TON SA |
| TOL4041039/144A | GASLMLTV 144 G652D 10 TON SA |
| TOL4041039/192A | GASLMLTV 192 G652D 10 TON SA |

GASLMLTV Submarine Cables 15 ton SAH Single Armored

Single-layer armored with the same principal design as the GASLMLTV, 5-ton SAL.

DESIGN: Slotted core ribbon, single armor **TYPE:** 15 ton, ≤ 500 m **CAPACITY:** 12 - 192 fibers

| PRODUCT NO | PRODUCT NAME |
|-----------------|-------------------------------|
| TOL4041023/24A | GASLMLTV 24 G652D 15 TON SAH |
| TOL4041023/48A | GASLMLTV 48 G652D 15 TON SAH |
| TOL4041023/96A | GASLMLTV 96 G652D 15 TON SAH |
| TOL4041040/144A | GASLMLTV 144 G652D 15 TON SAH |
| TOL4041040/192A | GASLMLTV 192 G652D 15 TON SAH |



Double Armored

Submarine Cables 20 ton DA Double Armored

GASLMLTV, 20-ton DA is a double armored fiber ribbon cable for submarine installation where high protection is required. This submarine cable is based on our well-proven 4- or 8- fiber ribbon cable design. Added on to the inner PEjacket is a waterproof copper tube, followed by a second outer polyethylene jacket and two layers of galvanized steel wires. The complete cable is wrapped with a layer of polypropylene yarn.

DESIGN: Slotted core ribbon, double armor **TYPE:** 20 ton, ≤ 500 m **CAPACITY:** 12 - 192 fibers



| PRODUCT NO | PRODUCT NAME |
|-----------------|------------------------------|
| T0L4041011/24A | GASLMLTV 24 G652D 20 TON DA |
| T0L4041011/48A | GASLMLTV 48 G652D 20 TON DA |
| T0L4041011/96A | GASLMLTV 96 G652D 20 TON DA |
| T0L4041024/144A | GASLMLTV 144 G652D 20 TON DA |
| T0L4041024/192A | GASLMLTV 192 G652D 20 TON DA |

GASLMLTV Submarine Cables 40 ton DAH Double Armored

Double-layer armored with the same principal design as the GASLMLTV, 20-ton DA.

DESIGN: Slotted core ribbon, double armor **TYPE:** 40 ton, ≤ 500 m **CAPACITY:** 12 - 192 fibers



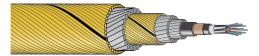
| PRODUCT NO | PRODUCT NAME |
|-----------------|-------------------------------|
| TOL4041002/24A | GASLMLTV 24 G652D 40 TON DAH |
| TOL4041002/48A | GASLMLTV 48 G652D 40 TON DAH |
| TOL4041002/96A | GASLMLTV 96 G652D 40 TON DAH |
| TOL4041042/144A | GASLMLTV 144 G652D 40 TON DAH |
| TOL4041042/192A | GASLMLTV 192 G652D 40 TON DAH |

Rock Armored

Submarine Cables 20 ton RA Rock Armored

The GASLMLTV, 20-ton RA is a rock armored fiber ribbon cable for submarine installation in areas where the cable is exposed to severe mechanical wear and tear. For example, installation direct on rock or shore landings where the cable is hit by forces from waves and tides.

This submarine cable is based on our wellproven 4- or 8-fiber ribbon cable design. Added on to the inner PE-jacket is a waterproof copper tube, followed by a second outer polyethylene jacket and a triple layer of galvanized steel wires. The complete cable is wrapped with a layer of polypropylene yarn. **DESIGN:** Slotted core ribbon, triple armor, rock **TYPE:** 20 ton, ≤ 500 m **CAPACITY:** 12 - 192 fibers



| PRODUCT NO | PRODUCT NAME |
|-----------------|------------------------------|
| T0L4041043/24A | GASLMLTV 24 G652D 20 TON RA |
| T0L4041043/48A | GASLMLTV 24 G652D 20 TON RA |
| TOL4041043/96A | GASLMLTV 96 G652D 20 TON RA |
| TOL4041041/144A | GASLMLTV 144 G652D 20 TON RA |
| TOL4041041/192A | GASLMLTV 192 G652D 20 TON RA |

Submarine Joints

Submarine Cable Joint

The NCD 601 joint is designed for jointing of Hexatronic fiber optic submarine cables, maintaining the mechanical, optical and electrical properties of the cable.

The joint closure is made of corrosion resistant stainless steel alloy. The watertight outer housing provides the mechanical strength and protection. An inner sealed box contains the fiber organizers and can accommodate splice sleeves for up to 96 fibers in the NCD 601 0010 model and up to 192 fibers in the NCD 601 0008 model.

NCD 601 0010 is designed for 4-fiber ribbon submarine cables. NCD 601 0008 is designed for 8-fiber ribbon submarine cables. **DESIGN:** Straight joint for GASLMLTV **CAPACITY:** 1 - 192 fibers

| PRODUCT NO. | PRODUCT NAME |
|-------------|---------------------------------------|
| NCD6010010 | Straight Joint for GASLMLTV, 12-96f |
| NCD6010008 | Straight Joint for GASLMLTV, 144-192f |
| | |

CABLE PARTS FOR INTEGRATION

Throughout our history of supplying high quality, reliable cable solutions, we have developed a long track record with leading power cable suppliers. Fiber optic submarine cable parts for integration into power cables, enables global suppliers to meet the growing need for more power over greater distances.

GJMLV Submarine Optical Cable Part 12-96 Fibers

The cable part is based on a hermetically sealed stainless tube of 3.7mm outer diameter. Inside the tube the fibers are free to move in thixotropic water blocking compound. The steel tube is protected by a semiconductive polypropylene sheath. The fibers are easy to identify due to color and colored yarns. The cable part is designed to be integrated in submarine electrical power cables.

DESIGN: Loose tube **TYPE:** For integration, ≤ 3000 m **CAPACITY:** 12 - 96 fibers

Cable up to 24 km can be installed without a factory joint. Cables that are longer than 24 km require factory joints. Repair joints can also be provided.



GASLMLV Submarine Optical Cable Part 12-192 Fibers, Ribbon

This submarine cable part is based on our wellproven 4- or 8- fiber ribbon cable design. Added on to the inner polyethylene jacket is a waterproof copper tube, followed by asecond outer semiconductive polyethylene jacket.

DESIGN: Slotted core ribbon **TYPE:** For integration, \leq 500 m **CAPACITY:** 12 - 192 fibers



LOCAL SITE CABLING AND FTTA

CABLES FOR INDOOR INSTALLATION

The range of indoor installation cables is intended for various telecommunication applications and especially for interconnection between the optical line interface and the optical distribution frames. The indoor cables are also suitable for use in LAN networks or other types of data networks. All indoor cables are

halogen-free and flame-retardant, and consequently generate no corrosive gases during combustion. All cables are also completely dielectric. The fibers in the cable can be of different types and different fiber types can be mixed in the same cable.

GNGQBDU, 1-fiber

Simplex, buffered patch cord cable, non-jelly filled with an outer diameter of 2.0mm as standard. It can be delivered pre-terminated with a variety of connector types. The cable has low shrinkage of less than 0.5% for reliable high performance. DESIGN: Tight-buffered TYPE: Halogen-free, flame-retardant, EC60332-3 cat C (LSZH), UL 1666 (CMR/Riser) CAPACITY: 1 fiber

DESIGN: Tight-buffered

CAPACITY: 2 fibers

TYPE: Halogen-free, flame-retardant,

EC60332-3 cat C (LSZH), UL 1666 (CMR/Riser)

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|-----------------|
| 4984130 | TOL4053001/1A | GNGQBDU 1xG652D |

GNGQBDU, 2-fibers

Two-fiber, tight-buffered duplex patch cord cable, non-jelly filled and aramid reinforced. The cable has a figure-8 design with single fibers laid in parallel, which makes it easy to split into two simplex patch cables.

 E-NO.
 PRODUCT NO.
 PRODUCT NAME

 4984140
 TOL4053001/2A
 GNGQBDU 2xG652D

GNGQQBDU, 2-fibers

Two fiber, tight-buffered duplex patch cord cable, non-jelly filled and aramid reinforced. Two single fiber cables are enclosed in an outer sheath forming a flexible and dry cable with an outer dimension of 4.8x2.8 mm. It can be delivered pre-terminated with a variety of connector types.

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|------------------|
| 4980580 | T0L4053006/2A | GNGQQBDU 2xG652D |

DESIGN: Tight-buffered, break-out TYPE: Halogen-free, flame-retardant, EC60332-3 cat C (LSZH), UL 1666 (CMR/Riser) CAPACITY: 2 fibers

GNGQQBDU, 4-fibers

Break-out cable where simplex cables are assembled into one cable, with aramid yarn as central strength member. The construction results in a robust cable combined with high flexibility. The cable can be delivered pre-terminated with a variety of connector types.

DESIGN: Tight-buffered, break-out TYPE: Halogen-free, flame-retardant, EC60332-3 cat C (LSZH), UL 1666 (CMR/ Riser) CAPACITY: 4 fibers



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|------------------|
| 4980590 | TOL4053018/4A | GNGQQBDU 4xG652D |

CABLES FOR INDOOR/OUTDOOR INSTALLATION, FTTA APPLICATIONS

The cables for combined indoor/outdoor installation are all halogen-free and flame-retardant (HFFR); consequently, no corrosive gases are generated during combustion. The fibers can be of different types and different fiber types can be mixed in the same cable. The indoor/outdoor cables are often used between a pre-terminated indoor optical distribution frame and an outdoor joint closure as well as for Fiber To The Antenna (FTTA) applications.

GNGQBDU Drop Cable for Indoor and Outdoor Use

Halogen-free, flame-retardant drop cables with tight secondary coated fiber for quick and easy splicing. The cable is designed with G657A2 high bendresistant fiber and has a robust design to facilitate mounting with brackets directly on the wall. A flame retardant and UV protected sheath makes it suitable for both indoor and outdoor use. The cable is water blocked.

TYPE: Indoor and outdoor use, halogen-free, flame-retardant, IEC60332-3, bend resistant G657A2 CAPACITY: 1 - 4 fibers DIAMETER: 4.8 mm to be used with cable clamps FIBER TYPE: G657A2

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|---------------|--|
| 4979680 | TOL4063007/1A | Drop Cable, Indoor/Outdoor, 4.8mm HFFR, Tight sec, G657A2, 1-fiber |
| 4979690 | T0L4063007/2A | Drop Cable, Indoor/Outdoor, 4.8mm HFFR, Tight sec, G657A2, 2-fiber |
| 4979700 | TOL4063007/4A | Drop Cable, Indoor/Outdoor, 4.8mm HFFR, Tight sec, G657A2, 4-fiber |

GRHQBDUV

Loose tube cable with concentric core design, resulting in a cost-effective solution. Each tube contains up to 12 fibers and the cable contains up to 16 tubes. Dry water blocking makes the cable jointing procedure clean and easy.

DESIGN: Concentric core **TYPE:** Dielectric, halogen-free, flame-retardant **CAPACITY:** 4 - 144 fibers

| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|-----------------|--------------------|
| 4979110 | T0L4052003/8A | GRHQBDUV 8 G652D |
| 4979120 | TOL4052003/12A | GRHQBDUV 12 G652D |
| 4979130 | TOL4052003/24A | GRHQBDUV 24 G652D |
| 4979140 | TOL4052003/36A | GRHQBDUV 36 G652D |
| 4979150 | T0L4052003/48A | GRHQBDUV 48 G652D |
| 4979160 | TOL4052003/72A | GRHQBDUV 72 G652D |
| 4979170 | TOL4052003/96A | GRHQBDUV 96 G652D |
| 4988280 | TOL4052003/144A | GRHQBDUV 144 G652D |

GNGQQBDV

Fiber optic cable designed for FTTA applications in both indoor and outdoor environments. The cable is flame resistant. Water blocking tape guarantees that no water can pass through the cable and the outer sheath is specially designed for highest protection in outdoor environments. The cable is suitable for pre-terminated delivery and has extremely good bending performance due to the use of bend-resistant G657A2 fiber.

DESIGN: Tight-buffered TYPE: Dielectric, halogen-free, flame-retardant, bend resistant G657A2 CAPACITY: 2 fibers



| PRODUCT NO. | PRODUCT NAME |
|---------------|-------------------|
| T0L4063004/2A | GNGQQBDV 2 G657A2 |



GASQBDUV

Ribbon cable with slotted core design, which reduces installation costs and ensures superior fiber protection. Each of the six slots contains 1-2 ribbons of the 4-fiber ribbon type. The cable is dielectric, and very slim and flexible, making it very versatile. Dry water blocking makes the cable jointing procedure clean and easy. The cable is offered in two variants: standard and extra slim. **DESIGN:** Slotted core ribbon **TYPE:** Dielectric, halogen-free, flame-retardant **CAPACITY:** Ø 13 mm, 4 - 48 fibers



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|---------------------------|
| 4984170 | TOL4051001/4A | GASQBDUV 4 G652D |
| 4983550 | TOL4051001/8A | GASQBDUV 8 G652D |
| 4983160 | TOL4051001/12A | GASQBDUV 12 G652D |
| 4983170 | T0L4051001/24A | GASQBDUV 24 G652D |
| 4983180 | T0L4051001/36A | GASQBDUV 36 G652D |
| 4983190 | TOL4051001/48A | GASQBDUV 48 G652D |
| 4983370 | TOL4051001/72A | GASQBDUV 72 G652D (18x4f) |
| 4983340 | TOL4051001/96A | GASQBDUV 96 G652D (24x4f) |

GASQBDUV

Ribbon cable with slotted core design which enables a cable design with reduced installation cost and superior fiber protection. Each of the six slots contains 1-2 ribbons of the 4-fiber ribbon type. The cable is dielectric, very slim and flexible, making it very versatile. Dry water blocking makes the cable jointing procedure clean and easy. The cable is offered in two variants: standard and extra slim. **DESIGN:** Slotted core ribbon **TYPE:** Dielectric, halogen-free, flame-retardant **CAPACITY:** Ø 9.9 mm, 4- 48 fibers



| E-NO. | PRODUCT NO. | PRODUCT NAME |
|---------|----------------|------------------------|
| 4983600 | TOL4051014/4A | GASQBDUV-SLIM 4 G652D |
| 4983610 | TOL4051014/8A | GASQBDUV-SLIM 8 G652D |
| 4983620 | TOL4051014/12A | GASQBDUV-SLIM 12 G652D |
| 4983630 | TOL4051014/24A | GASQBDUV-SLIM 24 G652D |
| | TOL4051014/36A | GASQBDUV-SLIM 36 G652D |
| 4983640 | TOL4051014/48A | GASQBDUV-SLIM 48 G652D |

GASQBDUV

4 or 8-fiber ribbon cable with slotted-core design providing superior fiber protection and high fiber count. Each of the slots contains ribbons of 4 or 8 fibers. The 8-fiber ribbon can easily be split into two 4-fiber ribbons. The versatility of the cable and the inherent benefits of ribbon fiber technology reduce installation costs. The cable is provided in two configurations: \leq 96 fibers with 4-fiber ribbons and >96 fibers with 8-fiber ribbons.

DESIGN: Slotted core ribbon **TYPE:** Dielectric, halogen-free, flame-retardant **CAPACITY:** 72 - 96 fibers (4-f ribbon) 192 - 640 fibers (8-f ribbon)



| PRODUCT NO. | PRODUCT NAME |
|------------------|---------------------|
| TOL4051024/288A | GASQBDUV 288 G652D |
| TOL4051024/384A | GASQBDUV 384 G652D |
| TOL4051024/480A | GASQBDUV 480 G652D |
| TOL4051024/640A | GASQBDUV 640 G652D |
| TOL4051024/1000A | GASQBDUV 1000 G652D |

GNGQBDUV, High Temperature Performance

Fiber optic cable designed for FTTA applications in both indoor and outdoor environments. This cable has extremely good heat resistance and operates -40 to +95 (degrees) C. The cable is flame resistant so it can be installed indoors at the same time the outer sheath is robust enough to cope with outdoor environments. It is suitable for preterminated delivery. **DESIGN:** Tight-coated, with aramid yarn **TYPE:** Dielectric, halogen-free, flame-retardant, IEC60332-3, UL 1666 (CMR/Riser), bend resistant G657. A2* **CAPACITY:** 2 fibers

PRODUCT NO. TOL4059009/2A

GNGQBDUV High Temp, 2 G657A2

PRODUCT NAME

GNGQBDUV

Fiber optic cable designed for FTTA applications for both indoor and outdoor environments. Water blocking aramid yarns guarantees that no water can pass through the cable and the outer sheath is specially designed for highest protection in outdoor environments It is suitable for pre-terminated delivery. **DESIGN:** Tight-coated, with aramid yarn **TYPE:** Dielectric, halogen-free, flame-retardant, IEC60332-3, UL 1666 (CMR/Riser) **CAPACITY:** 2 fibers



PRODUCT NO. TOL4063008/2A **PRODUCT NAME** GNGQBDUV FTTA 2 G652D

Industry Leading System Solutions for Fiber Optic Communications

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Hexatronic Cables & Interconnect Systems is a part of Hexatronic which is an innovative Swedish technology group, specializing in fiber communications. The Group provides products and solutions for the fiber optic network and together, the five independent, entrepreneurial companies offer a full range of passive infrastructure. We combine our large corporate stability and resources with small company flexibility and speed.

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