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HITRONIC®

Optical transmission systems

Optical transmission systems

For communication technology

HITRONIC® cable sets/trunk systems

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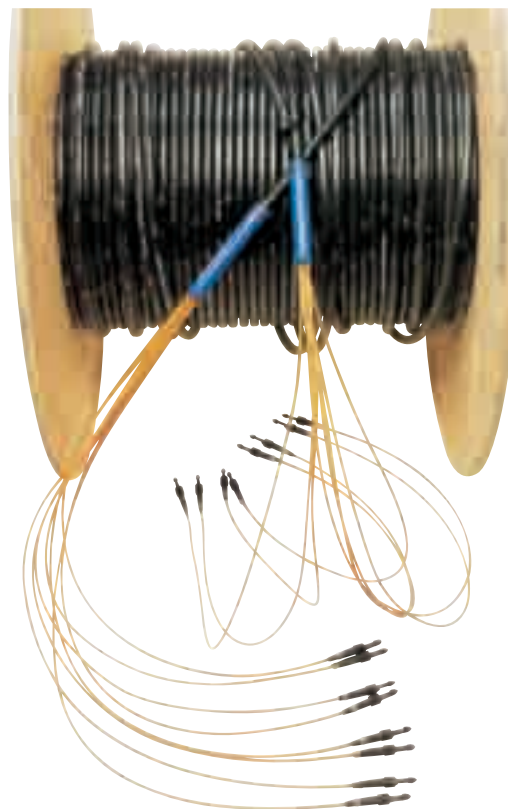**Two different connection types are used with fibre optic cables:**

1. Detachable connections realised with plug connectors. In this case it is necessary to attach a plug to a glass fibre. This calls for trained personnel and expensive special tools.

2. Non-detachable connections created by directly splicing two glass fibres together. To do this requires highly trained personnel and very expensive equipment. If the necessary resources are used only occasionally, the investment is very unlikely to pay for itself.

The answer: The Lapp fibre trunk system.

■ Advantages

Using a trunk system offers you the following advantages:
- No costs of special equipment
- No need for highly trained personnel
- Uniform quality thanks to manufacture under laboratory conditions
- Installation is quick, thereby saving costs
- No need to carry out measurements on the cable run, comes with OTDR test certificate
- Fan-out elements also available in IP67

■ Requirements

The following data are needed to produce your tailor-made trunk system:
- Length of cable run (effective run +3 to 5 metres reserve on either side)
- Fibre type (SM 9 µm, MM 50 µm or 62.5 µm)
- Number of fibres (2, 4, 6, 8 ... to 48 fibres)
- Plug type (ST, SC, DIN, E-2000 .... including mixed)
- Cable type (indoor, outdoor, rodent protection etc.)
- Special type on request

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Optical transmission systems
For communication technology
POF cables

HITRONIC® POF SIMPLEX PE

Info
- **J-V2Y 1P 980/1000**
- **Simplex plastic fibre-optic cable for direct connector assembly**

Benefits
- Transmission lengths up to 70 m
- Direct connector assembly
- EMC protection
- No crosstalk
- Easy to handle

Application range
- For optical signal transmission in industrial applications
- Very suitable for fixed installation in control cabinets, cable ducts, or pipes with low mechanical stress

Product features
- Halogen-free
- Lightweight design
- High flexibility

Approvals
RoHS ✓

Design
- Plastic fibre-optic cables
- PE buffer tube
- Without outer sheath
- Colour: black

Technical data

Optical fibre type
Core material: PMMA
Cladding material: fluoropolymers

Temperature range
Operation: -50°C to +80°C
Installation: -10°C to +50°C

Permissible bending radius
Static: ≥ 25 mm

Permissible tensile force
Fixed installation: 5 N
Short-term: 15 N

Article number	Article designation	Fibre type	Number of fibres	Outer diameter (mm)	Weight (kg/km)
28000001	HITRONIC® POF SIMPLEX PE	POF	1	2.2	4

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Mille-Tie™ is a registered trademark of Millepede™ International Ltd.
Photographs are not to scale and do not represent detailed images of the respective products.

Similar products
- HITRONIC® POF DUPLEX PE refer to page 430

Accessories
- Mille-Tie™ cable ties refer to page 961
- Damage-free cable bundles through: Mille-Tie™
- Connectors, tools and other accessories are available upon request

HITRONIC® POF SIMPLEX PE-PUR

Info
- **J-V2Y(ZN)11Y 1P 980/1000**
- **Simplex POF cable with strain relief and PUR outer sheath**

Benefits
- Transmission lengths up to 70 m
- EMC protection
- No crosstalk
- Easy to handle

Application range
- For optical signal transmission in industrial applications with high mechanical stress

Product features
- Flame-retardant and halogen-free
- Resistant to abrasion, oil, microbes and hydrolysis
- Adhesion-free

Approvals
RoHS ✓

Design
- Plastic fibre-optic cables
- PE buffer tube
- Aramid yarns as strain relief
- PUR outer sheath, orange (RAL 2003)

Technical data

Optical fibre type
Core material: PMMA
Cladding material: fluoropolymers

Temperature range
Operation: -20°C to +70°C
Installation: -10°C to +50°C
Storage: -50°C to +80°C

Permissible bending radius
Short-term: 30 mm
Fixed installation: 50 mm

Permissible tensile force
Fixed installation: 100 N
Short-term: 350 N

Article number	Article designation	Fibre type	Number of fibres	Outer diameter (mm)	Weight (kg/km)
28020001	HITRONIC® POF SIMPLEX PE-PUR	POF	1	5.5	25

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Similar products
- HITRONIC® POF DUPLEX PE-PUR refer to page 431

Accessories
- SMARTSTRIP stripping tool refer to page 907
- Mille-Tie™ cable ties refer to page 961
- Damage-free cable bundles through: Mille-Tie™
- Connectors, tools and other accessories are available upon request

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Optical transmission systems

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For communication technology

POF cables

HITRONIC® POF DUPLEX PE

Info
- J-V2Y 2x1 P 980/1000
- Duplex plastic fibre-optic cable for direct connector assembly

Benefits
- Transmission lengths up to 70 m
- Direct connector assembly
- EMC protection
- No crosstalk
- Easy to handle

Application range
- For optical signal transmission in industrial applications
- Very suitable for fixed installation in control cabinets, cable ducts, or pipes with low mechanical stress
- Light mechanical stress
- Identification by white dots

Product features
- Halogen-free
- Lightweight design
- High flexibility

Approvals
RoHS ✓

Design
- Plastic fibre-optic cables
- Twin cable
- PE buffer tube
- Without outer sheath
- Colour: black

Technical data

Optical fibre type
Core material: PMMA
Cladding material: fluoropolymers

Temperature range
Operation: -50°C to +80°C
Installation: -10°C to +50°C

Permissible tensile force
Fixed installation: 10 N
Short-term: 30 N

Article number	Article designation	Fibre type	Number of fibres	Weight (kg/km)
28000002	HITRONIC® POF DUPLEX PE	POF	2	7.6

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Accessories
- Mille-Tie™ cable ties refer to page 961
- Damage-free cable bundles through: Mille-Tie™
- Connectors, tools and other accessories are available upon request

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HITRONIC® POF DUPLEX PE-PUR

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Info

- J-V2Y(ZN)11Y 2P 980/1000
- Duplex plastic fibre-optic cable with strain relief and PUR outer sheath

Benefits

- Transmission lengths up to 70 m
- EMC protection
- No crosstalk
- Easy to handle

Application range

- For optical signal transmission in industrial applications with high mechanical stress

Product features

- Flame-retardant and halogen-free
- Resistant to abrasion, oil, microbes and hydrolysis
- Adhesion-free

Approvals

RoHS ✓

Design

- Plastic fibre-optic cables
- PE buffer tube
- Aramid yarns as strain relief
- PUR outer sheath, orange (RAL 2003)

Technical data

Optical fibre type
Core material: PMMA
Cladding material: fluoropolymers

Temperature range
Operation:
-20 °C to +70 °C (PE-PUR)
-20 °C to +85 °C (Heavy PE-PUR)
Installation: 0 °C to +50 °C
Storage:
-50 °C to +80 °C (PE-PUR)
-30 °C to +95 °C (Heavy PE-PUR)

Permissible bending radius
Static: ≥ 30 mm (PE-PUR), ≥ 50 mm (Heavy PE-PUR)
Dynamic: ≥ 50 mm (PE-PUR), ≥ 80 mm (Heavy PE-PUR)

Permissible tensile force
Fixed installation: 100 N (PE-PUR), 130 N (Heavy PE-PUR)
Short-term: 400 N

Article number	Article designation	Fibre type	Number of fibres	Outer diameter (mm)	Weight (kg/km)
28020002	HITRONIC® POF DUPLEX PE-PUR	POF	2	5.5	28
28030002	HITRONIC® POF DUPLEX HEAVY PE-PUR	POF	2	8.0	28

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Accessories

- SMARTSTRIP stripping tool refer to page 907
- DATA STRIP stripping tool refer to page 907
- Mille-Tie™ cable ties refer to page 961
- Damage-free cable bundles through: Mille-Tie™
- Connectors, tools and other accessories are available upon request

HITRONIC® BUS PCF DUPLEX indoor + outdoor

Info

- Polymer-cladded fibre (PCF)
- Standard designation (indoor):
  J-V(ZN)H11Y 2K200/230
- Standard designation (outdoor):
  AT-VQ(ZN)HB2Y 2K200/230

Benefits

- Data transmission up to approx. 500 m
- To be used for direct connector assembly
- Easy to assemble
- EMC protection
- High mechanical stability

Application range

- Can be used in industrial environments, for data transmission in field bus systems, such as PROFIBUS, INTERBUS etc.

Product features

- Data transmission up to approx. 500 m
- Usable wavelengths: 650 nm and 850 nm
- In Duplex version
- Good resistance to oil, petrol, acids and alkalis
- PE/PUR outer sheath is halogen-free

Approvals

RoHS ✓

Design

- 2 step-index fibres PCF 200/230 (Polymer Cladded Fibre)
- DUPLEX cable with fibre core made of quartz glass and a fluorinated polymer (plastic, ETFE) sheath
- Outer sheath: PUR for indoors; PE for outdoors

Technical data

Dimensions
PCF 200/230 µm

Fibre type
Step index fibre

Minimum bending radius
(indoor) 120 mm
(outdoor) 200 mm

Optical values
Attenuation at 850 nm wavelength:
8 dB/km
Bandwidth-length product:
20 MHz x km at 850 nm
Numerical aperture: 0.37

Temperature range
During installation: -5°C to +50°C
Operation: -20°C to +70°C

Permissible tensile force
Fixed installation (indoor): 400 N
Fixed installation (outdoor): 500 N

Article number	Article designation	Fibre type	Number of fibres	Outer diameter (mm)	Weight (kg/km)
2185311	HITRONIC® BUS PCF PUR DUPLEX indoor	PCF	2	8.0	55
2185302	HITRONIC® BUS PCF PE DUPLEX outdoor	PCF	2	10.5	90

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Accessories

- SMARTSTRIP stripping tool refer to page 907
- DATA STRIP stripping tool refer to page 907
- Mille-Tie™ cable ties refer to page 961
- Damage-free cable bundles through: Mille-Tie™

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HITRONIC® HQN Outdoor Cable

Info

- A-DQ(ZN)B2Y
- **Outdoor cable with central loose tube and non-metallic strain relief**

Benefits

- Suitable for direct burial
- Easy to install due to the compact design, high flexibility, robust sheath and small bending radii
- UV and water-resistant
- Zero electromagnetic interference as the cable contains no metal

Application range

- For outdoor use
- Campus backbone
- WAN applications
- Industrial environment
- Methods of Deployment: empty plastic pipes, ducts and trays

Product features

- Central loose tube with up to 24 fibres
- Colour-coded fibres
- Longitudinal watertight
- Rodent-protection
- Robust, halogen-free outer sheath

Approvals

RoHS ✓

Design

- Glass fibres with primary coating
- Gel-filled loose tube
- Water-blocking reinforced glass yarn strength members
- PE outer sheath
- Colour: black (RAL 9005)

Technical data

Optical fibre type
Core material: Glass
Cladding material: Glass

Temperature range
Operation: -20°C to +60°C
Installation: 0 °C to +50 °C
Storage: -40 °C to +70 °C

Permissible bending radius
Static: ≥ 15 x outer diameter
Dynamic: ≥ 20 x outer diameter

Permissible tensile force
Fixed installation: 1500 N
Short-term: 3000 N

Article number	Article designation	Fibre type	Number of fibres	Outer diameter (mm)
Multimode G 50 OM3				
27600304	HITRONIC® HQN 1500 4G 50 / 125 OM3	50 / 125 OM3	4	7.3
27600308	HITRONIC® HQN 1500 8G 50 / 125 OM3	50 / 125 OM3	8	7.3
27600312	HITRONIC® HQN 1500 12G 50 / 125 OM3	50 / 125 OM3	12	7.3
27600324	HITRONIC® HQN 1500 24G 50 / 125 OM3	50 / 125 OM3	24	8.3
Multimode G 50 OM2				
27600204	HITRONIC® HQN 1500 4G 50 / 125 OM2	50 / 125 OM2	4	7.3
27600208	HITRONIC® HQN 1500 8G 50 / 125 OM2	50 / 125 OM2	8	7.3
27600212	HITRONIC® HQN 1500 12G 50 / 125 OM2	50 / 125 OM2	12	7.3
27600224	HITRONIC® HQN 1500 24G 50 / 125 OM2	50 / 125 OM2	24	8.3
Multimode G 62.5 OM1				
27600104	HITRONIC® HQN 1500 4G 62.5 / 125 OM1	62.5 / 125 OM1	4	7.3
27600108	HITRONIC® HQN 1500 8G 62.5 / 125 OM1	62.5 / 125 OM1	8	7.3
27600112	HITRONIC® HQN 1500 12G 62.5 / 125 OM1	62.5 / 125 OM1	12	7.3
27600124	HITRONIC® HQN 1500 24G 62.5 / 125 OM1	62.5 / 125 OM1	24	8.3
Singlemode E 9 OS2				
27600904	HITRONIC® HQN 1500 4E 9 / 125 OS2	9 / 125 OS2	4	7.3
27600908	HITRONIC® HQN 1500 8E 9 / 125 OS2	9 / 125 OS2	8	7.3
27600912	HITRONIC® HQN 1500 12E 9 / 125 OS2	9 / 125 OS2	12	7.3
27600924	HITRONIC® HQN 1500 24E 9 / 125 OS2	9 / 125 OS2	24	8.3

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The cables can also be supplied as pre-terminated fibre optic trunks.
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■ Accessories

- Simplex Pigtail refer to page 438
- DATA STRIP stripping tool refer to page 907

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New

HITRONIC® HVN Outdoor Cable

Info
● A-DQ(ZN)B2Y
● Outdoor cable with stranded loose tube and non-metallic strain relief

■ Benefits

- Suitable for direct burial
- Easy to install due to the compact design, high flexibility, robust sheath and small bending radii
- UV and water-resistant
- Zero electromagnetic interference as the cable contains no metal

■ Application range

- For outdoor use
- Campus backbone
- WAN applications
- Industrial environment
- Methods of Deployment: empty plastic pipes, ducts and trays

■ Product features

- Stranded loose tube with up to 144 fibres (12 loose tubes with each 12 fibres)
- Colour-coded fibres and loose tubes
- Longitudinal watertight
- Rodent-protection
- Robust, halogen-free outer sheath

■ Approvals

RoHS ✓

■ Design

- Up to 12 stranded gel-filled loose tubes
- Central GRP strength member
- Water-blocking reinforced glass yarn strength members
- PE outer sheath
- Colour: black (RAL 9005)

■ Technical data

Optical fibre type
Core material: Glass
Cladding material: Glass

Temperature range
Operation: –20°C to +60°C
Installation: 0 °C to +50 °C
Storage: -40 °C to +70 °C

Permissible bending radius
Static: ≥ 15 x outer diameter
Dynamic: ≥ 20 x outer diameter

Permissible tensile force
Fixed installation: 5000 N
Short-term: 6000 N

Article number	Article designation	Fibre type	Number of fibres	Outer diameter (mm)
Multimode G 50 OM3				
26600324	HITRONIC® HVN5000 2x12G 50/125 OM3	50/125 OM3	24	11
26600348	HITRONIC® HVN5000 4x12G 50/125 OM3	50/125 OM3	48	11
Singlemode E 9 OS2				
26600924	HITRONIC® HVN5000 2x12 E 9/125 OS2	9/125 OS2	24	11
26600948	HITRONIC® HVN5000 4x12 E 9/125 OS2	9/125 OS2	48	11

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The cables can also be supplied as pre-terminated fibre optic trunks.
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Other models are available upon request.

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For communication technology
GOF cables

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New

HITRONIC® HQW Armoured Outdoor Cable

Info
- **A-DQ(ZN)(SR)2Y**
- **Outdoor cable with corrugated steel tape armour, central loose tube and non-metallic strength elements**

Benefits
- Armouring provides excellent protection against high mechanical stress and rodents
- Suitable for direct burial
- Easy to install due to the compact design, high flexibility, robust sheath and small bending radii
- UV and water-resistant
- Zero electromagnetic interference as the cable contains no metal

Application range
- For outdoor use
- Campus backbone
- WAN applications
- Industrial environment
- Methods of Deployment: empty plastic pipes, ducts and trays

Product features
- Central loose tube with up to 24 fibres
- Colour-coded fibres
- Longitudinal watertight
- Excellent rodent protection
- Robust, halogen-free outer sheath

Approvals
RoHS ✓

Design
- Gel-filled loose tube
- Water-blocking reinforced glass yarn strength members
- Corrugated steel tape armour
- PE outer sheath
- Colour: black (RAL 9005)

Technical data
Optical fibre type
Core material: Glass
Cladding material: Glass

Temperature range
Operation: -20°C to +60°C
Installation: 0 °C to +50 °C
Storage: -40 °C to +70 °C

Permissible bending radius
Static: ≥ 15 x outer diameter
Dynamic: ≥ 20 x outer diameter

Permissible tensile force
Long-term: 3000 N
Short-term: 5700 N

Article number	Article designation	Fibre type	Number of fibres	Outer diameter (mm)
Multimode G 50 OM3				
27900304	HITRONIC® HQW3000 4G 50/125 OM3	50/125 OM3	4	9.6
27900308	HITRONIC® HQW3000 8G 50/125 OM3	50/125 OM3	8	9.6
27900312	HITRONIC® HQW3000 12G 50/125 OM3	50/125 OM3	12	9.6
27900324	HITRONIC® HQW3000 24G 50/125 OM3	50/125 OM3	24	9.6
Multimode G 50 OM2				
27900204	HITRONIC® HQW3000 4G 50/125 OM2	50/125 OM2	4	9.6
27900208	HITRONIC® HQW3000 8G 50/125 OM2	50/125 OM2	8	9.6
27900212	HITRONIC® HQW3000 12G 50/125 OM2	50/125 OM2	12	9.6
27900224	HITRONIC® HQW3000 24G 50/125 OM2	50/125 OM2	24	9.6
Multimode G 62.5 OM1				
27900104	HITRONIC® HQW3000 4G 62.5/125 OM1	62.5/125 OM1	4	9.6
27900108	HITRONIC® HQW3000 8G 62.5/125 OM1	62.5/125 OM1	8	9.6
27900112	HITRONIC® HQW3000 12G 62.5/125 OM1	62.5/125 OM1	12	9.6
27900124	HITRONIC® HQW3000 24G 62.5/125 OM1	62.5/125 OM1	24	9.6
Singlemode E 9 OS2				
27900904	HITRONIC® HQW3000 4E 9/125 OS2	9/125 OS2	4	9.6
27900908	HITRONIC® HQW3000 8E 9/125 OS2	9/125 OS2	8	9.6
27900912	HITRONIC® HQW3000 12E 9/125 OS2	9/125 OS2	12	9.6
27900924	HITRONIC® HQW3000 24E 9/125 OS2	9/125 OS2	24	9.6

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The cables can also be supplied as pre-terminated fibre optic trunks.
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HITRONIC® HRH Breakout Cable

Info
● J-V(ZN)HH
● Breakout cable for direct connector assembly

■ Benefits
● Suitable for field assembly
● Universal cable for cabling of buildings
● Very easy to install due to compact design, high flexibility, small bending radii and suitable for field assembly
● Zero electromagnetic interference as the cable contains no metal

■ Application range
● For indoor use
● Tertiary cabling
● Structured cabling - backbone
● Universal cable for cabling of buildings

■ Product features
● Installation cable with up to 12 Simplex cables
● Flame-retardant and halogen-free
● Highly flexible
● Mechanically robust

■ Approvals
RoHS ✓

■ Design
● 2.1 mm tight-buffered subcable with FRNC sheath
● Subcable identification: numbers
● Aramid yarns as strain relief
● FRNC inner and outer sheaths
● Colour: aqua (RAL 6027) for OM3, orange (RAL 2003) for OM2 and OM1

■ Technical data

Optical fibre type
Core material: Glass
Cladding material: Glass

Temperature range
Operation: -10°C to +60°C
Installation: 0°C to +50°C
Storage: -20°C to +70°C

Permissible bending radius
Static: ≥ 15 x outer diameter
Dynamic: ≥ 20 x outer diameter

Article number	Article designation	Fibre type	Number of fibres	Outer diameter (mm)
Multimode G 50 OM3				
26000302	HITRONIC® HRH400 2G 50/125 OM3	50/125 OM3	2	7
26000304	HITRONIC® HRH600 4G 50/125 OM3	50/125 OM3	4	7
26000308	HITRONIC® HRH1200 8G 50/125 OM3	50/125 OM3	8	9.7
26000312	HITRONIC® HRH1700 12G 50/125 OM3	50/125 OM3	12	10.3
Multimode G 50 OM2				
26000202	HITRONIC® HRH400 2G 50/125 OM2	50/125 OM2	2	7
26000204	HITRONIC® HRH600 4G 50/125 OM2	50/125 OM2	4	7
26000208	HITRONIC® HRH1200 8G 50/125 OM2	50/125 OM2	8	9.7
26000212	HITRONIC® HRH1700 12G 50/125 OM2	50/125 OM2	12	10.3
Multimode G 62.5 OM1				
26000102	HITRONIC® HRH400 2G 62.5/125 OM1	62.5/125 OM1	2	7
26000104	HITRONIC® HRH600 4G 62.5/125 OM1	62.5/125 OM1	4	7
26000108	HITRONIC® HRH1200 8G 62.5/125 OM1	62.5/125 OM1	8	9.7
26000112	HITRONIC® HRH1700 12G 62.5/125 OM1	62.5/125 OM1	12	10.3

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The cables can also be supplied as pre-terminated fibre optic trunks.
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■ Accessories
● DATA STRIP stripping tool refer to page 907

Duplex Jumper/Patchcord

Info
- J-VH 2x1 G/E
- Pre-terminated tight buffered duplex cable with durable ceramic ferrules

Benefits
- "Plug & Play" connection between any optical devices
- Non-permanent connections allow for easy change of equipment
- Direct connection between two active optical components
- Zero electromagnetic interference as the cable contains no metal

Application range
- For indoor use
- LAN connections

Product features
- Flame-retardant and halogen-free
- High flexibility
- Cable termination with durable ceramic ferrules

Approvals

RoHS ✓

Design
- Tight-buffered duplex cable with FRNC outer sheath
- Connector: LC, SC or ST
- Cable colour:
  aqua for multimode OM3,
  orange for multimode OM2 and OM1,
  yellow for single-mode OS2
- Standard length: 2 m

Technical data

Optical fibre type
Core material: Glass
Cladding material: Glass

Temperature range
Operation: -20°C to +60°C
Installation: 0°C to +50°C
Storage: -25°C to +70°C

Permissible bending radius
Static: ≥ 30 mm
Dynamic: ≥ 40 mm

Permissible tensile force
Fixed installation: 150 N

Article number	Article designation	PU
Duplex Jumper Singlemode 9 µm		
94841	Duplex Jumper ST/ST 9 µm, 2 m	1 piece
94891	Duplex Jumper SC/SC 9 µm, 2 m	1 piece
94931	Duplex Jumper ST/SC 9 µm, 2m	1 piece
9498	Duplex Jumper LSH APC/LC 9 µm, 2 m	1 piece
9477	Duplex Jumper LSH APC/LSH APC 9 µm, 2m	1 piece
9495	Duplex Jumper LSH APC/SC 9 µm, 2 m	1 piece
Duplex Jumper Multimode 50 µm		
93681	Duplex Jumper ST/ST 50 µm, 2 m	1 piece
93561	Duplex Jumper SC/SC 50 µm, 2 m	1 piece
94641	Duplex Jumper ST/SC 50 µm, 2 m	1 piece
9510	Duplex Jumper MTRJ/MTRJ 50 µm, 2m	1 piece
9513	Duplex Jumper MTRJ/ST 50 µm, 2 m	1 piece
9509	Duplex Jumper LC/LC 50 µm, 2 m	1 piece
9508	Duplex Jumper LC/SC 50 µm, 2 m	1 piece
9501	Duplex Jumper LC/ST 50 µm, 2 m	1 piece
9457	Duplex Jumper LSH/LSH 50 µm, 2 m	1 piece
9511	Duplex Jumper MTRJ/SC 50 µm, 2 m	1 piece
Duplex Jumper Multimode 62,5 µm		
93781	Duplex Jumper ST/ST 62.5 µm, 2 m	1 piece
93581	Duplex Jumper SC/SC 62.5 µm, 2m	1 piece
94651	Duplex Jumper ST/SC 62.5 µm, 2 m	1 piece
9519	Duplex Jumper LC/LC 62.5 µm, 2 m	1 piece
9531	Jumper Duplex LC/ST 62.5 µm, 2 m	1 piece
9521	Duplex Jumper MTRJ/SC 62.5 µm, 2 m	1 piece
9528	Duplex Jumper LC/SC 62.5 µm, 2 m	1 piece
9523	Duplex Jumper MTRJ/ST 62.5 µm, 2 m	1 piece

Other lengths and types of connectors are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products.

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Simplex Pigtail

Info
- J-VH 1 G/E
- Pre-terminated tight-buffered simplex cable with one durable ceramic ferrule

■ Benefits
- Create a direct plug connection for installation cables with splicing
- Ease of installation and assembly
- Zero electromagnetic interference as the cable contains no metal

■ Application range
- For indoor use
- Connection to an end optical device

■ Product features
- Flame-retardant and halogen-free
- High flexibility
- Cable termination with durable ceramic ferrules
- Set consisting of 12 colour-coded pigtails

■ Approvals
RoHS ✓

■ Design
- Tight-buffered simplex fibre with FRNC secondary coating (900 μm)
- Connector: LC, SC or ST
- Colour-coded primary and secondary coatings
- Standard length: 2 m

■ Technical data

Optical fibre type
Core material: Glass
Cladding material: Glass

Temperature range
Operation: -20°C to +60°C
Installation: 0°C to +50°C
Storage: -25°C to +70°C

Permissible tensile force
Fixed installation: 150 N

Article number	Article designation	PU
Pigtail Multimode 50 μm		
93911	ST Pigtail Simplex 50 μm, 2m	12 piece
93411	SC Pigtail 50 μm, 2 m	12 piece
Pigtail Multimode 62.5 μm		
93931	ST Pigtail Simplex 62.5 μm, 2 m	12 piece
93441	SC Pigtail Simplex 62.5 μm, 2 m	12 piece
Pigtail Singlemode 9 μm		
93471	ST Pigtail Simplex 9 μm, 2 m	12 piece
93401	SC Pigtail Simplex 9 μm, 2 m	12 piece
9396	LSH APC Pigtail Simplex 9 μm, 2 m	12 piece

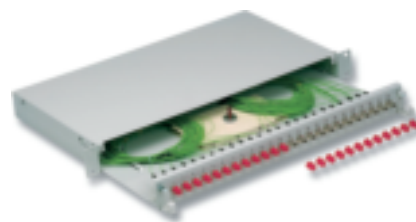Other lengths and types of connectors are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products.

19" Splice Box for ST

■ Product features

- For up to 12 or 24 fibres
- Can be pulled out
- Unpopulated
- For a maximum of 4 splicing catridges
- Height: 1 RU
- Dimensions (WxHxD): 483 x 44.5 x 244 mm
- Material: sheet steel, 1.5 mm
- Colour: light grey (RAL 7035)

■ Approvals

RoHS ✓

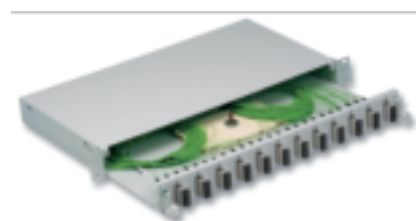| Article number	Article designation	PU
Splice Box Compact		
CE9138	19" Splice Box for 12 ST	1 piece
CE9139	19" Splice Box for 24 ST	1 piece

Splice boxes for more fibres with other types of connectors are available upon request. Also available in pre-assembled versions with coupings and pigtails.
Photographs are not to scale and do not represent detailed images of the respective products.

19" Splice Box for SC

■ Product features

- For up to 24 fibres
- Included: front panel with 12 SC-duplex holes
- Can be pulled out
- Unpopulated
- Height: 1 RU
- Dimensions (WxHxD): 483 x 44.5 x 170 mm
- Material: steel plate, 1.5 mm
- Colour: light grey (RAL 7035)

■ Approvals

RoHS ✓

Article number	Article designation	PU
Splice Box Compact		
CE9135	19" Splice Box für SC	1 piece

Splice boxes for more fibres with other types of connectors are available upon request. Also available in pre-assembled versions with coupings and pigtails.
Photographs are not to scale and do not represent detailed images of the respective products.

Splice Box Compact

■ Product features

- Panel mounting
- Lockable
- Max. capacity of 8 splicing cartridges or 4 splicing cartridges and one distribution plate
- Includes distributor plate for 8 ST couplings
- Includes distributor plate for 4 SC duplex couplings
- Dimensions (WxHxD): 265 x 150 x 55 mm
- Colour: light grey (RAL 7035)

■ Approvals

RoHS ✓

Article number	Article designation	PU
Splice Box Compact		
CE9147	Splice Box Compact	1 piece

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Mini Wall mounted Rack

■ Product features
- Panel mounting
- Lockable
- Max. capacity of 8 splicing cartridges or 4 splicing cartridges and one distribution plate
- Accessories for Mini wall-mounted rack:
  - Distributor plate for 24 ST couplings
  - Distributor plate for 24 SC Simplex couplings
  - Distributor plate for 12 SC Duplex couplings
- Dimensions (W x H x D): 320 x 280 x 54 mm
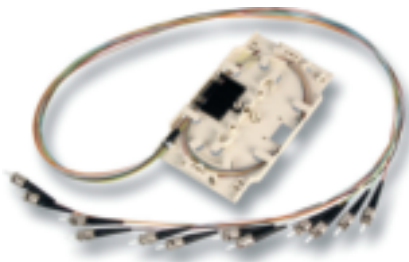- Colour: light grey (RAL 7035)

■ Approvals
RoHS ✓

Article number	Article designation	PU
CE9150	Mini Wall mounted Rack	1 piece
Accessories for Mini wall-mounted rack		
CE9151	Distribution plate for 24 x ST-Couplers	1 piece
CE9152	Distribution plate for 24 x SC-simplex-Couplers	1 piece
CE9153	Distribution plate for 12 x SC-duplex-Couplers	1 piece

Photographs are not to scale and do not represent detailed images of the respective products.

Accessories for Splice Box and Wall mounted Rack

■ Product features
- Splicing cassette for up to 2 splicing protection holders
- Cover for splicing cartridge
- 12-fold splicing protection holder
- Splicing protection sleeve for ANT splicing device
- Dummy cap instead of E2000 coupling
- Dummy cap instead of ST coupling
- Dummy cap instead of SC duplex coupling

■ Approvals
RoHS ✓

Article number	Article designation	PU
Accessories for splice boxes and wall-mounted rack		
CE9914	Splicing cartridge for up to 2 splicing protection hold	1 piece
CE9914D	Cover for splicing cartridge	1 piece
CE9916	Splicing protection holder 12-fold	1 piece
CE9913	Splicing protection sleeve for ANT splicing device	15 pieces
CE9917	Blind cap instead of E2000 coupling	10 pieces
CE9918	Blind cap instead of ST coupling	10 pieces
CE9919	Blind cap instead of SC duplex coupling	10 pieces

Photographs are not to scale and do not represent detailed images of the respective products.

LWL-Kupplungen

■ Product features
- The couplings connect the glass fibre connectors with the same or different connector types.

■ Approvals
RoHS ✓

Article number	Article designation	PU
Multimode		
CE93191	SC / SC Duplex-Adapter for 50 µm or 62.5 µm	4 piece
CE94611	SC / SC Duplex-Adapter for 50 µm or 62.5 µm	4 piece
CE9462	LC / LC Duplex-Adapter for 50 µm or 62.5 µm	4 piece
CE9441	SC / ST Duplex-Adapter for 50 µm or 62.5 µm	4 piece
CE9449	MTRJ / MTRJ Simplex-Adapter for 50 µm or 62.5 µm	4 piece
Singlemode		
CE94591	SC / SC Duplex-Coupler for 9 µm	4 piece
CE9460	SC / ST Duplex-Adapter for 9 µm	4 piece
CE9009	E2000 / E2000 Simplex-Adapter for 9 µm	4 piece
CE9011	E2000 / E2000 Simplex-Adapter 8° for 9 µm	4 piece
CE9458	LC / LC Duplex-Adapter for 9 µm	4 piece

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