GOF DUPLEX PATCHCORD



- "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

■ Product make-up

- Tight-buffered duplex cable with LSZH outer sheath
- Connector: LC, SC or ST
- Cable colour: violet for multimode OM4, agua for multimode OM3, orange for multimode OM2 and OM1,
- Standard length: 2 m

J-VH 2x1G/E Pre-terminated tight buffered duplex cable with durable ceramic ferrules

Technical data

Optical fibre type

Core material: glass Cladding material: glass



- Temperature range Fixed installation: -20°C to +60°C Occasional flexing: -5°C to +50°C
- Permissible bendi Static: ≥ 30 mm
 - Permissible bending radius Dynamic: ≥ 40 mm
- Permissible tensile force Fixed installation: 100 N

yellow for single-mode OS2

■ Product features

 Connector sets included all needed parts for assembly

■ Norm references / Approvals

LC comply with IEC standard 61754-20

GOF CONNECTOR

 SC comply with IEC standard 61754-4 ST comply with IEC standard 61754-2

■ Product make-up

• Ferrule diameter:

LC: 1.25mm (zirconia) SC, ST: 2.5mm (zirconia)

 Can be assembled with cables of 1.7mm-2.1mm diameter

 LC and SC connector sets available in green (single-mode APC), blue (single-mode PC)

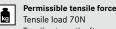




■ Technical data

Temperature range LC: -40°C to 75°C

SC: -40°C to 75°C ST: -40°C to 85°C Humidity 95% Flammability UL 94 V-0



Tensile load 70N Tensile strength after assembly > 100N

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.

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

The answer: The Lapp fibre trunk system





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, LC including mixed) Cable type (indoor, outdoor, rodent protection etc.)
- Special type on request

EXAMPLE SYSTEMS

ÖLFLEX®

UNITRONIC®

ETHERLINE®

HITRONIC®

EPIC®

SKINTOP®

SILVYN®

Fibre optic cables

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For telecommunications



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Terms of Trade: Our general conditions of sale can be downloaded from our website www.lappgroup.com/terms



www.lappgroup.com







HITRONIC®

The brand for split-second, flawless and secure data transmission.

Product overview

- Polymer fibre (POF - Polymer Optical Fibre) P980/1000
- Plastic-cladded glass fibre (PCF - Polymer Cladded Fibre) K200/230
- Glass fibre (GOF - Glass Optical Fibre) E9/125, G50/125

Pioneering industry solutions

and G62.5/125

Mobile apps, smart grids, TV & video on demand, telemedicine, intelligent vehicles, traffic information systems, Industry 4.0 - the need for high-performance glass fibre cables to create a reliable broadband infrastructure is constantly growing. Whether it is a rewire that requires up to 288 fibres or an extension to the existing backbone network that needs two or more fibres, the Lapp Group is your expert solutions partner in all things related to cable and connection technology.

With HITRONIC®, the Lapp Group offers customised solutions for energy suppliers, utility companies, telecommunication companies, city carrier or mobile network suppliers. The product range includes cables, accessories, pre-assembled cables and complex customised products. What can we do for you?

Application examples

FTTa: Fibre to the Antenna FTTb: Fibre to the Building

- > Antenna Building/
- multi-dwelling unit
- FTTc: Fibre to the Curb/Cabinet > Service area interface / street area cabinet

FTTd: Fibre to the Desk FTTe: Fibre to the Enclosure

- Workspace
- > Telecom enclosure FTTh: Fibre to the Home > Home FTTo: Fibre to the Office > Office

Even more brand quality

With our SKINTOP®, EPIC®, SILVYN® and FLEXIMARK® brands, we meet the requirements for plug connectors, cable glands, cable guiding systems and marking systems.

We only use top-quality glass fibres from prestigious manufacturers to meet our high demands on quality. Our products are being used in a range of applications, such as tunnel construction, industrial site networking and internal communication networks at energy suppliers. Why not opt for the uncompromising quality made by the Lapp Group as well?

For more information, go to www.lappgroup.com

HITRONIC® HVN OUTDOOR CABLE

HITRONIC® HVN-MICRO OUTDOOR CABI F

- Suitable for direct burial
- Easy to install due to the compact design. high flexibility, robust sheath and small bending radii
- UV-resistant longitudinally and laterally watertight

• Zero electromagnetic interference as the

Application range

cable contains no metal

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

- Stranded loose tubes 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

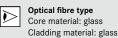
■ Product make-up

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

A-DQ(ZN)B2Y

Outdoor cable with stranded loose tubes and non-metallic strain relief

■ Technical data



Temperature range Fixed installation: -40°C to +70°C

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

- Suitable for blowing into micro-ducts
- UV-resistant
- longitudinally and laterally watertight • Zero electromagnetic interference as the

■ Application range

- For outdoor use
- For installations by blowing

cable contains no metal

- Telecommunications network WAN applications

■ Benefits

ding radii

UV-resistant

■ Application range

For outdoor use

Campus backbone

WAN applications

Methods of Deployment:

Industrial environments

• Methods of Deployment: empty plastic pipes, ducts and travs

Armouring provides excellent protection

Easy to install due to the compact design,

longitudinally and laterally watertight

empty plastic pipes, ducts and trays

Suitable for direct burial

against high mechanical stress and rodents

high flexibility, robust sheath and small ben-

■ Product features

- Stranded loose tubes 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

■ Product make-up

- Up to 12 stranded gel-filled loose tubes
- Central GRP strength element
- Water-blocking reinforced glass yarn strain

Stranded loose tubes with up to 144 fibres

(12 loose tubes with each 12 fibres)

Colour-coded fibres and loose tubes

Robust, halogen-free outer sheath

Corrugated steel tape armour

Colour: black (RAL 9005)

Up to 12 stranded gel-filled loose tubes

Water-blocking reinforced glass yarn strain

PE outer sheath

■ Product features

Longitudinal watertight

■ Product make-up

PF outer sheath

Excellent rodent protection

HITRONIC® HVW ARMOURED OUTDOOR CABLE

Colour: black (RAL 9005)

A-DQ(ZN)B2Y

Micro outdoor cable designed for installation by air-blowing systems (Micro Ducts)

■ Technical data

Optical fibre type Core material: glass

Cladding material: glass Temperature range
Fixed installation: -40°C to +70°C

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

ding radii UV-resistant longitudinally and laterally watertight

Application range

HITRONIC® FIRE

data during and after a fire

in harsh environments

(according to IEC 60331-25)*

Ensures that the fibres can still transmit

Suitable for installation in underground

Armouring provides excellent protection

longitudinally and laterally watertight

In industrial areas that use fire as a tool

Methods of Deployment: empty plastic pipes,

Flame retardance makes it suitable for indoor.

high flexibility, robust sheath and small ben-

Easy to install due to the compact design,

Zero electromagnetic interference as the

Methods of Deployment: empty plastic pipes,

and outdoor installations

cable contains no metal

HITRONIC® HUN UNIVERSAL CABLE

Highly combustible or fire-prone areas

Additional sheath protects the fibres for use

against high mechanical stress and rodents

tunnels where fire safety is critical

■ Benefits

UV-resistant

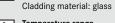
■ Application range

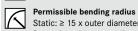
ducts and travs

For indoor and outdoor use

- For indoor and outdoor use
- Campus backbone
- Industrial environments
- ducts and trays

■ Technical data



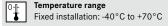


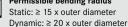
Permissible tensile force

A-DQ(ZN)B2Y(SR)2Y

Outdoor cable with corrugated steel tape armour, stranded loose tubes and non-metallic strain relief

Optical fibre type Core material: glass





Fixed installation: 3000 N Short-term: 5000 N

• Fire behaviour:

■ Product features

- Halogen-free (IEC 60754-1)
- Flame-retardant (IEC 60332-3)
- Low smoke density (IEC 61034-1/2) - Circuit integrity (IEC 60331-25); Ontical fibre cables
- Central loose tube with up to 24 fibres
- Colour-coded fibres
- Longitudinal watertight Flame-retardant and halogen-free outer sheath

■ Product make-up

- Gel-filled loose tube
- Water-blocking reinforced glass yarn strain

Central loose tube with up to 24 fibres

Flame-retardant and halogen-free

Glass fibres with primary coating

Water-blocking reinforced glass yarn strain

 Corrugated steel tape armour LS7H inner and outer sheaths

Colour-coded fibres

outer sheath

Rodent-protection

■ Product make-up

Gel-filled loose tube

LSZH outer sheath

Colour: dark grey

Longitudinal watertight

Colour: black (RAL 9005)

A/J-DQ(ZN)BH or U-DQ(ZN)BH Universal cable with central or stranded loose tube and

non-metallic strain relief

A/J-DQ(ZN)BH(SR)H or

Fire-resistant for at least

* Cable had been tested

to withstand 180 min

Cladding material: glass

Permissible bending radius
Static: ≥ 15 x outer diameter

Temperature range
Fixed installation: -30°C to +70°C

Static: ≥ 15 x outer diameter

Permissible tensile force

Fixed installation: 1500 N

Short-term: 2200 N

Dynamic: ≥ 20 x outer diameter

90 minutes in the event of fire*

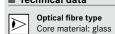
U-DQ(ZN)BH(SR)H

■ Technical data

Optical fibre type

Optical libro spr Core material: glass

■ Technical data



Cladding material: glass Temperature range
Fixed installation: -30°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: 2000 N

HITRONIC® HRH BREAKOUT CABLE

■ Benefits

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

■ Application range

For indoor use

buildings

- Tertiary cabling
- Structured cabling backbone
- Methods of Deployment: laying in trunking. ducts, trays, empty plastic pipes, building riser, raised floors and plenums

■ Product features

 Installation cable with up to 12 Simplex cables

■ Product make-up

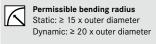
• Flame-retardant and halogen-free Mechanically robust

- 2.1 mm tight-buffered sub-cable with LSZH sheath (identified by numbers) Central GRP strength element
- Aramid yarns as strain relief
- LSZH inner and outer sheaths
- Colour: agua (RAL 6027) for OM3, orange (RAL 2003) for OM2 and OM1









For current information see: www.lappgroup.com

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