

Fax inquiry (Fax-Number +49 - 71 50 - 88 84)

Sender (Firm stamp)

| Company: | Contact pers | Contact person: | |
|--------------------------|----------------------------------|----------------------------------|--|
| Street: | Phone: | Phone: | |
| Zip / postal code, city: | Fax: | | |
| | | | |
| Inquiry: No | | Date: | |
| Pre-assembled cables | | | |
| Cable type | | | |
| Fibre type | ☐ G50 ☐ G62,5 ☐ E9 ☐ K200 ☐ P980 | ☐ G50 ☐ G62,5 ☐ E9 ☐ K200 ☐ P98 | |
| Cable length | meter: | meter: | |
| Connector type, page 1 | | | |
| Connector type, page 2 | | | |
| Pulling aid | ☐ yes ☐ no | ☐ yes ☐ no | |
| If yes | ☐ one side/end ☐ both sides/ends | ☐ one side/end ☐ both sides/ends | |
| Area of application | | | |
| Quantity | number of pieces: | number of pieces: | |
| Desired delivery date | day / date: | day / date: | |
| Other requests | | | |
| Splicing boxes | | | |
| | complete partially empty | complete partially empty | |
| Type of fitting | configured configured | □ complete □ configured □ empty | |
| Coupling types | | | |
| Number of couplers | piece: | piece: | |
| Fibre type | ☐ G50 ☐ G62,5 ☐ E9 ☐ K200 ☐ P980 | ☐ G50 ☐ G62,5 ☐ E9 ☐ K200 ☐ P980 | |
| Type of polish | □ PC □ APC/8° | □ PC □ APC/8° | |
| Part no. (if available): | | | |
| Quantity | number of pieces: | number of pieces: | |
| Desired delivery date | day / date: | day / date: | |

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Fibre-optic cable wiring made easy - prefabricated fibre-optic cable systems







HELUCOM® pre-assembled fibre optic cables can be installed without any special knowledge or tools. The cable is pre-assembled and can be connected immediately after it has been laid. As a result, the installation process actually involves nothing more than laying the cable itself. In the distributor bodies, the fibres from the buffered-fibre cable are conducted through the individual simplex cables without splicing. The simplex cables are fitted with pre-assembled connectors. The pulling aid is connected to the pull cable. As a result, it is possible to lay the cable together with the pre-assembled distributor (in the case of the buffered-fibre cable) just as you would lay a standard cable. The benefits of pre-fabricated, pre-assembled cables are easy to see:



- Any length of cable can be ordered without any extra cable lengths.
- Connectors are pre-assembled at the factory in a dust-free environment.
- No more splicing or connector assembly is necessary.
- Included measurement report does away with dimensional checks.
- Pre-fabricated subcomponents result in greater time savings.
- Compatible splice boxes enable easy, "plug-and-play" installation.
- The high investment costs of splicing and measuring equipment are eliminated.



Completing the HELUCOM® CONNECTING SYSTEMS series, we also offer splice boxes in all configurations. Our splice boxes feature a sturdy, extractable metal housing with two return outlets.

A PG thread on the back side makes them compatible with pre-assembled buffered-fibre cable sets.

Splice boxes are available either fully fitted (couplings, pigtails, splice cartridge, comb, splice protector), partially fitted (couplings only), or empty.

If you have any questions about our products or product combinations, please contact our Data, Network and Bus Technology department. We're happy to help!

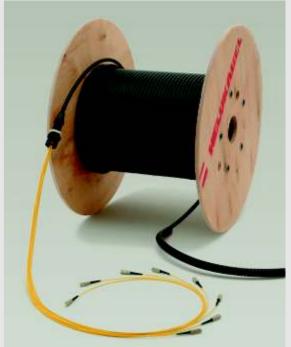


HELUCOM® Packed-strand cables

These model types are suitable for indoor or outdoor applications (depending on cable type). Series features:

- 2-48 fibres (depending on cable type)
- High-quality distributor body with threaded mount
- Y-distributor for more than 24 fibres (for example, 2x24 fibre bundles)
- Excellent mechanical and thermal resistance
- Protected from spray water; sturdy design
- Variable use with different cable types
- Available with all standard plug connectors
- Can be pre-assembled on one or both sides
- Pulling aid on one or both sides
- Measurement report included





| Number of fibres | up to 12 | up | to 24 | up to 48 |
|---|--|-------------|------------------|------------------------------|
| Distributor body diameter | 28 mm | 35 | mm | 2 x 35 mm (Y-distributor) |
| Max. tensile load | | | | |
| (on pulling aid) | 400 N | 550 N | 2000 N | |
| Max. tensile load (on cable) | Depends on cable type used | | | |
| Temperature range | - during installation | | | - 10°C to +50°C |
| | - during oper | ration | | - 25°C to +70°C |
| | - during storage | | | - 25°C to +70°C* |
| | | | | (depends on cable type used) |
| Subcable diameter | 2.5 mm | | | |
| Standard whip length | 2500 mm in 8-cm intervals (max. 3000 mm) | | | |
| Max. cable length | 4000 m (depending on fibre type) | | | |
| Plug connectors | ST, SC, FC, DIN, F-SMA, E2000, LC (depending on fibre type) | | | |
| | APC/8°: SC, FC, E2000, DIN (depending on fibre type) | | | |
| Connector attenuation | Max. 0.3 dB (multimode) | | | |
| | Max. 0.4 dB (single mode) | | | |
| Cable types | Sheathed and | d unsheath | ed buffered-fibr | e cables |
| Cable types | Examples: A- | DQ(ZN)B2Y, | A/I-DQ(ZN)BH, | A-DQ(ZN)2Y4Y |
| Sheath materials | PE, H, PA, PU | R | | |
| Pulling aid type | Plastic pulling tube | | | |
| Pulling aid dimensions | 35 mm | 38 | mm | 2 x 38 mm |
| Pulling aid transversal pressure strength | Approx. 150 N (tested with 50 mm x 50 mm plate according to in-house | | | |
| | testing standard DO 9.21-4320) | | | |
| Impermeability of distributor | IP 67 (regular internal thread adapter) / IP 66 | | | |
| | (complete cable system) | | | |
| Thread dimensions | PG 16 | PG | 21 | 2 x PG 21 |
| Subcable designation | Individual nu | meric desig | nation of each f | fibre (subcable) |





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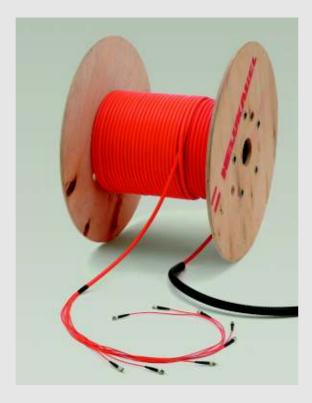




HELUCOM® Breakout cable

These model types are suitable for indoor applications. Series features:

- 2-24 fibres (depending on cable type)
- FRNC outer sheath, flame retardant according to EN60332-1
- Excellent mechanical properties
- Slim design
- Easy to lay in tubes, cable ducts or trays
- Available with all standard plug connectors
- Can be pre-assembled on one or both sides
- Pulling aid on one or both sides
- Measurement report included



| Number of fibres | Max. 24 | | |
|------------------------------------|---|--|--|
| Distributor body diameter | - | | |
| Max. tensile load (on pulling aid) | - | | |
| Max. tensile load (on cable) | Depends on cable type used (see cable specification sheets) | | |
| Temperature range* | - during installation -5°C to +50°C | | |
| | - during operation -20°C to +60°C | | |
| | - during storage -20°C to +60°C | | |
| Subcable diameter | 2.1 mm | | |
| Standard whip length | 2500 mm in 8-cm intervals (max. 3000 mm) | | |
| Max. cable length | 2000 m (depending on fibre type) | | |
| Plug connectors | ST, SC, FC, DIN, F-SMA, E2000, LC (depending on fibre type) | | |
| | APC/8°: SC, FC, E2000, DIN (depending on fibre type) | | |
| Connector attenuation | Max. 0.3 mm (multimode) | | |
| | Max. 0.4 mm (single mode) | | |
| Cable types | Sheathed and unsheathed breakout cables | | |
| Cable types | Examples: I-V (ZN)HH, I-VH, I-VHH | | |
| Sheath materials | PE, FRNC (H), PUR | | |
| Pulling aid type | Connector-type protective tube | | |
| Dimensions** | Depending on cable type, max. NW23 | | |
| Transversal pressure strength** | Approx. 150 N (tested with 50 mm x 50 mm plate | | |
| | according to in-house testing standard DO 9.21-4320 | | |
| Impermeability of distributor | - | | |
| Thread dimensions | - | | |
| Subcable designation | Individual numeric designation of each fibre (subcable) | | |
| | | | |

^{*}Depends on cable used

HELUCOM® Mobile cable, suitable for drums

These model types are suitable for indoor and outdoor applications. Series features:

- 2-12 fibres (depending on fibre type)
- PUR outer sheath, flame retardant according to EN60332-1
- Excellent mechanical and thermal properties
- Oil-resistant
- Longitudinally watertight according to IEC 60794-1-2-F5
- Resistant to hammer impact according to IEC 60794-1-2-E6
- Suitable for drag chain applications
- Can be spooled provided that the minimum bending radius is not exceeded
- Available with all standard plug connectors
- Can be pre-assembled on one or both sides
- Pulling aid on one or both sides
- Measurement report included
- Also available on sturdy drum body made of solid rubber



| Number of fibres | Max. 12 | | |
|---|---|--|--|
| Distributor body diameter | 28 mm | | |
| Max. tensile load (on pulling aid) | 300 N | | |
| Max. tensile load (on cable) | Depends on cable type used (see cable specification sheets, 650 - 1100 N) | | |
| Temperature range | - during installation -5°C to +50°C | | |
| | - during operation -30°C to +70°C | | |
| | - during storage -30°C to +70°C | | |
| Subcable diameter | 2.1mm | | |
| Standard whip length | 1500 mm in 8-cm intervals (max. 2500 mm) | | |
| Max. cable length | 2000 m depending on fibre type | | |
| Plug connectors | ST, SC, FC, F-SMA, E2000, LC (depending on fibre type) | | |
| | APC/8°: SC, FC, E2000, DIN (depending on fibre type) | | |
| Connector attenuation | Max. 0.3 dB (multimode) | | |
| | Max. 0.4 dB (single mode) | | |
| Cable types | Sheathed and unsheathed mini breakout / breakout cables | | |
| Cable types | Examples: A-V(ZN)11Y, A-V(ZN)11Y11Y | | |
| Sheath materials | PUR | | |
| Pulling aid type | Connector-type protective tube | | |
| Pulling aid dimensions | Depending on cable type, max. NW23 | | |
| Pulling aid transversal pressure strength | Approx. 150 N (tested with 50 mm x 50 mm plate | | |
| | according to in-house testing standard DO 9.21-4320 | | |
| Impermeability of distributor | IP 67 (regular internal thread adapter) / IP 66 | | |
| | (complete cable system) | | |
| Thread dimensions | PG 16 | | |
| Subcable designation | Individual numeric designation of each fibre | | |





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^{**}Connector-type protective tube





General technical options

Product component Options

Fibre type - MM G50/125 μ m

- MM G62.5/125μm - SM E9/125μm - HCS K200/230μm

- POF P980/1000μm

Number of fibres 2-48 (depending on cable type)

Cable type - sheathed / unsheathed

buffered-fibre cablebreakout cable

- mini breakout cable

Net cable length (up to respective distributor)

2 - 4000 m (depending on

fibre type)

Connector type ST, SC, FC, DIN, F-SMA,

E2000, LC (depending on fibre

type)

APC/8°: SC, FC, E2000,

DIN (depending on fibre type)

Pulling tube On one or both sides (standard)

Description HELUCOM® buffered-fibre cable

HELUCOM® breakout cable HELUCOM® mobile cable





Quality assurance documentation

| Measurement reports | A measurement report is included with each pre-assembled cable set. | | | | |
|----------------------------------|---|---|-------|------------------------|--|
| Traceability | A production | A production number ensures seamless tracing. | | | |
| Goods issue check | A complete vi | A complete visual check is performed on goods before they are issued. | | | |
| | | | | | |
| | | | | | |
| Packaging type/drum sizes | Diameter | Width | Tare | Max. cable length | |
| Standard types | | | | | |
| Cable reel | - | - | - | Approx. 150 m* | |
| Small plywood drum | 600 mm | 410 mm | 6 kg | Approx. 450 m* | |
| Large plywood drum | 800 mm | 410 mm | 6 kg | Approx. 450 m* | |
| Wood drum | 1250 mm | 710 mm | 67 kg | Approx. 2000 m* | |
| | | | | | |
| Longer cable lengths require otl | ther drum types; available on request. | | | *Depends on cable type | |

Splice boxes, extractable, 19"-1HE

Application

HELUCOM® CONNECTING SYSTEMS glass-fibre patch panels can be used as cable end enclosures for multicore fibre-optic cables in 19" cabinets. They are used for holding and protecting fibre splices, coupling connections and pigtails. Units are available with 2 to 24 connections and two possible cable inlets.

Design

Unit is designed for 19" application and constructed of a two-component metal housing. All fittings such as splice boxes, cable inlets (PG thread) and front couplings are on the basic unit. The unit can be fully extracted from the upper component for installation or servicing. Handles on the front side enable easy installation.

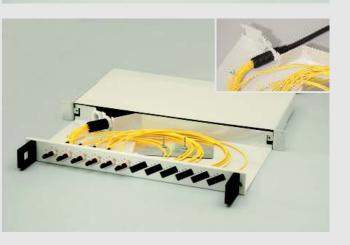
Properties

Use of state-of-the art components ensures good attenuation coefficients and low reflection. Connectors meet strict standards with regard to corrosion resistance and reliability.

Connections conform to all applicable standards.

The unit has an economical design and attractive appearance, making it ideal for a wide range of applications.





From our delivery programme:

Fully fitted:

| rany necea. | | | | • |
|-------------|----------------|------------|-----|---|
| Part | Coupling type/ | Fibre type | VPE | Ρ |
| number | number | | | n |
| 801164 | 4xST | G50/125 | 1 | 8 |
| 801165 | 8xST | G50/125 | 1 | 8 |
| 81354 | 12xST | G50/125 | 1 | 8 |
| 81355 | 12xST | G62,5/125 | 1 | 8 |
| 82869 | 12xST | E9/125 | 1 | 8 |
| 81356 | 24xST | G50/125 | 1 | 8 |
| 81357 | 24xST | G62,5/125 | 1 | 8 |
| 82870 | 24xST | E9/125 | 1 | 8 |
| 801166 | 2xSCdx | G50/125 | 1 | 8 |
| 801167 | 4xSCdx | G50/125 | 1 | 8 |
| 81358 | 6xSCdx | G50/125 | 1 | 8 |
| 81359 | 6xSCdx | G62,5/125 | 1 | 8 |
| 82871 | 6xSCdx | E9/125 | 1 | |
| 81675 | 12xSCdx | G50/125 | 1 | |
| 81676 | 12xSCdx | G62,5/125 | 1 | |
| 82872 | 12XSCdx | E9/125 | 1 | |
| | | | | |

Fitted with coupling:

| Part | Coupling type/ | Fibre type | VPE |
|--------|----------------|------------|-----|
| number | number | | |
| 801171 | 4XST | Multimode | 1 |
| 801172 | 8XST | Multimode | 1 |
| 801173 | 12XST | Multimode | 1 |
| 801629 | 12XST | Singlemode | 1 |
| 801174 | 24XST | Multimode | 1 |
| 801630 | 24XST | Singlemode | 1 |
| 801168 | 2XSCdx | Multimode | 1 |
| 801169 | 4XSCdx | Multimode | 1 |
| 801170 | 6XSCdx | Multimode | 1 |
| 801631 | 6XSCdx | Singlemode | 1 |
| 80996 | 12XSCdx | Multimode | 1 |
| 801632 | 12XSCdx | Singlemode | 1 |
| | | | |
| | | | |

Also available with other fittings or connector systems such as FC, DIN, F-SMA, E2000, LC (depending on fibre type) and APC/8° (SC, FC, E2000, DIN).





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