

GOSB

Central Loose Tube Cables
Outdoor
A-DQ(ZN)B2Y
Standard Rodent Protection

Ordering Information

Belden European Part Numbers

| Fibre type / count | 2 | 4 | 6 | 8 | 12 | 16 | 24 |
|------------------------------------|--|---------|---------|---------|---------|---------|---------|
| 62.5/125-OM1 | GOSB102 | GOSB104 | GOSB106 | GOSB108 | GOSB112 | GOSB116 | GOSB124 |
| 50/125-OM2 BW 600/1200 | GOSB202 | GOSB204 | GOSB206 | GOSB208 | GOSB212 | GOSB216 | GOSB224 |
| 50/125-OM3 | GOSB302 | GOSB304 | GOSB306 | GOSB308 | GOSB312 | GOSB316 | GOSB324 |
| 50/125-OM2e | GOSB402 | GOSB404 | GOSB406 | GOSB408 | GOSB412 | GOSB416 | GOSB424 |
| 50/125-OM2 BW 500/500 | GOSB502 | GOSB504 | GOSB506 | GOSB508 | GOSB512 | GOSB516 | GOSB524 |
| 50/125-OM4 | GOSB602 | GOSB604 | GOSB606 | GOSB608 | GOSB612 | GOSB616 | GOSB624 |
| 9/125 ITU G.655 | GOSB702 | GOSB704 | GOSB706 | GOSB708 | GOSB712 | GOSB716 | GOSB724 |
| 9/125 ITU G.652D-OS2 | GOSB802 | GOSB804 | GOSB806 | GOSB808 | GOSB812 | GOSB816 | GOSB824 |
| Std. plywood reel (non-returnable) | plywood reel Ø 1000 * 530 mm, weight 18 kg | | | | | | |
| Std. delivery length | 2100 ± 100 m | | | | | | |

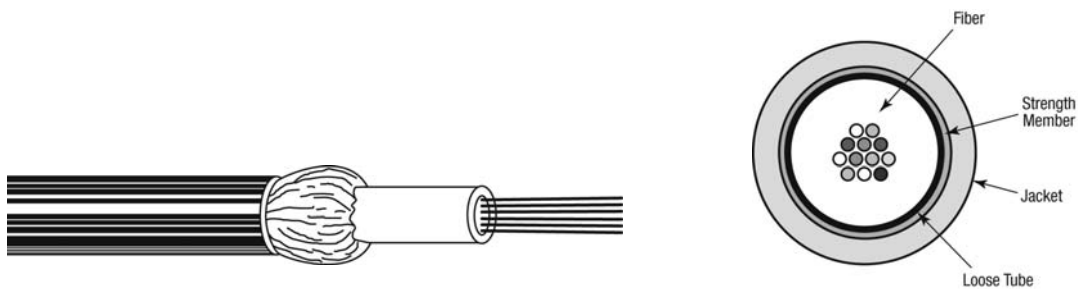
Applications

- For **outdoor** use in structured (data) wiring systems (**campus backbone**)
- For **outdoor** use in networks for telecom, cable TV and/or broadcast.
- Suitable for **direct burial**.
- Easy to install in ducts, tunnels and trenches (by means of compressed air or pulling wire).

Features & Benefits

- A simple **all dielectric** cable construction (and consequently **more cost-effective up to 24 fibres** than multi-tube cables) with improved rodent protection.
- **Predicted lifetime > 30 years.**

Construction & Dimensions



Cable Specifications (construction in accordance with IEC 60794)

1. Primary coated optical fibres: $\varnothing 250 \pm 15 \text{ um}$.
2. Central tube, jelly filled (**non-dripping and silicon-free**) with **up to 24 fibres**.
Individually colour coded optical fibres:
1 – 12: red – natural – yellow – blue – green – violet – brown – black – orange – turquoise – pink and white
13 – 24: red – natural – yellow – blue – green – violet – brown – grey – orange – turquoise – pink and white
With rings.
3. Swellable (for the longitudinal watertightness) yarns as strength members and for standard rodent protection.
4. Black UV resistant PE outer jacket.
Identification: BELDEN OFC – “cable type” – number x type of fibre + date-, meter- and P/N marking.

Mechanical Data

| No. of fibres | Max. 24 |
|---------------------------------|-----------|
| \varnothing Central tube (mm) | 4.2 |
| nom./max. (mm) | 8.7 / 9.0 |
| Energy of flame (kJ/m) | 1700 |
| Weight (kg/km) | 66 |

Optical Characteristics

Characteristics (cabled) Single-Mode – Matched-Cladded optical fibres according to ITU.

| European Partnumber Coding, Position 5 | Fibre-Type | Mode-Field /Cladding Diameter (um) | Wave-length (nm) | Attenuation average/ max. (dB/km) | Dispersion (ps/(nm-km)) | PMD (ps/km) | Cable Cut-off Wave-length (nm) |
|--|------------------------|------------------------------------|------------------|-----------------------------------|-------------------------|--------------------|--------------------------------|
| 8 | 9/125 G.652D OS2 | 9.2 ± 0.4 125 ± 0.7 | 1310 1550 | 0.32 / 0.40 0.21 / 0.30 | ≤ 3.5 ≤ 18 | ≤ 0.2 | ≤ 1260 |
| 7 | 9/125 G.655 | 8.4 ± 0.6 125 ± 1 | 1550 | 0.25 / 0.30 | 3.5 – 8.5 | ≤ 0.1 ^A | ≤ 1260 |

Note A- Link design value

Characteristics (cabled) Multi-Mode Graded-Index optical fibres according to IEC 60793

| European Partnumber Coding, Position 5 | Fibre-Type | Mode-Field Diameter (um) | Wave-length (nm) | Attenuation average/ max. (db/km) | Bandwidth (MHz•km) | Ethernet Performance (m) | | Num. Apert. (µm) | Refr. Index |
|--|-----------------|--------------------------|------------------|-----------------------------------|--------------------|--------------------------|-------------|------------------|----------------|
| | | | | | | 1GBE | 10 GBE | | |
| 1 | 62.5/125 OM1 | 62.5 ± 2.5 125 ± 1 | 850 1300 | 2.7 / 3.2 0.6 / 1.1 | ≥ 200 ≥ 600 | 275 550 | 33 n.a. | 0.275 ± 0.015 | 1.495 1.490 |
| 5 | 50/125 OM2 | 50 ± 2.5 125 ± 1 | 850 1300 | 2.4 / 3.0 0.7 / 1.0 | ≥ 500 ≥ 500 | 600 600 | 82 n.a. | 0.20 ± 0.015 | 1.481 1.476 |
| 2 | 50/125 OM2 | 50 ± 2.5 125 ± 1 | 850 1300 | 2.3 / 2.8 0.6 / 0.9 | ≥ 600 ≥ 1200 | 600 600 | 82 n.a. | 0.20 ± 0.015 | 1.481 1.476 |
| 4 | 50/125 OM2e | 50 ± 2.5 125 ± 1 | 850 1300 | 2,3 / 2,8 0,6 / 0,9 | ≥ 600 ≥ 1200 | 750 2000 | 110 na | 0.20 ± 0.015 | 1,481 1,476 |
| 3 | 50/125 OM3 | 50 ± 2.5 125 ± 1 | 850 1300 | 2.5 / 3.0 0.5 / 1.0 | ≥ 1500 ≥ 500 | 900 550 | 300 n.a. | 0.20 ± 0.015 | 1.482 1.477 |
| 6 | 50/125 OM4 | 50 ± 2.5 125 ± 1 | 850 1300 | 2.5 / 3.0 0.5 / 1.0 | ≥ 6000 ≥ 500 | 900 550 | 550 n.a. | 0.20 ± 0.015 | 1.482 1.477 |

A test report (attenuation) is supplied with each delivery.

Mechanical, Physical and/or Environmental Characteristics

| Requirements | |
|--|---|
| Temperature range according to IEC 60794-1-2-F1 Transport/storage Installation Operation | -30 to + 70 °C -5 to + 50 °C -30 to + 70 °C |
| Pulling tension according to IEC 60794-1-2-E1 Long term Short term | ≤ 2110 N ≤ 4220 N |
| Bending radii for fibres and tubes Installation/operation | >25 mm |
| Watertightness according to IEC 60794-1-2-F5 | Yes |
| Crush resistance according to IEC 60794-1-2-E3 Cable | ≤ 15000 N/m |
| Bending radii cable Static according to IEC 60794-1-2-E11 Dynamic according to IEC 60794-1-2-E6 | 10 x Ø 15 x Ø |

Guide to installation and handling

- When laying and installing optical fibre cables it is **vitaly important not to exceed the specified values** set for pulling tension, bending radii and temperature. The installation methods have to be in accordance with the common standards.
- To ease insertion into tubes by means of compressed air or pulling wire, certified lubricants (e.g. paraffin) may be used. The use of soap or similar substances as lubricants is strictly prohibited.
- If a cable needs to be fastened, constrictions > 0.3 mm must be prevented.
- The jelly filling inside the tubes can be removed using a tissue soaked in turpentine.
- It is advisable to cap the cable-ends during storage.

Options

- Universal (halogen-free) cables for outdoor and/or indoor use.
- **Non-standard cable constructions**, colours, details and/or additional information regarding specifications are available on request.

Revision

| Rev. | Description | Date | Init. |
|----------------|-----------------------------|--------------|-----------------------------|
| 01 | Added B in VDE description | 10 Dec 2008 | TvR |
| 02 | OM3+ changed to OM4 | 12 Oct. 2009 | JW |
| 03 | OS2 added | 25 Nov. 2009 | JW |
| 04 | Correction table EPN page 1 | 16 Feb 2010 | SN |
| 05 | Correction table EPN page 1 | 01 Feb 2012 | TvR |
| Date: 10/07/08 | | Page 1 of 1 | Part Number: GOSB |
| Orig.: SN | | Review: | |