BELDEN
SENDING ALL THE RIGHT SIGNALS

Technical Data Sheet

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	GOSB104	GOSB106	GOSB108	GOSB104	GORA112	GOSB116	GOSB124
50/125-OM2 BW 600/1200	GOSB204	GOSB206	GOSB208	GOSB204	GORA212	GOSB216	GOSB224
50/125-OM3	GOSB304	GOSB306	GOSB308	GOSB304	GORA312	GOSB316	GOSB324
50/125-OM2e	GOSB404	GOSB406	GOSB408	GOSB404	GORA412	GOSB416	GOSB424
50/125-OM2 BW 500/500	GOSB504	GOSB506	GOSB508	GOSB504	GORA512	GOSB516	GOSB524
50/125-OM3+	GOSB604	GOSB606	GOSB608	GOSB604	GORA612	GOSB616	GOSB624
9/125 ITU G.655	GOSB704	GOSB706	GOSB708	GOSB704	GORA712	GOSB716	GOSB724
9/125 ITU G.652D	GOSB804	GOSB806	GOSB808	GOSB804	GORA812	GOSB816	GOSB824
Std. plywood reel (non-returnable)	plywood reel ∅ 1000 * 530 mm, weight 18 kg						
Std. delivery length	2100 ± 100 m						

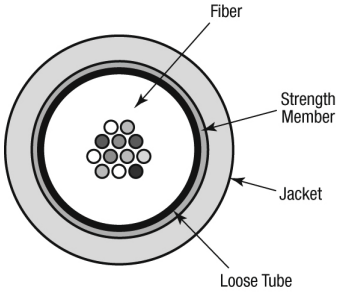
Applications

- 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** then 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: Ø 250 ± 15 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 longtidunal 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
Ø 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	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 OM3+	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	
Tansport/storage	-30 to + 70 ˚C
Installation	-5 to + 50 ˚C
Operation	-30 to + 70 ˚C
Pulling tension according to IEC 60794-1-2-E1	
Long term	≤ 1400 N
Short term	≤ 2500 N
Bending radii for fibres and tubes	>25 mm
Installation/operation	
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	10 x Ø
Dynamic according to IEC 60794-1-2-E6	15 x Ø

Guide to installation and handling

- When laying and installing optical fibre cables it is **vitally 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.
1.1	Added B in VDE description	10 Dec 2008	TvR

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Orig.: SN	Review:	**GOSB**