

## GOWB

Central Loose Tube Cables  
Outdoor, Steel Wire Armor (SWA)  
A-DQ(ZN)2YB2Y  
Full Rodent Protection

### Ordering Information

#### Belden European Part Numbers

Fibre type / count	2	4	12	16	24
62.5/125-OM1	GOWB102	GOWB104	GOWB112	GOWB116	GOWB124
50/125-OM2 BW 600/1200	GOWB202	GOWB204	GOWB212	GOWB216	GOWB224
50/125-OM3	GOWB302	GOWB304	GOWB312	GOWB316	GOWB324
50/125-OM2e	GOWB402	GOWB404	GOWB412	GOWB416	GOWB424
50/125-OM2 BW 500/500	GOWB502	GOWB504	GOWB512	GOWB516	GOWB524
50/125-OM4	GOWB602	GOWB604	GOWB612	GOWB616	GOWB624
9/125 ITU G.655	GOWB702	GOWB704	GOWB712	GOWB716	GOWB724
9/125 ITU G.652D-OS2	GOWB802	GOWB804	GOWB812	GOWB816	GOWB824
Std. plywood reel (non-returnable)	Wooden reel Ø 1250 * 688 mm 93 kg				
Std. delivery length	2100 ± 100m				

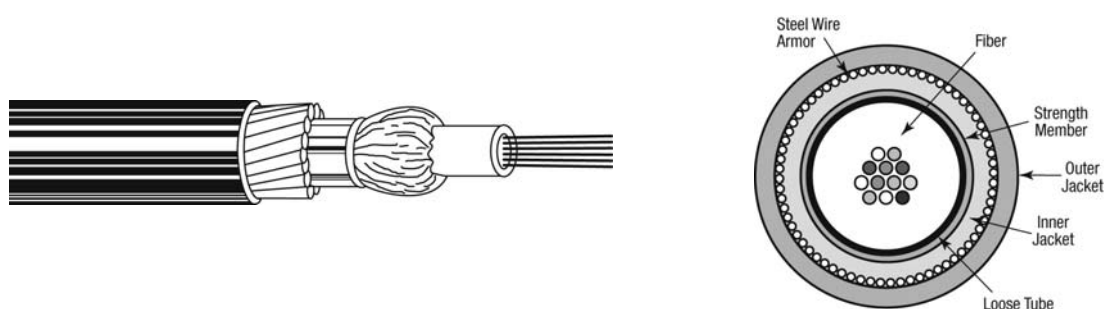
### Applications

- For **outdoor** use in structured (data) wiring systems such as **industrial backbone**, campus backbone, building backbone (riser) and/or horizontal cabling.
- For **outdoor** use in networks for **industrial**, telecom, cable TV and/or broadcast.
- Suitable for **direct burial** and / or in ducts and trenches.

### Features & Benefits

- **High mechanical and full rodent protection** provided by Steel Wire **Armor (SWA)**.
- A simple (central tube) cable construction and consequently **more cost-effective up to 24** fibres than multi-tube cables with a Steel Wire Armouring.
- **Predicted lifetime > 30 years.**

## Construction & Dimensions



### Cable Specifications (construction in accordance with IEC 60794)

1. Primary coated optical fibres:  $\varnothing 250 \pm 15 \mu\text{m}$ .
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 yarns as strength members and for the **longitudinal watertightness**.
4. PE inner jacket.
5. Steel Wire Armouring (SWA): helically stranded galvanized steel wires of  $\varnothing 0.9 \text{ mm}$
6. 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
$\varnothing$ Inner jacket, nom./max. (mm)	8.7 / 9.0
$\varnothing$ Outer jacket, nom./max. (mm)	13.5 / 13.8
Energy of flame (kJ/m)	4794
Weight (kg/km)	283

## 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 <sup>A</sup>	≤ 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 h (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	
<b>Temperature range</b> according to IEC 60794-1-2-F1	
Transport/storage	-30 to + 70 °C
Installation	-5 to + 50 °C
Operation	-30 to + 70 °C
<b>Pulling tension</b> according to IEC 60794-1-2-E1	
Long term	≤ 2110 N
Short term	≤ 4220 N
<b>Bending radii for fibres and tubes</b>	
Installation/operation	>25 mm
<b>Watertightness (core + inner jacket)</b> according to IEC 60794-1-2-F5	Yes
<b>Crush resistance</b> according to IEC 60794-1-2-E3	≤ 30000 N/m
<b>Bending radii cable</b>	
Static according to IEC 60794-1-2-E11	10 x Ø
Dynamic according to IEC 60794-1-2-E6	20 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.
- 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

- **Non-standard cable constructions**, colours, details and/or additional information regarding specifications are available on request.

## Revision

Rev.	Description	Date	Init.
2.0	Added 2 and 4 fiber	09/09/09	SN
3.0	OM3+ changed to OM4	12/10/09	JW
4.0	OS2 added	25/11/09	JW
5.0	Extended description watertightness	22/03/10	SN
6.0	Updated tensile strength	22/11/2010	TvR
Date: 15/08/08		Page 1 of 1	Part Number: <b>GOWB</b>
Orig.:		Review:	