

## GOFA

**Central Loose Tube Cables**  
**Outdoor, Fiber Reinforced Plastic Armor (FRP)**  
**A-DQB2Y**  
Full Rodent Protection

### Ordering Information

#### Belden European Part Numbers

Fibre type / count	4	6	8	12	16	24
62.5/125-OM1	GOFA104	GOFA106	GOFA108	GOFA112	GOFA116	GOFA124
50/125-OM2 BW 600/1200	GOFA204	GOFA206	GOFA208	GOFA212	GOFA216	GOFA224
50/125-OM3	GOFA304	GOFA306	GOFA308	GOFA312	GOFA316	GOFA324
50/125-OM2e	GOFA404	GOFA406	GOFA408	GOFA412	GOFA416	GOFA424
50/125-OM2 BW 500/500	GOFA504	GOFA506	GOFA508	GOFA512	GOFA516	GOFA524
50/125-OM4	GOFA604	GOFA606	GOFA608	GOFA612	GOFA616	GOFA624
9/125 ITU G.655	GOFA704	GOFA706	GOFA708	GOFA712	GOFA716	GOFA724
9/125 ITU G.652D-OS2	GOFA804	GOFA806	GOFA808	GOFA812	GOFA816	GOFA824
Std. plywood reel (non-returnable)	Ø 1000 * 530mm 18 kg					
Std. delivery length	2100 ± 100m					

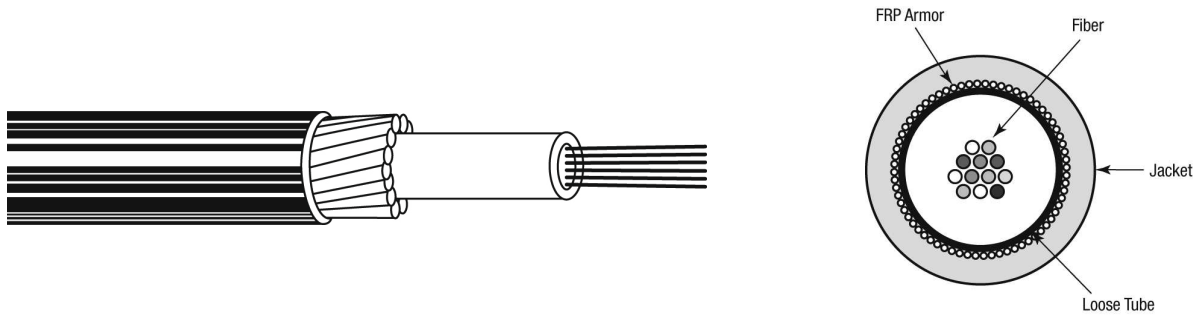
### Applications

- 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 non-metallic Fiber Reinforced Plastic (FRP)
- These cables are **all dielectric** and therefore immune to lightning and electromagnetic interference (EMC-safe), spark-free and require no earthing.
- A simple (central tube) cable construction and consequently **more cost-effective up to 12 fibres** than multi-tube cables with a Fiber reinforced plastic armor.
- **Predicted lifetime > 30 years.**

## Construction & Dimensions



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

1. Primary coated optical fibres:  $\text{Ø } 250 \pm 15 \text{ }\mu\text{m}$ .
2. Central tube, jelly filled (**non-dripping and silicon-free**) with **up to 12 fibres**.  
Individually colour coded optical fibres:  
1 – 12: red – natural – yellow – blue – green – violet – brown – black – orange – turquoise – pink and white.
3. Swellable tape for the **longitudinal watertightness**.
4. Fiber Reinforced Plastic armouring: helically stranded FRP of  $\text{Ø } 1.0 \text{ mm}$
5. 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)	2.8
Ø Outer jacket, nom./max. (mm)	7.8 / 8.1
Energy of flame (kJ/m)	967
Weight (kg/km)	64

## 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	Core/Cladding 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	
<b>Temperature range</b> according to IEC 60794-1-2-F1 Transport/storage Installation Operation	-30 to + 70 °C -5 to + 50 °C -30 to + 70 °C
<b>Pulling tension</b> according to IEC 60794-1-2-E1 Long term Short term	≤ 3000 N ≤ 6000 N
<b>Bending radii for fibres and tubes</b> Installation/operation	>25 mm
<b>Watertightness</b> according to IEC 60794-1-2-F5	Yes
<b>Crush resistance</b> according to IEC 60794-1-2-E3	≤ 20000 N/m
<b>Bending radii cable</b> Static according to IEC 60794-1-2-E11 Dynamic according to IEC 60794-1-2-E6	10 x Ø 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.
	New item introduced	20/11/2008	SN
02	OM3+ changed to OM4	12/10/09	JW
03	OS2 added	25/11/09	JW
Date: 15/08/08		Page 1 of 1	
Orig.:		Review:	
		Part Number: <b>GOFA</b>	