

## GOVN

### Central Loose Tube Cables

#### Outdoor

#### A-DQ(ZN)B2Y

Improved Rodent Protection, 2500N Permanent Load

### Ordering Information

#### Belden European Part Numbers

Fibre type / count	2	4	6	8	12	16	24
62.5/125-OM1	GOVN102	GOVN104	GOVN106	GOVN108	GOVN112	GOVN116	GOVN124
50/125-OM2 BW	GOVN202	GOVN204	GOVN206	GOVN208	GOVN212	GOVN216	GOVN224
50/125-OM3	GOVN302	GOVN304	GOVN306	GOVN308	GOVN312	GOVN316	GOVN324
50/125-OM2e	GOVN402	GOVN404	GOVN406	GOVN408	GOVN412	GOVN416	GOVN424
50/125-OM2 BW 500/500	GOVN502	GOVN504	GOVN506	GOVN508	GOVN512	GOVN516	GOVN524
50/125-OM3+	GOVN602	GOVN604	GOVN606	GOVN608	GOVN612	GOVN616	GOVN624
9/125 ITU G.655	GOVN702	GOVN704	GOVN706	GOVN708	GOVN712	GOVN716	GOVN724
9/125 ITU G.652D	GOVN802	GOVN804	GOVN806	GOVN808	GOVN812	GOVN816	GOVN824
Std. plywood reel (non-returnable)	Ø800*475mm 7.65 kg Ø1000*530mm 18.0 kg						
Std. delivery length	2100m ± 100m 4100m ± 100m						

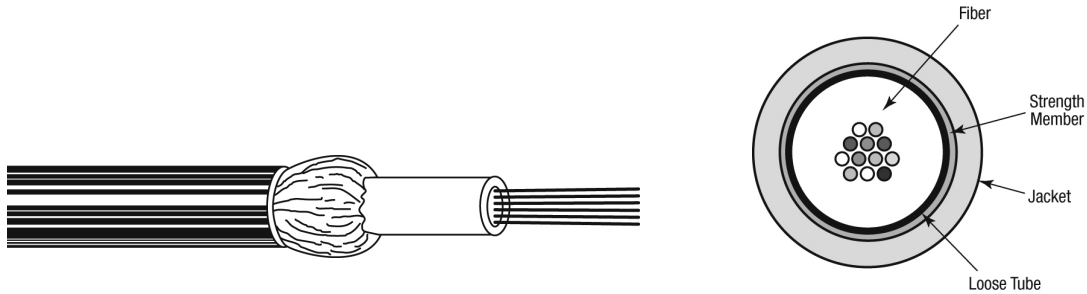
### Applications

- 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.

### Features & Benefits

- A simple cable construction and consequently **more cost-effective up to 24 fibres** than multi-tube cables. With standard or improved rodent protection.
- These cables are **all dielectric** and therefore immune to lightning and electromagnetic interference (EMC-safe), spark-free and require no earthing.
- **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. 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)	3.3
nom./max. (mm)	7.8 / 8.1
Energy of flame (kJ/m)	1350
Weight (kg/km)	52

## 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 <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 (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	≤ 2500 N ≤ 5000 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 Central tube and cable	≤ 10000 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 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.
Date: 23/06/09		Page 1 of 1	
Orig.: SN		Review:	
		Part Number: <b>GOVN</b>	