

GODB

Central Loose Tube Cables

Outdoor – Corrugated Steel Tape Armor (CST)

A-DQ(ZN)2Y(SR)2Y

Full Rodent Protection

Ordering Information

Belden European Part Numbers

Fibre type / count	4	6	8	12	16	24
62.5/125-OM1	GODB104	GODB106	GODB108	GODB112	GODB116	GODB124
50/125-OM2 BW 600/1200	GODB204	GODB206	GODB208	GODB212	GODB216	GODB224
50/125-OM3	GODB304	GODB306	GODB308	GODB312	GODB316	GODB324
50/125-OM2e	GODB404	GODB406	GODB408	GODB412	GODB416	GODB424
50/125-OM2 BW 500/500	GODB504	GODB506	GODB508	GODB512	GODB516	GODB524
50/125-OM4	GODB604	GODB606	GODB608	GODB612	GODB616	GODB624
9/125 ITU G.655	GODB704	GODB706	GODB708	GODB712	GODB716	GODB724
9/125 ITU G.652D-OS2	GODB804	GODB806	GODB808	GODB812	GODB816	GODB824
Std. plywood reel (non-returnable)	Ø 1250 * 688 mm 93 kg					
Std. delivery length	2100 ± 100m					

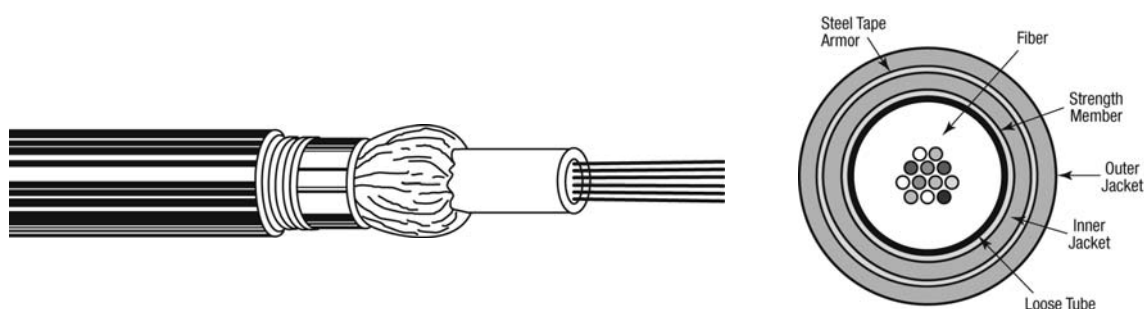
Applications

- 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**. 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.
- **High mechanical and full rodent protection** provided by corrugated steel tape (**CST**) armor.
- **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. Water Swellable Glass yarns as strength members and for the **longitudinal watertightness**.
4. Black UV resistant PE inner jacket.
5. Corrugated Steel Tape Armoring (CST): longitudinally applied steel tape (0.155 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)	4.0
nom./max. (mm)	13.0 / 13.3
Energy of flame (kJ/m)	4980
Weight (kg/km)	178

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	≤ 2000 N ≤ 4000 N
Bending radii for fibres and tubes Installation/operation	>25 mm
Watertightness (core + inner jacket) according to IEC 60794-1-2-F5	Pass
Crush resistance according to IEC 60794-1-2-E3	≤ 40 KN/m
Bending radii cable 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.
- 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

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

Revision

Rev.	Description	Date	Init.
02	OM3+ changed to OM4	12/10/09	JW
03	OS2 added	25/11/09	JW
04	Extended description watertightness	22/03/10	SN
Date: 15/08/08		Page 1 of 1	
Orig.: SN		Review:	
			Part Number: GODB