BELDEN
SENDING ALL THE RIGHT SIGNALS

Technical Data Sheet

GOCB

Central Loose Tube Cables
Outdoor – Corrugated Steel Tape Armor (CST)
A/I-DQ(ZN)(SR)2Y

Full Rodent Protection

Ordering Information

Belden European Part Numbers

Fibre type / count	4	6	8	12	16	24
62.5/125-OM1	GOCB104	GOCB106	GOCB108	GOCB112	GOCB116	GOCB124
50/125-OM2 BW 600/1200	GOCB204	GOCB206	GOCB208	GOCB212	GOCB216	GOCB224
50/125-OM3	GOCB304	GOCB306	GOCB308	GOCB312	GOCB316	GOCB324
50/125-OM2e	GOCB404	GOCB406	GOCB408	GOCB412	GOCB416	GOCB424
50/125-OM2 BW 500/500	GOCB504	GOCB506	GOCB508	GOCB512	GOCB516	GOCB524
50/125-OM4	GOCB604	GOCB606	GOCB608	GOCB612	GOCB616	GOCB624
9/125 ITU G.655	GOCB704	GOCB706	GOCB708	GOCB712	GOCB716	GOCB724
9/125 ITU G.652D-OS2	GOCB804	GOCB806	GOCB808	GOCB812	GOCB816	GOCB824
Std. plywood reel (non-returnable)	Ø 1000 * 588 mm 50 kg					
Std. delivery length	2100 ± 100m					

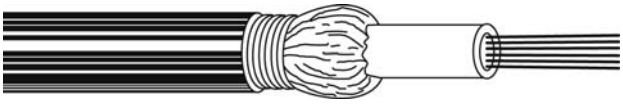
Applications

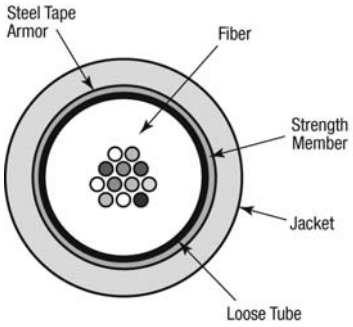
- For **outdoor** use in structured (data) wiring systems such as **industrial backbone,** campus backbone, building backbone (riser) and/or horizontal cabling..
- For **outdoor** use in networks for **industrial**, telecom, cable TV and/or broadcast.
- Suitable for **direct burial**. Easy to install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

Features & Benefits

- A simple cable construction and consequently **more cost-effective up to 24 fibres** then multi-tube cables.
- **High mechanical and full rodent protection** provided by corrugated steel tape **(CST) armour.**
- **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. Water Swellable yarns as strength members and for the **longitudinal watertightness.**
4. Corrugated Steel Tape Armouring (CST): helical longitudinally applied steel tape (0.155 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)	4.0
nom./max. (mm)	10.6 / 10.9
Energy of flame (kJ/m)	2242
Weight (kg/km)	107

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	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	
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	≤ 2000 N
Short term	≤ 4000 N
Bending radii for fibres and tubes	
Installation/operation	>25 mm
Impact resistance	3000
Watertightness according to IEC 60794-1-2-F5	Yes
Crush resistance according to IEC 60794-1-2-E3	≤ 40 KN/m
Bending radii cable	
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 **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

- Cables for outdoor use only.
- **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

Date: 08/07/08	Page 1 of 1	Part Number:
Orig.: SN	Review:	**GOCB**