

GOSA

Central Loose Tube Cables

Outdoor

A-DQ(ZN)B2Y

Standard Rodent Protection

Ordering Information

Belden European Part Numbers

Fibre type / count	2	4	6	8	12
62.5/125-OM1	GOSA102	GOSA104	GOSA106	GOSA108	GOSA112
50/125-OM2 BW 600/1200	GOSA202	GOSA204	GOSA206	GOSA208	GOSA212
50/125-OM3	GOSA302	GOSA304	GOSA306	GOSA308	GOSA312
50/125-OM2e	GOSA402	GOSA404	GOSA406	GOSA408	GOSA412
50/125-OM2 BW 500/500	GOSA502	GOSA504	GOSA506	GOSA508	GOSA512
50/125-OM4	GOSA602	GOSA604	GOSA606	GOSA608	GOSA612
9/125 ITU G.655	GOSA702	GOSA704	GOSA706	GOSA708	GOSA712
9/125 ITU G.652D-OS2	GOSA802	GOSA804	GOSA806	GOSA808	GOSA812
Std. plywood reel (non-returnable)	Ø 800 * 475mm 14 kg				
Std. delivery length	4100 ± 100m				

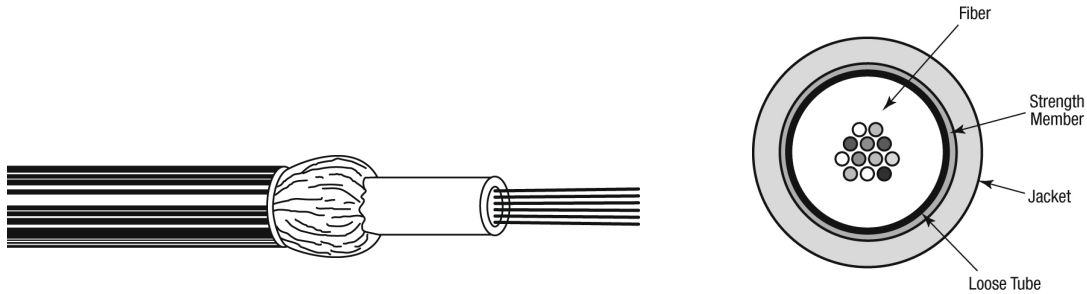
Applications

- 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 12 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 12 fibres**.
Individually colour coded optical fibres:
Red – natural or grey – yellow – blue – green – violet – brown – black – orange – turquoise – pink and white.
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. 12
Cable-type	12
\varnothing Central tube (mm)	3.2
nom./max. (mm)	5.8 / 6.1
Energy of flame (kJ/m)	762
Weight (kg/km)	28

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	≤ 700 N ≤ 1500 N
Bending radii for fibres and tubes Installation/operation	>25 mm
Watertightness according to IEC 60794-1-2-F5	Yes
Crush resistance according to IEC 60794-1-2-E3 Central tube and cable	≤ 20000 N/m
Bending radii cable 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.
1.1	Added B in VDE description	10 Dec 2008	TvR
02	OM3+ changed to OM4	12/10/09	JW
03	OS2 added	25/11/09	JW
04	Crush resistance increased	29/03/10	SN
Date: 10/07/08		Page 1 of 1	
Orig.: SN		Review:	
			Part Number: GOSA