

GERG

Multi Loose Tube Cables
 Universal – Indoor / Outdoor
 A/I-DF(ZN)BH
 Improved Rodent Protection

Ordering Information

Belden European Part Numbers

Fibre type / count	4	6	8	12	18	24	30	36
62.5/125-OM1	GERG104	GERG106	GERG108	GERG112	GERG118	GERG124	GERG130	GERG136
50/125-OM2 BW 600/1200	GERG204	GERG206	GERG208	GERG212	GERG218	GERG224	GERG230	GERG236
50/125-OM3	GERG304	GERG306	GERG308	GERG312	GERG318	GERG324	GERG330	GERG336
50/125-OM2e	GERG404	GERG406	GERG408	GERG412	GERG418	GERG424	GERG430	GERG436
50/125-OM2 BW 500/500	GERG504	GERG506	GERG508	GERG512	GERG518	GERG524	GERG530	GERG536
50/125-OM4	GERG604	GERG606	GERG608	GERG612	GERG618	GERG624	GERG630	GERG636
9/125 ITU G.655	GERG704	GERG706	GERG708	GERG712	GERG718	GERG724	GERG730	GERG736
9/125 ITU G.652D-OS2	GERG804	GERG806	GERG808	GERG812	GERG818	GERG824	GERG830	GERG836
Std. plywood reel (non-returnable)	Ø 1250 * 688 mm 93 kg							
Std. delivery length	2100 ± 100m							

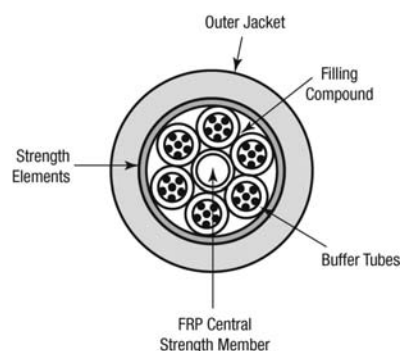
Applications

- For **outdoor and indoor** use in structured (data) wiring systems such as (**campus backbone**).
- For **outdoor and indoor** use in networks for telecom, cable TV and/or broadcast.
- Easy to install in ducts, tunnels and trenches by means of compressed air or pulling wire.
- Suitable for direct burial.

Features & Benefits

- **Improved rodent protection** provided by waterblocking glassyarns.
- **Predicted lifetime > 30 years.**

Construction & Dimensions



Cable Specifications (construction in accordance with IEC 60794)

1. Dielectric central element of glass reinforced plastic (GRP), also as protection against kinks.
2. Jelly filled (non-dripping and silicon-free) loose tubes with primary coated optical fibres ($\text{Ø } 250 \pm 15 \mu\text{m}$).
Individually colour coded optical fibres: red – green – blue – yellow – violet – pink.
3. The loose tubes are stranded around the central element, if necessary with fillers (PE-natural).
Colour coding of the loose tubes: 1. red – 2. green – rest white.
4. Jelly filling compound between interstices, and PET foil over cable core.
5. Swellable (for the longitudinal watertightness) aramid yarns as strength members.
6. Black UV resistant FRNC/LSNH outer jacket.
Identification: BELDEN OFC – “cable type” – “number x fibre type” + date-, meter- and P/N marking.

Mechanical Data

No. of fibres	Max. 36
Cable core	6 tubes
Ø Central element (mm)	2.1
Ø Loose tube (mm)	1.9
Ø nom./max. (mm)	11.5 / 11.8
Energy of flame (kJ/m)	2900
Weight (kg/km)	130

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	-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	≤ 3000 N
	Short term	≤ 6000 N
Bending radii for fibres and tubes		
	Installation/operation	>25 mm
Watertightness	according to IEC 60794-1-2-F5	Pass
Crush resistance	according to IEC 60794-1-2-E3	
	Cable	≤ 20 KN/m
Bending radii cable		
	Static according to IEC 60794-1-2-E11	15 x Ø
	Dynamic according to IEC 60794-1-2-E6	20 x Ø
Flame retardancy	according to	
	IEC 60332-3-22 (EN 50266-2-2)	Pass
	IEC 61034 (EN 50268)	Pass
Halogen-free	according to IEC 60754-2 (EN 50267-2-2)	
	Corrosivity	pH ≥ 3.5 - μS/cm ≤ 100

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 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	OS2 added	30/11/09	JW
03	Changed energy	22/11/10	TvR
Date: 26/10/09		Page 1 of 1	Part Number: GERG
Orig.: SN		Review:	