GIOS_G1

Interconnect Cables
Indoor
I-K

Ordering Information

Belden European Part Numbers

Fibre type / count	1
62.5/125-OM1	GIOS1G1
50/125-OM2 BW 600/1200	GIOS2G1
50/125-OM3	GIOS3G1
50/125-OM2e	GIOS4G1
50/125-OM2 BW 500/500	GIOS5G1
50/125-OM4	GIOS6G1
9/125 ITU G.655	GIOS7G1
9/125 ITU G.652D	GIOS8G1
9.125 ITU G.657A1	GIOSAG1
9.125 ITU G.657A2	GIOSFG1
Std. plastic reel (non-returnable)	∅ 238 * 107 mm weight 0.4 kg
Std. delivery length	2100 ± 100m

Applications

- Structured (premises) wiring systems.
- Support all computer network applications such as **FDDI, Gigabit Ethernet and ATM.**

Features & Benefits

- Dry **FRNC / LSNH** Semi-Tight buffered fibres with excellent stripabillity.
- Colored fiber and colored buffer.
- **Predicted lifetime > 30 years.**

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Construction & Dimensions

Cable Specifications (construction in accordance with IEC 60794)

1. Primary coated optical fibres: Ø 245 ± 10 µm.
2. Dry FRNC / LSNH semi-tight buffer: Ø 0.90 ± 0.05 mm.
3. Individually colour coded optical fibres:
   Red – grey – yellow – blue – green – violet – brown – black – orange – turquoise – pink and white.

Mechanical Data

No. of fibres	1
Ø nom. (mm)	0.9
Weight (kg/km)	0.67
Energy of Flame (kJ/m)	19

Jacket colours

Color	Dark		Light	
	Color Code	Color sample	Color Code	Color sample
Yellow	RAL 1021		Pantone 100C	
Blue	RAL 5015		Pantone 2905C	
Green	RAL 6018		RAL 6019	
Red	RAL 3000		RAL 3015	
White	RAL 9010			
Brown	RAL 8003			
Orange	RAL 2003			
Black	RAL 9005			
Pink	RAL 3015			
Grey	RAL 7000			
Turquoise	RAL 6027			
Purple	RAL 4005			

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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 Patch cord quality**	9.2 ± 0.4 125 ± 0.3	1310 1550	0.34 / 0.50 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
A	**9/125 G.657A1**	8.9 ± 0.4 124.8 ± 0.3	1310 1550 1625	0.35 / 0.5 0.21 / 0.3 0.24 / 0.4	≤ 3.5 ≤ 18	≤ 0.2	≤ 1260
F	**9/125 G.657A2**	8.9 ± 0.4 124.8 ± 0.3	1310 1550 1625	0.35 / 0.5 0.21 / 0.3 0.24 / 0.4	≤ 3.5 ≤ 18	≤ 0.2	≤ 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)
						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
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
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
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
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
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

A test report (attenuation) is supplied with each delivery.

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Mechanical, Physical and/or Environmental Characteristics

Requirements	
Temperature range according to IEC 60794-1-2-F1 Transport/storage Installation Operation	 -40 to + 70 ˚C -15 to + 50 ˚C -40 to + 70 ˚C
Pulling tension according to IEC 60794-1-2-E1	≤ 3 N
Bending radii for fibres and tubes Installation/operation	 >25 mm
Bending radii cable Static according to IEC 60794-1-2-E11 Dynamic according to IEC 60794-1-2-E6	 >25 mm >35 mm
Strippability Secondary coating only Secondary + primary coating	 ≤ 100 cm ≤ 25 mm
Crush resistance according to IEC 60794-1-2-E3 Semi-Tight Buffer	 ≤ 4000 N/ m
Halogen-free according to IEC 60754-2 (EN 50267-2-2) Corrosivity	pH ≥ 3.5 - µS/cm ≤ 100

Guide to installation and handling

- It is vitally important to not exceed the specified values.
- Semi-Tight buffered optical fibres have been designed for short distance (≤ 10 m) applications.

Options

- Non standard colours.
- Tight buffered fibres.

Revision

Rev.	Description	Date	Init.
02	Bending radii cable added	16/07/09	SN
03	OM3+ changed to OM4	12/10/09	JW
04	Temp. Range changed	20/03/12	SN
05	G.657 A2 fiber added	31/05/12	SN
06	Add color coding	02/07/14	SN
Date: 20/02/09	Page 1 of 1	Part Number:	
Orig.: SN	Review:	**GIOS_G1**	

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