

## GIOS

### Interconnect Cables

#### Indoor

#### I-K

### Ordering Information

#### Belden European Part Numbers

Fibre type / count	1
62.5/125-OM1	GIOS101
50/125-OM2 BW 600/1200	GIOS201
50/125-OM3	GIOS301
50/125-OM2e	GIOS401
50/125-OM2 BW 500/500	GIOS501
50/125-OM4	GIOS601
9/125 ITU G.655	GIOS701
9/125 ITU G.652D	GIOS801
9.125 ITU G.657A	GIOSA01
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 stripability.
- **Predicted lifetime > 30 years.**

### Construction & Dimensions



#### Cable Specifications (construction in accordance with IEC 60794)

1. Primary coated optical fibres:  $\varnothing 245 \pm 10 \mu\text{m}$ .
2. Dry FRNC / LSNH semi-tight buffer:  $\varnothing 0.90 \pm 0.05 \text{ mm}$ .

### Mechanical Data

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

### Optical Characteristics

Characteristics (cabled) Single-Mode – Matched-Cladded optical fibres according to ITU.

European Partnumber Coding, Position 5	Fibre-Type	Mode-Field /Cladding Diameter (µm)	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 <sup>A</sup>	≤ 1260
A	9/125 G.657A	8.9 ± 0.4 125 ± 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 (µm)	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.

Belden Technical Support +31 (0) 77 3875 414

[www.belden-emea.com](http://www.belden-emea.com)

## Mechanical, Physical and/or Environmental Characteristics

Requirements		
<b>Temperature range</b> according to IEC 60794-1-2-F1	Transport/storage	-30 to + 70 °C
	Installation	-5 to + 50 °C
	Operation	-5 to + 55 °C
<b>Pulling tension</b> according to IEC 60794-1-2-E1		≤ 3 N
<b>Bending radii for fibres and tubes</b>	Installation/operation	>25 mm
<b>Bending radii cable</b>	Static according to IEC 60794-1-2-E11	>25 mm
	Dynamic according to IEC 60794-1-2-E6	>35 mm
<b>Strippability</b>	Secondary coating only	≤ 100 cm
	Secondary + primary coating	≤ 25 mm
<b>Crush resistance</b> according to IEC 60794-1-2-E3	Semi-Tight Buffer	≤ 4000 N/ m
<b>Halogen-free</b> 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

- Semi-Tight buffered fibres with inked fibres.
- Non standard colours.
- Tight buffered fibres.

## Revision

Rev.	Description	Date	Init.
2.0	Bending radii cable added	16/07/09	SN
3.0	OM3+ changed to OM4	12/10/09	JW
Date: 14/07/08		Page 1 of 1	
Orig.: SN		Review:	
		Part Number: <b>GIOS</b>	