

## GIPT\_2

**Interconnect Cables**  
**Indoor**  
**I-V(ZN)H**

### Ordering Information

#### Belden European Part Numbers

Fibre type / diameter	1.6	1.8	2.0	2.1	2.4	2.8	3.0
62.5/125-OM1	GIPT1A2	GIPT1B2	GIPT1C2	GIPT1H2	GIPT1D2	GIPT1E2	GIPT1F2
50/125-OM2 BW 600/1200	GIPT2A2	GIPT2B2	GIPT2C2	GIPT2H2	GIPT2D2	GIPT2E2	GIPT2F2
50/125-OM3	GIPT3A2	GIPT3B2	GIPT3C2	GIPT3H2	GIPT3D2	GIPT3E2	GIPT3F2
50/125-OM2e	GIPT4A2	GIPT4B2	GIPT4C2	GIPT4H2	GIPT4D2	GIPT4E2	GIPT4F2
50/125-OM2 BW 500/500	GIPT5A2	GIPT5B2	GIPT5C2	GIPT5H2	GIPT5D2	GIPT5E2	GIPT5F2
50/125-OM4	GIPT6A2	GIPT6B2	GIPT6C2	GIPT6H2	GIPT6D2	GIPT6E2	GIPT6F2
9/125 ITU G.655	GIPT7A2	GIPT7B2	GIPT7C2	GIPT7H2	GIPT7D2	GIPT7E2	GIPT7F2
9/125 ITU G.652D	GIPT8A2	GIPT8B2	GIPT8C2	GIPT8H2	GIPT8D2	GIPT8E2	GIPT8F2
9.125 ITU G.657A	GIPTAA2	GIPTAB2	GIPTAC2	GIPTAH2	GIPTAD2	GIPTAE2	GIPTAF2
Std. plastic reel (non-returnable)	Ø 238 * 107 mm weight 0.4 kg						
Std. delivery length	2100 ± 100m						

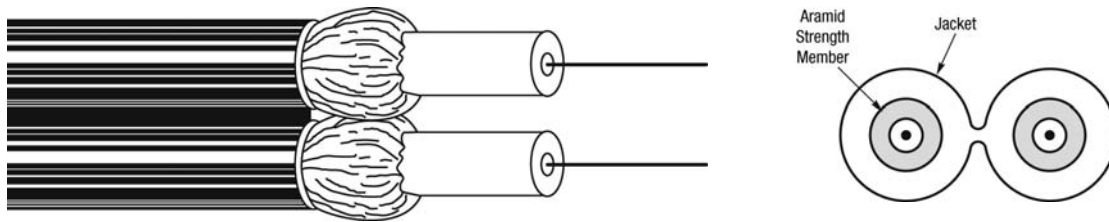
### Applications

- **Flexible terminating leads** such as pigtails, patchcords and test leads.
- Support all computer network applications such as **FDDI, Gigabit Ethernet and ATM**.
- Short distance applications for indoor use.

### Features & Benefits

- **All dielectric** (metal-free) optical fibre leads permitting **direct (detensioned) termination with connectors**.
- These cables are **halogen free (FRNC / LSNH)**
- **Predicted lifetime > 30 years**.

## Construction & Dimensions



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

1. Primary coated optical fibres:  $\text{Ø } 280 \pm 15 \text{ }\mu\text{m}$ .
2. FRNC / LSNH Tight buffer:  $\text{Ø } 0.90 \pm 0.05 \text{ mm}$ .
3. Aramid yarns as strength members.
4. **Yellow** (SM fibre) or **Orange** (MM fibre) or **Turquoise** (OM3 fibre) **Green** (OM3+ fibre) halogen-free (FRNC/LSNH) outer jacket.

Identification: BELDEN OFC – "cable type"– "number x type of fibre" + date-, meter-and P/N-marking.

### Mechanical Data

Diameter	1.6	1.8	2.0	2.1	2.4	2.8	3.0
$\text{Ø nom, out (mm)}$	1.6 x 3.3 $\pm 0.2$	1.8 x 3.7 $\pm 0.2$	2.0 x 4.1 $\pm 0.2$	2.1 x 4.3 $\pm 0.2$	2.4 x 4.9 $\pm 0.2$	2.8 x 5.7 $\pm 0.2$	3.0 x 6.1 $\pm 0.2$
$\text{Ø nom, in (mm)}$	1.3 $\pm 0.1$	1.3 $\pm 0.1$	1.3 $\pm 0.1$	1.4 $\pm 0.1$	1.8 $\pm 0.2$	1.8 $\pm 0.2$	1.8 $\pm 0.2$
Max. pulling tension (N)							
Long term	140	140	140	200	200	200	200
Short term	240	240	240	400	400	400	400
Weight (kg/km)	5.9	6.5	8.7	8.9	11.3	14.5	18.3
Energy of Flame (kJ/m)	106	114	128	138	156	186	208

## 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 <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 (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.

## 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	Tight buffer	≤ 3 N
	Duplex cable	See table
<b>Bending radii for fibres and tight buffers</b>		
Installation/operation		>25 mm
<b>Bending radii cable</b>		
Static according to IEC 60794-1-2-E11		15 x Ø
Dynamic according to IEC 60794-1-2-E6		20 x Ø
<b>Strippability</b>		
Secondary coating only		≤ 10 cm
Secondary + primary coating		≤ 10 mm
<b>Crush resistance</b> according to IEC 60794-1-2-E3		
Tight Buffer		≤ 4000 N/ m
Duplex cable		≤ 5000 N/m
<b>Halogen-free</b> according to IEC 60754-2 (EN 50267-2-2)		
Corrosivity		pH ≥ 3.5 - µS/cm ≤ 100
<b>Flame retardancy</b> according to IEC 60332-1 (EN 60332-1)		
		Pass

## Guide to installation and handling

- It is vitally important to not exceed the specified values.
- Interconnection optical fibre cables have been designed for short distance (≤ 10 m) applications inside buildings.

## Options

- Semi-Tight Buffered fibres with excellent strippability.
- Non standard colours.

## Revision

Rev.	Description	Date	Init.
02	Bending radii cable added	16/07/09	SN
03	OM3+ changed to OM4	12/10/09	JW
Date: 16/07/09		Page 1 of 1	
Orig.: SN		Review:	
		Part Number: <b>GIPT_2</b>	