

GIPS_2

Interconnect Cables
Indoor
I-K(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	GIPS1A2	GIPS1B2	GIPS1C2	GIPS1H2	GIPS1D2	GIPS1E2	GIPS1F2
50/125-OM2 BW 600/1200	GIPS2A2	GIPS2B2	GIPS2C2	GIPS2H2	GIPS2D2	GIPS2E2	GIPS2F2
50/125-OM3	GIPS3A2	GIPS3B2	GIPS3C2	GIPS3H2	GIPS3D2	GIPS3E2	GIPS3F2
50/125-OM2e	GIPS4A2	GIPS4B2	GIPS4C2	GIPS4H2	GIPS4D2	GIPS4E2	GIPS4F2
50/125-OM2 BW 500/500	GIPS5A2	GIPS5B2	GIPS5C2	GIPS5H2	GIPS5D2	GIPS5E2	GIPS5F2
50/125-OM4	GIPS6A2	GIPS6B2	GIPS6C2	GIPS6H2	GIPS6D2	GIPS6E2	GIPS6F2
9/125 ITU G.655	GIPS7A2	GIPS7B2	GIPS7C2	GIPS7H2	GIPS7D2	GIPS7E2	GIPS7F2
9/125 ITU G.652D	GIPS8A2	GIPS8B2	GIPS8C2	GIPS8H2	GIPS8D2	GIPS8E2	GIPS8F2
9.125 ITU G.657A	GIPSAA2	GIPSAB2	GIPSAC2	GIPSAH2	GIPSAD2	GIPSAE2	GIPSAF2
Std. plastic reel (non-returnable)	Ø 238 * 107 mm weight 0.4 kg						
Std. delivery length	2100 ± 100m						

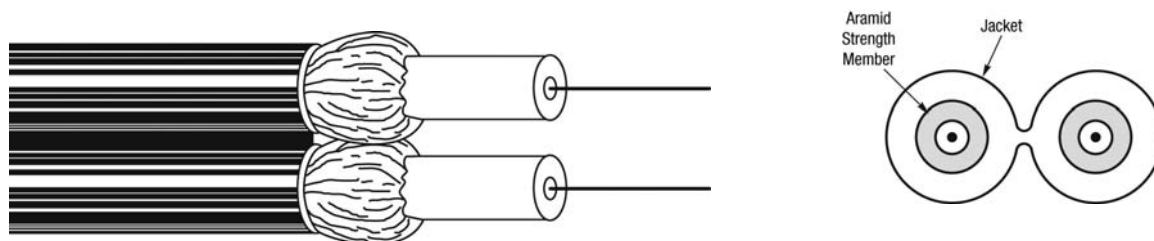
Applications

- **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

- These cables are based on **excellent strippable** semi-tight buffered optical fibres
- **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: $\varnothing 245 \pm 10 \mu\text{m}$.
2. Dry FRNC / LSNH Semi-Tight buffer: $\varnothing 0.90 \pm 0.1 \text{ mm}$.
3. Aramid yarns as strength members.
4. **Yellow** (SM fibre) or **Orange** (MM fibre) or **Turquoise** (OM3 fibre) or **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
\varnothing nom, out (mm)	1.6 x 3.3 ± 0.2	1.8 x 3.7 ± 0.2	2.0 x 4.1 ± 0.2	2.1 x 4.3 ± 0.2	2.4 x 4.9 ± 0.2	2.8 x 5.7 ± 0.2	3.0 x 6.1 ± 0.2
\varnothing nom, in (mm)	1.3 ± 0.1	1.3 ± 0.1	1.3 ± 0.1	1.4 ± 0.1	1.8 ± 0.2	1.8 ± 0.2	1.8 ± 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 ^A	≤ 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	
Temperature range according to IEC 60794-1-2-F1 Transport/storage Installation Operation	-30 to + 70 °C -5 to + 50 °C -5 to + 55 °C
Pulling tension according to IEC 60794-1-2-E1 Semi tight buffer Duplex cable	≤ 3 N See table
Bending radii for fibres and semi-tight buffers Installation/operation	>25 mm
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
Strippability Secondary coating only Secondary + primary coating	≤ 30 cm ≤ 10 mm
Crush resistance according to IEC 60794-1-2-E3 Semi-Tight Buffer Duplex cable	≤ 4000 N/ m ≤ 5000 N/m
Halogen-free according to IEC 60754-2 (EN 50267-2-2) Corrosivity	pH ≥ 3.5 - μS/cm ≤ 100
Flame retardancy 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

- Tight Buffered fibres.
- 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
04	Inner diameter added	21/01/11	SN
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