

GIMS

Mini-Breakout Cables (Distribution)

Indoor

I-K(ZN)H

Ordering Information

Belden European Part Numbers

Fibre type / count	2	4	6	8	12	16	24
62.5/125-OM1	GIMS102	GIMS104	GIMS106	GIMS108	GIMS112	GIMS116	GIMS124
50/125-OM2 BW 600/1200	GIMS202	GIMS204	GIMS206	GIMS208	GIMS212	GIMS216	GIMS224
50/125-OM3	GIMS302	GIMS304	GIMS306	GIMS308	GIMS312	GIMS316	GIMS324
50/125-OM2e	GIMS402	GIMS404	GIMS406	GIMS408	GIMS412	GIMS416	GIMS424
50/125-OM2 BW 500/500	GIMS502	GIMS504	GIMS506	GIMS508	GIMS512	GIMS516	GIMS524
50/125-OM4	GIMS602	GIMS604	GIMS606	GIMS608	GIMS612	GIMS616	GIMS624
9/125 ITU G.655	GIMS702	GIMS704	GIMS706	GIMS708	GIMS712	GIMS716	GIMS724
9/125 ITU G.652D	GIMS802	GIMS804	GIMS806	GIMS808	GIMS812	GIMS816	GIMS824
9.125 ITU G.657A	GIMSA02	GIMSA04	GIMSA06	GIMSA08	GIMSA12	GIMSA16	GIMSA24
Std. plastic reel (non-returnable)	Ø 560 * 336 mm weight 4.25 kg		Ø 800 * 475 mm weight 7.65 kg			Ø 1000 * 530 mm weight 18 kg	
Std. delivery length	2100 ± 100m						

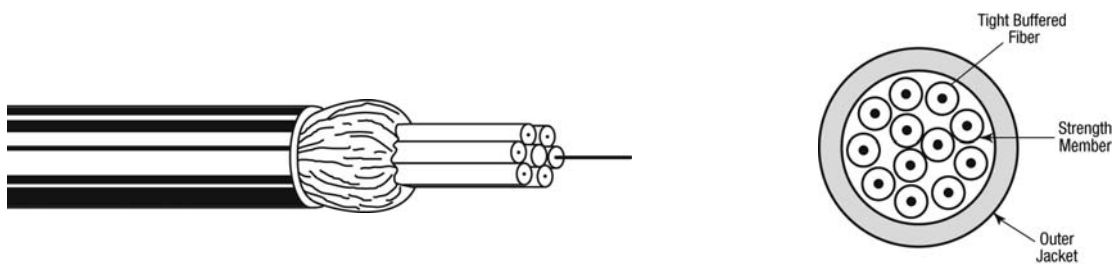
Applications

- Structured (premises) wiring systems: building backbone (riser) and/or **horizontal cabling (Fibre To The Desk)**.
- Support all computer network applications such as **FDDI, Gigabit Ethernet and ATM**.

Features & Benefits

- These cables are based on **excellent strippable** semi-tight buffered optical fibres
- **All dielectric** (metal-free) optical fibre cable, immune to lightning and electromagnetic interference (EMC-safe), spark-free and require no earthing.
- 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. Colour coding of the buffered fibres:
white – red – blue – yellow – green – violet – brown – black – orange – turquoise – pink – grey
The fibres 13 – 24 are ringmarked
4. Aramid yarns as strength members.
5. Orange halogen-free (FRNC/LSNH) outer jacket.
Identification: BELDEN OFC – "cable type" – "number x type of fibre" + date-, meter-and P/N-marking.

Mechanical Data

No. of fibres	2	4	6	8	12	16	24
\varnothing nom. (mm)	4.0	4.8	5.3	5.3	7.0	8.0	9.0
Max. pulling tension (N)							
Long term	400	400	450	450	500	500	600
Short term	800	800	900	900	1000	1000	1200
Weight (kg/km)	16	19	23	25	40	49	57
Energy of Flame (kJ/m)	227	294	339	351	619	886	1044

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	-30 to + 70 °C
	Installation	-5 to + 50 °C
	Operation	-5 to + 55 °C
Pulling tension according to IEC 60794-1-2-E1	Semi tight buffer	≤ 3 N
	Cable	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	10 x Ø
	Dynamic according to IEC 60794-1-2-E6	15 x Ø
Strippability		
	Secondary coating only	≤ 30 cm
	Secondary + primary coating	≤ 10 mm
Crush resistance according to IEC 60794-1-2-E3		
	Semi-Tight Buffer	≤ 4000 N/m
	Cable	≤ 4000 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 60332-2 (EN 60332-2)		
		Pass

Guide to installation and handling

- When laying and installing optical fibre cables **it is vitally 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 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.
- Indoor optical fibre cables have been designed for use inside buildings. Consequently they are not longitudinal watertight. It is vitally important to not exceed the specified values.

Options

- Indoor Mini-Breakout cables with tight buffered fibres.
- Intex Mini-Breakout cables for internal and external use.
- Non standard cable constructions and 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: GIMS	