

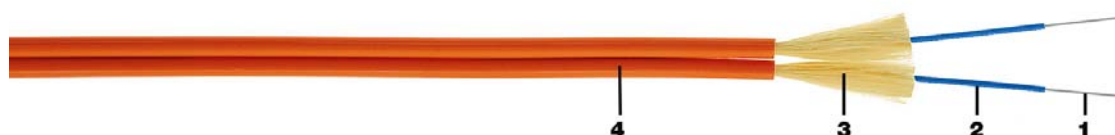
Application

- **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.

Key features

- 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 (Flame-Retardant, Non Corrosive) and LSNH (Low Smoke, Non Halogen).
- **Predicted lifetime > 30 years.**

Construction & dimensions



Cable specifications (construction in accordance with IEC 60794)

1. Primary coated optical fibres: $\varnothing 250 \pm 15 \mu\text{m}$.
2. Semi-tight buffer: $\varnothing 0.9 \pm 0.1 \text{ mm}$.
 Colour coding of the buffered fibres: blue with MM 62.5/125
 green with MM 50/125
 yellow with SM 9/125
3. Aramid yarns as strength members.
4. Halogen-free (FRNC/LSNH) outer jacket. The outer jacket is extruded in a good splittable shape.
 Identification: BELDEN OFC – "cable type" – "number x type of fibre" + date-, meter-and P/N-marking.

Mechanical data

Cable-type	Duplex Fig. 8
No. of fibres	2
\varnothing nominal (mm)	$(2.8 \times 5.7) \pm 0.2$
Energy of flame (kJ/m)	256
Weight (kg/km)	14.1

Ordering information

Belden Europe code

Fibre-type / Cable-type	62.5/125-OM1	50/125-OM2	50/125-OM2e	50/125-OM3	9/125-OS1
Std. colour	orange	orange	orange	orange	yellow
Duplex Fig.8 - 2.8 mm	GIPS102	GIPS202	GIPS402	GIPS302	GIPS902
Std. reel (non-returnable)	plywood reel $\varnothing 560 * 336 \text{ mm}$, weight 4.25kg				
Std. del. length	2100 \pm 100 m				

Optical characteristics

Characteristics (cabled) Multi-Mode - Graded-Index optical fibres according to IEC 60793

Fibre-type	Size (μm)	Wavelength (nm)	Attenuation average/max. (dB/km)	Bandwidth (MHz \cdot km)	Ethernet Performance (m)		Refractive Index
					1GbE	10Gbe	
62.5/125 OM1	62.5 \pm 2.5	850	3.0 / 3.2	\geq 200	275	33	1.495
	125 \pm 1	1300	0.7 / 0.9	\geq 600	550	n.a.	1.490
50/125 OM2	50 \pm 2.5	850	2.6 / 2.8	\geq 600	550	82	1.481
	125 \pm 1	1300	0.6 / 0.9	\geq 1200	550	n.a.	1.476
50/125 OM2e	50 \pm 2.5	850	2,6 / 2,8	\geq 600	750	110	1,481
	125 \pm 1	1300	0,6 / 0,9	\geq 1200	2000	n.a.	1,476
50/125 OM3	50 \pm 2.5	850	2.6 / 2.8	\geq 1500	900	300	1.482
	125 \pm 1	1300	0.6 / 0.9	\geq 500	550	n.a.	1.477

Characteristics (cabled) Single-Mode - Matched-Cladded optical fibres according to ITU-G.652B

Fibre-type	Size (μm)	Wavelength (nm)	Attenuation average/max. (dB/km)	Dispersion (ps/(nm \cdot km))	PMD (ps/ $\sqrt{\text{km}}$)	Refractive Index
9/125-OS1 patchcord quality	9.2 \pm 0.4	1310	0.35 / 0.5	\leq 3.5		1.467
	125 \pm 1	1550	0.21 / 0.3	\leq 18	\leq 0.2	1.467

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

Mechanical, physical and/or environmental

Temperature range for lengths \leq 100 m

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	\leq 3 N
Simplex cable	\leq 200 N
Duplex cable	\leq 400 N

Bending radii for fibres and tight buffers

Installation/operation	> 25 mm
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Halogen-free according to IEC 60754-2 (HD 602)

Corrosivity	pH \geq 3.5 - $\mu\text{S/cm} \leq$ 100
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Strippability

Secondary coating only	\leq 100 cm
Secondary + primary coating	\leq 25 mm

Crush resistance according to IEC 60794-1-2-E3

Semi-tight buffer	\leq 10000 N/m
Duplex cable	\leq 10000 N/m
Duplex cable	\leq 20000 N/m

Bending radii cable

Static according to IEC 60794-1-2-E11	– 15 x \varnothing
Dynamic according to IEC 60794-1-2-E6	– 20 x \varnothing

Flame retardancy according to IEC 60332-1

Guide to installation and handling

- When using Interconnection optical fibre cables **it is vitally important not to exceed the specified values** set for pulling tension, bending radii and temperature.
- The primary and secondary coating are separated by means of a very thin layer of jelly. Consequently the strippability is very good. If necessary the jelly can be removed using a tissue soaked in turpentine, for example.
- Interconnection optical fibre cables have been designed for short distance applications (tens of meters) inside buildings.

Options

- Non-standard cable constructions**, colours, details and/or additional information regarding specifications are available on request.