

Key features

- Dry semi-tight buffered fibres with excellent strippability.
- **Predicted lifetime > 30 years.**

Construction (in accordance with IEC 60794) & dimensions

1. Primary coated optical fibres: $\varnothing 250 \pm 15 \mu\text{m}$.
2. Dry semi-tight buffer: $\varnothing 0.9 \pm 0.1 \text{ mm}$.

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 ± 2.5	850	3.0 / 3.2	≥ 200	275	33	1.495
	125 ± 1	1300	0.7 / 0.9	≥ 600	550	n.a.	1.490
50/125 OM2	50 ± 2.5	850	2.6 / 2.8	≥ 600	550	82	1.481
	125 ± 1	1300	0.6 / 0.9	≥ 1200	550	n.a.	1.476
50/125 OM2e	50 ± 2.5	850	2,6 / 2,8	≥ 600	750	110	1,481
	125 ± 1	1300	0,6 / 0,9	≥ 1200	2000	na	1,476
50/125 OM3	50 ± 2.5	850	2.6 / 2.8	≥ 1500	900	300	1.482
	125 ± 1	1300	0.6 / 0.9	≥ 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 ± 0.4	1310	0.35 / 0.5	≤ 3.5		1.467
	125 ± 1	1550	0.21 / 0.3	≤ 18	≤ 0.2	1.467

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

Mechanical, physical and/or environmental

Temperature range

Transport/storage	- 30 to + 70 °C
Installation	- 5 to + 50 °C
Operation	- 5 to + 55 °C

Strippability

Secondary coating only	$\leq 100 \text{ cm}$
Secondary + primary coating	$\leq 25 \text{ mm}$

Pulling tension $\leq 3 \text{ N}$

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

Dry semi-tight buffer $\leq 4000 \text{ N/m}$

Bending radii for fibres and tight buffers

Installation/operation $> 25 \text{ mm}$

Weight

0.67 kg/km

Energy of flame

19 kJ/m

Guide to installation and handling

- **It is vitally important not to exceed the specified values.**
- (Semi-)tight buffered optical fibres have been designed for **short distance ($\leq 10 \text{ m}$) applications.**

Ordering information

Belden European Part Numbers

Fibre-type / Cable-type	62.5/125-OM1	50/125-OM2	50/125-OM2e	50/125-OM3	9/125-OS1
Std. colour	blue	green	green	green with black rings	yellow
Pigtails	GIOK101	GIOK201	GIOK401	GIOK301	GIOK901
Std. reel (non-returnable)	plastic reel \varnothing 238 * 107 mm, weight 0.4 kg				
Std. del. length	2100 \pm 100 m				