Intex (for internal & external use) Mobile Optical Fibre Cables

Polyurethane jacket

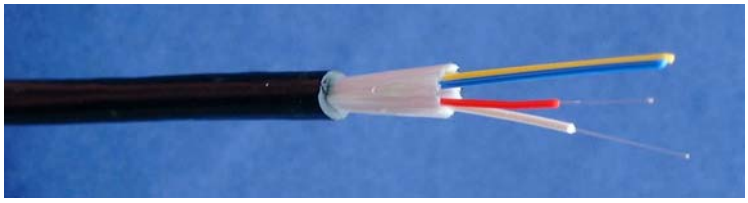
Application

- These metal-free mobile cables have been designed for despooling and respooling repeatedly.
- Support computer network applications such as FDDI, Gigabit Ethernet and ATM.
- **Easy to install.** Not recommended for direct burial.

Key features

- These cables are flame retardant and watertight and therefore suitable for internal and external (= intex) use.
- These cables are **all dielectric** (metal-free).
- **Predicted lifetime > 30 years**.

Construction & dimensions



Cable specifications

1. Primary coated optical fibres: Ø 280 ± 15 µm.
2. Tight buffered fibres: Ø 0.9 ± 0.1 mm. Colour coding of the buffered fibres:
   white – red – blue – yellow – green – violet – brown – black
3. Swellable reinforced yarns as common strength members and for the longitudinal watertightness.
4. **Orange** or **Black Polyurethane** outer jacket.
   Identification: BELDEN OFC – MOBILE CABLE – ”number x type of fibre” +date-, meter- and P/N-marking.

Mechanical data

No. of fibres	**4**	**6**	**8**
Ø nom. (mm)	5.8	6.3	7.0
Max. pulling tension (N)	800	950	1100
Energy of flame (kJ/m)	580	725	890
Weight (kg/km)	31	38	47

Ordering information

Belden European Part Numbers

Fibre-type/-count	**4**	**6**	**8**
62.5/125-OM1	GMMT104	GMMT106	GMMT108
50/125-OM2	GMMT204	GMMT206	GMMT208
50/125-OM2e	GMMT404	GMMT406	GMMT408
50/125-OM3	GMMT304	GMMT306	GMMT308
9/125-OS1	GMMT904	GMMT906	GMMT908
Std. reel (non-returnable)	plywood reel ∅ 560 * 336 mm, weight 4.25 kg	plywood reel ∅ 800 * 475 mm, weight 7.65 kg	
Std. del. length	2100 ± 100 m		

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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•km)	Ethernet Performance (m)		Refractive Index
					1GbE	10Gbe	
62.5/125 OM1	62.5 ± 2.5 125 ± 1	850 1300	3.0 / 3.2 0.7 / 0.9	≥ 200 ≥ 600	275 550	33 n.a.	1.495 1.490
50/125 OM2	50 ± 2.5 125 ± 1	850 1300	2.6 / 2.8 0.6 / 0.9	≥ 600 ≥ 1200	550 550	82 n.a.	1.481 1.476
50/125 OM2e	50 ± 2,5 125 ± 1	850 1300	2,6 / 2,8 0,6 / 0,9	≥ 600 ≥ 1200	750 2000	110 n.a.	1,481 1,476
50/125 OM3	50 ± 2.5 125 ± 1	850 1300	2.6 / 2.8 0.6 / 0.9	≥ 1500 ≥ 500	900 550	300 n.a.	1.482 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•km))	PMD (ps/√km)	Refractive Index
9/125-OS1 patchcord quality	9.2 ± 0.4 125 ± 1	1310 1550	0.35 / 0.5 0.21 / 0.3	≤ 3.5 ≤ 18	≤ 0.2	1.467 1.467

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

Mechanical, physical and/or environmental

Temperature range according to IEC 60794-1-2-F1

Transport/storage	- 30 to + 70 ºC
Installation	- 5 to + 50 ºC
Operation	- 30 to + 70 ºC

Pulling tension according to IEC 60794-1-2-E1
See table with dimensions

Bending radii for fibres and tubes
Installation/operation > 25 mm

Repeated bending according to IEC 60794-1-2-E6
> 500.000 times

Strippability

Secondary coating only	≤ 10 cm
Secondary + primary coating	≤ 10 mm

Watertightness according to IEC 60794-1-2-F5

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

Tight buffer	≤ 4000 N /m
Cable	≤ 4000 N /m

Bending radii cable
Static according to IEC 60794-1-2-E11 – 15 x Ø
Dynamic according to IEC 60794-1-2-E6 – 20 x Ø

Flame retardancy according to IEC 60332-2

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.
- If a cable needs to be fastened, constrictions ≥ 0.3 mm must be prevented.
- It is advisable to cap the cable-ends during storage.

Options

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