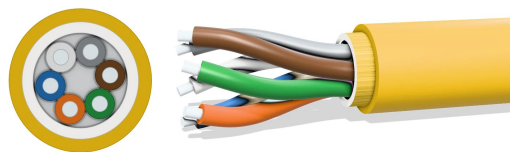


Application

This tight-buffered indoor cable carries 900 µm tight-buffered optical fibres for indoor riser, distribution and patch/breakout use inside buildings. Unlike a loose-tube cable, each fibre has a 900 µm tight buffer applied directly over the 250 µm coating, which makes the fibre robust and directly connectorisable and lets the cable be broken out and terminated without a fan-out kit. The buffered fibres are surrounded by aramid (or E-glass) yarn strength members and a low-smoke halogen-free (LSZH) outer sheath with a CPR reaction-to-fire class for use in buildings. It is available both as single-mode OS2 (9/125 µm, ITU-T G.652.D) and as multimode OM3/OM4/OM5 (50/125 µm, ISO/IEC 11801 / IEC 60793-2-10) - OM4 being the common laser-optimised multimode grade with 4700 MHz·km modal bandwidth at 850 nm. It is fully dielectric, light and flexible, and is supplied in counts up to 24 fibres.



CONSTRUCTION

Optical fibre	Single-mode OS2 9/125 µm (ITU-T G.652.D) or multimode OM3/OM4/OM5 50/125 µm (ISO/IEC 11801, IEC 60793-2-10).
Tight buffer	900 µm tight buffer applied directly over the 250 µm coating, colour-coded; directly connectorisable (no fan-out kit).
Strength member	Aramid yarn (or E-glass) strength members around the buffered fibres - fully dielectric, non-metallic.
Core assembly	Buffered fibres stranded with the aramid yarns; ripcord for easy sheath removal.
Outer sheath	Low-smoke halogen-free (LSZH), flame-retardant; for indoor riser / distribution / patching.
Colour code	Fibres colour-coded per TIA-598 / IEC 60304; sheath colour by grade (e.g. yellow OS2, aqua OM3/OM4, lime OM5).

OPTICAL & MECHANICAL PROPERTIES

Fibre type / standard	OS2 single-mode ITU-T G.652.D; OM3/OM4/OM5 multimode ISO/IEC 11801 / IEC 60793-2-10.
Attenuation (OS2)	≤ 0.40 dB/km @ 1310 nm; ≤ 0.30 dB/km @ 1550 nm.
Attenuation (OM4)	≤ 3.5 dB/km @ 850 nm; ≤ 1.5 dB/km @ 1300 nm (cabled, ISO/IEC 11801).
Modal bandwidth (OM4)	4700 MHz·km @ 850 nm (EMB); 500 MHz·km @ 1300 nm (OFL).
Fibre count	up to 24 fibres (typ. 2, 4, 6, 8, 12, 24).
Tensile strength	approx. 750 N during installation; approx. 375 N in operation (12F, leading source).
Crush resistance	≥ 1000 N/10 cm (IEC 60794-1-21 E3).
Min. bending radius	approx. 20 × outer diameter during installation; approx. 10 × outer diameter in operation (136/68 mm at 12F).
Temperature range	Operation -20 to +60 °C; installation -5 to +50 °C; storage -20 to +60 °C.
Reaction to fire (CPR)	LSZH sheath, CPR class Dca / B2ca to EN 50575 (low smoke, halogen-free, flame-retardant).

KEY FIGURES

Nominal outer diameter	approx. 6.5 mm (12F)
Nominal weight	approx. 40 kg/km (12F)
Maximum fibre count	24 fibres (OS2 or OM3/OM4/OM5)

Optical values are the ITU-T G.652.D (OS2) and ISO/IEC 11801 / IEC 60793-2-10 (OM3/OM4/OM5) category limits, not vendor-specific guarantees; mechanical values, CPR class, outer diameter and weight are nominal leading-source references and vary with fibre count, grade and order. All values are indicative and non-binding.