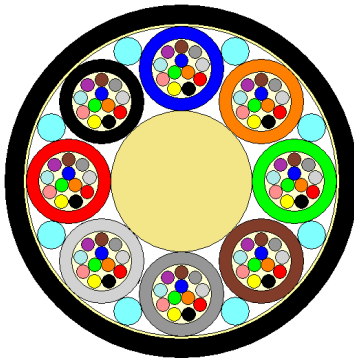


## Loose Tube Optical Minicables for use in Ducts

### Cable Design



- not to scale -

- **Central Strength Member (CSM):** glass fibre reinforced plastic rod (FRP).
- **Loose Tube:** thermoplastic material, containing optical fibres and filled with a suitable water tightness compound.
- **Filler Elements:** thermoplastic rods, where needed.
- **Stranding:** loose tubes (and fillers), SZ stranded around the CSM.
- **Longitudinal Water Tightness:** dry core with water swellable elements.
- **Peripheral Strength Elements:** aramid yarns.
- **Outer Sheath:** PE, two ripcords beneath.

This loose tube dielectric optical cable is designed for outdoor installation in ducts and microducts by blowing or pulling techniques.

### Technical data

<b>No. of Fibres</b>		<b>96</b>
Design		8 x 12
Cable Diameter	mm	6.5
Cable Weight	kg / km	42
Minimum Bending Radius	mm	Without Tension 15 x Cable-Ø Under Maximum Tension 25 x Cable-Ø
Temperature Range	°C	Installation -10 to +40 Transport & Storage -40 to +70 Operation -30 to +60

Please refer to our General Installation, Safety & Handling recommendations before handling.

### Main characteristics

Test	Test Standard	Specified Value	Acceptance Criteria <sup>(2)</sup>
Tensile strength	IEC 60794-1-2-E1	1000 N	$\Delta\alpha \leq 0.05$ dB after test, no damage
Crush	IEC 60794-1-2-E3	1000 N / 100 mm, 1 min.	$\Delta\alpha \leq 0.05$ dB after test, no damage
Impact	IEC 60794-1-2-E4	5 Nm, 10 impacts, R= 300 mm	no damage
Repeated Bending	IEC 60794-1-2-E6	R=25xD, 20 N, 100 cycles	no damage
Torsion	IEC 60794-1-2-E7	$\pm 180^\circ$ , L=1m, 10 cycles	no damage
Kink	IEC 60794-1-2-E10	Min. diameter = 100mm	$\Delta\alpha \leq 0.05$ dB, no damage
Cable Bend	IEC 60794-1-2-E11	R=20xD, 5 turns, 3 cycles <sup>(1)</sup>	$\Delta\alpha \leq 0.1$ dB
Temperature Cycling	IEC 60794-1-2-F1	-30°C to +60°C -40°C to +70°C	$\Delta\alpha \leq 0.05$ dB/km $\Delta\alpha \leq 0.10$ dB/km
Water Penetration	IEC 60794-1-2-F5B	sample=3m, water column=1m	no water leakage in 24h













<sup>(1)</sup> at room temperature 23°C  $\pm$  2°C <sup>(2)</sup> All optical measurements at 1550 nm.

### Optical Characteristics

See the attached cabled optical fibre data sheet.

## Identification

### Fibre Colours

No.	1	2	3	4	5	6	7	8	9	10	11	12
Colour	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
												

### Buffer Tube Colours

No.	1	2	3	4	5	6	7	8
Colour	blue	orange	green	brown	grey	white	red	black
								

In cables containing 12 G.655 fibres, these shall be placed in brown tube.

### Sheath Colour:

The outer sheath colour is black.

### Sheath Marking:

The outer sheath is marked in 1 meter intervals as follows:

**ORES FIBER OPTIC CABLE <Manufacturer> <year>**  
**JN-SM-LRE XS <no. and type of fibre> <length marking in meter>**

## Logistic

### Packing:

Plastic or plywood drums with protection.

### Delivery Length:

Standard delivery length is 4 km with a tolerance of -1% / +3%

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All sizes and values without tolerances are reference values. Specifications are for product as supplied by PrysmianGroup: any modification or alteration afterwards of product may give different result.

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