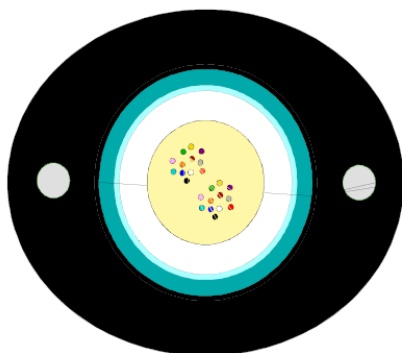


Product Specification

Eurolan outdoor steel wire cable 4-96 fibre, 39U-S1-XX-15BL



Optical fibre: Coloured optical single-mode fibres according to ITU-T Rec. G.652D.

- **Secondary coating:** A plastic core with a jelly-filled channel for fibres.
- **Gel compound:** The tube is fully filled with a non-toxic and dermatological safe compound.
- **Water blocking layer:** The cable core is surrounded with swellable tape.
- **Protection:** Corrugated steel tape coated with a copolymer of polyethylene on both sides is applied longitudinally with an overlap. Minimum overlapping 3.0mm. The nominal thickness of the steel tape is 0.15 mm.
- **Strength members:** Two high tensile strength steel wires in the outer sheath. The diameter of the steel wires is 1.57 mm.
- **Outer sheath:** Consists of black weather resistant PE. The nominal thickness is 2.4 mm. Minimum distance from rod to outer surface is 1 mm. Minimum sheath thickness is 1.5mm.

Ordering information

Part number	Description
39U-S1-04-15BL	Eurolan 4x9/125 steel wire cable PE Black
39U-S1-06-15BL	Eurolan 6x9/125 steel wire cable PE Black
39U-S1-12-15BL	Eurolan 12x9/125 steel wire cable PE Black
39U-S1-24-15BL	Eurolan 24x9/125 steel wire cable PE Black
39U-S1-48-15BL	Eurolan 48x9/125 steel wire cable PE Black
39U-S1-96-15BL	Eurolan 96x9/125 steel wire cable PE Black

Applications

These cables are used in access networks.
Universal optical fibre cable for duct and direct burial installation.
Excellent for arctic climate when the soil around the cable can be frozen.
Crew friendly installation.

Technical data

No. of Fibres		6	12	24	48	96
No. of fibres per group	[pcs]	6	12			
Loose tube diameter	[mm]	4.5			5.5	7
Outer sheath thickness (nom)	[mm]	2.4				
Cable diameter (approx.)	[mm]	12.7			14.5	15.5
Cable weight (approx.)	[kg/km]	170			205	240
Drum for 6km length (±100m)		K18			K22	K22

Product Specification

Eurolan outdoor steel wire cable 4-96 fibre

Main characteristics

Test	Standard	Specified value	Acceptance Criteria*
Max. Installation Tension	IEC 60794-1-2-E1	5000N	$\Delta\alpha \leq 0.05$ dB after test, fibre strain $\leq 0.33\%$
Max. Operating Tension	IEC 60794-1-2-E1	3500N	$\Delta\alpha \leq 0.05$ dB during test
Crush	IEC 60794-1-2-E3	6000 N / 100 mm	$\Delta\alpha \leq 0.10$ dB, no damage
Impact	IEC 60794-1-2-E4	30 Nm, R= 300 mm, 3 spots	$\Delta\alpha \leq 0.05$ dB after test
Repeated Bending	IEC 60794-1-2-E6	R=15x D, 100 cycle	$\Delta\alpha \leq 0.10$ dB
Torsion	IEC 60794-1-2-E7	100N \pm 1 turn (length 1m)	$\Delta\alpha \leq 0.05$ dB after test
Cable Bend	IEC 60794-1-2-E11	R=10x D	$\Delta\alpha \leq 0.10$ dB
Temperature cycling	IEC 60794-1-2-F1	-15°C to +30°C -45°C to +60°C	$\Delta\alpha \leq 0.05$ dB $\Delta\alpha \leq 0.10$ dB, reversible
Water Penetration	IEC 60794-1-2-F5B	sample=3m, water column=1m	No water leakage in 24h.

* values for single-mode fibres, all optical measurements performed at 1550 nm

Min. bending radius	mm	Final installation 300mm		During installation 400mm	
Temperature range	°C	Installation -15 to +60	Transport. & Storage -45 to +60	Operation -45 to +60	

Fiber Colours (all fiber groups)

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

Lay-up and Colour of the Group Yarns

No. of fibres	Lay-up	Colour of the group yarns
4	1 x 4	-
6	1 x 6	-
12	1 x 12	-
24	2 x 12	blue, white
48	4 x 12	blue, white, yellow, green
96	8 x 12	blue, white, yellow, green, grey, orange, brown, turquoise