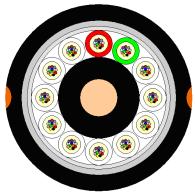




Optical Fibre Cables for Outdoor Installation (XT type)

Cable Design

6PHETOP_1069_00E_v6.2 IEC/EN 60794



- not to scale -

- Central Strength Member (CSM): glass fibre reinforced plastic rod (FRP), with plastic oversheathing when needed.
- **Loose Tube:** thermoplastic material, containing 12 or 24 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 and Non Metallic Armour: glass yarns (glass content 43kTex).
- 2 Ripcords
- Outer Sheath: PE.

Technical data

Cable Type Designation		ХТ						
No. of Fibres		288		432				
Design	1 st layer	12 x 24		6 x 24				
Design	2 nd layer	-			12 x 24			
Outer Sheath Thickness (min.)	mm		1	.5				
Cable Diameter	mm	18.5		18.9				
Cable Weight	kg / km	285		290				
Minimum Bending Radius	mm	Without Tension 15 x Cable-Ø	n	Under Maximum Tension 20 x Cable-Ø				
Temperature Range	oC.	Installation -20 to +60		& Storage Operation -20 to +60				

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

Main characteristics

Test	Test Standard	Specified Value	Acceptance Criteria
Max. Installation Tension	IEC 60794-1-2-E1	6000 N	$\Delta\alpha$ reversible, fibre strain $\leq 0.33\%$
Crush	IEC 60794-1-2-E3	3000 N / 100mm, max. 15m	$\Delta \alpha \leq$ 0.05 dB, no damage
Impact	IEC 60794-1-2-E4	10 Nm, 3 impacts, R= 10 mm	$\Delta \alpha \leq$ 0.05 dB after the test
Torsion	IEC 60794-1-2-E7	1m, 100N, +/- 180°, 5 cycles	$\Delta \alpha \leq$ 0.1 dB, no damage
Repeated Bending	IEC 60794-1-2-E6	R=15x D, 400N, 100 cycles	no damage
Cable Bend	IEC 60794-1-2-E11	R=15x D, 5 turns, 3 cycles	$\Delta \alpha \leq 0.05 \text{ dB}$
Temperature Cycling	IEC 60794-1-2-F1	-20°C to +60°C	$\Delta \alpha \leq 0.05 dB/km$
		-25°C to +70°C	$\Delta \alpha \leq 0.10$ dB/km, reversible
Water Penetration	IEC 60794-1-2-F5B	Water column=1m, 14 days	water penetration < 1m

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	red	green	yellow	blue	white	violet	orange	black	grey	brown	pink	aqua
												1
No.	13	14	15	16	17	18	19	20	21	22	23	24
No. Colour	13 red ¹	14 green ¹	15 yellow ¹	16 blue ¹	17 white ¹	18 violet ¹	19 orange ¹	20 natural ¹	21 grey ¹	22 brown ¹	23 pink ¹	24 aqua ¹

<colour> $^{\mathbf{1}}$ with black ring marks in 50mm intervals

Buffer Tube Colours

1st laver

Tube	1	2	3	4	5	6	7	8	9	10	11	12
Colour	red	green	white	white	white							
2 nd layer												
Tube	1	2	3	4	5	6	7	8	9	10	11	12
Tube Colour	1 red	2 green	3 white	4 white	5 white	6 white	7 white	8 white	9 white	10 white	11 white	12 white

Filler Elements Colour:

All filler elements are black.

Sheath Colour:

The outer sheath colour is black with two diametrically opposite orange stripes.

Sheath Marking:

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

SWISSCOM DRAKA <pear of manufacture> XT DR 6000N <fabrication no.> <length marking in meter>

Example: cable with 432 G.652.D fibres produced in 2015:

SWISSCOM DRAKA 2015 XT 432 FS/D DR 6000N 012345 01234M

Logistic

Packing:

Wooden drums with protection.

Delivery lengths:

Standard delivery lengths are 2.5 km, 4.5 km, 6 km, 8 km with a tolerance of -1% / +3%

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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