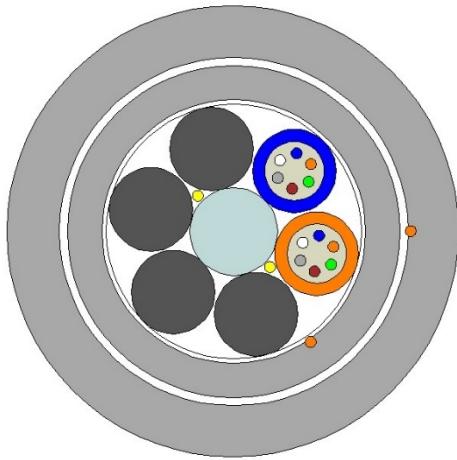


12-144F Double Jacket ALL Dielectric DUCT Cable

Cable Design

IEC/EN 60794-3-10



- **Central strength member (CSM):** glass fibre reinforced plastic material (FRP) with PE coating when needed.
- **Tube:** thermoplastic material, containing up to 12 optical fibres and filled with a suitable water tightness compound.
- **Stranding:** the required number of elements (tubes or fillers) are SZ stranded around the central strength member.
- **Core Wrapping:** water blocking tape (dry core).
- **Inner Sheath:** PE. 1 ripcord beneath
- **Peripheral reinforcement:** glass yarns.
- **Outer Sheath:** PE. 1 ripcord beneath

- not to scale -

Technical data

No. of Fibres	12, 24	16, 32	48	96	128	144
Design(element x fibre per tube)	6x6	6x8	6x12	8x12	8x16	12x12
Inner sheath nominal thickness	mm	0.8	0.8	0.8	0.8	0.8
Outer sheath nominal thickness	mm	1.8	1.8	1.8	1.8	1.8
Cable nominal Diameter	mm	11.9	12.2	12.4	13.6	15.8
Cable Weight	kg / km	158	164	168	197	249
Min. bending radius	mm	Without Tension 15 x Cable-Ø		Under Maximum Tension 20 x Cable-Ø		
Temperature range	°C	Installation -10 -> +60;		Transport. & Storage -40 -> +70 ;		Operation -30 -> +70

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

Main characteristics

Test	Standard	Value	Sanction*
Max. installation tension	IEC 60794-1-2-E1	2700 N	fibre strain $\leq 0.6\%$, $\Delta\alpha$ reversible
Crush(short term)	IEC 60794-1-2-E3	2000 N / 100mm	$\Delta\alpha \leq 0.1$ dB
Temperature range	IEC 60794-1-2-F1	-30 -> +70°C	$\Delta\alpha \leq 0.1$ dB /km
Water Penetration	IEC 60794-1-2-F5B	sample=3m, water=1m	No water leakage after 24 hour

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

Optical Characteristics

See the attached cabled optical fibre data sheet.

Loose Tube

Double Jacket Un-Armored Cable

Identification

Fibre Colours

Fibre No.	1	2	3	4	5	6	7	8	9	10	11	12
Fibre Colour	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
Fibre No.	13	14	15	16								
Fibre Colour	blue	orange	green	brown								
Tracer Colour	black	black	black	black								

Loose Tube Colours

Tube No.	1	2	3	4	5	6	7	8	9	10	11	12
Tube Colour	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
Tube No.	13	14	15	16								
Tube Colour	blue	orange	green	brown								
Tracer Colour	black	black	black	black								

Fillers are black

Sheath Colour:

The inner and outer sheath colour are black.

Sheath Marking:

The outer sheath is marked in 1 meter intervals in Black:

<fiber type & Number> DUCT CABLE <Year of manufacture> XXXXM

Logistic

Packing:

Wooden drums with protection.

Delivery Lengths:

Standard delivery length is 4km with a tolerance of $\pm 5\%$.

Loose Tube

Double Jacket Un-Armored Cable