

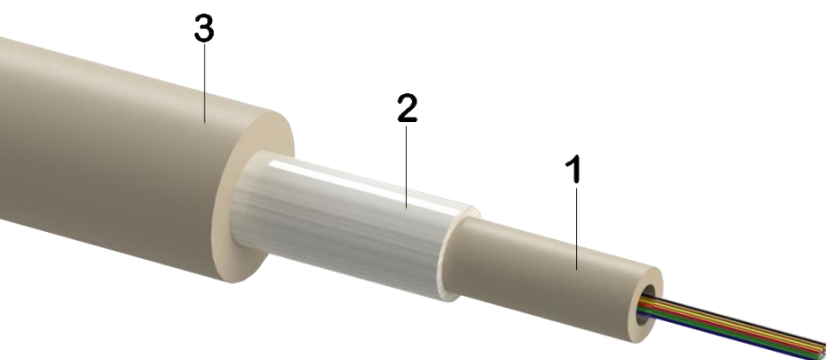
Non-metallic indoor cables with higher CPR classification

Cable construction code

IFEF FiRis xx.yy.zz.c

DIN code

J-B(ZN)H wbg



- 1. Dry tube with optical fibers
- 2. Water swell-able e-glass yarn
- 3. FRLSZH UV stable outer jacket

Cable general description

Max. 24 fiber uni-tube non-metallic cable with standard rodent protection for indoor installation.

Construction and dimensions

Dry tube nominal diameter	2,4 mm
Outer jacket nominal thickness	0,9 mm
Cable nominal outer diameter	5,4 mm
Cable informative weight	32 kg/km
Standard put-up length	2100/4100 m ± 5%

Outer jacket

Material	UV stable FRLSZH
Jacket colour	Ivory. Other colours available on request
Sheath marking	Ink-Jet, black or white depending on the jacket colour
Print legend	Trademark, construction name, cable type, batch-number, meter-marking, CE marking, Customer print legend available on request

Optical fibers

Colour coding (IEC 60304)	1.-12.: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink 13.-24.: red, green, blue, yellow, white, grey, brown, violet, turquoise, natural, orange, pink (ring-marked)
Fiber type	Single- and multi-mode fibers (OS2, OM1, OM2, OM3, OM4)

Geometrical and transmission parameters are available at separate generic datasheet

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Mechanical characteristics

Test	Test method	Value	Acceptance criteria*
Tensile performance	IEC 60794-1-21:E1A	1000 N (5 min)	$\Delta\alpha \leq 0,05$ dB after test
Crush	IEC 60794-1-21:E3A	500 N/100mm (long term - 15 min) 1000 N/100mm (short term)	$\Delta\alpha \leq 0,05$ dB prior release, no damage $\Delta\alpha \leq 0,05$ dB after release, no damage
Impact	IEC 60794-1-21:E4	5 Nm, 3 impacts, d=20 mm, R=12,5 mm	no fiber breakage
Repeated bending	IEC 60794-1-21:E6	R=20 x cable diameter, 25 cycles, m=4 kg	no damage
Torsion	IEC 60794-1-21:E7	L=1 m, rotation angle $\pm 180^\circ$, 10 cycles, F=20 N	no fiber breakage
Kink	IEC 60794-1-21:E10	d=20 x cable diameter	no kink
Bend	IEC 60794-1-21:E11A	d=20 x cable diameter, 6 turns, 10 cycles, 23°C	no fiber breakage

Environmental characteristic

Test	Test method	Value	Acceptance criteria*
Temperature cycling	IEC 60794-1-22:F1	-20°C ÷ 60°C -25°C ÷ 60°C	$\Delta\alpha \leq 0,05$ dB $\Delta\alpha \leq 0,15$ dB, reversible
Temperature range of use		-5°C ÷ 50°C -20°C ÷ 60°C -25°C ÷ 60°C	installation operation storage, transport

* IEC 60794-2-20

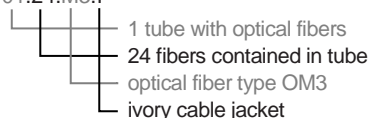
Cable expected lifetime / min. 30 years

Fire performance

Test	Test method	Result
Euro classification to CPR	EN 50575, EN 13501-6	B2ca-s1,d0,a1

Order information

Order code e.g.: IFEF Firis 01.24.M3.I



Detailed explanation of the FOC constructions coding found in the file *FOC coding*.