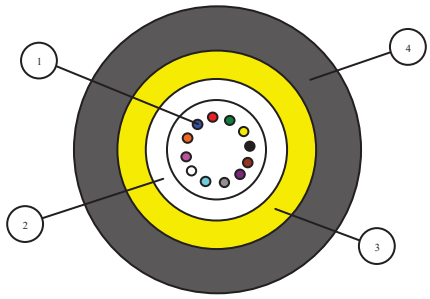
MICRODUCT, DIELECTRIC CENTRAL LOOSE TUBE FO CABLES
A-D(ZN)2Y 2,4,12 E9/125 G657A1

IEC 60794-3 / IEC 60794-5

CABLE DESCRIPTION – APPLICATIONS

Loose tube, outdoor, fully dielectric FO cables with **very small outer diameter** suitable for air-blown installation in microduct systems. The layer of the reinforcing aramide yarns provides safer installation and operation conditions making them suitable also for indoor installation by drawing.

CABLE DESIGN



Note: drawing is not to scale

1. Optical fiber: Coloured glass fiber.

2. Loose tube: Polymer tube, filled with jelly compound.

3. Reinforcing elements: Aramide yarns.

4. Outer jacket: Black PE

No. of fibers	**2**	**6**	**12**
No. of loose tubes	1	1	1
No. of fibers / tube	2	6	12
Outer sheath thickness (nominal) (mm)	0.3	0.3	0.35
Cable overall diameter (nominal) (mm)	2.5	2.5	2.6
Cable weight (nominal) (kg/km)	5	5	6

CABLE MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Parameter	Tested according	Specified value	Acceptance criteria
Tensile strength (short term – installation)	IEC 60794-1-2E1	80 N	Δα reversible, fiber strain < 0.33 %
Crush resistance (short term)	IEC 60794-1-2E3	300 N/10cm	Δα reversible, no damage
Impact resistance	IEC 60794-1-2E4	0.2 N. m, 3 impacts spaced, R= 300 mm	Δα reversible, no damage
Torsion	IEC 60794-1-2E7	± 180°, 3 cycles, 20 N	Δα reversible, no damage
Bending (static)	IEC 60794-1-2E11	R= 15 x D, 6 turns, 3 cycles	Δα reversible, no damage
Repeated bending (dynamic)	IEC 60794-1-2E6	R= 20 x D, 20 N, 25 cycles	Δα reversible, no damage
Temperature cycling	IEC 60794-1-2F1	-30°C to +70°C	Δα < 0.05 dB/km

Note: all optical power measurements are at 1550nm.

IDENTIFICATION COLOUR CODING

Fiber colours per tube

1	2	3	4	5	6	7	8	9	10	11	12
Red	Green	Blue	Yellow	White	Grey	Brown	Violet	Turquoise	Black	Orange	Pink

Note: Other fiber and / or tube colour coding can be provided if requested.