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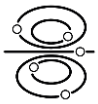
Product Datasheet

Fiber Optic Cable: A-DQ4Y
Blowing MT 12 PA 96 (8x12) G.657.A1 1800N ø5.9mm (ANSI)

Order information

Design	Part number
Blowing MT 12 PA 96 (8x12) G.657.A1 1800N ø5.9mm (ANSI)	543308

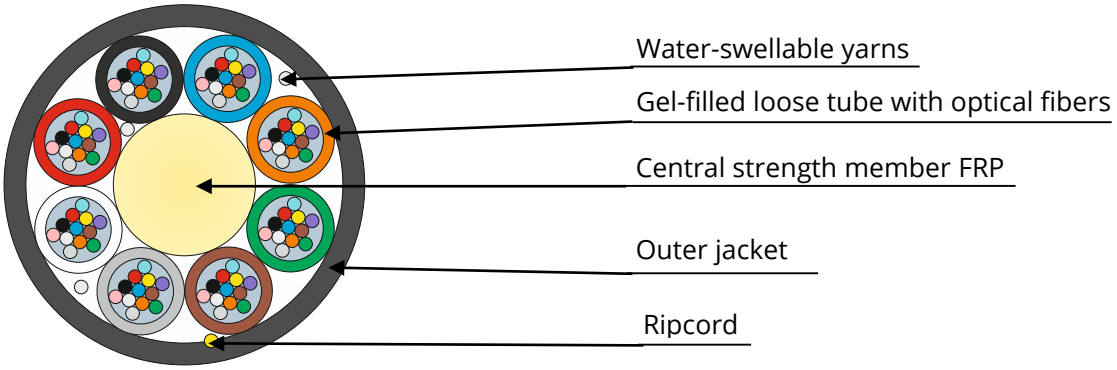
Product Pros



Cables are tested according to IEC 60794-1-21:2015	Performance at the blowing test track confirmed	Tube inner diameter suitable for blowing	All-dielectric design	Tension: installation 1800 N operation 500 N

Application and design

- Blowing into microducts
- Installation into indoor/outdoor cable conduits and trays



Cable consists of stranded core with central strength member (FRP), gel-filled loose tubes with optical fibers. Stranded core is fixed by water-swellable yarns. Outer jacket is made of polyamide PA12. Color of outer jacket is black. Ripcord is laid under the cable jacket.

Color identification of loose tubes and optical fibers is according to ANSI/TIA-598-D-2014

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

Other colors upon request

Cable marking example

Marking is made on each meter of cable

Fiber optic cable	= INCAB EUROPE =	Blowing MT 12	PA	96	8	x	12	G.657.A1	1800N	Ø5.9mm	BATCH	2023	= 00001 m =
		1	2	3	4		5	6	7	8	9	10	11

1	Cable name	7	Installation tension
2	Jacket type	8	Cable diameter
3	Fiber count	9	Batch number
4	Number of loose tubes	10	Year of production
5	Fibers per loose tube	11	Meter marking
6	Fiber type		

Design details

Fiber count		96
Number of loose tubes		8
Fibers per loose tube		12
Cable diameter ±0.2	mm	5.9
Cable weight	kg/km	26.0

Other designs upon request

Operating parameters

Operating temperature	-45°C...+70°C
Installation temperature	-30°C...+50°C
Transportation and storage temperature	-60°C...+70°C
Minimum bending radius	15 x cable diameter
Design life	25 years (per fiber supplier)

Optical fiber

Fiber type	«G.657.A1»
Fiber brand	Corning® SMF 28®ULTRA
ITU-T Recommendation	G.657.A1
Dimensional Specifications	
Core-Clad Concentricity	0.5 µm
Cladding Diameter	125 ±0.7 µm
Cladding Non-Circularity	0.7 %
Coating Diameter	242 ±5 µm
Transmission Specifications	
Attenuation in the cable (dB/km)*:	
1310 nm wavelength (Typical** / Max.)	0.32 / 0.35
1550 nm wavelength (Typical** / Max.)	0.19 / 0.21

* Local attenuation discontinuities caused by cable winding on a reel are allowed.
** Typical attenuation is the real level of optical attenuation of at least 90% fibers after cabling.
Additional information about optical fibers on www.incabeurope.com

Blowing performance

Tube outer/inner diameter, mm	Installation distance, m
14/10	2000

Cable parameters

Parameter	Nominal value		Evaluation criterion
Tensile strength (IEC 60794-1-21 method E1)	Long term calc. OF strain ≤ 0.20 % 0.5 kN	Short term calc. OF strain ≤ 0.60 % 1.8 kN	- Δα* ≤ 0.05 dB - no damage
Crush (IEC 60794-1-21 method E3)	0.1 kN/cm		
Repeated bending (IEC 60794-1-21 method E6)	20 cycles, bending radius ±90°		
Torsion (IEC 60794-1-21 method E7)	- 10 cycles - torsion angle ±360° length 4 m		
Impact (IEC 60794-1-21 method E4)	Impact energy 5 J		
Water penetration (IEC 60794-1-22 method F5C)	Sample length: 3 m Testing time: 24 hours		No water at the cable end
Temperature cycling** (IEC 60794-1-22 method F1)	- temperature range from -45°C to 70°C - 2 cycles - cycle period ≥16 hours		Δα* ≤ 0.05 dB/km
Compound flow (IEC 60794-1-21 method E14)	at 70°C		No dripped compound

* - attenuation increasing at standard wavelengths
** - other temperature range upon request

Safety standards compliance

RoHS: 2011/65/EU; 2015/863/EU	"Restriction on the use of certain Hazardous Substances"
REACH: 1907/2006/EU	"Registration, Evaluation, Authorisation and Restrictions of Chemicals"

Reel packing and marking

Cables are supplied on non-returnable wooden reels. Reel diameter is not less than 40 diameters of the cable. Not less than 2 m of inside end of the cable is fixed to the reel flange. The cable ends are sealed with waterproof covers.

The label on the outer reel flange contains our trademark, cable type, customer's name and PO, reel number, production date, cable length, cable weight net/gross.

The following information is printed on the reel flange: manufacturer's name and website, rotation direction, cable end indication, shipping and handling summary, labels "Fragile" and "Handle with care".

Our cable passport shows: cable type, technical standard number, cable length, fiber type, fiber coloring, fibers per tube, tube identification coloring, final attenuation for all fibers, refractive index of the fiber, fiber manufacturer and production date.

Cable passport is affixed to the inner flange in a plastic bag. Additional information can be included on the passport upon request.

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