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Product Datasheet

Fiber Optic Cable: A-DQ4Y
Blowing MT 12 PA 288 (24x12) G.657.A1 2400N ø7.9mm (ANSI)

Order information

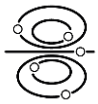
Design	Part number
Blowing MT 12 PA 288 (24x12) G.657.A1 2400N ø7.9mm (ANSI)	543423

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

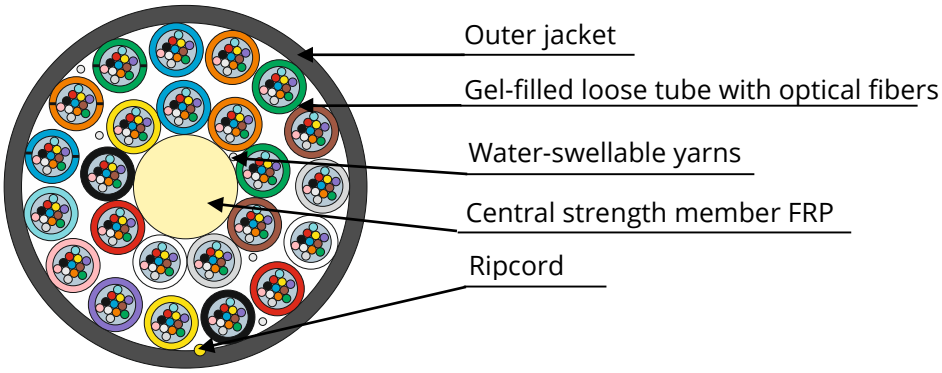


All-dielectric design

Tension: installation 2400N operation 900N

Application and design

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



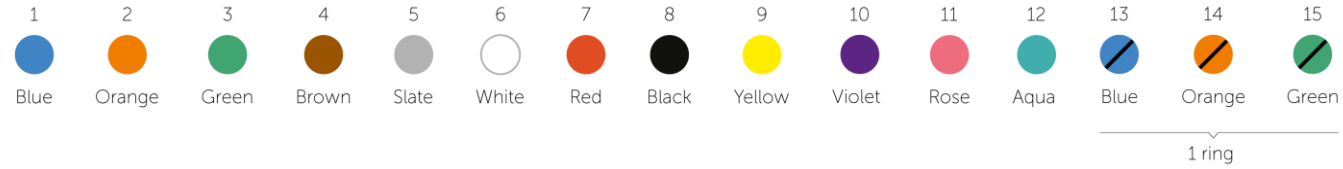
Cable consists of stranded core with central strength member (FRP) and two layers of gel-filled loose tubes with optical fibers. Stranded core is fixed by water-swellable yarns. Outer jacket is made of PA12. Ripcord is laid under the cable jacket. Color of outer jacket is black.

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

Loose tubes 1st layer: 1-9

Loose tubes 2nd layer: 1-15

Optical fibers: 1-12



Other colors upon request

Cable marking example

Marking is made on each meter of cable

Fiber optic cable	= INCAB EUROPE =	Blowing MT 12	PA	288	24	x	12	G.657.A1	2400N	Ø 7.9mm	BATCH	2022	= 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		288
Number of loose tubes		24
Fibers per loose tube		12
Cable diameter ±0.2	mm	7.9
Cable weight	kg/km	41.1

Other designs upon request

Optical fiber

Fiber type	«G.657.A1»
Fiber brand	Corning® SMF 28®ULTRA 200
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	200 ±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

Operating parameters	
Operating temperature (Δα ≤ 0.05 dB/km)	-30°C...+70°C
Operating temperature (Δα ≤ 0.10 dB/km)	-40°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)

Blowing performance	
Tube outer/inner diameter, mm	Installation distance, m
14/10	2000
16/12	2000

Cable parameters			
Parameter	Nominal value		Evaluation criterion
Tensile strength (IEC 60794-1-21 method E1)	Long term calc. OF strain ≤ 0.20 % 0.9 kN	Short term calc. OF strain ≤ 0.60 % 2.4 kN	- Δα* ≤ 0.05 dB after test - no damage
Crush (IEC 60794-1-21 method E3)	0.05 kN/cm		- Δα* ≤ 0.05 dB - no damage
Repeated bending (IEC 60794-1-21 method E6)	20 cycles, bending radius ±90°		- Δα* ≤ 0.05 dB - no damage
Torsion (IEC 60794-1-21 method E7)	- 10 cycles - torsion angle ±360° length 4 m		
Impact (IEC 60794-1-21 method E4)	Impact energy 2 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 -30°C to 70°C - temperature range from -40°C to 70°C - 2 cycles - cycle period ≥16 hours		Δα* ≤ 0.05 dB/km Δα* ≤ 0.10 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.