

10.03.2023

Product Datasheet
 Fiber Optic Cable: BQ(ZS)B2Y
 Aerial ULW CFU PE G.657.A1 1250N Ø 7.0mm (ANSI)

Order information

Design	Part number
Aerial ULW CFU PE 12 (1x12) G.657.A1 1250N Ø 7.0mm (ANSI)*	562214
Aerial ULW CFU PE 24 (2x12) G.657.A1 1250N Ø 7.0mm (ANSI)*	562215
Aerial ULW CFU PE 36 (3x12) G.657.A1 1250N Ø 7.0mm (ANSI)*	562216
Aerial ULW CFU PE 48 (4x12) G.657.A1 1250N Ø 7.0mm (ANSI)*	562217
Aerial ULW CFU PE 72 (3x24) G.657.A1 1250N Ø 7.0mm (200 µm) (ANSI)*	562308
Aerial ULW CFU PE 96 (4x24) G.657.A1 1250N Ø 7.0mm (200 µm) (ANSI)*	562309

* The design is preliminary; its technical parameters are subject to revision. The lead time for this design should be agreed separately.

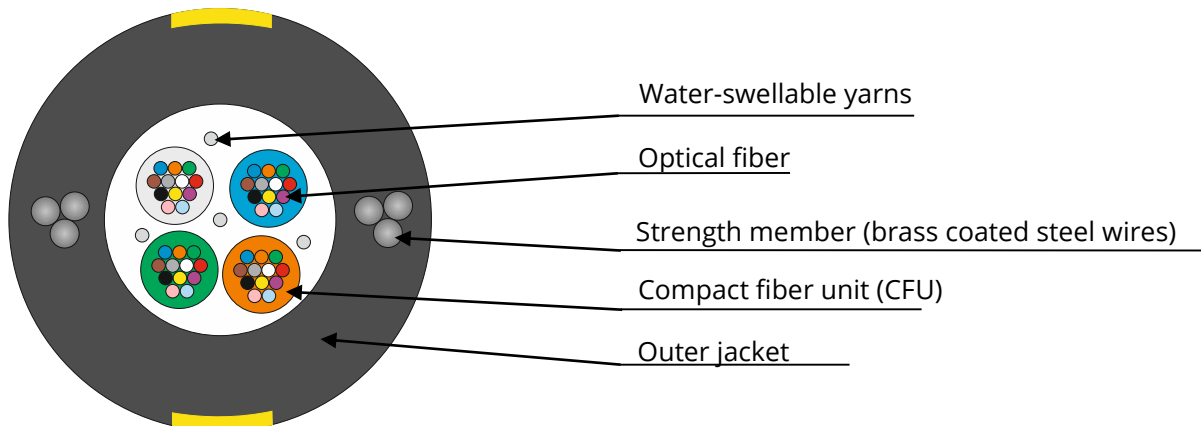
Product Pros



Ultra-light design	Max break < 2000 N Elastic limit > 1250 N	No tools needed, use lightweight glove to strip
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Application and design

- Aerial installation between poles and buildings
- Pulling into underground ducts and sewer pipes
- Installation into indoor/outdoor cable conduits and trays
- Installation along bridges, tunnels and other structures



The cable consists of a bundle of compact fiber units, water-swellable yarns. Outer jacket is made of MDPE. Two strength members (brass coated steel wires 3x0.32 mm) are located inside the jacket. Outer jacket color is black with 2 yellow stripes.

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

Loose tubes: 1,2,3,6

Optical fibers: 1-12

1	2	3	4	5	6	7	8	9	10	11	12
											
Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
13	14	15	16	17	18	19	20	21	22	23	24
											
Blue	Orange	Green	Brown	Slate	White	Red	Natural	Yellow	Violet	Rose	Aqua

1 ring

Other colors upon request

Cable marking example

Marking is made on each meter of cable

Fiber optic cable	=	INCAB EUROPE	=	Aerial ULW CFU	48	4	x	12	G.657.A1	1250 N	Ø 7.0mm	BATCH	2023	= 00001 m =
					1	2	3	4	5	6	7	8	9	10

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

Design details

Fiber type		«G.657.A1»	«G.657.A1 200»			
Fiber count	12	24	36	48	72	96
Number of loose tubes	1	2	3	4	3	4
Number of fillers	3	2	1	-	1	-
Fibers per loose tube		12			24	
Cable diameter ±0.2	mm			7.0		
Cable weight	kg/km		39.4			36.0

Other designs upon request

Operating parameters

Operation temperature	-30°C...+70°C
Installation temperature	-20°C...+50°C
Transportation and storage temperature	-30°C...+70°C
Minimum bending radius	10 x cable diameter

Optical fiber		
Fiber type	«G.657.A1»	«G.657.A1 200»
Fiber brand	Corning®	
ITU-T Recommendation	G.657.A1	
Dimensional Specifications		
Core-Clad Concentricity	0.5 µm	0.5 µm
Cladding Diameter	125 ±0.7 µm	125 ±0.7 µm
Cladding Non-Circularity	0.7 %	0.7 %
Coating Diameter	242 ±5 µm	200 ±5 µm
Transmission Specifications		
Attenuation in the cable (dB/km)*:		
1310 nm wavelength (Typical** / Max.)	0.35 / 0.38	
1550 nm wavelength (Typical** / Max.)	0.21 / 0.30	

* 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

Cable parameters			
Parameter	Nominal value		Evaluation criterion
Tensile strength (IEC 60794-1-21 method E1)	Short Term 1250 N	Long Term 650 N	- $\Delta\alpha^* \leq 0.10$ dB - no damage
Crush (IEC 60794-1-21 method E3)	200 N		
Repeated bending (IEC 60794-1-21 method E6)	20 cycles, bending radius $\pm 90^\circ$		- $\Delta\alpha^* \leq 0.10$ dB - no damage
Impact (IEC 60794-1-21 method E4)	Impact energy 5 J 20 cycles		
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 - 2 cycles - cycle period ≥ 16 hours		$\Delta\alpha^* \leq 0.10$ dB/km

* - 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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