



## AIAI BREAKOUT fiber optic cable, armoured, SHF1, Fire Retardant IEC60332-3-24 Cat.C



**Store at:** -40 to +70 °C

**Install at:** -10 to +50 °C, **Bend minimum:** 20 times O.D.

**Operate at:** -40 to +70 °C, **Bend minimum:** 15 times O.D.

**Crush maximum:** 5000N/100mm

**Impact maximum:** 10J

### Design

**Bare fiber :** 250µm

**Buffer :** 900µm tight buffer

**Colour code :** white

**Protection :** aramide yarns

**Inner sheath :** blue LSZH material, nominal diameter 2.0mm, each numbered for identification

**Cable core :** up to 24 tight buffered fibers are stranded together around a central member and wrapped by a synthetic tape.

**Intermediate jacket :** blue SHF1 UV-Resistant material, nominal thickness 1.0mm

**Armour :** galvanized steel wire braid, coverage ≥85% (tinned copper or bronze braid available upon request)

**Outer jacket :** blue LSZH material, nominal thickness 1.0mm

**Marking :** APS Finland ww/mm – AIAI Breakout Armoured – FIBER OPTIC CABLE [Fibre type and No of fibres] – IEC 60332-3-24  
– Lot No + meter marking [A]

## Environmental properties and Fire Performances

**Degree of acidity of gases :** IEC 60754-1, IEC 60754-2 (pH value  $\geq 4,3$  and Conductivity  $\leq 10\mu\text{S/mm}$ )

**Halogen acid gas :** IEC 60754-1, IEC 60754-2 (Halogen acid gas emission  $\leq 0.5\%$ )

**Smoke Emission :** IEC 61034-2, EN 50268-2 (Transmittance)  $\geq 60\%$

**Toxicity of evolved gas :** EN 50305 9.2

**Flame retardant :** IEC 60332-1-2

**Fire retardant :** IEC 60332-3-24 Cat.C

**Oil resistant :** intermittent splash – permanent resistance available upon request

**UV resistant :** IEC60811-2-1, ASTM-D-2565-92A

## Features

| Fiber count | Inner jacket thickness (mm) | Inner jacket outer diameter (mm) | Outer jacket thickness (mm) | Cable Inner Diameter (mm) | Cable Outer Diameter (mm) | Cable weight (kg/km) | Pulling tension (N) |
|-------------|-----------------------------|----------------------------------|-----------------------------|---------------------------|---------------------------|----------------------|---------------------|
| 4           | 0,5                         | 2,0                              | 1,0                         | 6,8                       | 11,0                      | 180                  | 500                 |
| 6           | 0,5                         | 2,0                              | 1,0                         | 8,8                       | 12,0                      | 200                  | 1000                |
| 8           | 0,5                         | 2,0                              | 1,0                         | 9,8                       | 13,5                      | 230                  | 1500                |
| 12          | 0,5                         | 2,0                              | 1,0                         | 12,0                      | 15,5                      | 280                  | 2000                |
| 16          | 0,5                         | 2,0                              | 1,0                         | 12,6                      | 16,0                      | 300                  | 3000                |
| 24          | 0,5                         | 2,0                              | 1,0                         | 15,0                      | 18,0                      | 380                  | 4000                |

## Ordering and delivery information

| Fiber count | P/N            | Packaging          |
|-------------|----------------|--------------------|
| 4           | OAIAIBA04 ff 1 | drum 2000m (+/-5%) |
| 6           | OAIAIBA06 ff 1 | drum 2000m (+/-5%) |
| 8           | OAIAIBA08 ff 1 | drum 2000m (+/-5%) |
| 12          | OAIAIBA12 ff 1 | drum 2000m (+/-5%) |
| 16          | OAIAIBA16 ff 1 | drum 2000m (+/-5%) |
| 24          | OAIAIBA24 ff 1 | drum 2000m (+/-5%) |

ff = S2 for G652D, A1 for G657A1, M1 for OM1, ME for OM1+, M2 for OM2, M3 for OM3, M4 for OM4, M5 for OM5.

## Other standards of reference

|                  |                                                                                                        |
|------------------|--------------------------------------------------------------------------------------------------------|
| IEC 60092-370    | Electrical installations in ships: Guidance on the selection of cables for telecommunication and data. |
| DNV TAP 827.50/1 | Type Approval Program - Optical Fibre Cables                                                           |
| ABS SVR          | Rules for building and classing. Steel Vessels.                                                        |
| ABS SMR          | Rules for building and classing. Steel vessels under 90 meters.                                        |
| IEC 60793        | General specifications for both multimode and single-mode optical fibres                               |
| IEC 60794        | general specifications for optical fibres cables                                                       |

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