



AIAI Breakout Armoured

Breakoutcable

4 - 24 single fiber members

Galvanized steel wire braid

SHF1, UV

DNV

Application

The separate fibers are tight buffered with aramid yarn and jacketed with numbered LSZH material. Inner jacket and the galvanized steel wire braid represent a further common protection for the fibers. AIAI Breakout Arm is designed for communication and data transmission in shipboard- and offshore installations close to electrical machinery and power lines. It is also well suited for harsh industrial environments.



Construction Fiber

Fiber tube	Tight buffer aramid yarn $\varnothing = 2$ mm, blue, numbered
Assembling	Assembled in concentric layer with syntetic tape around a central member
Inner jacket	Black LSZH compound
Armour	Galvanized steel wire braid $\geq 85\%$ optical cover (alternative tinned Cu-braid)
Jacket	Black SHF1 UV-resistant
Diameter	See table
Weight	See table
Jacket marking	AIAI breakout armoured – FIBER OPTIC CABLE – [Fibre type and no. of fibres] – IEC 60332-3-22 - Lot no – *****

Specifications fiber

Fiber type	Single mode 9/125, Multimode 50/125 or 62,5/125
Temperature range	-40 - +70 [°C]
Temperaturerange at inst.	-10 - +70 [°C]
Tensile strength	1500 [N] ($\Delta\alpha$ reversible) IEC 60794-1-2-E1
Crush resistance	5000 [N/10cm] ($\Delta\alpha$ reversible) IEC 60794-1-2-E3
Impact resistance	5 [J] ($\Delta\alpha$ reversible) IEC 60794-1-2-E4
Torsion	± 1 turns/m acc. to IEC 60794-1-2E11
Bending radius	10 [x outer diam]



Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Flame resistance	IEC 60332-3-22 Cat.A
Flame retardant	IEC 60332-1-2
Weather resistant	IEC 60794-1-2
Smoke emission	IEC 61034-1 & IEC 61034-2
UV-resistant	ISO 4892-2-A: 720hours
Certification	DNV



An alternative to steel wire armour is aramide yarn protection, AIAI Breakout A, or AIAI Breakout, which has no extra protection.

Number of fibre	Diam. inner jacket [mm]	Diam. outer jacket [mm]	Weight [kg/km]
4	7	11.4	142
8	8.5	14	212
24	14.5	19.0	420

Updated

Date	Rev.	Description
23.04.2018	1	Construction
April 2019	2	Additional technical information
13.12.2024	3	Additional information