



AICI up to 24 fibers tight buffered, armoured metallic, LSZH, Fire Retardant IEC60332-3-22 Cat.A



Store at : -40 to +70 °C

Install at : -10 to +50 °C, **Bend minimum :** 15 times O.D.

Operate at : -30 to +70 °C, **Bend minimum :** 10 times O.D.

Crush maximum : 2000N/100mm

Impact maximum : 25J

Design

Bare fiber : 250µm

Buffer : 900µm tight buffer

Colour code : See table

Cable core : up to 24 tight buffered fibers are stranded together. The core is filled with waterblocking glass yarns.

Inner sheath : black SHF1 material

Armour : galvanized steel, bronze or tinned copper wired braid. Coverage ≥80%.

Outer jacket : black SHF1 UV-Resistant material, LSZH

Marking : APS Finland - ww/mm - Fiber Optic Cable AICI "fiber count and type" - SHF1 IEC60332-3-22 Cat A - TK/lot + meter

Environmental properties and Fire Performances

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

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 60332-3-22 Cat.A

Fire resistant : NO

Ozone resistant : upon request

Weather resistant : upon request

LSZH SHF2 : upon request

Oil resistant : intermittent splash – permanent resistance available upon request

MUD resistant : upon request

Water absorption : IEC60502

Water penetration : IEC 60794-1-2-F5-B (inner core only)

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

Ordering and delivery information

Fiber count	SM	OM1	OM2	OM3	OM4	Packaging
2	OAICI02S21	OAICI02M11	OAICI02M21	OAICI02M31	OAICI02M41	drum 2000m (+/-5%)
4	OAICI04S21	OAICI04M11	OAICI04M21	OAICI04M31	OAICI04M41	drum 2000m (+/-5%)
8	OAICI08S21	OAICI08M11	OAICI08M21	OAICI08M31	OAICI08M41	drum 2000m (+/-5%)
12	OAICI12S21	OAICI12M11	OAICI12M21	OAICI12M31	OAICI12M41	drum 2000m (+/-5%)
24	OAICI24S21	OAICI24M11	OAICI24M21	OAICI24M31	OAICI24M41	drum 2000m (+/-5%)

Colour code of fibers

01	02	03	04	05	06	07	08	09	10	11	12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Turquoise
13	14	15	16	17	18	19	20	21	22	23	24
Blue/BR	Orange/BR	Green/BR	Brown/BR	Grey/BR	White/BR	Red/BR	Black/BR	Yellow/BR	Violet/BR	Pink/BR	Turquoise/BR

Features

Fiber count	Inner jacket thickness (mm)	Inner jacket diameter (mm)	Outer jacket thickness (mm)	Cable Diameter (mm)	Cable weight (kg/km)	Pulling tension (N)
2	1.0	4.8	1.0	8.0	95	1000
4	1.0	5.2	1.0	8.5	105	1000
8	1.0	6.0	1.0	9.4	125	1000
12	1.2	6.7	1.3	10.3	145	1500
24	1.2	8.5	1.3	12.1	185	2000

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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