

AICI-I/O/RM-JM

Tight buffered
Flettet ståltråd armering
UV-bestandig
SHF1, F6
DNV / ABS

Bruksområde

Optisk fiberkabel for industrimiljø. Innendørs og utendørs bruk. Ikke egnet for langsiktig forlegning i vann. Ytterkappe av UV-bestandig og værbestandig materiale. Strekkelement av glassfibersnor for fritt oppheng. 0,9 mm tight buffered for enkel avmantling og varig skjøting og konnektering. Fibrene er fargekodet for enkel identifisering. Kappen er merket med fiber- og kabeltype.



Konstruksjon

Fibre	4, 8, 12 or 24
Båndering/filler	Glassgarn
Fargekode	TIA / EIA 598
Fyllkappe	Glass yarn
Innerkappe	SHF1
Armering alt.1	Galvanisert ståltrådfletting
Armering alt.2	Fortinnet Cu-fletting
Armering alt.3	Bronse fletting
Ytterkappe	UV-bestandig SHF1 SHF1

Tekniske data

Driftstemperatur normalt	-40 to +70 [°C]
Temperatur v/installasjon	-10 to +70 [°C]
Slagbestandig	2000 [N/10cm]
Presstyrke	1 impacts, 25J
Vridning	1 turn
Min. bøyeradius	15
Min. bøyeradius fleksibel	15 [x ytre diam]
Min. bøyeradius installert	10 [x ytre diam]

Normer

Halogenfri, max korrosive og giftige gasser	IEC 60754-1 & IEC 60754- 2
Materialegenskaper, isolasjon og kappe	IEC 60092-360 (359)
Flammehemmet buntet kabel	IEC 60332-3-22 Cat.A
Olje- og drivstoffbestandig	IEC 60811-3-1 IRM 902 23°C / 7 dager, 70°C / 4h
Kjemikalie bestandig	Mineral oils - IRM 902 (IEC 60811-2-1): 7days/23°C, 4hours/70°C Diesel -
UV-bestandig	ASTM G 154
Sertifisering	DNV / ABS



Table Fiber

Dimensjoner fiberkabel

Antall fibre	Ytterdiam. (mm)	Vekt (kg/km)	Strekstyrke (N) (ved installasjon/i drift)
4	8.5	105	700/250
8	9.4	125	800/350
12	10.3	145	1,200/500
24	12.1	185	1,700/750

Fiber data

Egenskaper	MM 62.5 OM1	MM 50 OM2	MM 50 OM3	MM 50 OM4
Core Diameter	62.5 ± 2.5 µm	50 ± 2.5 µm	50 ± 2.5 µm	50 ± 2.5 µm
Core Diameter	62.5 ± 2.5 µm	50 ± 2.5 µm	50 ± 2.5 µm	50 ± 2.5 µm
Core non-circularity	< 5%	< 5%	< 5%	< 5%
Cladding diameter	125 ± 1.0 µm	125 ± 1.0 µm	125 ± 1.0 µm	125 ± 1.0 µm
Coating diameter	242 ± 5 µm	242 ± 5 µm	242 ± 5 µm	242 ± 5 µm
Cladding non-circularity	<0.7%	<0.7%	<0.7%	<0.7%
Core/Cladding concentricity error	<1 µm	<1 µm	<1 µm	<1 µm
Coating/cladding concentricity error	<10 µm	<6 µm	<6 µm	<6 µm
Numerical Aperture	0.275 ± 0.015 µm	0.00 ± 0.015 µm	0.200 ± 0.015 µm	0.200 ± 0.015 µm
Attenuation @ 850 nm	<3.50 dB/km	<2.89 dB/km	<2.89 dB/km	<2.89 dB/km
Attenuation @1300 nm	<1.00 dB/km	<0.80 dB/km	<0.80 dB/km	<0.80 dB/km
Bandwidth @ 850 nm	>200 MHz*km	>500 MHz*km	>1500 MHz*km	>3500 MHz*km
Bandwidth @ 1300 nm	>500 MHz*km	>500 MHz*km	>500 MHz*km	>500 MHz*km
Effective Modal Bandwidth (EMB)@ 850 nm	-	-	>2000 MHz*km	>4700 MHz*km
Fibre capacity 10GBase-SR	33 m	83 m	300 m	550 m
Fibre capacity 1GBase-SR	274 m	600 m	1000 m	1100 m
Fibre cap. 40GBase-SR4/100Base-RS10	-	-	140 m	170 m
Proof test	>100kpsi	>100kpsi	>100kpsi	>100kpsi

Egenskaper	SMR ITU-T G652D	SMR ITU-T G657A	SMR ITU-T G657B / -B2	SMR NZD ITU-T G655.E
Mode field Diameter @ 1310 nm	9,0±0,4 µm	9,0±0,4 µm	8,9±0,4 µm	-
Mode field Diameter @ 1310 nm	9,0±0,4 µm	9,0±0,4 µm	9,0±0,4 µm	-
Mode field Diameter @ 1550 nm	10,1±0,5µm	10,1±0,5µm	9,9±0,5µm	9,2±0,5µm
Cladding diameter	125±0,7µm	125±0,7µm	125±0,7µm	125±1,0µm
Coating diameter	242±7 µm	242±7 µm	242±7 µm	242±7 µm
Cladding non-circularity	≤ 0,7 %	≤ 0,7 %	≤ 0,7 %	≤ 0,7 %
Core/Cladding concentricity error	≤ 0,5 µm	≤ 0,5 µm	≤ 0,5 µm	≤ 0,5 µm
Coating/cladding concentricity error	≤ 12 µm	≤ 12 µm	≤ 12 µm	≤ 12 µm
Cable Cut off wavelength	≤ 1260 nm	≤ 1260 nm	≤ 1260 nm	≤ 1300 nm
Zero dispersion wavelength (λ_0)	1300-1322 µm	1300-1322 µm	1300-1324 µm	1440 µm
Dispersion slope (S_0) @ (λ_0)	≤ 0,090 ps/(nm ² * km)	≤ 0,090 ps/(nm ² * km)	≤ 0,092 ps/(nm ² * km) - Chromatic dispersion @ 1285-1330 nm ≤ 3,5 ps/(nm * km) ≤ 3,5 ps/(nm * km) -	-
Chromatic dispersion @ 1285-1330 nm	≤ 3,5 ps/(nm * km)	≤ 3,5 ps/(nm * km)	-	-
Chromatic dispersion @ 1550 nm	≤ 18 ps / (nm * km)	≤ 18 ps / (nm * km)	-	-
Chromatic dispersion @ 1625 nm	≤ 22 ps/(nm * km)	≤ 22 ps/(nm * km)	-	-
Chromatic dispersion @ 1530-1565 nm	-	-	-	5,5 - 10 ps/(nm * km)
Chromatic dispersion @ 1565-1625 nm	-	-	-	5,5 - 10 ps/(nm * km)
PMD @ 1550 nm	≤ 0,1 ps/√ km	≤ 0,1 ps/√ km	≤ 0,1 ps/√ km	≤ 0,2 ps/√ km
Attenuation @ 1310 nm	≤ 0,35 dB/km	≤ 0,35 dB/km	≤ 0,35 dB/km	≤ 0,40 dB/km
Attenuation @ 1383nm	≤ 0,35 dB/km	≤ 0,35 dB/km	≤ 0,35 dB/km	≤ 0,40 dB/km
Attenuation @ 1550 nm	≤ 0,25 dB/km	≤ 0,25 dB/km	≤ 0,25 dB/km	≤ 0,28 dB/km

Egenskaper	SMR ITU-T G652D	SMR ITU-T G657A	SMR ITU-T G657B / -B2	SMR NZD ITU-T G655.E
Attenuation @ 1625 nm	≤ 0,28 dB/km	≤ 0,28 dB/km	≤ 0,28 dB/km	≤ 0,28 dB/km
Attenuation with bending:	-	≤ 0,25 dB	≤ 0,03 dB	-
Mandreal Radius 15mm @1550 10 turns	-	≤ 0,25 dB	≤ 0,03 dB	-
Mandreal Radius 15mm @1625 10 turns	-	≤ 1,0 dB	≤ 1,0 dB	-
Mandreal Radius 10mm @1550 1 turn	-	≤ 0,75 dB	≤ 0,1 dB	-
Mandreal Radius 10mm @1625 1 turn	-	≤ 1,5 dB	≤ 0,2 dB	-
Mandreal Radius 7,5mm @1550 1 turn	-	-	≤ 0,5 dB	-
Mandreal Radius 7,5mm @1625 1 turn	-	≥ 100 kpsi	≤ 1,0 dB	-
Proof test	≥ 100 kpsi	≥ 100 kpsi	≥ 100 kpsi	≥ 100 kpsi

Produkt nr.Fiber

62.5/125	50/125 OM2	50/125 OM3	50/125 OM4	9/125
1028888 - G4-62,5/125 AICI-I/O/RM-JM/SHF1	1028884 - G4-OM2-50/125 AICI-I/O/RM-JM/SHF1	1028892 - G4-OM3 AICI-I/O/RM-JM/SHF1	1028860 - G4-OM4-50/125 AICI-I/O/RM-JM/SHF1	1028880 - G4-9/125 AICI-I/O/RM-JM/SHF1
1028889 - G8-62,5/125 AICI-I/O/RM-JM/SHF1	1028885 - G8-OM2-50/125 AICI-I/O/RM-JM/SHF1	1028893 - G8-OM3 AICI-I/O/RM-JM/SHF1	1028861 - G8-OM4-50/125 AICI-I/O/RM-JM/SHF1	1028881 - G8-9/125 AICI-I/O/RM-JM/SHF1
1028890 - G12-62,5/125 AICI-I/O/RM-JM/SHF1	1028886 - G12-OM2-50/125 AICI-I/O/RM-JM/SHF1	1028894 - G12-OM3 AICI-I/O/RM-JM/SHF1	1028862 - G12-OM4-50/125 AICI-I/O/RM-JM/SHF1	1028882 - G12-9/125 AICI-I/O/RM-JM/SHF1
1028891 - G24-62,5/125 AICI-I/O/RM-JM/SHF1	1028887 - G24-OM2-50/125 AICI-I/O/RM-JM/SHF1	1028895 - G24-OM3 AICI-I/O/RM-JM/SHF1	1028863 - G24-OM4-50/125 AICI-I/O/RM-JM/SHF1	1028883 - G24-9/125 AICI-I/O/RM-JM/SHF1

Versjon

Dato	Rev.	Beskrivelse
10.03.2015	1	Armour
30.03.2016	2	Dimensions
14.10.2016	3	Fire properties (BS)
23.01.2017	4	Fiber data
23.10.2018	5	Part numbers
26.02.2020	6	Norms
23.09.2020	7	Norsk utgave
26.09.2023	8	Fargekode