

Fibre Optic Shipboard Cable, LSZH

Low Smoke, Zero Halogen MIL-PRF-85045, SM / MM 1,4 and 8 fibres

Cable variants

MIL SPEC Part Number	Number of Fibers	Installation (Short Term) Pull Strength Lbs (Newtons)	Installation (Short Term) Bend Radius in (cm)	Operating (Long Term) Tension Lbs (Newtons)	Operating (Long Term) Bend Radius in (cm)	Cable O.D. in (mm)	Approx. Cable Weight Lbs/Mft (Kg/Km)
Thermoplastic jacketed cables							
M85045/13-01	8	2775 (625)	9.0 (3.5)	555 (125)	18.0 (7.0)	11.3 (0.445)	115 (77)
M85045/13-02	8	2775 (625)	9.0 (3.5)	555 (125)	18.0 (7.0)	11.3 (0.445)	115 (77)
M85045/15-01	4	2015 (454)	6.6 (2.6)	418 (94)	13.2 (5.2)	8.26 (0.325)	60 (40)
M85045/15-02	4	2015 (454)	6.6 (2.6)	418 (94)	13.2 (5.2)	8.26 (0.325)	60 (40)
M85045/16-01	1	220 (50)	1.6 (.63)	100 (22)	3.2 (1.26)	2.0 (0.079)	4.5 (3.0)
M85045/16-02	1	220 (50)	1.6 (.63)	100 (22)	3.2 (1.26)	2.0 (0.079)	4.5 (3.0)
Thermoset jacketed cables							
M85045/17-01	8	2775 (625)	9.0 (3.5)	555 (125)	18.0 (7.0)	11.3 (0.445)	115 (77)
M85045/17-02	8	2775 (625)	9.0 (3.5)	555 (125)	18.0 (7.0)	11.3 (0.445)	115 (77)
M85045/18-01	4	2015 (454)	6.6 (2.6)	418 (94)	13.2 (5.2)	8.26 (0.325)	60 (40)
M85045/18-02	4	2015 (454)	6.6 (2.6)	418 (94)	13.2 (5.2)	8.26 (0.325)	60 (40)

Fibre Performance

	Multimode	Single-mode
Applicable Specification	MIL-PRF-49291/6	MIL-PRF-49291/7
Fiber Designator	62G	010N
Core Diameter	62.5um ± 3um	8.3um Nominal
Cladding Diameter	125um ± 1um	125um ± 1um
Coating Diameter	250um ± 15um	250um ± 15um
Buffer Diameter	900um ± 50um	900um ± 50um
Numerical Aperture	0.275 nominal	N/A
Mode Field Diameter	N/A	9.3um ± 0.5um
Max. Attenuation	3.5 dB/km @ 850nm 1.5 dB/km @ 1300nm	1.0 dB/km @ 1310nm 1.0 dB/km @ 1550nm
Min. Bandwidth (overfilled)	350 MHz*km @ 850nm 800 MHz*km @ 1300nm	N/A N/A
Dispersion	N/A	3.2ps/nm-Km @ 1310nm 22ps/nm-Km @ 1550nm
Proof Test	100,000 psi	100,000 psi
Radiation Resistance	per MIL-PRF-49291	per MIL-PRF-49291

Cable Specification

	Thermoplastic	Thermoset
Applicable Specifications	M85045/13 & /15	M85045/17 & /18
Strength Member	Water-blocked aramid yarn	Water-blocked aramid yarn
OFCC nom. diameter	2.0 mm (0.079 in)	2.0 mm (0.079 in)
Storage Temperature	-40°C to +70°C	-40°C to +75°C
Operating Temperature	-28°C to +65°C	-28°C to +65°C
Life Aging	240 hrs @ 110°C	240 hrs @ 110°C
Smoke Index, NES 711	< 25	< 25
Toxicity, NES 713	< 5	< 5
Halogen Content	< 0.2% by weight	< 0.2% by weight
Flammability	UL-1685 NFPA 262 (Modified)	UL-1685 NFPA 262 (Modified)
Crush Resistance	2,000N per cm of outer cable diameter	2,000N per cm of outer cable diameter
Abrasion Resistance	250 cycles	750 cycles
Low Temp Flexibility	-28°C	-40°C
Tempest	Comply	Comply
Fluid Immersion		
Lubricating Oil	24 hrs @ 75°C	24 hrs @ 100°C
Fuel Oil	24 hrs @ 35°C	24 hrs @ 100°C
Cable-to-cable abrasion	150 cycles	500 cycles

For further information and to discuss your application please contact:-

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Specifications subject to change without notice.

Shipboard Cable – Jan 2019

ISO9001:2015
for the distribution
of fibre optic
products and the
manufacture of
fibre optic
assemblies.



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