AFT micro wave

Data Sheet   MFOC-LKS

Multimode Fiber Optic Cable

Author	C. Weil
Revision	02
Release	09.04.2024
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- Low-loss multimode fiber optic cable

- 2mm bundle of 70µm fibers

- FSMA fiber optic connectors

- Available in standard length of 2.5m, 5m, 10m, 15m, 20m, 30m, and 50m. Customized length on request.

- Designed for use with AFT´s high-sensitivity optical arc detectors

- RoHS compliant to directive 2011/65/EU with exemption 13a for Pb in glass for optical application
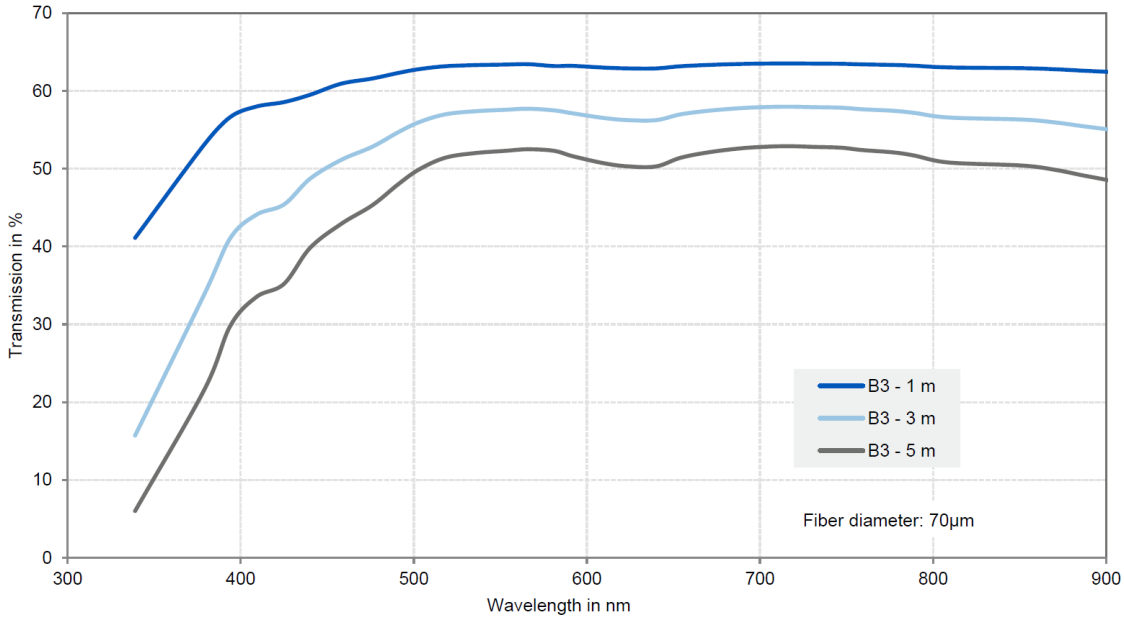
Ordering Code

MFOC-LKS - **XXX**

Variable	Description	Example :
XXX	Cable length in meter x10	**MFOC-LKS-100** for a cable length of 10m

Parameter	Value
Fiber Type	Step-index multimode fiber
Material Core	High-purity optical glass
Fiber Diameter	70 µm ± 4 µm
Bundle Diameter	2 mm
Numerical Aperture	0.54 (λ = 587 nm)
Effective Opening angle 2α	64° (λ = 587 nm, 70µm single fiber, 1m length)
Optical Attenuation	< 250 dB/km (λ = 553 nm, 70µm single fiber)
Spectral Transmission	see **Fig. 1**
Coating Outer Diameter	3.85 mm
Coating Material	HFFR, black, light-proof
Minimum Bending Radius	50 mm
Operational Temperature Range	-20°C to + 80°C
Connector Type	FSMA, 1/4"-36 UNS female thread, see **Fig. 2**
Cable Length Tolerance	-0% +10%

Important Notes:

⚠ <u>Warning</u>: Do not pull, twist or bend the cable with a radius less than 50mm, as it can permanently destroy the cable.

⚠ <u>Warning</u>: The cable is not designed for the use in high x-ray or gamma ray environment, as high energy radiation can opaque the fibers.

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Fig.1 : Typical spectral transmission of a glued fiber bundle (for reference only).
Source: Schott AG.
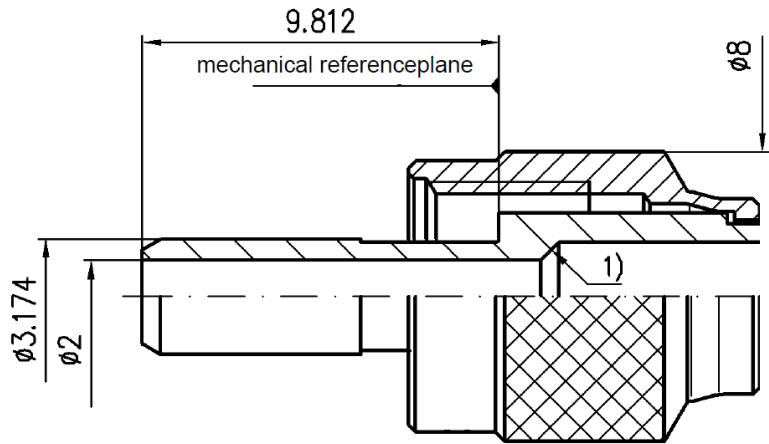
Fig. 2 : Interface dimensions of FSMA Connector, compatible to CECC 86104-801.
All dimensions in mm.

Rev.	Remark	Date	Name
00	Initial	18.01.2016	C. Weil
01	Length 15m added	19.04.2016	C. Weil
02	Cable length tolerance added	08.06.2018	C. Weil
	Formal update	07.03.2022	C. Weil
	Fig. 2 added	09.04.2024	J. Schwarzhorn