

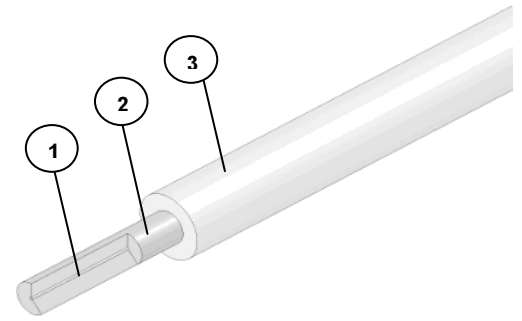
HUBER+SUHNER® DATA SHEET

FIBER OPTICS CABLE E9/125/250



Description

Fibre type: Single Mode Optical Fiber according to:
ITU G.652-D, IEC 60793-2-50 Type B1.3,
DIN-VDE 0888 part 3



Technical Data

Construction

Pos.	Description / Material	Size
1	Core	8.3 µm
2	Cladding	125 µm
3	Coating Material: acrylate	245 µm

Optical Characteristics

Conditions

		Standard		
Attenuation (typical)	1310 nm	≤ 0.40	(≤ 0.36)	dB/km
	1383 nm	≤ 0.40	(≤ 0.36)	dB/km *)
	1550 nm	≤ 0.25	(≤ 0.22)	dB/km
	1625 nm	≤ 0.25	(≤ 0.23)	dB/km
Chromatic dispersion	1285-1330nm	≤ 3.5		ps/nm*km
	1550nm	≤ 18.0		ps/nm*km
Fibre cut-off wavelength λ_c	Standard	1100-1330		nm
	Special application	1100-1280		nm
Cable cut-of wavelength λ_{cc}	Standard	≤ 1260		nm
	Special application	≤ 1180		nm
Polarization mode dispersion (PMD)	Link value	≤ 0.15		ps/√km
	Individual	≤ 0.20		ps/√km
Zero dispersion wavelength λ_0		1300-1324		nm
Zero dispersion slope S_0 at λ_0		≤ 0.093		ps/nm ² ·km
Mode-field diameter	1310nm	9.2 ± 0.4		µm
	1550nm	10.4 ± 0.8		µm
Group index of refraction typical	1310nm	1.466 – 1.477		
	1550nm	1.467 – 1.482		

*) post H₂ aging

Geometrical Characteristics

Cladding diameter	125 ± 1	µm
Coating diameter, nature	245 ± 10	µm
Concentricity error core / cladding	≤ 0.6	µm
Concentricity error cladding / coating	≤ 12.5	µm
Cladding non-circularity	≤ 1	%
Coating non-circularity	≤ 6	%

Mechanical Characteristics

Conditions

Tensile proof test	fibre elongation ≤ 1%	≥ 8.8 (100)	N (Kpsi)
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Environmental Characteristics

Conditions

Temperature dependence Induced attenuation	1310, 1550 & 1625nm -60°C to +85°C	≤ 0.05	dB/km
Temperature and humidity cycling Induced attenuation	1310, 1550 & 1625nm -10°C to +85°C, 95% R.H.	≤ 0.05	dB/km
Water immersion Induced attenuation	1310, 1550 & 1625nm 23°C for 30 days	≤ 0.05	dB/km
Damp heat Dependence Induced attenuation	1310, 1550 & 1625nm 85°C, 85% R.H., 30 days	≤ 0.205	dB/km

The HUBER+SUHNER group is certified according to ISO 9001 and ISO 14001

WAIVER!
All product data is not binding and subject to change at any time. The products of HUBER+SUHNER are tested in a laboratory environment against specific standards and test procedures. Any guarantee for specific applications or environmental conditions requires a separate written agreement.



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