

# **Universal Cable UC2000 ..**

## **Fibre Specification**

### **Graded Index Fibre 9/125 acc. to DIN EN 188 101**

**Material**

<b>Fibre material</b>	germanium doped silica
<b>Primary coating</b>	double layer UV hardened acrylate
<b>Process</b>	PCVD

**Dimensions**

Core diameter at 1310 nm	µm	9.0 – 9.5
Tolerance	µm	± 0,5
Core/cladding concentricity error	µm	≤ 1
Cladding diameter	µm	125
Tolerance	µm	± 2
Cladding non-circularity	%	≤ 2
Diameter over coating	µm	245
Tolerance	µm	± 10

**Transmission Properties and optical characteristics**

Fibre type	Attenuation dB/km	Dispersion ps/nm*km	Cut-off wavelength	Wavelength nm	Standard
9/125	≤ 0.4 ≤ 0.4	≤ 3.5 ≤ 20	$\lambda_c < 1270$ nm	1300 1550	ITU-T Rec.G 652

Index of refraction (IOR)	@1310 nm @1550 nm	1.4677 1.4682
Zero-dispersion wavelength	nm	1300 - 1324
Zero-dispersion slope	ps/(nm*km)	≤ 0.093
Cut-off wavelength (fibre) $\lambda_c$	nm	1170 - 1315

**Mechanical properties**

Proofstress level	GN/m <sup>2</sup>	0.7
Proofstrain for 1 second (equivalent)	%	1.0
minimum bending radius	mm	30
Loss increase of 100 turns of fibre loosely-wound with 30 mm radius, measured at 850 nm and 1310 nm	dB	< 0.1

**Standard**

The fibres are acc. to DIN EN 188 100, DIN EN 188 101 and ITU-T G. 652.