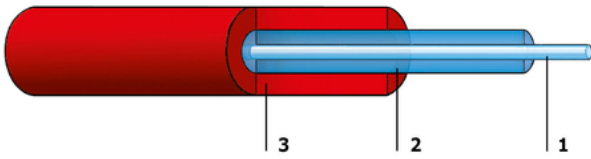# Single-mode fibre, E9/125/250, OS2 / G.652.D
low attenuation
in accordance with ITU-T G.652.D, IEC 60793-2-50 Type B1.3, equates to EN 50173:2011 OS2

DÄTWYLER

1 Core
2 Cladding
3 Coating

DESCRIPTION

Full-spectrum single-mode fibre in accordance with ITU-T G.652.D with optimised transmission characteristics.
Suitable for the operating wavelengths in all FTTx networks.
Tight dispersion tolerance to support low-cost upstream transmitters.
Superior bending properties allow for easy installation.
Backward compatible with installed base of G.652 fibre.
Enables a cost-effective FTTx deployment: provides extra distance and margin and reduces field equipment and maintenance costs.

APPLICATION

LAN backbone, data centre, city network, access network, FTTx network, long haul network (WAN).

OPTICAL PROPERTIES

Transmission characteristics

Wavelength	[nm]	1310	1383	1550	1625
Maximum attenuation (cabled)	[dB/km]	0.34	0.34*	0.21	0.23
		*post hydrogen aging performance			
Maximum Chromatic Dispersion	[ps/(nm x km)]	3,5		18	23
Zero Dispersion Wavelength λ_0	[nm]	$1304 \leq \lambda_0 \leq 1324$			
Maximim Zero Dispersion Slope So	[ps/(nm^2 x km)]	0.092			
Mode-Filed Diameter	[µm]	9.2 +/- 0.4		10.4 +/- 0.5	
Maximum Cable Cut-off Wavelength λ_{CC}	[nm]	1260			

Polarisation Mode Dispersion

PMD Link Design Value	[ps/√km]	≤ 0.04			
Max. individual fibre PMD	[ps/√km]	≤ 0.1			
Max. individual cable PMD	[ps/√km]	≤ 0.2			
Refractive Index		1.4676		1.4682	

MECHANICAL PROPERTIES

Geometrical and mechanical characteristics

Cladding diameter	[µm]	125.0 +/- 0.7
Maximum Core/Cladding Concentricity Error	[µm]	0.5
Maximum Cladding Non-Circularity	[%]	0.7
Coating diameter	[µm]	245 +/-5
Maximum Cladding/Coating Concentricity Error	[µm]	12
Operating temperature range	[°C]	-60 to +85
Test load	[kpsi]	100

STANDARDS

Post hydrogen aging	IEC 60793-2-50-C.5
Fiber specifications	ITU-T G.652.D, IEC 60793-2-50 Category B-652.D

VERSIONS

Article No.