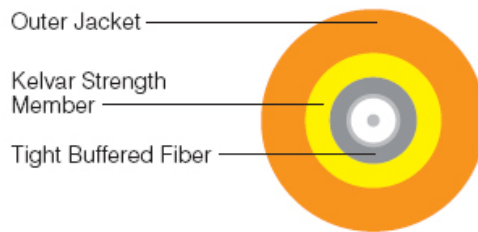


SIMPLEX CABLE

Simplex fiber cable is a single tight buffer cable available in both singlemode and multimode type. These cables are optimized for ease of connectorization and used as jumpers in intrabuilding distribution. Go4Fiber offers choices of well-known brand as well as some quality economic alternatives. All cables meet industry performance specifications. Custom cable jacket colours and special fiber types are available for nearly all cables below. Corning simplex cable are available upon request, please contact us for more details.

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Cable Structure



Cable mechanical data

Fiber Count	Cable Diameter (mm)	Weight (kg/km)	Min. Bending Radius (mm)		Max. Tension (N)	
			Dynamic	Static	Short Term	Long Term
1	2.0	3.4	30	20	150	80
	3.0	6.2	45	30		

Optical Characteristics for Singlemode 9/125um

Characteristics	Conditions	Specific Values		Units
Optical characteristics				
Attenuation	1310nm	≤0.36		[dB/km]
	1550nm	≤0.22		[dB/km]
Dispersion coefficient	1285~1340nm	-3.0 to 3.0		[ps/(nm · km)]
	1550nm	≤18		[ps/(nm · km)]
Zero dispersion wavelength		1302 to 1322		[nm]
Zero dispersion slope		≤0.091		[ps/(nm ² · km)]
Polarization Mode Dispersion		≤0.2		[ps/√km]
PMD Maximum Individual Fiber		≤0.08		[ps/√km]
PMD Link Design Value		≤0.08		[ps/√km]
Fiber cutoff wavelength λ_c		1180 to 1330		[nm]
Fiber cutoff wavelength λ_{cc}		≤1260		[nm]
Mode field diameter (MFD)	1310nm	9.2±0.4		[um]
	1550nm	10.4±0.8		[um]
Group index of refraction (Typical)	1310nm	1.466		
	1550nm	1.467		
Geometrical characteristics				
Cladding diameter		125.0±1.0		[um]
Cladding non-circularity		≤1.0		%
Coating diameter		242±7		[um]
Coating/ cladding concentricity error		≤12.0		[um]
Coating non-circularity		≤6.0		%
Core/ cladding concentricity error		≤0.6		[um]
Curl (radius)		≥4		[m]
Environmental Characteristics				
	1310nm, 1550nm			
Temperature dependence induced attenuation	-60°C to +85 °C	≤0.05		[dB/km]
Temperature-humidity cycling induced attenuation	-10°C to +85 °C, 90% R.H	≤0.05		[dB/km]
Damp heat dependence induced attenuation	85 °C, 85% R.H., 30days	≤0.05		[dB/km]
Watersoak dependence induced attenuation	20 °C for 30days	≤0.05		[dB/km]

Optical Characteristics for Multimode 50/125um

Characteristics	Conditions	Specific Values			Units
			OM3	OM4	
Optical characteristics					
Attenuation	850nm	≤3.0	≤3.2	≤3.2	[dB/km]
	1300nm	≤1.0	≤1.0	≤1.0	[dB/km]
Overfilled Modal Bandwidth	850nm	≥500	≥1500	≥3500	[MHz · km]
	1300nm	≥500	≥500	≥500	[MHz · km]
Numerical Aperture (NA)		0.200±0.015			
Group index of refraction (Typical)	850nm	1.482			
	1300nm	1.477			
Geometrical characteristics					
Core diameter		50±2.5			[um]
Cladding diameter		125.0±1.0			[um]
Cladding non-circularity		≤1.0			%
Coating diameter		242±7			[um]
Coating/ cladding concentricity error		≤12.0			[um]
Coating non-circularity		≤6.0			%
Core/ cladding concentricity error		≤1.5			[um]
Environmental Characteristics					
	850nm, 1300nm				
Temperature dependence induced attenuation	-60°C to +85 °C	≤0.10			[dB/km]
Temperature-humidity cycling induced attenuation	-10°C to +85 °C, 90% R.H	≤0.20			[dB/km]
Damp heat dependence induced attenuation	85 °C, 85% R.H., 30days	≤0.20			[dB/km]
Watersoak dependence induced attenuation	20 °C for 30days	≤0.20			[dB/km]

Optical Characteristics for Multimode 62.5/125um

Characteristics	Conditions	Specific Values	Units
Optical characteristics			
Attenuation	850nm	≤2.7	[dB/km]
	1300nm	≤0.6	[dB/km]
Overfilled Modal Bandwidth	850nm	≥200	[MHz · km]
	1300nm	≥600	[MHz · km]
Numerical Aperture (NA)		0.275±0.015	
Group index of refraction (Typical)	850nm	1.496	
	1300nm	1.491	
Geometrical characteristics			
Core diameter		62.5±2.5	[um]
Cladding diameter		125.0±1.0	[um]
Cladding non-circularity		≤1.0	%
Coating diameter		242±7	[um]
Coating/ cladding concentricity error		≤12.0	[um]
Coating non-circularity		≤6.0	%
Core/ cladding concentricity error		≤1.5	[um]
Environmental Characteristics			
Temperature dependence induced attenuation	850nm, 1300nm		
	-60°C to +85 °C	≤0.10	[dB/km]
Temperature-humidity cycling induced attenuation	-10°C to +85 °C, 90% R.H	≤0.20	[dB/km]
Damp heat dependence induced attenuation	85°C, 85% R.H., 30days	≤0.20	[dB/km]
Watersoak dependence induced attenuation	20°C for 30days	≤0.20	[dB/km]

Ordering Information

