

## DIGITUS® Fiber Optic Installation Cables, Singlemode



✓ Singlemode 09/125 µm

✓ OS2

✓ Flame retardant & rodent protection

✓ LSZH sheath

### Abstract

DIGITUS® Fiber Optic Installation Cables, Singlemode, OS2 09/125 µm

### Features

- Singlemode
- Universally useable, for indoor and outdoor use
- Central loose tube cable
- Dry cable cores
- Color coded fibers
- Available with 4, 8, 12 or 24 fibers
- Glass yarn armored
- Metal free
- Non-metal rodent protection
- UV-resistant
- Halogen-free, flame resistant as per IEC 332-3 C
- Longitudinally and laterally water-resistant
- Storage temperature: -30 °C up to +70 °C
- Cord rewind temperature: -10 °C up to +50 °C
- Operating temperature: -30 °C up to +70 °C

### Product Overview

DIGITUS® offers a wide range of high quality fiber optic installation cables. Practically every request and every requirement is covered by the broad range of fibers and cable types. The DIGITUS® product range supplies all cable types, whether with 4, 8, 12 or 24 fibers or in different qualities as OM1, OM2, OM3, OM4 and OS2. The DIGITUS® fiber optic installation cables guarantee the best performance and fail-safety. They are suitable for local wiring applications like Local Area Networks (LAN) with Video-, Data- and Voice communication via LED, VCSEL or Fabry-Perot laser sources.

### Geometric and Mechanical Properties

Geometric and Mechanical Properties		
	G.652.B	G.652.D
Fiber sheath diameter	125 ± 1.0 μm	125 ± 0.7 μm
Core/sheath concentricity error	≤ 0.6 μm	≤ 0.5 μm
Unroundness of sheath	≤ 1.0 %	≤ 0.7 %
Coating diameter	242 ± 7 μm	
Undroundness of coating	≤ 5 %	
Coating/sheath concentricity error	≤ 12 μm	
Test load	≥ 8.8 N / ≥ 1% / ≥ 100 Kpsi	

### Optical Properties

Optical Properties			
		G.652.B	G.652.D
Mode field diameter (μm)	1310 nm	9.0 ± 0.4	9.0 ± 0.4
	1550 nm	10.1 ± 0.5	10.1 ± 0.5
Typical attenuation (dB/km)	1310 nm	≤ 0.35	≤ 0.35
	1383 nm	≤ 1.0	≤ 0.35
	1460 nm	-	≤ 0.25
	1550 nm	≤ 0.23	≤ 0.21
	1625 nm	≤ 0.24	≤ 0.23
Chromatic dispersion coefficient (ps/nm.km)	1285-1330 nm	≤  3	
	1550 nm	≤ 18	
	1625 nm	≤ 22	
Dispersion zero-crossing (nm)	-	1300-122	
Increase in dispersion zero-crossing (ps /nm <sup>2</sup> km)	-	≤ 0.092	≤ 0.090
Index of refraction (IOR)	1310 nm	1.467	
	1550 nm	1.468	
Threshold wavelength (nm)	-	≤ 1260	
PMD route-layout value (ps/√ km)	1550 nm	≤ 0.2	≤ 0.1

### Compliant according to the standards

- IEC 60793-2-50
- ITU-T G.652.B
- G.652.D
- Telcordia GR-20-CORE
- ANSI/ICEA S-87-640
- RUS 7CFR 1755.900
- ANSI/TIA/EIA-492CAAA

### Product Number Information

#### Fiber Optic Installation Cables, Singlemode, OS2 09/125 μm

DK-39041-U	Universal Cable, OS2, 4 fibers, AI-DQ(ZN)BH, 4E09/125μ, color yellow, length 1m
DK-39081-U	Universal Cable, OS2, 8 fibers, AI-DQ(ZN)BH, 8E09/125μ, color yellow, length 1m
DK-39121-U	Universal Cable, OS2, 12 fibers, AI-DQ(ZN)BH, 12E09/125μ, color yellow, length 1m
DK-39241-U	Universal Cable, OS2, 24 fibers, AI-DQ(ZN)BH, 24E09/125μ, color yellow, length 1m