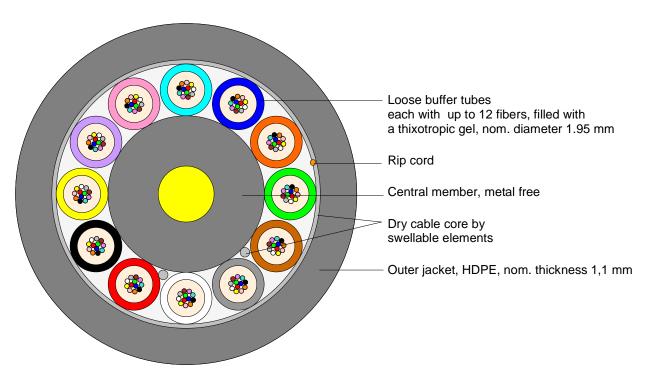
CORNING



Non-metallic fiber optic duct and aerial cables

with 4 to 144 single-mode fibers E9/125 SMF 28e+™



Principle drawing

Example: A-DQ(ZN)2Y 12x12 E9/125 0.36F3.5 + 0.22H18 LG

A-DQ(ZN)2Y 4 to 144 E9/125 0.36F3.5 + 0.22H18 LG

Design and special properties

- Light, thin and robust cables
- Cables for pulling into duct systems, laying in concrete channels or on cable racks
- · Optimized cable stiffness yields an excellent blowing performance
- Fully dielectric cable requires no grounding or potential equalization
- Dry cable core by swellable elements
- Single-layer stranded construction up to 144 fibers
- The used Corning[®] single-mode fibers SMF-28e+[®] are fully compliant to standard ITU-T G.652.D (reduced OH- peak) showing low attenuation throughout the 1285 nm to 1625 nm wavelength range
- Telcordia standard for fiber and loose tube coloring (Bellcore)
- Cable design according to Corning standard
- UV resistant

EVOLANT® Solutions



Data sheet

Coloring

Fibers: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise Buffer tubes: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise

Filling elements: natural, if required to fill up the inner layer of the cable core

Outer jacket: black

Cable printing: meter marking handset double sinus CORNING year

or acc. customer specification Method: hot foil printing

Characteristics of single-mode fibers E9/125 SMF-28e+®

Optical and mechanical:

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Mode-field diameter at 1310 nm	[µm]	9.2 ± 0.4		
Cladding diameter	[µm]	125.0 ± 0.7		
Coating diameter	[µm]	245 ± 5		
Attenuation at 1310 nm) nm [dB/km]			
Attenuation at 1550 nm	[dB/km]	≤ 0.22		
Attenuation at 1383 nm	[dB/km]	≤ 0.36		
Dispersion in the range 1285 to 1330 nm	[ps/(nm*km)]	≤ 3.5		
Dispersion at 1550 nm	[ps/(nm*km)]	≤ 18		
Cable cutoff wavelength (λ_{cc})	[nm]	≤ 1260		
PMD Link Design Value	Ps/√km	≤ 0.06*		

^{*)} Complies with IEC 60794-3:2001, Section 5.5, Method 1 (m=20, Q=0,01%)

Technical cable characteristics

Mechanical and environmental:

Max. tensile load during installation	[N]	2000
Crush (test methode acc. IEC 69794-1-2 E3)	[N/10 cm]	3000
Impact (test methode acc. IEC 69794-1-2 E4, 5 J, r=300 mm)	impacts	1 in 3 pos.
Temperature range Laying and installation		[°C] -10 to 50
Operation		-30 to 70
Transport and storage		-40 to 70
Water penetration (0.1 bar / 24 h)	[m]	≤ 1

Cable type	No. of	No. of	No. of	Outer Ø,	Weight,	Min. bending radius
	fibers	tubes	stranding	approx.	approx.	during install.
A-DQ(ZN)2Y			elements	[mm]	[kg/km]	[mm]
1x12 to 6x12	12 - 72	1 - 6	6	9.0	54	140
8x12	96	8	8	9.5	70	155
12x12	14	12	12	12.2	112	200

Delivery length

Delivery length up to 6 km

Other options are available on request

The fibers are fully in compliance with ITU-T G.652.D and annexes