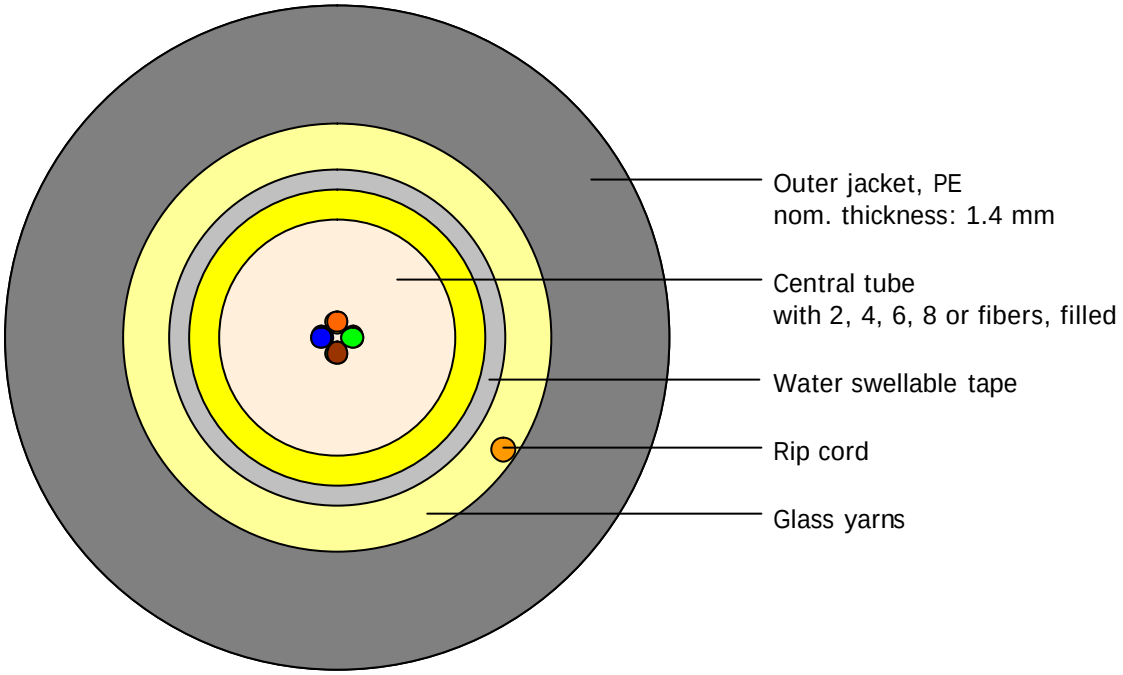
Fiber*Way*™

Armored Campus Backbone Cables

with 2, 4, 6, 8 and 12 single-mode fibers E9/125, non-metallic, central tube and glass yarn armor



Principle Drawing
Example: A-DQ(BN)2Y 1x4 E9/125 0.36F3.5 + 0.22H18

A-DQ(BN)2Y 1x2 E9/125 0.36F3.5 + 0.22H18
A-DQ(BN)2Y 1x4 E9/125 0.36F3.5 + 0.22H18
A-DQ(BN)2Y 1x6 E9/125 0.36F3.5 + 0.22H18
A-DQ(BN)2Y 1x8 E9/125 0.36F3.5 + 0.22H18
A-DQ(BN)2Y 1x12 E9/125 0.36F3.5 + 0.22H18

Design and special properties

- Especially light, thin and robust cables
- Cables for the use within and between buildings, pulling into duct systems, laying in concrete channels and on cable racks and in areas with rodents
- Central tube design
- Non-metallic construction, no problems with grounding or potential equalization
- Complete dry cable design, water blocking with water swellable elements
- Enhanced rodent protection by laminated glass yarns
- Outer jacket PE, UV resistant
- Single-mode fibers 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 (Bellcore) for fiber coloring
- Cable design similar to Corning FiberWay

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Coloring

Fibers: tube with 2 fibers: blue, orange
tube with 4 fibers: blue, orange, green, brown
tube with 6 fibers: blue, orange, green, brown, grey, white
tube with 8 fibers: blue, orange, green, brown, grey, white, red, black,
tube with 12 fibers: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise

Central tube: yellow
Outer jacket: black

Cable printing: <meter marking> <handset> <double sine> CORNING <year>
Method: hot foil printing

Characteristics of fibers E9/125

Optical and mechanical:

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	[dB/km]	≤ 0.36
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

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

Technical cable characteristics

Mechanical and environmental:

Cable type **A-DQ(BN)2Y ...**		**1x2**	**1x4**	**1x6**	**1x8**	**1x12**
Number of fibers		2	4	6	8	12
Number of tubes – central tube		1				
Diameter central tube, approx.	[mm]	3.5				
Outer diameter of the cable, approx.	[mm]	7.9				
Weight of the cable, approx.	[kg/km]	47				
Max. tensile load during installation	[N]	1500				
Min. bending radius during installation	[mm]	160				
Temperature range Laying and installation	[°C]	-5 to 50				
Operation		-30 to 70				
Transport and storage		-40 to 70				
Water penetration (0.1 bar / 24 h)	[m]	≤ 3				

Delivery length

Delivery length up to 6 km