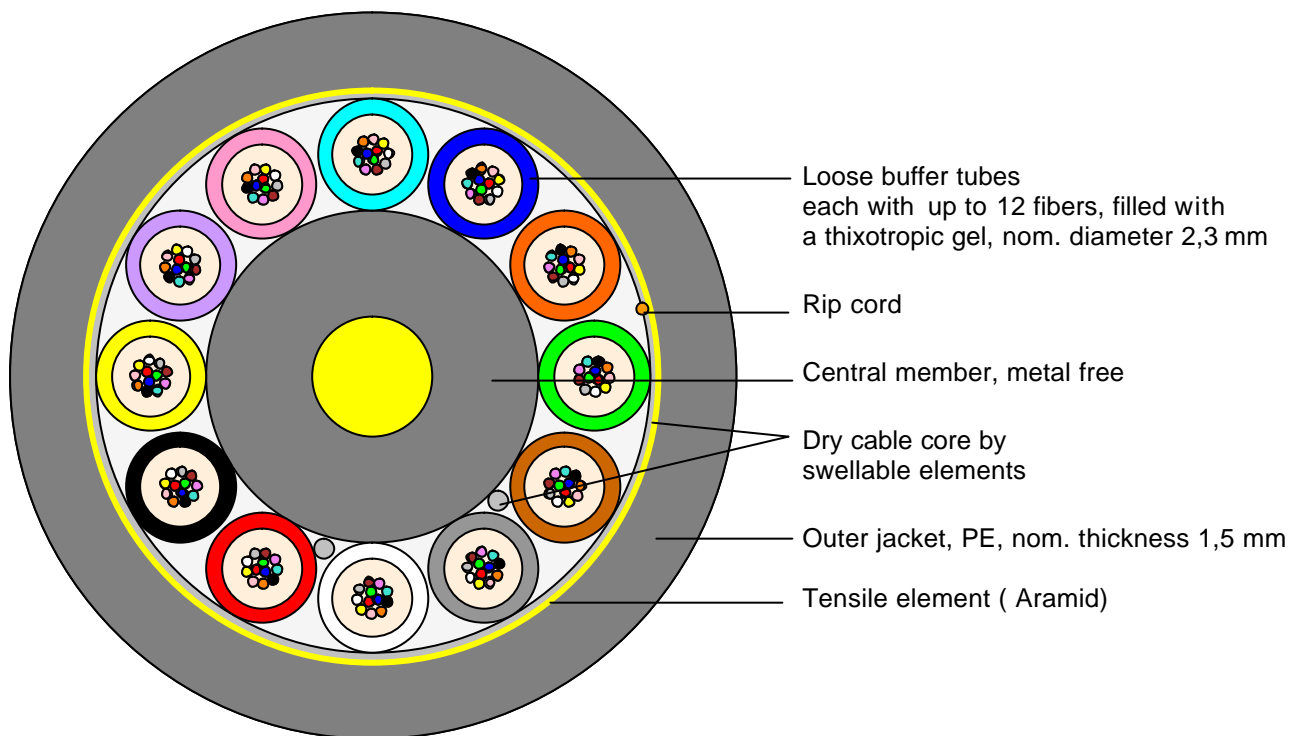


Non-metallic fiber optic duct cables

with 4 to 288 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 288 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
- Double-layer stranded construction for > 144 up to 288 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

Data sheet

Coloring

Fibers: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
 Buffer tubes: up to 12 tubes: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
 more than 12 tubes: continuous sequence of Telcordia standard
 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:

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

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

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

Technical cable characteristics

Mechanical and environmental:

Max. tensile load during installation	[N]	2700
Crush (test methode acc. IEC 69794-1-2 E3)	[N/10 cm]	2000
Impact (test methode acc. IEC 69794-1-2 E4, 5 J, r=300 mm)	impacts	1 in 3 pos.
Temperature range	Laying and installation	[$^{\circ}\text{C}$]
	Operation	-5 to 50
	Transport and storage	-40 to 70
Water penetration (0.1 bar / 24 h)	[m]	\leq 1

Cable type	No. of fibers	No. of tubes	No. of stranding elements	Outer \varnothing , approx. [mm]	Weight, approx. [kg/km]	Min. bending radius during install. [mm]
A-DQ(ZN)2Y ...						
1x4 or 1x6 to 6x6	4 - 36	1 - 6	6	10,7	83	180
1x8 to 6x8	8 - 48	1 - 6	6	10,7	83	180
1x12 to 6x12	12 - 72	1 - 6	6	10,7	83	180
8x12	96	8	8	12,1	106	205
10x12	120	10	10	13,6	135	230
12x12	144	12	12	15,1	166	240
(4x12)+(12x12)	192	16	18	15,3	163	250
(6x12)+(12x12)	216	18	18	15,3	163	250
(5x12)+(15x12)	240	20	24	17,5	216	295
(9x12)+(15x12)	288	24	24	17,5	216	295

Delivery length

Delivery length up to 6 km

Other options are available on request