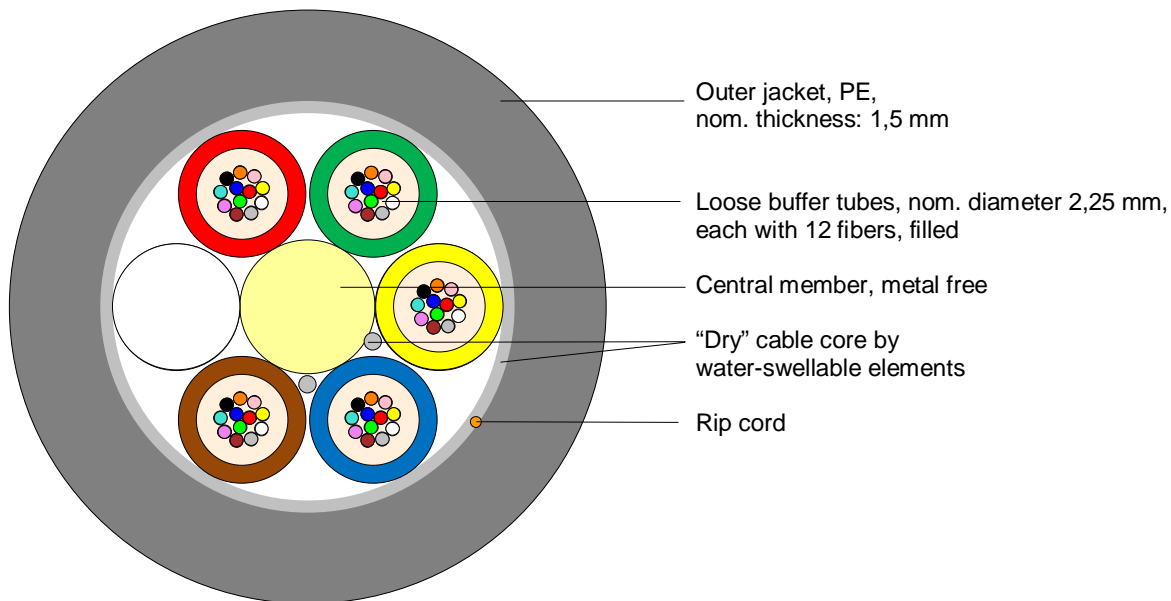


Data sheet

Non-metallic fiber optic duct cables

with 24 - 192 Corning[®] single-mode fibers E9/125 SMF 28e+™
stranded loose tube design and “dry” cable core, PE jacket;
non-metallic



Principle drawing: Example A-DQ(ZN)2Y 5x12E9/125 0.36F3.5 + 0.22H18 LG

A-DQ(ZN)2Y 24 - 144 E9/125 0.36F3.5 + 0.22H18 LG

Design and special properties

- Particularly light, thin and robust cables
- Cable for blowing or pulling into duct systems, laying in concrete channels or on cable racks
- Minibundle (loose tube) design
- S/Z stranding
- “Dry” cable core by water-swellable elements
- Fully dielectric cable requires no grounding or potential equalization
- Outer jacket PE, black
- 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
- Hungarian standard for fiber and loose tube coloring
- Cable design acc. to CORNING standard

Data sheet

Coloring

Fibers:	red, green, yellow, blue, brown, white, grey, violet, black, orange, turquoise, pink
Buffer tubes:	
Up to 12 tubes:	red, green, yellow, blue, brown, white, grey, violet, black, orange, turquoise, pink
16 tubes:	
Inner layer	red, green, yellow, blue, filler, filler
Outer layer	red, green, yellow, blue, brown, white, grey, violet, black, orange, turquoise, pink
Fillers:	natural, if required, to fill up the cable core
Outer jacket:	black
Cable marking	Corning + FVE nn*x12(652.D)B + A-DQ(ZN)2Y nn*x12 E9/125 + [batch number] [week/year] + [xxxxx**] m
Method:	hot-foil printing, white *) nn = number of tubes; **) xxxxx = meter mark

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

Optical and mechanical:

Mode field diameter at 1310 nm	[μm]	9.2 ± 0.4
Cladding diameter	[μm]	125.0 ± 0.7
Coating diameter	[μm]	242 ± 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
PMD (single fiber value)	Ps/√km	≤ 0,1
PMD _Q link design value)	Ps/√km	≤ 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	[°C]	-5 to 50
Laying and installation		-30 to 70
Operation		-40 to 70
Transport and storage		-40 to 70
Water penetration (0.1 bar / 24 h)	[m]	≤ 1

Cable type	No. of fibers	No. of tubes	No. of stranding elements	Outer Ø, approx. [mm]	Weight, approx. [kg/km]	Min. bending radius during install.
A-DQ(ZN)2Y ...						
2x12 – 6x12	24 - 72	2 - 6	6	10,5	80	17,5 x D
8x12	96	8	8	11,9	103	17,5 x D
12 x 12	144	12	12	14,9	163	17,5 x D
(4x12)+(12x12)	192	16	18	15,1	161	17,5 x D

Delivery length

Delivery length up to 6 km