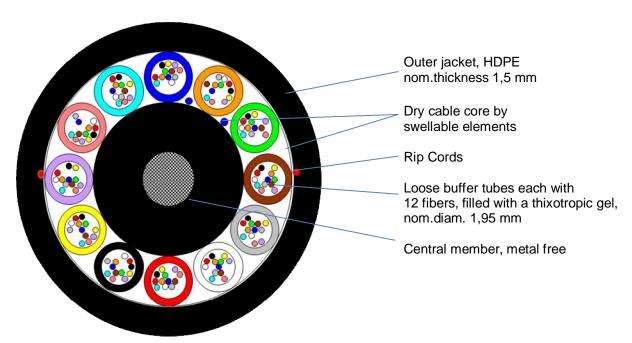
Evolant® Solutions Data sheet

Non-metallic fiber optic duct cable

with 144 and 288 single-mode fibers E9/125 SMF-28® With low-loss and improved bend performance technologies



Principle drawing: A-DQ(ZN)2Y 12x12E9/125 0.34F3.5 + 0.20H18 LG

A-DQ(ZN)2Y 12x12 - 24x12E9/125 0.34F3.5 + 0.20H18 LG

Design and special properties

- Light, thin and robust cable
- Cable 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 construction up to 12 stranding elements
- The used Corning[®] single-mode fiber SMF-28[®] optical fiber is an ITU-T G652.D compliant optical fiber with Corning's enhanced low loss and bend technologies. This full-spectrum fiber has bend performance that exceeds the ITU-T G.657.A1 standard and still splices the same as the installed base of standard SM fibers such as SMF28e+[®]
- Telcordia standard for fiber and loose tube coloring
- Cable design according to Customer standard

Evolant® Solutions



Data sheet

Coloring

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

more than 12 tubes: continuous sequence of Telcordia standard

Fillers: natural, to fill up the cable core

Outer jacket: black

Cable printing: CORNING + FDCN-z*-(G.657A) + STC +MADE IN POLAND+ Year + Meter+batch

number+ MIC#

 z^* = fibre count

Characteristics of fibers SMF-28®

Optical and mechanical:

Mode field diameter at 1310 nm	[µm]	9.2 ± 0.4
Cladding diameter	[μ m]	125.0 ± 0.7
Coating diameter	[μm]	242 ± 5
Attenuation at 1310 nm	[dB/km]	≤ 0.34
Attenuation at 1550 nm	[dB/km]	≤ 0.20
Attenuation at 1383 nm	[dB/km]	≤ 0.34
Dispersion in the range 1285 to 1330 nm	[ps/(nm*km)]	≤ 3.5
Max.Dispersion at 1550 nm	[ps/(nm*km)]	≤ 18
Cable cutoff Wavelength (λ _{cc})	[nm]	≤ 1260
PMD cabled (link value)	Ps/√	≤ 0,04*
Max.PMD cabled (single fiber)	Ps/√	≤ 0,1

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

Technical cable characteristics

Mechanical and environmental:

Mechanical and environmental.			
Bending radius during installation			15xD
Crush (test methode acc. IEC 6979	[N/10 cm]	2000	
Impact (test methode acc. IEC 69794-1-2 E4, 20 J, r=300 mm)		impacts	1
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

Cable type	No. of	No. of	No. of	Outer Ø	Weight	Tensile Force
	fibers	tubes	stranding	Nom.	[kg/km]	[N]
A-DQ(ZN)2Y			elements	[mm]		
12x12	144	12	12	13,3	134	2900
24x12	288	24	24	15,3	175	2900

Delivery:

Delivery length up to 6 km

The fibers is fully compliant with ITU-T G.652.D standard and exceeds ITU-T G.657.A1 standard