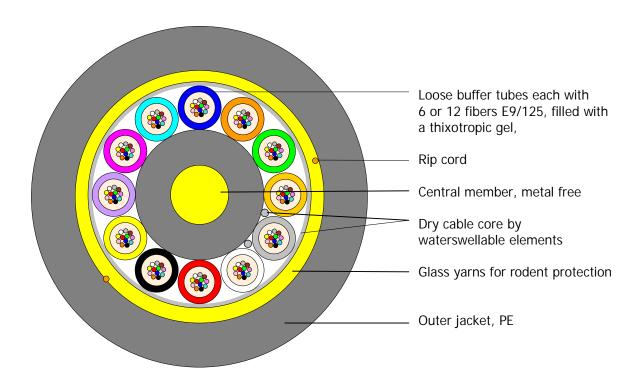
Evolant® Solutions Data sheet

Duct - Cable

Armored, non-metallic fiber optic duct cable with 6 to 288 single-mode fibers E9/125 SMF 28e[™]



Principle drawing

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

A-DQ(BN)2Y 6 to 288 E9/125 0.36F3.5 + 0.22H18 LG

Design and special properties

- Cable for pulling into duct systems, laying in concrete channels or cable racks, for the application in areas with rodent and direct buried in sand beds
- Light, thin and robust cables
- Improved rodent resistance provided by laminated glass yarns
- Fully dielectric cable requires no grounding or potential equalization
- Dry cable core: waterswellable elements over the cable core
- Outer jacket of polyethylene PE, UV resistant
- Single-layer stranded construction up to 144 fibers
- Double-layer stranded construction for > 144 up to 288 fibers
- Single mode fibers fully compliant to standard ITU G.652 D (reduced OH- peak) showing low attenuation throughout the 1285 nm to 1625 nm wavelength range
- Cable design according to Corning standard
- Color code of the fibers according to Telcordia (Bellcore)

Coloring

Evolant® **Solutions**

Data sheet

Duct - Cable

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 cable core

Outer jacket: black

Cable printing: meter marking handset double sinus CORNING year

Characteristics of fibers E9/125 SMF 28e[™] - low water peak fiber -

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_{ccf})	[nm]	≤ 1260

The fibers are fully in compliance with ITU-T G. 652.D and annexes. Other options are available on request.

Technical cable characteristics

Mechanical and environmental:

Crush (test methode acc. IEC	[N/10 cm]	2000	
Impact (test methode acc. IE	impacts	1 in 3 pos.	
Temperature range	Laying and installation	[°C]	-5 to 50
		-30 to 70	
	Transport and storage		-40 to 70
Water penetration (0.1 bar / 2	24 h)	[m]	≤ 3

Cable type	No. of	No. of	No. of	Outer Ø	Weight	Min. bending	Max.Tensile
	fibers	tubes	stranding	[mm]		radius during	strength
A-DQ(BN)2Y			elements		[kg/km]	install. [mm]	_
1x6 or 1x12	6 or 12	1	6	10,9	91	190	4000
2x12	24	2	6	10,9	91	190	4000
3x12	36	3	6	10,9	91	190	4000
4x12	48	4	6	10,9	91	190	4000
5x12	60	5	6	10,9	91	190	4000
6x12	72	6	6	10,9	91	190	4000
8x12	96	8	8	12,3	116	215	4000
10x12	120	10	10	13,8	146	240	5000
12x12	144	12	12	15,3	180	270	5000
(4x12)+(12x12)	192	16	16	15,5	177	270	5000
(6x12)+(12x12)	216	18	18	15,5	177	270	5000
(9x12)+(15x12)	288	24	24	17,6	232	305	5000

Delivery length up to 6 km

Other options are available on request.