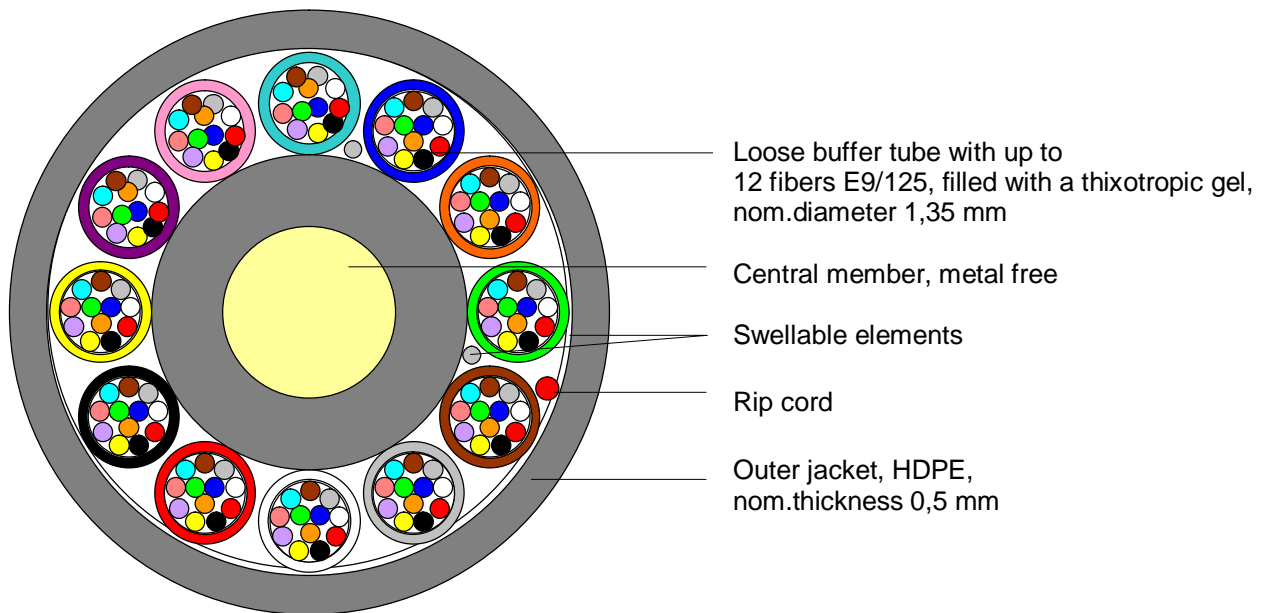


Stranded loose tube MiniXtend cable

with up to 144 LL single-mode fibers E9/125 SMF 28e+™ (low loss)



Principle drawing

MiniXtend A-DQ(ZN)2Y 1x12 – 12x12 E9LL /125 0.34F3.5 + 0.20H18 LG

Design and special properties

- Cable for installation into miniduct systems, suitable for Metro, Access or FTTx implementations
- Incremental capacity installation capability results in reduced capital expenditure
- Extremely compact; small diameter; low weight cables
- Reduced duct utilisation and easy installation, optimized cable stiffness
- Fully dielectric construction requires no grounding
- Fiber tubes with different colors resulting in easy identification
- Stranded Loose Tube structure ensures jointing and network configuration compatibility with conventional designs
- The used Corning® LL 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
- Cable design and color code acc. to Corning spec

Fiber Optic Cable

Data sheet

CORNING

Coloring

Fibers: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
 Tubes: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
 Filling elements: natural, if required, to fill up the cable core
 Outer jacket: black
 Cable printing: m + hand set + sinus + CORNING + year + A-DQ(ZN)2Y nn x mm* E9LL / 125
 or acc to customer request *) nn = number of tubes / number of fibers per tube
 Method: Laser

Characteristics of fibers E9/125 SMF 28e+® LL (Low Loss Technology)

Optical and mechanical:

Mode field diameter at 1310 nm	[μm]	9.2 ± 0.4
Mode field diameter at 1550 nm	[μm]	$10,4 \pm 0.5$
Cladding diameter	[μm]	125.0 ± 0.7
Coating diameter	[μm]	242 ± 5
Max. attenuation at 1310 nm	[dB/km]	≤ 0.34
Average attenuation at 1310 nm	[dB/km]	≤ 0.32
Max. attenuation at 1550 nm	[dB/km]	≤ 0.20
Average attenuation at 1550 nm	[dB/km]	≤ 0.18
Dispersion at 1550 nm	[ps/(nm*km)]	≤ 18
Cable cutoff Wavelength (λ_{cc})	[nm]	≤ 1260
PMD Link Design Value	Ps/ $\sqrt{\text{km}}$	$\leq 0.04^*$

* Complies with IEC 60794-3: 2001, Section 5.5, Methode 1, (m = 20, Q = 0.01%), September 2001
 The fibers are fully in compliance with ITU G.652.D and annexes

Technical cable characteristics

Mechanical and environmental:

Max. tensile load during installation	[N]	up to 72F = 350 96F = 1000 144F = 1000
Crush, short term	[N/10 cm]	1000
Bending radius, permanent	[mm]	15xD
Bending radius, during installation	[mm]	20xD
Impact (E=3 Nm, hammer radius R=300 mm attenuation increase reversible $\Delta\lambda \leq 0,05$ dB)	impacts	1 at 3 different places
Temperature range	Installation Operation Transport & Storage	[°C] [°C] [°C] -5... +40 -30... +70 -30... +70
Water penetration (0.1 bar / 24 h)	[m]	≤ 1

Cable type	No. of fibers	Fibers per tube	No. of tubes	No. of passive fillers	Outer Ø [mm]	Weight approx. [kg/km]
1 x 12	12	12	1	5	$5.3 \pm 0,3$	23
2 x 12	24	12	2	4	$5.3 \pm 0,3$	23
3 x 12	36	12	3	3	$5.3 \pm 0,3$	23
4 x 12	48	12	4	2	$5.3 \pm 0,3$	23
5 x 12	60	12	5	1	$5.3 \pm 0,3$	23
6 x 12	72	12	6	0	$5.3 \pm 0,3$	23
8 x 12	96	12	8	0	$6.3 \pm 0,3$	35
12 x 12	144	12	12	0	$8.0 \pm 0,3$	53

Delivery length

Standard delivery length: 4.000m