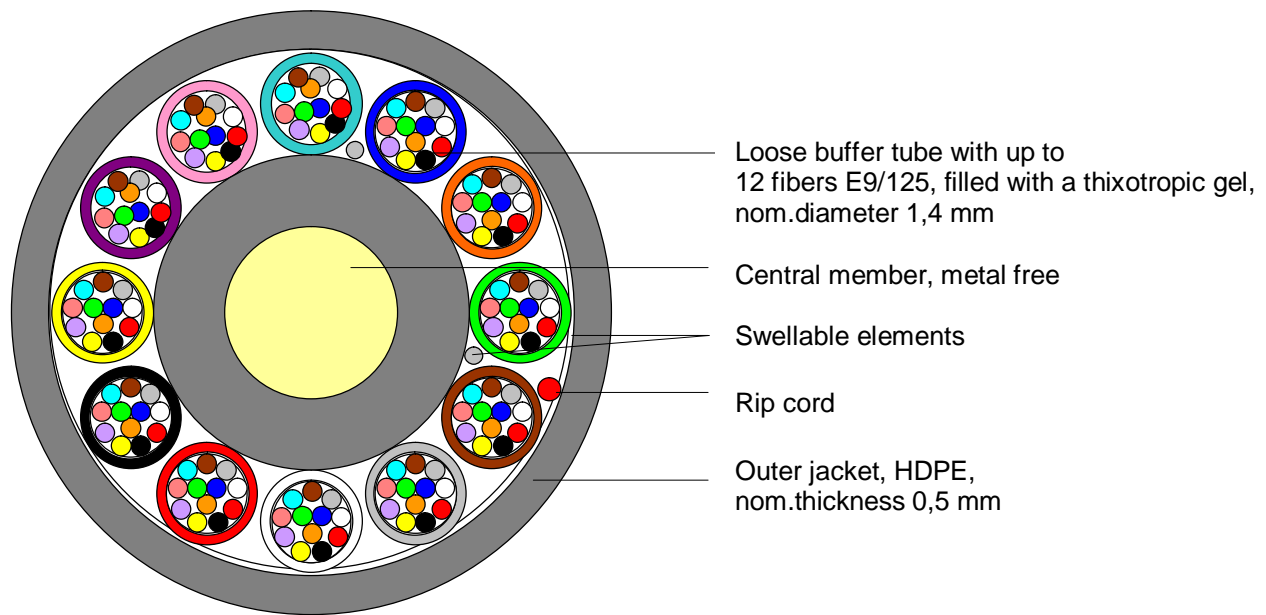


# Stranded loose tube MiniXtend cable

with 12 up to 144 single-mode fibers E9/125 SMF-28<sup>®</sup>ULTRA with low-loss and improved bend performance technologies



**Principle drawing:** A-DQ(ZN)2Y 12x12 E9U/125 0.34F3.5 + 0.20H18 LG

**MiniXtend A-DQ(ZN)2Y 1x12 – 12x12 E9U/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<sup>®</sup> single-mode fiber SMF-28<sup>®</sup>ULTRA 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+<sup>®</sup>
- Cable design and color code acc. to Corning spec

## Data sheet

### 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:	Meter + hand set + sinus + CORNING + year + A-DQ(ZN)2Y zz* x 12E9ULTRA/125 *zz = number of tubes
Method:	Laser

### Characteristics of fibers SMF-28<sup>®</sup> ULTRA (low loss and bend improved fiber)

Optical and mechanical:

Mode field diameter at 1310 nm	[ $\mu\text{m}$ ]	$9.2 \pm 0.4$
Cladding diameter	[ $\mu\text{m}$ ]	$125.0 \pm 0.7$
Coating diameter	[ $\mu\text{m}$ ]	$242 \pm 5$
Attenuation at 1310 nm	[dB/km]	$\leq 0.34$
Attenuation at 1550 nm	[dB/km]	$\leq 0.20$
Attenuation at 1383 nm	[dB/km]	$\leq 0.34$
Dispersion in the range 1285 to 1330 nm	[ps/(nm*km)]	$\leq 3.5$
Max.Dispersion at 1550 nm	[ps/(nm*km)]	$\leq 18$
Cable cutoff Wavelength ( $\lambda_{cc}$ )	[nm]	$\leq 1260$
PMD cabled (link value)	Ps/ $\sqrt{\text{km}}$	$\leq 0,04^*$
Max.PMD cabled (single fiber)	Ps/ $\sqrt{\text{km}}$	$\leq 0,1$

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

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

### Technical cable characteristics

Mechanical and environmental:

Max. tensile load during installation	[N]	up to 72F = 350 96 and 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 [°C]	-5... +40
	Operation [°C]	-30... +70
	Transport & Storage [°C]	-30... +70
Water penetration (0.1 bar / 24 h)	[m]	$\leq 1$

Cable type	No. of fibers	Fibers per tube	No. of tubes	No. of passive fillers	Outer $\varnothing$ [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	4	2	$5.3 \pm 0,3$	23
4 x 12	48	12	4	2	$5.3 \pm 0,3$	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