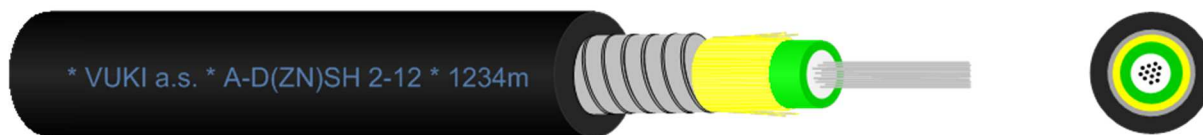




Outdoor optical cables with central loose tube



Usage:

Cables are used for LAN network construction, TV cable distribution as well as multimedia transmission of the highest parameters for telecommunication transmission. It is possible to install cable by flow air and pulling into the protective tubes and cable ducts, placing into cable conduit, sand seating or cable frames.

Construction:

- Optical fibre
- Water-blocking jelly
- PBT tube
- Aramid tensile elements
- Inner LSZH sheath

Cable has low weight and high tensile strength. It belongs to the cheapest solutions of optical line transmission. It is non- flame spreading execution acc.to IEC 332-3-22 with metallic protection against rodents /A-D(ZN)SH/.

Technical data:

Cable type		A-D(ZN)SH..
Number of fibers in tube		2 -12
Tube diameter	[mm]	3,0
Outer diameter	[mm]	9
Maximal allowed tensile load	[N]	1500
Min. bending radius	[mm]	165
Temperature range		
• by instalation	[°C]	-5 to +55
• at operation	[°C]	-25 to +70
Weight- informative value	[kg/km]	135
Fibre type		SM - E9/125 (G.652D), MM - G50/125, MM - G62, 5/125
Outer sheath		LSZH black
Typical production lengths	[m]	2000, 4000



Properties of used optical fibres:

Single -mode fibres SM - E9/125		ITU - T G.652D standard	ITU - T G.655 With non- zero dispersion
Mode field diameter at 1310 nm	[μm]	$9,2 \pm 0,4$	-
at 1550 nm	[μm]	$10,4 \pm 0,5$	$9,6 \pm 0,4$
Cladding diameter	[μm]	$125 \pm 0,7$	$125 \pm 0,7$
Fibre diameter (coloured)	[μm]	255 ± 10	255 ± 10
Attenuation at 1310 nm	[dB/km]	$\leq 0,36$	-
at 1383 nm	[dB/km]	$\leq 0,31$	-
at 1550 nm	[dB/km]	$\leq 0,21$	$\leq 0,22$
at 1625 nm	[dB/km]	$\leq 0,23$	$\leq 0,24$
Chromatic dispersion (D) at 1285 - 1330 nm	[ps/(nm.km)]	$\leq 3,5$	-
at 1550 nm	[ps/(nm.km)]	≤ 18	$2,80 \leq D \leq 6,20$
at 1625 nm	[ps/(nm.km)]	≤ 22	$5,77 \leq D \leq 11,26$
Polarization mode dispersion (PMD) coefficient	[ps/ $\sqrt{\text{km}}$]	$\leq 0,2$	$\leq 0,1$

Multimode gradient fibres		ITU - T G.651 MM - G50/125 (OM2)	ITU - T G.651 MM - G62,5/125 (OM1)
Core diameter	[μm]	50 ± 2	$62,5 \pm 2$
Cladding diameter	[μm]	$125 \pm 1,0$	$125 \pm 1,0$
Fibre diameter	[μm]	242 ± 5	242 ± 5
Attenuation at 850 nm	[dB/km]	$\leq 3,0$	$\leq 3,2$
at 1300 nm	[dB/km]	$\leq 0,9$	$\leq 1,0$
Bandwidth at 850 nm	[MHz.km]	≥ 300	≥ 160
at 1300 nm	[MHz.km]	≥ 600	≥ 500
Numerical aperture		$0,200 \pm 0,015$	$0,275 \pm 0,015$

Colour marking acc.to IEC 304:

Tubes*		Fibres	
number	colour	number	colour
1	red	1	red
2	white	2	green
3 - 8	yellow (E9/125)	3	blue
	green (G50/125)	4	yellow
	blue (G62,5/125)	5	white
*other colours upon request		6	grey
		7	brown
		8	purple