

Електролуks Electrolux

Opticki kabli

Optic cable



Made in Electrolux

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Ovaj crtez e sopstvenost na Electrolux-Bitola.Bez negovo pismeno odoobruvanje istiot nesmee da se prepisuva , umnozuva niti kopira bez soglasnost od Elektroлуks vo sproftivo se snosat posledici vo smislana clenovite 163 i 164 od kriticniot zakon R.M. (повреда na avtorsko pravo)

Electrolux is registered trademark of **Електролуks** companies in Macedonia and other countries

SINGLE MODE FIBER OPTIC (S.M.), steel armoured 9/ 125



APPLICATIONS

Single mode optical fibers allow the transmission of one light beam [with a wavelength above a precise value (cut-off wavelength)]. They are suitable for numerous applications as data transmission cables. They are distinguished for the: high transmission rates, low attenuation, no electromagnetic problems, small dimensions and low weight.

For indoor fixed installations is used as outer sheath material LSOH

For indoor - outdoor installations is used as outer sheath material LSOH-UV-R

For underground and outdoor installations is recommended as outer sheath material PE

CABLE STRUCTURE

Tube: 1 or multi PBT tubes
Tube filling compound: thyrrotrophic jelly
Fiber Optics: 2-12 in single tube
 up to 144 in multi tubes
Tube Insulation: glass yarn for 2-12 F/O,
 polyester tape up to 144 F/O
Armour: corrugated steel tape.
Outer Sheath:
 1) of LSOH colour grey, thickness 1.5mm or
 2) of LSOH-UV-R colour grey, thickness 1.5mm
 or
 3) of polyethylene PE, colour black,
 thickness 1.5mm

TECHNICAL DATA

Tensile Strength: 900 up to 4000 Newton
Temperature Range:
 Installed & stored from -40°C up to +70°C
 During installation from -20°C up to +70°C
Attenuation: 1310 nm 0.36dB/ km max
 1550 nm 0.25dB/ km max
Minimum Bending Radius:
 Installed 10 x Ø cable
 During installation 2 x Ø cable

TECHNICAL DATA SHEET (FIBER DATA FOR SINGLE MODE)

1. FIBER MATERIAL	Single mode, complying with ITU- T G 652 specification
Core	9.2 ± 0.6 µm High grade silica
Cladding	125 ± 1 µm silica cladding
Coating	242 ± 7 µm UV cured acrylate based coating
2. GEOMETRICAL SPECIFICATION	
Mode field diameter (1310 nm)	9.3 ± 0.5 µm
Mode field diameter (1550 nm)	10.5 ± 0.5 µm
Cladding diameter	125 ± 1.0 µm
Primary coating diameter	245 ± 10 µm
Mode field concentricity error	< 0.8 µm
Core non-circularity	% < 6.0
Core to cladding offset	1.0 µm
Cladding non-circularity	% < 2.0
Coating non-circularity	% ≤ 10
Coating concentricity error	< 15 µm

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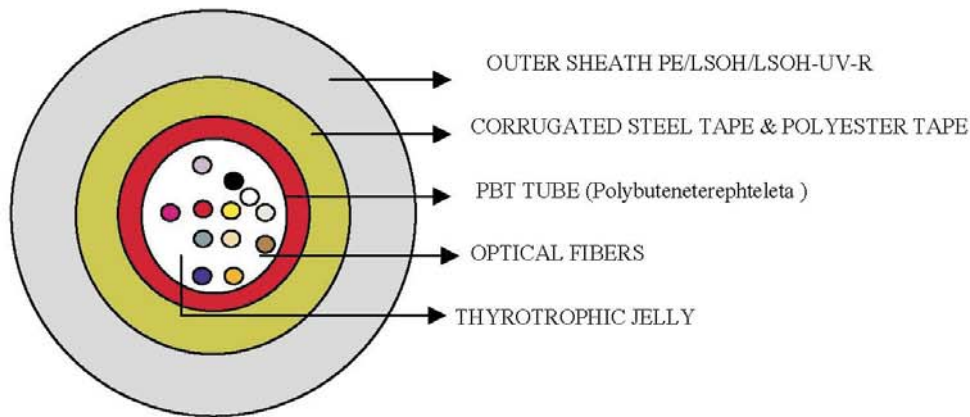
P. Cables



SINGLE MODE FIBER OPTIC (S.M.), steel armoured 9/ 125

3. OPTICAL & PERFORMANCE SPECIFICATION	
Attenuation at 1310 nm (dB/ km)	0.35 dB/ km
Attenuation at 1550 nm (dB/ km)	0.21 dB/ km
Attenuation at 1383 ± water peak nm (dB/ km)	2.0 dB/ km
Zero dispersion wavelength	1310 ± 10 nm
Zero dispersion slope	≤ 0.092 ps/ nm ² x km
Fiber cut-off wavelength	1250 – 1270 Nm
Cable cut-off wavelength	≤ 1260
Dispersion at 1285-1330 nm	≤ 2.7 ps/ nm x km
Dispersion at 1550 nm	≤ 18 ps/ nm x km

Available from 2 up to 144 fibers in single or multi loose tube
 For more information please contact our sales department



Ovo je crtez e sposobnost na Elektroluks-Bitola.Bez negovo pisмено одобрување istiот nestree da se precisura umnozuvaju mli kopira bez soglasnost od **Elektroluks** vo sprotno se snoset posledici vo smislana clenova 163 i 164 od klicniot zakon R.M. (povreda na autorsko pravo

SINGLE MODE FIBER OPTIC (S.M.) 9/ 125



APPLICATIONS

Single mode optical fibers allow the transmission of one light beam [with a wavelength above a precise value (cut-off wavelength)]. They are suitable for numerous applications as data transmission cables. They are distinguished for the: high transmission rates, low attenuation, no electromagnetic problems small dimensions and low weight.

For indoor fixed installations is used as outer sheath material LSOH

For indoor - outdoor installations is used as outer sheath material LSOH-UV-R

For underground and outdoor installations is recommended as outer sheath material PE

CABLE STRUCTURE

Tube: 1or multi PBT tubes
Tube filling compound: thymotropic jelly
Fiber Optic: 2-12 single tube
 up to 144 multi tubes
Tube Insulation: of glass yarn for 2-12 F/O
 of polyester tape up to 144 F/O
Outer Sheath:
 1) of LSOH colour grey, thickness 1.5mm or
 2) of LSOH-UV-R colour grey, thickness 1.5mm
 or
 3) of polyethylene PE, colour black and
 thickness 1.5mm

TECHNICAL DATA

Tensile strength: 900 to 4000 Newton
Temperature Range:
 Installed & stored from -40°C up to +70°C
 During installation from -20°C up to +70°C
Attenuation: 1310 nm 0.38dB/ km max
 1550 nm 0.25dB/ km max
Minimum Bending Radius:
 Installed 10 x Ø cable
 During Installation 20 x Ø cable

TECHNICAL DATA SHEET (FIBER DATA FOR SINGLE MODE)

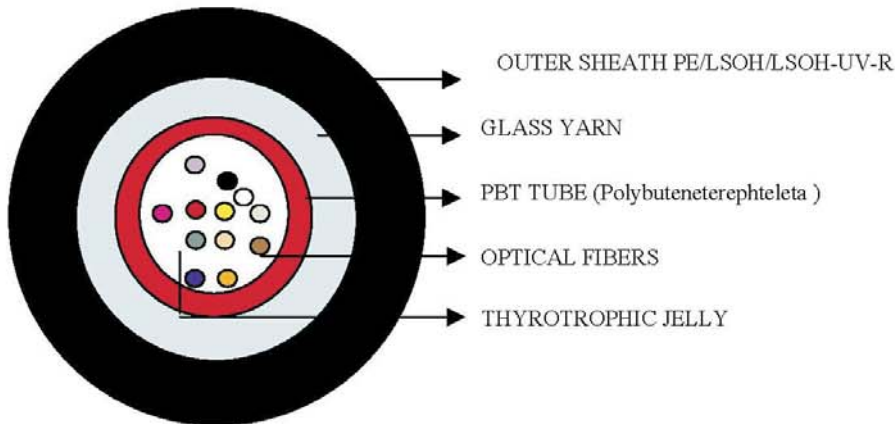
1. FIBER MATERIAL	Single mode, complying with ITU- T G 652 specification
Core	9.2 ± 0.6 µm High grade silica
Cladding	125 ± 1 µm silica cladding
Coating	242 ± 7 µm UV cured acrylate based coating
2. GEOMETRICAL SPECIFICATION	
Mode field diameter (1310 nm)	9.1 ± 0.5 µm
Mode field diameter (1550 nm)	10.2 ± 0.6 µm
Cladding diameter	125 ± 1.0 µm
Primary coating diameter	242 ± 7 µm
Fiber Non circularity	% ≤ 1.0 µm
Core non-circularity	% < 2.0
Core to cladding offset	1.0 µm
Cladding non-circularity	% < 2.0
Coating non-circularity	% ≤ 10
Coating concentricity error	< 15 µm



SINGLE MODE FIBER OPTIC (S.M.) 9/ 125

3. OPTICAL & PERFORMANCE SPECIFICATION	
Attenuation at 1310 nm (dB/ km)	≤ 0.35 dB/ km
Attenuation at 1550 nm (dB/ km)	≤ 0.21 dB/ km
Attenuation at 1383 ± water peak nm (dB/ km)	≤ 1.5 dB/ km
Zero dispersion wavelength	1310 ± 10 nm
Zero dispersion slope	≤ 0.092 ps/ nm ² x km
Fiber cut-off wavelength	1250 – 1270 Nm
Cable cut-off wavelength	≤ 1260
Dispersion at 1285-1330 nm	≤ 2.7 ps/ nm x km
Dispersion at 1550 nm	≤ 18 ps/ nm x km
Effective group index	
1310 nm	1.467
1550 nm	1.468

Available from 2 up to 144 fibers in single or multi loose tube
 For more information please contact our sales department



Ovo je proizvodnja na Elektroluksu. Bez njegovo pismeno odobrenje isti ni sme da se proizvodi, umnozava niti kopira bez saglasnosti od Elektroluksa. Ovo sprotno se snosati posledici vo smislana clerovitel 163 i 164 od klicniot zakon R.M. (povreda na autorsko pravo)

MULTI MODE FIBER OPTIC (M.M), steel armoured 50/125

62.5/125



APPLICATIONS	
<p>Multi mode optical fibers allow the instant transmission of many light beams. They are suitable for numerous applications as data transmission cables. They are distinguished for the: high transmission rates, low attenuation, no electromagnetic problems, small dimensions and low weight.</p> <p>For indoor installations is used as outer sheath material LSOH</p> <p>For indoor - outdoor installations is used as outer sheath material LSOH-UV-R</p> <p>For underground and outdoor installations is recommended as outer sheath material PE</p>	
CABLE STRUCTURE	TECHNICAL DATA
<p>Tube: 1 or multi PBT tubes</p> <p>Tube filling compound: thyrrotrophic jelly</p> <p>Fiber Optics: 2-12 in single tube up to 144 in multi tubes</p> <p>Tube Insulation: glass yarn for 2-12 F/O polyester tape up to 144 F/O</p> <p>Armour: corrugated steel tape.</p> <p>Outer Sheath:</p> <p>1) of LSOH colour grey, thickness 1.5mm or</p> <p>2) of LSOH-UV-R colour grey, thickness 1.5mm or</p> <p>3) of polyethylene PE, colour black and thickness 1.5mm</p>	<p>Tensile strength: 900 up to 4000 Newton</p> <p>Temperature Range: Installed & Stored from -40°C up to +70°C During installation from -20°C up to +70°C</p> <p>Attenuation: 850 nm 3.2dB/ km max 1300 nm 1.0dB/ km max</p> <p>Minimum Bending Radius: Installed 10 x Ø cable During installation 2 x Ø cable</p>

TECHNICAL DATA SHEET(FIBER DATA MULTI MODE) 50/125	
<p>1. FIBER MATERIAL</p> <p>Core Diameter Cladding Diameter Coating Diameter Core/ Cladding concentricity error Cladding non- circularity</p>	<p>Multi mode, complying with ITU- T G 651 OMI specification</p> <p>50 ± 3.0 um High grade silica</p> <p>125 ± 3.0 um silica cladding</p> <p>245 ± 10 um UV cured acrylate based coating</p> <p>≤ % 6</p> <p>≤ % 2</p>
<p>2. OPTICAL & PERFORMANCE SPECIFICATION</p> <p>Attenuation at 1310 nm (dB/ km) Attenuation at 1550 nm (dB/ km) Bandwidth 850 nm Bandwidth 1300 nm</p>	<p>0.6 dB/ km</p> <p>2.5 dB/ km</p> <p>≥ 500 Mhz x km</p> <p>≥ 800 Mhz x km</p>



MULTI MODE FIBER OPTIC (M.M.) 50/ 125, 62.5/ 125



APPLICATIONS

Multi mode optical fibers allow the instant transmission of many lights beams. They are suitable in numerous applications as data transmission cables. They are distinguished for the: high transmission rates, low attenuation, no electromagnetic problems, small dimensions and low weight.

For indoor installations is used as outer sheath material LSOH

For indoor - outdoor installations is used as outer sheath material LSOH-UV-R

For underground and outdoor installations is recommended as outer sheath material PE

CABLE STRUCTURE

Tube: 1or multi PBT tubes
Tube filling compound: thyrrotrophic jelly
Fiber Optics: 2-12 in single tube
 up to 144 in multi tubes
Tube insulation: glass yarn for 2-12 F/O
 polyester tape up to 144 F/O
Outer Sheath:
 1) of LSOH colour grey, thickness 1.5mm or
 2) of LSOH-UV-R colour grey, thickness 1.5mm
 or
 3) of polyethylene PE, colour grey,
 thickness 1.5mm

TECHNICAL DATA

Tensile strength: 900 up to 4000 Newton
Temperature Range:
 Installed & stored from -40°C up to +70°C
 During installation from -20°C up to +70°C
Attenuation: 850 nm 3.2dB/ km max
 1300 nm 1.0dB/ km max
Minimum Bending Radius:
 Installed 10 x Ø cable
 During installation 2 x Ø cable

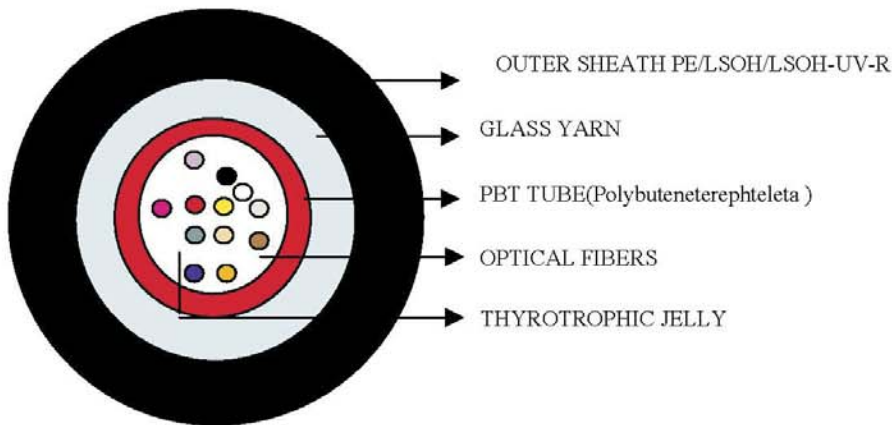
TECHNICAL DATA SHEET(FIBER DATA FOR MULTI MODE) 50/125

1. FIBER MATERIAL	Multi mode, complying with ITU- T G 651 OMI specification
Core Diameter	50 ± 3.0 um High grade silica
Cladding Diameter	125 ± 3.0 um silica cladding
Coating Diameter	245 ± 10 um UV cured acrylate based coating
Core/ Cladding concentricity error	≤ % 6
Cladding non- circularity	≤ % 2
2. OPTICAL & PERFORMANCE SPECIFICATION	
Attenuation at 1310 nm (dB/ km)	0.6 dB/ km
Attenuation at 1550 nm (dB/ km)	2.5 dB/ km
Bandwidth 850 nm	≥ 500 Mhz x km
Bandwidth 1300 nm	≥ 800 Mhz x km

MULTI MODE FIBER OPTIC (M.M.) 50/ 125, 62.5/ 125

TECHNICAL DATA SHEET(FIBER DATA FOR MULTI MODE) 62.5/125	
1. FIBER MATERIAL	Multi mode, complying with ITU- T G 651 OMII specification
Core Diameter	62.5 ± 3.0 um High grade silica
Cladding Diameter	125 ± 3.0 um silica cladding
Coating Diameter	245 ± 10 um UV cured acrylate based coating
Core/ Cladding concentricity error	≤ % 6
Cladding non- circularity	≤ % 2
2. OPTICAL & PERFORMANCE SPECIFICATION	
Attenuation at 1310 nm (dB/ km)	0.9 dB/ km
Attenuation at 1550 nm (dB/ km)	3.0 dB/ km
Bandwidth 850 nm	≥ 160 Mhz x km
Bandwidth 1300 nm	≥ 500 Mhz x km

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For more information please contact our sales department



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