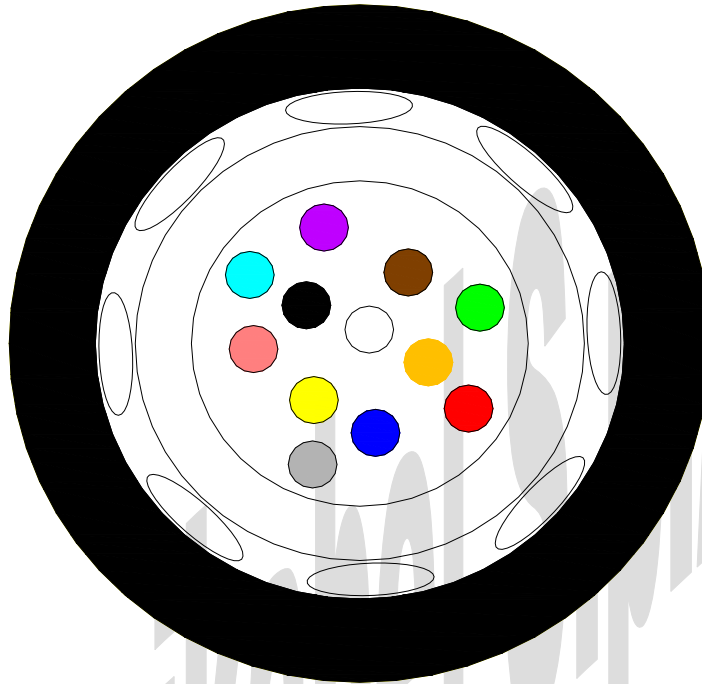


Description: WATERBLOCKING LOOSE WITH DIELECTRIC PROTECTION - LSZH



The drawing is for illustrative purpose only

OPTICAL CORE

			<i>u/m</i>
Colour of fibres	1 – Natural 2 – Red 3 – Green 4 – Yellow 5 – Brown 6 – Blue 7 – Violet 8 – Orange 9 – Grey 10 – White 11 – Black 12 – Pink	13- Turquoise 14 – Red (with black ring) 15 – Green (with black ring) 16 – Yellow (with black ring) 17 – Brown (with black ring) 18 – Blue (with black ring) 19 – Violet (with black ring) 20 – Orange (with black ring) 21 – Grey (with black ring) 22 – White (with black ring) 23 – Pink (with black ring) 24 – Turquoise (with black ring)	

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<i>Technical Office :</i> Leonardo BRUNI		<i>Customer's signature and stamp for acceptance :</i>	

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  OPTICAL	Technical Specification	N° TKFO-0176	 RoHS compliant <small>2002/95/EC</small>
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Description: WATERBLOCKING LOOSE WITH DIELECTRIC PROTECTION - LSZH

LOOSE TUBE

		<i>u/m</i>
Material	PBTP filled with Jelly	
Colour of loose	<i>Natural</i>	
Nominal diameter	<i>2,8 (up to 12 fibres)</i> <i>3,5 (up to 24 fibres)</i>	mm mm

RODENT PROTECTION

		<i>u/m</i>
Material	Water blocking Glass yarns	

OUTER SHEATH

		<i>u/m</i>
Material	LSZH UV- Resistant	
Colour	<i>Black</i>	
Nominal Thickness	<i>See table 1</i>	mm
Nominal Diameter	<i>See table 1</i>	mm

TABLE 1

N° of fibers	Nominal Thickness Outer sheath	Ø Nominal Outer Sheath	Nominal weight
1 ÷ 12	1,00mm	6,4 mm	40 Kg/km
13 ÷ 24	1,00mm	7,0mm	50 Kg/km

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<i>Other Characteristics</i>	
- Minimum Bending Radius	: 15 x Ø dynamic : 10 x Ø static
- Temperature	: - 30°C ÷ + 70°C Storage : - 30°C ÷ + 60°C Operative : - 5°C ÷ + 50°C Installation

<i>Mechanical Characteristics</i>	
- Tensile performance (IEC 60794-1-2-E1)	: 1500 N ($\Delta\alpha$ reversible)
- Crush (IEC 60794-1-2-E3)	: 2000 N/100 mm ($\Delta\alpha$ reversible)
- Impact (IEC 60794-1-2-E4)	: 10 J ($\Delta\alpha$ reversible)
- Water penetration (IEC 60794-1-2-F5)	: No water leakage

<i>Safety Performance</i>	
- Halogen acid gas emission $\leq 0,3$ % when tested accordance to IEC 60754-1 / 2	
- Degree of acidity of gases evolved during of the combustion (pH value $\geq 4,3$ and Conductivity $\leq 10\mu\text{S}/\text{mm}$) when tested in accordance to IEC 60754-1/2	
- Smoke emission (Transmittance) ≥ 60 % when tested accordance to IEC 61034-1 - IEC 61034-2	
- Fire propagation complying with IEC 60332-3-24 and IEC 60332-1-2	

All dimensions, weights, sizes, electrical and optical parameters are for information only. Tecnikabel will update data once products are finalized.

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SINGLEMODE FIBRES PROPERTIES

	SMR-LWP ITU-T G652D IEC 60793-2-50 Type B.1.3 Telcordia GR-20- CORE
Mode field Diameter @ 1310 nm	$9,0 \pm 0,4 \mu\text{m}$
Mode field Diameter @ 1550 nm	$10,1 \pm 0,5 \mu\text{m}$
Cladding diameter	$125 \pm 0,7 \mu\text{m}$
Coating diameter	$242 \pm 7 \mu\text{m}$
Cladding non-circularity	$\leq 0,7 \%$
Core/Cladding concentricity error	$\leq 0,5 \mu\text{m}$
Coating/cladding concentricity error	$\leq 12 \mu\text{m}$
Cable Cut off wavelength	$\leq 1260 \text{ nm}$
Zero dispersion wavelength (λ_0)	$1300 \div 1322 \text{ nm}$
Dispersion slope (S_0) @ (λ_0)	$\leq 0,090 \text{ ps}/(\text{nm}^2 * \text{km})$
Chromatic dispersion @ 1285 – 1330 nm	$\leq 3,5 \text{ ps}/(\text{nm} * \text{km})$
Chromatic dispersion @ 1550 nm	$\leq 18 \text{ ps}/(\text{nm} * \text{km})$
Chromatic dispersion @ 1625 nm	$\leq 22 \text{ ps}/(\text{nm} * \text{km})$
Chromatic dispersion @ 1530 – 1565 nm	
Chromatic dispersion @ 1565 – 1625 nm	
PMD @ 1550 nm	$\leq 0,1 \text{ ps}/\sqrt{\text{km}}$
Attenuation @ 1310 nm	$\leq 0,35 \text{ dB}/\text{km}$
Attenuation @ 1383nm	$\leq 0,35 \text{ dB}/\text{km}$
Attenuation @ 1550 nm	$\leq 0,25 \text{ dB}/\text{km}$
Attenuation @ 1625 nm	$\leq 0,28 \text{ dB}/\text{km}$
Proof test	$\geq 100 \text{ kpsi}$

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