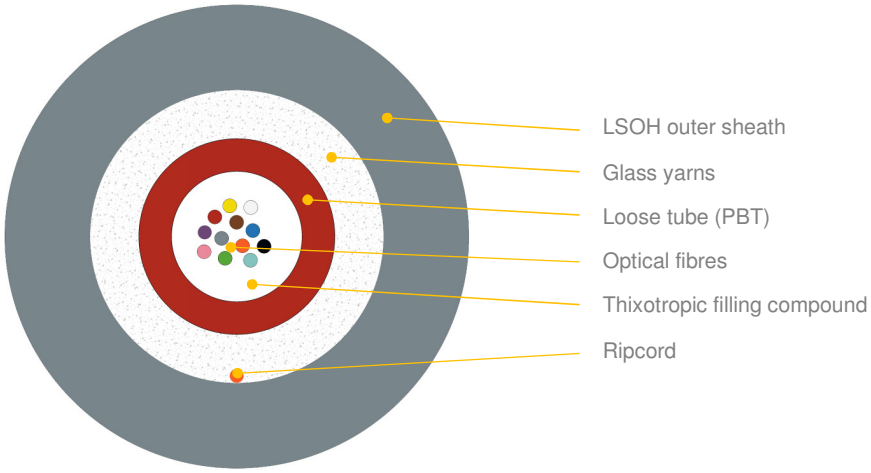
Type:	EXO-FI	REV: 2.1
Issued:	15/12/2015	PB
Modified:	20/01/2021	KP

Universal Single LS0H Jacket Central Loose Tube Cable with Fiberglass Reinforcement EXO-FI



*schematic drawing, not to scale

APPLICATION:

Internal installation
External installation into teletechnical ducts
Fully dielectric cable
Basic rodent protection
LAN and FTTX networks
Distribution network
ODF connections

DESIGN:

Central loose tubes (PBT Ø 3.0mm) with thixotropic filing compound
Glass yarns as strain relief and water absorbent
Polyester ripcord
LSOH outer sheath (different colours available)

CONFIGURATION:

Variant	Quantity [pcs]				Ø nominal (-0,3/+0,3)	Nominal weight (±10%)	Max allowed tension	Max static tension
	Fibres	Fibres per tube	Total elements	Active tubes	[mm]	[kg/km]	[N] / ε=0,4%	[N] / ε=0,25%
1T x 2-12F	2-12	2-12	1	1	7,1	54	2000	1000
1T x 14-24F	14-24	14-24	1	1	7,1	55	2000	1000

OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

For optical fibres and loose tube identification information please see DSH_Colors_CODE_XXXX document.

FIBRES PARAMETERS

For selected post-production optical fibres parameters please see DSH_OFP document.

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Temperature range:

Installation:	-10... +50 [℃]
Operation:	-20… +60 [℃]
Transport & Storage:	-40… +70 [℃]

Cable bending radius:

12 x cable diameter (during operation)
20 x cable diameter (during installation)

Test	Specification	Method	Requirements
Tensile strength	IEC60794-1-21 Method E1	**Sustained load**: 1000N	**Attenuation increment:** Δα≤0.05dB @ 1550nm (after test) No significant damage to fibre unit
		Extended load: 2000N	**Attenuation increment:** Δα≤0.05dB @ 1550nm (after test) No significant damage to fibre unit

Crush resistance	IEC60794-1-21 Method E3	**Load:** 1600 N / 10 cm / 5 minutes	Δα ≤ 0.1dB @ 1550nm (after test) No jacket cracking and fibre breakage
Impact resistance	IEC60794-1-21 Method E4	**Impact energy**: 10J	Δα≤0.1dB @ 1550nm (after test) No jacket cracking and fibre breakage
Torsion	IEC60794-1-21 Method E7	**Cable length to be twisted:** 2m **No. of cycles:** 5 **Twist angle:** starting position to -180° to starting position to +180°, and back (360° total) **Load:** 100N	Δα≤0.1dB @ 1550nm (after test) No jacket cracking and fibre breakage
Bending	IEC60794-1-21 Method E11	**Mandrel radius**: 12 x OD / 5 turns / 3 cycles	Δα≤0.1dB @ 1550nm (after test) No jacket cracking and fibre breakage
Water penetration	IEC 60794-1-22 Method F5A, F5B	**Water head**: 1m **Sample length**: 3m **Time**: 24 hrs	No water leakage
CPR class	EN 50575:2014+A1:2016		Eca

MARKING

The following print (inkjet) is applied at 1-meter intervals.

- HANDSET symbol
- Euro class regulation (CPR)
- DOUBLE SINE symbol
- Supplier: FIBRAIN
- Type of cable
- Year of manufacture: xxxx
- Standard code (Product type, fibre type, fibre count)
- Length marking in meters
- Cable ID / Drum No

Example: "HANDSET" - EN 50575 Eca - " DOUBLE SINE" - FIBRAIN - Fibre Optic Cable - " YEAR OF MANUFACTURE " - EXO-FI 12F G652D CT 3.0 LSOH - "LENGTH MARKING"- "BATCH NUMBER

The accuracy of marking is ±0,5%. Remarking is in accordance with Bellcore GR 20 and supersedes earlier markings. Occasional loss of marking is possible. Cables can be supplied with a range of single mode or multimode fibres and customized print.

PACKING

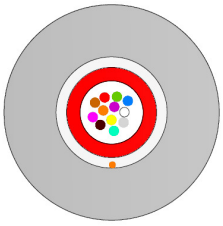
Cables will be shipped on disposable wooden or treated wooden drums. Both ends of the cable will be capped and accessible for testing. Rotation direction arrow will be marked on the drum together with identification information.

DELIVERY LENGTH

2000 – 8000 meters +1% / -2%, with possibility of supplying up to 5% of total contract quantity as short length cables which should be above 1000 meters long. Tolerance of 5 % of order quantity shall be allowed.

STANDARD OUTER JACKET COLOURS:

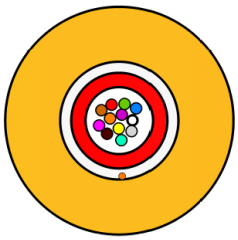
Black RAL 9005



Light Grey RAL 7037

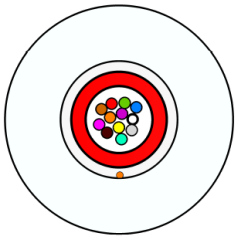
OUTER JACKET COLOUR OPTIONS*:

SM G.652D



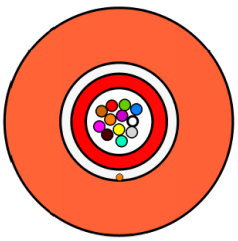
RAL 1021

SM G657A1, A2, A3



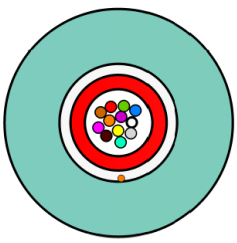
RAL 9010

MM 50/125 OM2



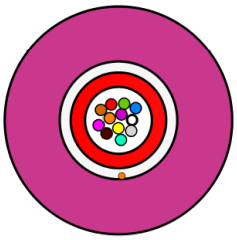
RAL 2003

MM 50/125 OM3



RAL 6027

MM 50/125 OM4



RAL 4003