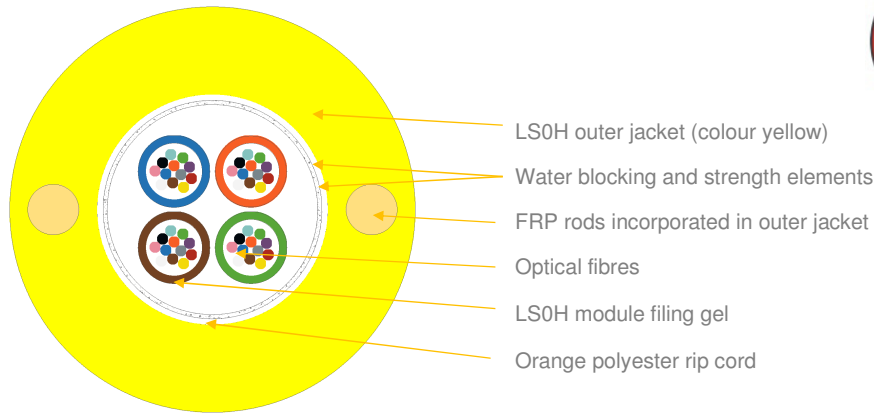


Type:	MDC with 12F ESM (LS0H)	REV: 2
Issued:	17/11/2016	MM
Modified:	19/12/2019	KP
Project:	Fibreworks	

Single LS0H jacket duct cable with Easy Section Modules MDC-FM



*schematic drawing of 48F configuration, not to scale

APPLICATION:

Duct cable
FTTH access networks
Fully dielectric cable

DESIGN:

LS0H modules jelly filled with 12 pcs of optical fibres each
Water swellable and tensile strength elements
FRP rods as strength elements (incorporated in outer jacket)
LS0H sheath
Orange polyester rip cord

DESIGNS:

Variant	Quantity [pcs]				Ø nominal (typ. ±0,3) [mm]	Nominal weight (±10%) [kg/km]	Max allowed tension [N]	Max static tension [N]
	Fibres	Fibres per module	Total elements	Active modules				
1M x 12F	12	12	1	1	5,9 (max 6,4)	35	800	400
2M x 12F	24	12	2	2	7,0 (max 7,5)	45	800	400
3M x 12F	36	12	3	3	7,2 (max 7,7)	50	800	400
4M x 12F	48	12	4	4	7,9 (max 8,4)	55	1000	500
6M x 12F	72	12	6	6	9,0 (max 9,5)	65	1600	800
8M x 12F	96	12	8	8	10,2 (max 10,7)	93	1800	900
12M x 12F	144	12	12	12	11,2 (max 11,7)	110	2200	1100
16M x 12F	192	12	16	16	13,0 (max 13,5)	130	2300	1100
18M x 12F	216	12	18	18	14,0 (max 14,5)	160	2500	1200
24M x 12F	288	12	24	24	14,5 (max 15,0)	170	2700	1300

Other variants, designs, mechanical and environmental properties available on demand

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Bending performance:	15 x D (10 cycles)	IEC 60794-1-2-E6, Δα reversible
Temperature range:		IEC 60794-1-2-F1,
Installation	-5... +40 [°C]	
Operation	-30... +60 [°C]	Δα ≤ 0,1 dB/km
Transport & Storage	-40... +70 [°C]	Δα reversible

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Test	Specification	Method	Requirements
Tensile strength	IEC60794-1-2 Method E1	Mandrel diameter: ≥ 30 x OD Load: as provided in table above	Fibre strain: < 0.5%(during test) ≤ 0.05%(after test) Δα reversible (after test)
		Mandrel diameter: ≥ 30 x OD Sustained Load: as provided in table above	Fibre strain: ≤ 0.25%
Crush resistance	IEC60794-1-2 Method E3	Load: 2000 N / 10 cm / 5 minutes Plate size: 100 mm x 100mm Number of pts: 3 (500mm apart)	Δα ≤ 0.05dB @ 1550nm (after test) No jacket cracking and fibre breakage
Impact resistance	IEC60794-1-2 Method E4	Impact energy: 5J Radius: 300 mm Distance: 1m No. of impacts: 3 at different points 500mm apart	Δα ≤ 0.1dB @ 1550nm (after test) No jacket cracking and fibre breakage
Torsion	IEC60794-1-2 Method E7	Cable length to be twisted: 1m No. of cycles: 5 Twist angle: ± 180° Load: 50N	Δα ≤ 0.1dB @ 1550nm (after test) No jacket cracking and fibre breakage
Bending	IEC60794-1-2 Method E11	Mandrel radius: 12 x OD / 5 turns (wrapped and unwrapped) / 10 flexing cycles <i>All fibres to be monitored</i>	Δα ≤ 0.05dB @ 1550nm (after test) No jacket cracking and fibre breakage
Water penetration	IEC 60794-1-2 Method F5B	Water head: 1m Sample length: 3m (3 samples of each cable) Time: 24 hrs	No water leakage
CPR Class	EN 50575:2014+A1:2016		Variant 12F-144F Dca-s2d0a1 & Eca
			Variant 192F-288F Eca

OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

Fibres and tubes identification information see **DSH_Colors_CODE_XXXX** document.

DoP No.: 0028

FIBRES PARAMETERS

For optical fibres parameters see **DSH_OFFP** document.

MARKING

Marking (black / ink jet or hot stamping) is applied at 1-meter intervals:

Pattern can be customized to meet certain requirements.

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. Identification information will be placed on the drum.

DELIVERY LENGTH

Cable length on one reel is 2000m ±100m. Can be changed upon arrangement.