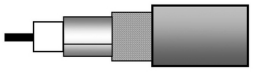
MLX COAX H155 LSNH UN ECE R118.02



TECHNICAL SPECIFICATIONS

PRODUCT OVERVIEW

Suitable applications	50 Ohm low loss coaxial transmission cable designed according European Standard EN 50117-1; Operating Frequencies between 5 and 6000 MHZ
Min Tensile Strength of Jacket:	9 MPa

PHYSICAL CHARACTERISTICS (OVERALL)

Conductor

AWG	Stranding	Material	Construction n x D	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
16	Stranded	BC - Bare Copper	19 x 0,28mm	1,4mm	0,03 mm	1

Conductor count: 1

Insulation

Type	Material	Nominal Diameter	Diameter +/- tolerance
Dielectric	PE - Polyethylene (Foam)	3,9 mm	0,15 mm

Table notes: Centricity min. 85%

Outer Shield Material

Type	Layer	Material	Coverage (%)	Min. Overlap	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Tape	1	Alum / Poly / Alum		2 mm			
Braid	2	Tinned Copper (TC)	80 %		4,5 mm	0,25 mm	5 %

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- tolerance
LSZH - Low Smoke Zero Halogen (Flame Retardant)	5,4	0,2 mm

CONSTRUCTIONS AND DIMENSIONS

Min Elongation at Breakof Jacket:	125 %
Min Tensile Strength of Jacket:	9 MPa

PHYSICAL CHARACTERISTICS (OVERALL)

Conductor DCR

Max. Conductor DCR	Max. Conductor Loop	Max. Shield DCR
15,4 Ohm/km	32,4 Ohm/1000ft	17 Ohm/km

Capacitance

Nom. Capacitance	Capacitance Tolerance
84 pF/m	3 pF/m

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Regularity of Impedance
50 Ohm	3 Ohm	Min. 40dB

High Frequency (Nominal/Typical)

Frequency (MHz)	Nom. Insertion Loss
5 MHz	2,5 dB/100m
50 MHz	6,9 dB/100m
100 MHz	9,1 dB/100m
230 MHz	13,4 dB/100m
400 MHz	18 dB/100m
800 MHz	26,1 dB/100m
862 MHz	27,3 dB/100m
1000 MHz	29,6 dB/100m
1350 MHz	34,9 dB/100m
1750 MHz	40,3 dB/100m
2150 MHz	46 dB/100m
2400 MHz	49,1 dB/100m
3000 MHz	56,3 dB/100m
3600 MHz	62,9 dB/100m
4200 MHz	69,1 dB/100m
4800 MHz	75,1 dB/100m
5400 MHz	80,8 dB/100m
6000 MHz	86,5 dB/100m

Tables Notes: Max. attenuation 10% higher

Delay

Velocity of Propagation Tolerance
2%

High Freq

Frequency (MHz)	Min. RL (Return Loss) dB
5 - 30 MHz	20 dB
30 - 470 MHz	20 dB
470 - 1000 MHz	18 dB
1000 - 2000 MHz	16 dB
2000 - 3000 MHz	15 dB
3000 - 6000 MHz	15 dB

Table Notes: In each frequency band, 3 peak values up to 4 dB lower are allowed, values above 3000 MHZ for information only

Screening

Frequency (MHz)	Min. Screening Attenuation
5 - 1000 MHz	85 dB

Voltage

Voltage Test Dielectric
2,0 kV DC

TEMPERATURE RANGE

Installation Temp Range:	-5°C To +50°C
Storage Temp Range:	-30°C To +70°C
Operating Temp Range:	-30°C To +70°C

MECHANICAL CHARACTERISTICS

Max. Pull Tension:	100 N
Min Bend Radius (W/o Pulling Strength):	60 mm
Crush Resistance:	Max. 1% (load of 700N) N
Adhesion Dielectric:	5-50 N at 25 mm N

STANDARDS

CPR Euroclass:	Dca-s1,d1,a1
CENELEC Compliance:	EN 50117-1, EN 50117-2-4 and EN 50290-2-20

APPLICABLE ENVIRONMENTAL AND OTHER PROGRAMS

Environmental Space:	Indoor - Euroclass Dca
EU RoHS Compliance Date (yyyy-mm-dd):	2013-02-19

FLAMMABILITY, LS0H, TOXICITY TESTING

IEC Flammability:	IEC 60332-1-2
Other Flammability:	UN ECE R118.02
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH: 4.3	4.3
IEC 61034-2 (EN 61034-2) (VDE 0482-1034) - Smoke Density Min. Transmittance:	IEC 61034-2

PART NUMBER

Variants

Item #	Item	Color	Putup type	Lenght
780703	MLX COAX H155 LSNH UN ECE R118.02 Bobin	Black	Reel	500 m
780703-M	MLX COAX H155 LSNH UN ECE R118.02 Metervara	Black	Reel	1,010 m

***Customized length and connectors on request.