M E S C Middle East Specialized Cables Co. CAT 7, Twisted Pair, S/FTP, LSHF Jacket Specification: ISO/IEC 11801:2002



APPLICATION	These cables are intended to be used for low loss extended frequency data systems that operate up to 600 MHz

CONSTRUCTION:

Conductor	Solid annealed copper 23 AWG						
Insulation	Foam polyethylene.						
Color code	White + Blue, White + Orange, White + Green, White + Brown						
Pair shield	Each pair is shielded with a Aluminum polyester tape						
Assembly Shielded twisted pairs are assembled with a solid tinned copper drain & Braided with tinned copper wires.							
Outer jacket Flame retardant LSHF with color Grey.							
Printing text	MESC CAT7 S/F1 11801 YEAR ME	P 4PR23AWG LSHF ISO/IEC TER MARKING					
Mechanical charac	Mechanical characteristics:						
Minimum bending r	adius	10 X D Installed					
Operation range		80 °C					
Electrical characteris	tics:						
Frequency		1 - 600 MHz					
Impedance		100+/- 15 Ω					
Direct current conduc	tor resistance	9.38 Ω/100 m					
Min. insulation resist	ance	>2GΩ•km					
Propagation velocity		74 %					
Halogen acid gas (ou	ter sheath)	≤ 0.5% (IEC 60754-1)					
Limiting Oxygen inde	x (outer sheath)	≥ 30 (ASTM D2863)					



DIMENSION AND WEIGHT TABLE:

MESC code for grey color jacket	Cable O.D.	Weight
MB63-04P23AWG-U2GY8-H0	8.7 mm	76 kg/km

Transmission characteristics at 20°C:

frequency MHz	Attenuation, dB/100m	NEXT Loss, dB	PS NEXT Loss, dB	PS ELFEXT, dB	PS ACR, dB	RL, dB		
4	3.7	80.0	77.0	75.0	73.3	23		
10	5.9	80.0	77.0	71.0	71.1	25		
16	7.4	80.0	77.0	66.9	69.6	25		
20	8.3	80.0	77.0	65.0	68.7	25		
31.2	10.4	80.0	77.0	61.1	66.6	23.7		
62.5	14.9	75.5	72.5	55.1	57.6	21.5		
100	19.0	72.4	69.4	51.0	50.4	20.1		
155	24.0	69.5	66.5	47.2	42.6	18.8		
250	31.0	66.4	63.4	43.0	32.5	17.3		
600	50.1	60.7	57.7	35.4	7.6	17.3		