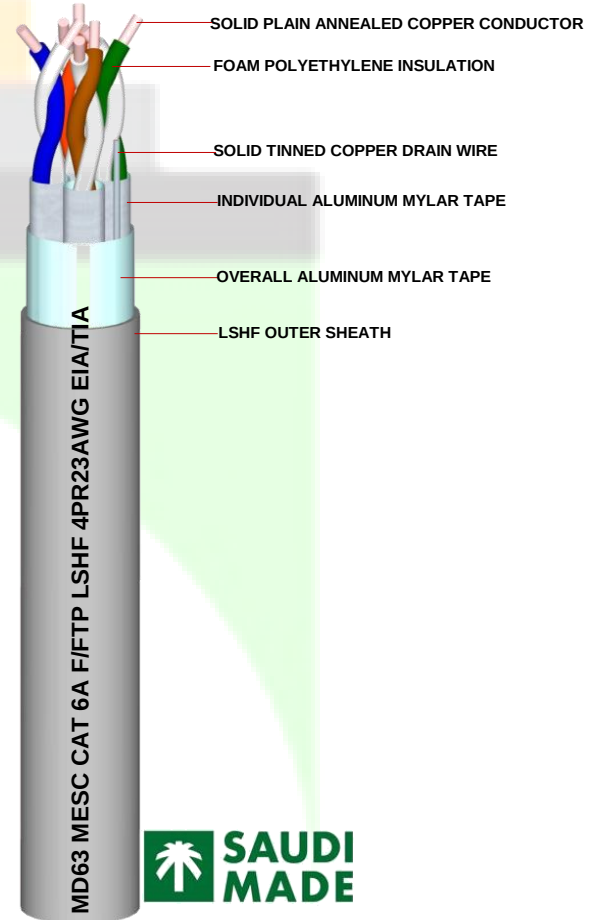


## CAT 6A, Twisted Pair, F/FTP, LSHF Jacket EIA/TIA-568-C.2

|                    |                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------|
| <b>APPLICATION</b> | These cables are intended to be used for low loss extended frequency data systems that operate up to 500 MHz |
|--------------------|--------------------------------------------------------------------------------------------------------------|

### CONSTRUCTION:

|                            |                                                                                                        |
|----------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Conductor</b>           | Solid annealed copper 23 AWG                                                                           |
| <b>Insulation</b>          | Foam polyethylene                                                                                      |
| <b>Color code</b>          | White + Blue, White + Orange, White + Green, White + Brown                                             |
| <b>Pair shield</b>         | Each pair is shielded with a Aluminum polyester tape                                                   |
| <b>Assembly/ Shielding</b> | Shielded twisted pairs are assembled with a solid tinned copper drain wire and aluminum polyester tape |
| <b>Outer jacket</b>        | Flame retardant LSHF with color Grey                                                                   |
| <b>Printing text</b>       | MD63 MESC CAT 6A F/FTP LSHF 4PR23AWG<br>EIA/TIA 568-C.2 YEAR METER MARKING                             |



### Mechanical characteristics:

|                               |                  |
|-------------------------------|------------------|
| <b>Minimum bending radius</b> | 10 X D Installed |
| <b>Operation range</b>        | 70 °C            |

### Electrical characteristics:

|                                             |                      |
|---------------------------------------------|----------------------|
| <b>Frequency</b>                            | 1 – 500 MHz          |
| <b>Impedance</b>                            | 100 +/- 15 Ω         |
| <b>Mutual Capacitance</b>                   | ≤ 56 nF/km           |
| <b>Resistance Unbalance</b>                 | ≤ 4 %                |
| <b>Conductor Resistance @ 20°C</b>          | 9.38 Ω/100 m         |
| <b>Min. insulation resistance</b>           | > 2GΩ·km             |
| <b>Propagation velocity</b>                 | 74 %                 |
| <b>Halogen acid gas (outer sheath)</b>      | ≤ 0.5% (IEC 60754-1) |
| <b>Limiting Oxygen index (outer sheath)</b> | ≥ 30 (ASTM D2863)    |

### DIMENSION AND WEIGHT TABLE:

| MESC code for Grey color jacket | Cable O.D. | Approx. Cable Weight |
|---------------------------------|------------|----------------------|
| MD63-04P23AWG-U0GY6-H0          | 8.3 mm     | 68 kg/km             |

### TRANSMISSION CHARACTERISTICS @20°C:

| frequency MHz | Attenuation, dB/100m (Max) | NEXT Loss, dB (Min) | PS NEXT Loss, dB (Min) | RL, dB (Min) | ACRF dB (Min) | PSACRF dB (Min) |
|---------------|----------------------------|---------------------|------------------------|--------------|---------------|-----------------|
| 4             | 3.8                        | 65.3                | 63.3                   | 23.0         | 55.8          | 52.8            |
| 10            | 5.9                        | 59.3                | 57.3                   | 25.0         | 47.8          | 44.8            |
| 16            | 7.5                        | 56.2                | 54.2                   | 25.0         | 43.7          | 40.7            |
| 20            | 8.4                        | 54.8                | 52.8                   | 25.0         | 41.8          | 38.8            |
| 31.25         | 10.5                       | 51.9                | 49.9                   | 23.6         | 37.9          | 34.9            |
| 62.5          | 15.0                       | 47.4                | 45.4                   | 21.5         | 31.9          | 28.9            |
| 100           | 19.1                       | 44.3                | 42.3                   | 20.1         | 27.8          | 24.8            |
| 200           | 27.6                       | 39.8                | 37.8                   | 18.0         | 21.8          | 18.8            |
| 250           | 31.1                       | 38.3                | 36.3                   | 17.3         | 19.8          | 16.8            |
| 500           | 45.3                       | 33.8                | 31.8                   | 15.2         | 13.8          | 10.8            |