# CAT 6A FTP

## NETWORK CABLES SHIELDED

### *TECHNICAL FEATURES*

| | |
|---|---|
| Conductor | Solid bare copper wire |
| Insulation | LDPE Polyethylene |
| Filler | Cross member PE |
| Drain wire | 27awg CCA |
| Shield | Aluminium / Polyester 100% coverage |
| Sheath material | LSZH Low Smoke Zero Halogen, Colour Grey |
| Standards | TIA/EIA-568B & ISO/TEC 11801 |
| | & IEC 61156-5:2009 |
| Core colours identification | blue, white / blue - orange, white / orange - |
| | green, white / green - brown, white / brown |

### *APPLICATION*

Local area Cat. 6A LAN cable, shielded, twisted pair, suitable for Networks and video applications.

### *SPECIAL FEATURES*

Halogen-Free sheath
Conform to RoHS, FLUKE TEST passed

### *REMARKS*

Conform to RoHS, FLUKE TEST passed
CE acc. to EC Low-Voltage Directive 73/23/EEC and 93/68/EEC
Standard put up: 305 meters drums or boxes

| Physical characteristics | | |
|---|---|---|
| ITALCOND part number | | ITAL033A |
| No. of pairs | num | 4 |
| Conductor size | AWG | 23 |
| Nom. Diameter of copper strand | mm | 0,585 |
| Nom. Radial Thickness insulation | mm | 0,26 |
| Nom. diameter over insulation | mm | 1,13x2c twist |
| Overall Malyar spiral | % | >100 |
| Drain wire | Y/N | Yes |
| Nom. Radial sheath Thickness | mm | 0,60 |
| Nom. Overall outer diameter | mm | 7,20 ± 0,2 |
| | | |
| Electrical Characteristics | | |
| Impedance (1 - 100 MHz) | Ω | 100±15 |
| Impedance (100 - 250 MHz) | Ω | 100±20 |
| Mutual Capacitance | pF/m | 50±5 |
| Velocity Ratio | % | 70 |
| Maximum Delay | ns/100m | ≤45 |
| Max. conductor Resistance at 20°C | Ω/km | <91,3 |
| Max. operating voltage | Vrms | 300 |
| | | |
| Miscellaneous | | |
| Operating temperature | °C | -25 / +60 |
| Max. reccomended pulling tension | N | 111 |
| Min. bending radius (install) | mm | 60 |
| Nominal cable weight | kg/km | 46 |

Electrical Characteristics

| Frequency | Attenuation | NEXT | PSNEXT | Return Loss |
|---|---|---|---|---|
| MHz | dB/100m | dB | dB | dB |
| | max | | | |
| 1,00 | 1,90 | 74,30 | 72,30 | 20,00 |
| 4,00 | 3,70 | 65,30 | 63,30 | 23,00 |
| 10,00 | 5,90 | 59,30 | 57,30 | 25,00 |
| 16,00 | 7,50 | 56,20 | 54,30 | 25,00 |
| 31,25 | 10,60 | 51,90 | 49,90 | 23,60 |
| 62,00 | 15,40 | 47,40 | 45,40 | 21,50 |
| 100,00 | 19,80 | 44,30 | 42,30 | 20,10 |
| 250,00 | 32,80 | 38,30 | 36,30 | 17,30 |
| 300,00 | 34,30 | 37,10 | 35,10 | 16,80 |
| 400,00 | 40,10 | 35,30 | 33,30 | 15,90 |
| 500,00 | 45,30 | 33,80 | 31,80 | 15,20 |

| Frequency | ELFEXT | PSELFEXT |
|---|---|---|
| MHz | dB | dB |
| 1,00 | 64,80 | 61,80 |
| 4,00 | 58,80 | 54,80 |
| 10,00 | 50,80 | 41,80 |
| 16,00 | 46,70 | 37,70 |
| 31,25 | 40,90 | 31,90 |
| 62,50 | 34,90 | 25,80 |
| 100,00 | 30,80 | 21,80 |
| 250,00 | 21,30 | 16,80 |
| 300,00 | 18,30 | 15,30 |
| 400,00 | 15,80 | 12,80 |
| 500,00 | 13,80 | 10,80 |



The data and sketches of this technical leaflet are not binding and can be varied as a consequence of modifications and/or improvements deemed necessary by the manufacturer. Tollerances on weights and diameters ± 5%.