

## Category 6<sub>A</sub> F-UTP Copper Cable

AFL's range of Category 6<sub>A</sub> cable has link and channel performance meeting internationally defined Physical and Electrical characteristics up to 500 MHz.

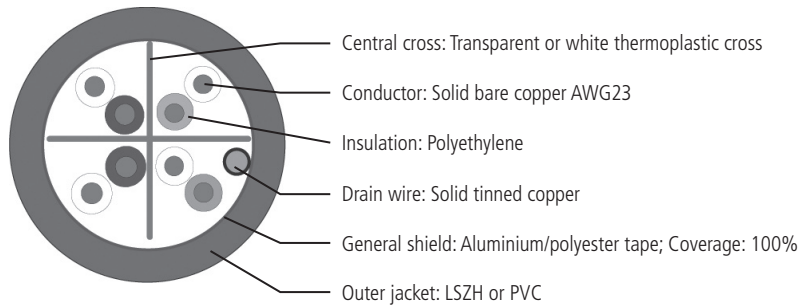
### Standards

- AS/NZS 11801.1:2019
- ANSI/TIA 568.2-D
- UL Subject 444
- ACMA

### Applications

- 10GBASE-T Ethernet
- 1000BASE-T Gigabit Ethernet
- 100BASE-TX Fast Ethernet
- 10BASE-T Ethernet
- Broadband Video
- 155/622 Mbps ATM
- 100 Mbps TP-PMD
- 4/16 Mbps Token Ring
- Voice

### Cable Components



### Construction

|                       |   |
|-----------------------|---|
| Conductor             | 23AWG Soft Plain Copper   |
| Insulation            | Foam and solid Polyethylene material, one pair made by foam material to improve the electrical performance                |
| Colour Code           | White /Blue, White /Orange, White /Green, White /Brown, no stripe and ring on the white foam core                         |
| Shield                | Aluminium poly laminate   |
| Outer Jacket          | ROHS Compliant PVC, CMX, CM, CMR, Leaded and Lead-free as well as LSZH versions available Nominal Diameter 7.2 +/- 0.5 mm |
| Additional Components | Cable is supplied without ripcord unless specified by the customer Central separator for improved performance.            |
| Printing              | Sheath printed Black with Legend  |

### Mechanical Characteristics

|                          |  |
|--------------------------|--|
| Maximum Pulling Force    | 100 N  |
| Minimum Bending Radius   | once installed 4 x OD, during installation 8 x OD  |
| Nominal Weight           | 55 kg/km   |
| Operating Temperature    | -15°C ~ +60°C  |
| Installation Temperature | +0°C ~ +50°C   |
| Fire Performance         | PVC: VW1, CMX, CM, MP, CMG, MPG, CMR, MPR, IEC332.1 LSZH: IEC332.1, IEC332.3 or depending on Jacket Type |
| Product lengths          | 305 m standard, 500 m, 1000 m on request   |

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### Electrical Performance

|   |           |      |      |      |      |       |      |      |        |      |        |
|---|-----------|------|------|------|------|-------|------|------|--------|------|--------|
| Transmission Frequency (MHZ)                        | 1         | 4    | 10   | 16   | 20   | 31.25 | 62.5 | 100  | 200    | 250  | 500    |
| NEXTA dB/100 m                                      | 74.3      | 65.3 | 59.3 | 56.2 | 54.8 | 51.9  | 47.4 | 44.3 | 39.8   | 38.3 | 33.8   |
| Characteristic Impedance (ohm)<br>(For information) | 100+/- 15 |      |      |      |      |       |      |      | +/- 22 |      | +/- 25 |
| Attenuation dB/100 m                                | 2.1       | 3.8  | 5.9  | 7.5  | 8.4  | 10.5  | 15.0 | 19.1 | 27.6   | 31.1 | 45.3   |
| Return Loss dB/100 m                                | 20        | 23   | 25   | 25   | 25   | 23.6  | 21.5 | 20.1 | 18     | 17.3 | 15.2   |
| PSNEXTA dB/100 m                                    | 72.3      | 63.3 | 57.3 | 54.2 | 52.8 | 49.9  | 45.4 | 42.3 | 37.8   | 36.3 | 31.8   |
| ELFEXT dB/100 m                                     | 67.8      | 55.8 | 47.8 | 43.7 | 41.8 | 37.9  | 31.9 | 27.8 | 21.8   | 19.8 | 13.8   |
| PSELFEXT dB/100 m                                   | 64.8      | 52.8 | 44.8 | 40.7 | 38.8 | 34.9  | 28.9 | 24.8 | 18.8   | 16.8 | 10.8   |
| Delay ns/100 m                                      | 570       | 552  | 545  | 543  | 542  | 540   | 539  | 538  | 537    | 536  | 536    |
| Skew ns/100 m                                       | 45        |      |      |      |      |       |      |      |        |      |        |
| NVP   | ≥ 64%     |      |      |      |      |       |      |      |        |      |        |

### Ordering Information

| PART NUMBER      | DESCRIPTION                                       |
|------------------|---|
| AFLCABLE6AF-BL-L | Category 6A F-UTP 4 Pair Cable Blue LSZH          |
| AFLCABLE6AF-BL   | Category 6A F-UTP 4 Pair Cable Blue CM Rated, PVC |

Other colours available on request.