

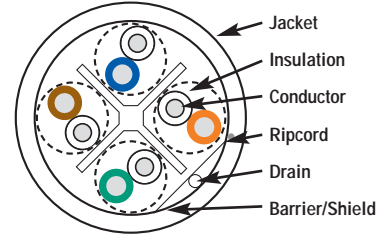
# Augmented Cat 6A F/UTP XGO™



Tested to 750 MHz

Mohawk's XGO F/UTP Augmented 6 is a robust, high performance data cable that is designed, manufactured and tested to exceed ANSI/TIA-568-C.2 performance standards. It is independently tested by Underwriters Laboratory (UL), a Nationally Recognized Test Laboratory (NRTL) and verified to ANSI/TIA-568-C.2. Category 6A

Mohawk's patented XGO design incorporates our Flexweb® core separator technology to reduce the effects of internal crosstalk. The foil shield and drain wire provides a cost-effective solution to blocking ANEXT, EMI and RFI in extreme environments.



| Mohawk Part No. | Cable Type             | Dielectric Type | Jacket Type Diameter<br>inch mm | Weight<br>lbs/M' kg/km | Listings              |
|-----------------|------------------------|-----------------|---------------------------------|------------------------|-----------------------|
| M58816 Riser    | 4 PAIR<br>23 AWG F/UTP | Thermoplastic   | .303 7.7                        | 42 63                  | C(UL)US or ETL<br>CMR |
| M58781 Plenum   | 4 PAIR<br>23 AWG F/UTP | FEP             | .305 7.75                       | 48 71                  | C(UL)US or ETL<br>CMP |

### Plenum

| Jacket Color | Mohawk # | Jacket Color | Mohawk # |
|--------------|----------|--------------|----------|
| BLUE         | M58781   | GREEN        | M58889   |
| WHITE        | M58782   | RED          | M58890   |
| YELLOW       | M58886   | ORANGE       | M58891   |
| GRAY         | M58887   | BLACK        | M58892   |
| PINK         | M58888   | VIOLET       | M58893   |

### Non-Plenum

| Jacket Color | Mohawk # | Jacket Color | Mohawk # |
|--------------|----------|--------------|----------|
| BLUE         | M58816   | GREEN        | M58897   |
| WHITE        | M58817   | RED          | M58898   |
| YELLOW       | M58894   | ORANGE       | M58899   |
| GRAY         | M58895   | BLACK        | M58900   |
| PINK         | M58896   | VIOLET       | M58901   |

## Electrical Characteristics

**CONDUCTOR DCR:**  
9.38 Ω/100m (28.6 Ω/Mft) MAX

**DCR UNBALANCE:** 3% MAX

**MUTUAL CAPACITANCE:**  
46 pF/m (14 pF/ft) NOM

**CAPACITANCE UNBALANCE**

**PAIR/GROUND:**  
33 pF/100m (100 pF/Mft) MAX

**CHARACTERISTIC IMPEDANCE:**  
100 Ω ±10% (10-550 MHz)

**INPUT IMPEDANCE:**  
100 Ω ±12% (1-100 MHz)  
100 Ω ±18% (>100-250 MHz)  
100 Ω ±32% (>250 MHz)

**RETURN LOSS (RL):**  
20 + 6 log<sub>10</sub> (f) dB MIN (1-10 MHz)  
26 dB MIN (>10-20 MHz)  
26 - 7 log<sub>10</sub> (f/20) dB MIN (>20 MHz)

**INSERTION LOSS (ATTENUATION):**  
1.82√f + .00091f + 25/√f dB/100m MAX

**NEAR END CROSSTALK (NEXT):**  
44.3 - 15 log<sub>10</sub> (f/100) dB/100m MIN

**POWER SUM NEAR END CROSSTALK (PS NEXT):**  
42.3 - 15 log<sub>10</sub> (f/100) dB/100m MIN

**ATTENUATION TO CROSSTALK RATIO FAR END (ACRF):**  
27.8 - 20 log<sub>10</sub> (f/100) dB/100m MIN

**POWER SUM ATTENUATION TO CROSSTALK RATIO FAR END (PS ACRF):**  
24.8 - 20 log<sub>10</sub> (f/100) dB/100m MIN

**POWER SUM ALIEN NEAR END CROSSTALK (PS ANEXT):**  
62.5 - 15 log<sub>10</sub> (f/100) dB/100m MIN

**POWER SUM ALIEN ATTENUATION TO CROSSTALK RATIO FAR END (PS AACRF):**  
38.2 - 20 log<sub>10</sub> (f/100) dB/100m MIN  
77dB MAX

**PROPAGATION DELAY:**  
534 + 36/√f ns/100m MAX

**PROPAGATION DELAY (SKEW):**  
45 ns/100m MAX

**NOMINAL VELOCITY OF PROPAGATION (NVP):**  
PLENUM 70%  
NON-PLENUM 66%

NOTE: Attenuation To Crosstalk Ratio Far End (ACRF) was previously referred to as Equal Level Far End Crosstalk (ELFEXT). WHERE f = FREQUENCY IN MHz from 1 to 500 MHz.

| FREQ (MHz) | INSERTION LOSS (dB/100m) | NEXT (dB/100m) | PS-NEXT (dB/100m) | ACRF (dB/100m) | PS-ACRF (dB/100m) | RETURN LOSS (dB) | PROP DELAY (ns/100m) | ALIEN CROSSTALK (dB/100m) |                    |
|------------|--------------------------|----------------|-------------------|----------------|-------------------|------------------|----------------------|---------------------------|--------------------|
|            |                          |                |                   |                |                   |                  |                      | PS-ANEXT (dB/100m)        | PS-AACRF (dB/100m) |
| 1.0        | max                      | min            | min               | min            | min               | min              | max                  | min                       | min                |
| 4.0        | 2.1                      | 74.3           | 72.3              | 67.8           | 64.8              | 20.0             | 570.0                | 67.0                      | 67.0               |
| 8.0        | 3.8                      | 65.3           | 63.3              | 55.8           | 52.8              | 23.0             | 552.0                | 67.0                      | 66.2               |
| 10.0       | 5.3                      | 60.8           | 58.8              | 49.7           | 46.7              | 24.5             | 546.7                | 67.0                      | 60.1               |
| 16.0       | 5.9                      | 59.3           | 57.3              | 47.8           | 44.8              | 25.0             | 545.4                | 67.0                      | 58.2               |
| 20.0       | 7.5                      | 56.2           | 54.2              | 43.7           | 40.7              | 25.0             | 543.0                | 67.0                      | 54.1               |
| 25.0       | 8.4                      | 54.8           | 52.8              | 41.8           | 38.8              | 25.0             | 542.0                | 67.0                      | 52.2               |
| 31.25      | 9.4                      | 53.3           | 51.3              | 39.8           | 36.8              | 24.3             | 541.2                | 67.0                      | 50.2               |
| 62.5       | 10.5                     | 51.9           | 49.9              | 37.9           | 34.9              | 23.6             | 540.4                | 67.0                      | 48.3               |
| 100.0      | 15.0                     | 47.4           | 45.4              | 31.9           | 28.9              | 21.5             | 538.6                | 65.6                      | 42.3               |
| 155.0      | 19.1                     | 44.3           | 42.3              | 27.8           | 24.8              | 20.1             | 537.6                | 62.5                      | 38.2               |
| 200.0      | 24.1                     | 41.4           | 39.4              | 24.0           | 21.0              | 18.8             | 536.9                | 59.6                      | 34.4               |
| 250.0      | 27.6                     | 39.8           | 37.8              | 21.8           | 18.8              | 18.0             | 536.5                | 58.0                      | 32.2               |
| 300.0      | 31.1                     | 38.3           | 36.3              | 19.8           | 16.8              | 17.3             | 536.3                | 56.5                      | 30.2               |
| 350.0      | 34.3                     | 37.1           | 35.1              | 18.3           | 15.3              | 16.8             | 536.1                | 55.3                      | 28.7               |
| 400.0      | 37.3                     | 36.1           | 34.1              | 16.9           | 13.9              | 16.3             | 535.9                | 54.3                      | 27.3               |
| 500.0      | 40.1                     | 35.3           | 33.3              | 15.8           | 12.8              | 15.9             | 535.8                | 53.5                      | 26.2               |
| 500.0      | 45.3                     | 33.8           | 31.8              | 13.8           | 10.8              | 15.2             | 535.6                | 52.0                      | 24.2               |

