

CATEGORY 6A F/UTP 28AWG, 500MHz, SOFT PVC

PGS-FL6A8-31ST811X1

STANDARD COMPLIANCE

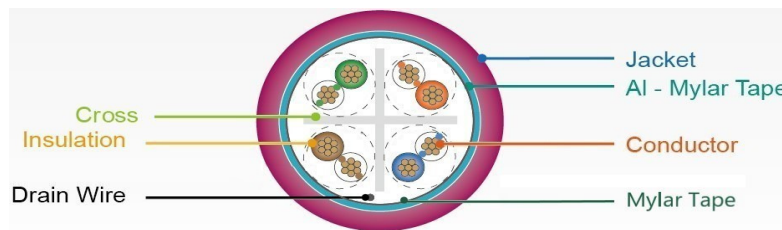
UL LISTED: UL 444

ISO/IEC 11801 CATEGORY 6A PATCH CABLE

RoHS COMPLIANCE FOR THE REQUIREMENT OF EUROPEAN UNION ISSUED DIRECTIVE 2011/65/EU



SECTION PLAN



CONSTRUCTION

| | | CATEGORY 6A F/UTP STRANDED |
|------------|-------------------------|---------------------------------------------------------------------------------------------------------------|
| CONDUCTOR | MATERIAL & SIZE | BARE COPPER, 28AWG |
| | DIAMETER | 7/0.12mm +/- 0.003mm |
| INSULATION | MATERIAL | HDPE (CMI-75E) |
| | THICKNESS | MIN. AVERAGE THICKNESS: 0.132mm MIN. THICKNESS: 0.102mm |
| | COLOR CODE | Pair 1: Blue & White/Blue Pair 3: Green & White/Green Pair 2: Orange & white/C Pair 4: Brown & White/Brown |
| | DIAMETER | 0.62 +/- 0.03mm |
| | TENSILE STRENGTH | 16.5 Mpa/2400 PSI |
| | ULTIMATE ELONGATION | ≥ 300% |
| JACKET | MATERIAL | PVC Compound (80P matt) |
| | THICKNESS | MIN. AVERAGE THICKNESS: 0.585mm MIN. THICKNESS: 0.485mm |
| | OVERALL DIAMETER | 5.0mm +/- 0.3mm |
| | MINIMUM BENDING RADIUS | ≥ 8 TIMES OF OVERALL DIAMETER |
| | MAXIMUM PULLING TENSION | MAX. 85N |
| | TENSILE STRENGTH | 13.8 Mpa / 2000 PSI |
| | ULTIMATE ELONGATION | ≥ 100% |
| SHIELDING | MATERIAL | Aluminum & Mylar Tape |
| DRAIN WIRE | MATERIAL | Tinned Copper |

ELECTRIC REQUIREMENT

| | | CATEGORY 6A F/UTP STRANDED |
|--------------------------------------------|--|----------------------------|
| CHARACTERISTIC IMPEDANCE (Z ₀) | | 85 ~ 115Ω (1~500MHz) |
| DC. RESISTANCE CAPACITANCE UNBALANCE | | 5% |
| PAIR-TO-GROUND CAPACITANCE UNBALANCE | | 330 pF/100M MAX. |
| CONDUCTOR RESISTANCE | | 22.3Ω /100M 20°C MAX. |
| MUTUAL CAPACITANCE | | 5600 pF/100M MAX. |
| SPARK TEST | | 2.5KV |
| NOMINAL VELOCITY OF PROPAGATION (N.V.P.) | | 80% |

CATEGORY 6A F/UTP 28AWG, 500MHz, SOFT PVC

PGS-FL6A8-31ST811X1

ENVIRONMENTAL CONDITION & USAGE

| | | |
|-------------------|--------------------|----------------|
| TEMPERATURE RANGE | SHIPPING & STORAGE | - 20°C to 75°C |
| | INSTALLATION | 0°C to 50°C |
| | OPERATION | - 10°C to 60°C |

TRANSMISSION REQUIREMENTS

| FREQUENCY (MHz) | MAX. ATTENUATION (dB/100m) | MIN. Pr-Pr NEXT (dB) | MIN. PSNEXT (dB) | MIN. RETURN LOSS (dB) |
|-----------------|----------------------------|----------------------|------------------|-----------------------|
| 1 | 6.0 | 74.3 | 72.3 | 20.0 |
| 8 | 11.1 | 60.8 | 58.8 | 24.5 |
| 16 | 20.8 | 56.2 | 54.2 | 25.0 |
| 25 | 28.5 | 53.3 | 51.3 | 24.3 |
| 100 | 55.4 | 44.3 | 42.3 | 19.0 |
| 250 | 65.1 | 38.3 | 36.3 | 15.6 |
| 400 | 75.6 | 35.3 | 33.3 | 13.8 |
| 500 | 85.4 | 33.8 | 31.8 | 13.0 |

Values show on tables above are for reference purpose only.

MARKING & PACKAGING

| | | |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| PACKAGING | FT/BOX | FT/BOX |
| APPROX.WEIGHT (kg) | | |
| DIMENSION (mm) | | |
| PACKAGES per PALLET | | |
| MARKING | TYPE CM 4PR 28AWG PATCH CABLE 75°C (UL) E495789 P ISO/IEC 11801 Category 6A 550MHz F/UTP <i>PT</i> pactech FlexLite PGS-FL6A8-31ST811X1 STRANDED BATCH NO. RoHS | |