

# CAT. 6A S/FTP 28AWG, 600MHz, Soft PVC

PGS-FL6A8-41ST211X1

## STANDARD COMPLIANCE

UL LISTED: UL444

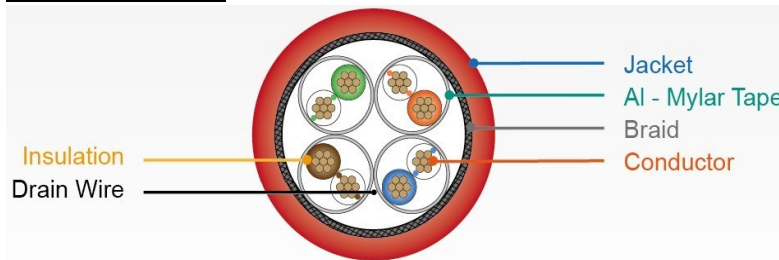
ISO/IEC 11801 CATEGORY 6A: PATCH CABLE

IEC 61156-5 FOR PATCH CABLE

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



## SECTION PLANS



## CONSTRUCTION

|            |                         | CATEGORY 6A S/FTP STRANDED   |
|------------|-------------------------|--|
| CONDUCTOR  | MATERIAL & SIZE         | BARE COPPER, 28AWG   |
|            | DIAMETER                | 7/0.12mm +/-0.003mm  |
| INSULATION | MATERIAL                | HDPE(CMI-75E)  |
|            | THICKNESS               | MIN. AVERAGE THICKNESS: 0.28mm<br>MIN.THICKNESS: 0.22mm  |
|            | COLOR CODE              | Pair 1: Blue & White/Blue      Pair 3: Green & White/Green<br>Pair 2: Orange & White/Orange      Pair 4: Brown & White/Brown |
|            | DIAMETER                | 0.9 +/-0.03mm  |
|            | TENSILE STRENGTH        | 16.5 MPa / 2400 PSI  |
|            | ULTIMATE ELONGATION     | ≥300%  |
|            | JACKET                  | MATERIAL   |
| JACKET     | THICKNESS               | MIN. AVERAGE THICKNESS: 0.585mm<br>MIN.THICKNESS: 0.485mm  |
|            | OVERALL DIAMETER        | 5.4mm +/-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   |
| DRAIN WIRE | MATERIAL                | Tinned Copper  |

## ELECTRIC REQUIREMENT

|  | CATEGORY 6A S/FTP STRANDED |
|--|----------------------------|
| CHARACTERISTIC IMPEDENCE(Zo)             | 85~115Ω (1~600MHz)         |
| 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%                        |

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## 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<br>(MHz) | MAX. ATTENUATION<br>(dB/100m) | MIN, Pr-Pr NEXT<br>(dB) | MIN. PSNEXT<br>(dB) | MIN. RETURN LOSS<br>(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                     |
| 600                | 90.2                          | 31.9                    | 30.1                | 12.3                     |

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<br>600MHz S/FTP <b>PT</b> pactech FlexLite PGS-FL6A8-41ST211X1 STRANDED BATCH NO. RoHS |         |