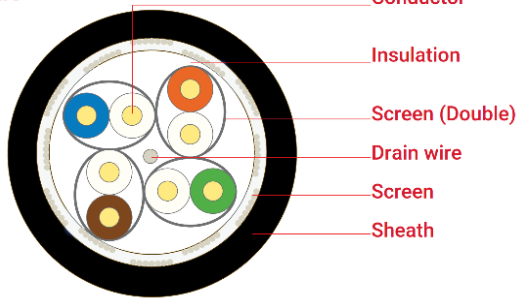




Cable structure



Conductor: Electrolytic copper wire, \varnothing 22AWG

Insulation: Physical foam PE, in compliance with TIA 568 insulation colour coding 70°C, EN 50290-2-23

Screen (Double): Al-Pet tape min. 100% coverage

Drain wire: Tinned copper, \varnothing 26AWG

Screen: Tinned braided copper wire, 40% coverage

Sheath: PE - RAL 9011 Black, \varnothing 7.8 mm 80°C, EN 50290-2-24

Applications

Utilising physical foam insulation technology, this data cable range is designed for analogue and digital signal transmission in audio, video and data applications supporting 1.2 GHz, 10Gbit/s 10 Gigabit Ethernet. Cables meet the requirements of structural cabling standards including ANSI EIA/TIA 568, ISO/IEC 11801 and EN 50173 Class FA.

IEEE 802.3:10Base-T; 100Base-T; 1000Base-T; 10GBase-T IEEE 802.5 16 MB; ISDN; TPDDI; ATM
Power over Ethernet (PoE) / PoE+

Standards

ISO/IEC 11801 2nd ed., IEC 61156-7
EN 50173-1

Fire performance

Vertical flame propagation EN 60332-1-2 (LSZH)
Corrosive gas EN 60754-1/2 (LSZH)
Smoke density EN 61034-2 (LSZH)

EU declaration of conformity

LVD Low Voltage Directive 2014/35/EU
RoHS Restriction of Hazardous Substances 2011/65/EU

Product Code

232852424

Specifications

| | | |
|--------------------------------|---------|----------------------------------|
| Temperature range | fixed | -20°C ...+60°C |
| | flexing | 0°C ...+50°C |
| Bending radius | fixed | min. 4 x D |
| | flexing | min. 8 x D |
| Tensile strength | max. | 135 N |
| Crushing strength | min. | 1000 N/10 cm |
| Impact strength | min. | 10 impacts |
| Conductor resistance | max. | 60 Ω /km |
| Resistance imbalance | max. | 2% |
| Insulation resistance | min. | 5000 M Ω x m |
| Capacitance | nom. | 42 pF/m |
| Capacity imbalance | max. | 1600 pF/km |
| Rated impedance | | 100 \pm 5 Ω @100 MHz |
| Velocity of propagation | | 78-80% |
| Propagation delay | max. | 430 ns/100 m |
| Signal delay | max. | 25 ns/100 m |
| Test voltage | | 1000 V |
| Operating voltage | max. | 125 V |
| TCL | min. | "Level 2" |
| Coupling attenuation | | "Type Ib" |
| Transfer Impedance | | "Class 1" |
| Segregation class | | "d" EN 50174-2 |

SYS1500 S/F22 PE Category 7A+ S/FTP 4x2x22AWG

Transmission characteristics @ 20°C

| Frequency [MHz] | Attenuation [dB/100 m] typ.max. | | NEXT [dB] typ.max. | | PS-NEXT [dB] typ.max. | | ACR [dB/100 m] typ.max. | | PS-ACR [dB/100 m] typ.max. | | ACR-F [dB/100 m] typ.max. | | PS-ACR-F [dB/100 m] typ.max. | | RL [dB] typ.max. | |
|-----------------|---------------------------------|------|--------------------|------|-----------------------|------|-------------------------|------|----------------------------|------|---------------------------|-------|------------------------------|------|------------------|------|
| 1 | 1.7 | 1.9 | 105 | 78 | 102 | 75 | 103 | 76.1 | 100 | 76.1 | 100 | 73.1 | 110 | 78 | 107 | 75 |
| 4 | 3.2 | 3.5 | 105 | 78 | 102 | 75 | 102 | 74.5 | 99 | 74.5 | 99 | 71.5 | 108 | 78 | 105 | 75 |
| 10 | 4.9 | 5.4 | 105 | 78 | 102 | 75 | 100 | 72.6 | 97 | 72.6 | 97 | 69.6 | 105 | 74 | 102 | 71 |
| 100 | 16.1 | 17.5 | 105 | 76 | 102 | 73 | 89 | 58.5 | 86 | 58.5 | 86 | 55.5 | 95 | 54 | 92 | 51 |
| 250 | 26 | 28.5 | 105 | 70 | 102 | 67 | 79 | 41.5 | 76 | 41.5 | 76 | 38.5 | 85 | 46 | 82 | 43 |
| 500 | 37.2 | 41.8 | 99 | 65.5 | 96 | 62.5 | 62 | 23.7 | 59 | 23.7 | 59 | 20.7 | 71 | 40 | 78 | 37 |
| 600 | 40.2 | 46.3 | 96 | 64.3 | 93 | 61.3 | 56 | 18 | 53 | 18 | 53 | 15 | 63 | 38.4 | 60 | 35.4 |
| 800 | 49 | 56.9 | 93 | 62 | 90 | 59 | 44 | 5.1 | 41 | 5.1 | 41 | 2.1 | 56 | 35.3 | 53 | 32.3 |
| 1000 | 54.8 | 62 | 88 | 61 | 85 | 58 | 33 | -1 | 30 | -1 | 30 | -4 | 52 | 34 | 49 | 31 |
| 1200 | 58.0 | 69 | 85 | 59.8 | 82 | 56.8 | 27 | -9.2 | 24 | -9.2 | 24 | -12.2 | 43 | 32.4 | 40 | 29.4 |
| 1500 | 67.5 | - | 81 | - | 78 | - | 15 | - | 12 | - | 12 | - | 38 | - | 35 | - |

IEC 61156-7

