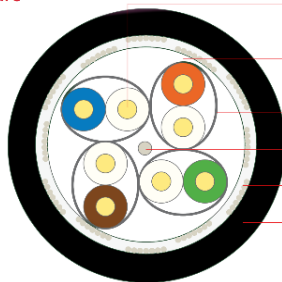




Cable structure



Conductor

Insulation

Screen (Double)

Drain wire

Screen

Sheath

Conductor: Electrolytic copper wire, Ø 23AWG

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, Ø 26AWG

Screen: Tinned braided copper wire, 40% coverage

Sheath: PE - RAL 9011 Black, Ø 7.4 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 500 MHz, 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 EA.  
IEEE 802.3:10Base-T; 100Base-T; 1000Base-T; 10GBase-T  
IEEE802.5 16 MB; ISDN; TPDDI; ATM  
Power over Ethernet (PoE) / PoE+

## Standards

ISO/IEC 11801 2nd ed., IEC 61156-5  
EN 50173-1, EN 50288-4-1

## 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

3275323

## Specifications

|                                |         |                       |
|--------------------------------|---------|-----------------------|
| <b>Temperature range</b>       | fixed   | -20°C ...+60°C        |
|                                | flexing | 0°C ...+50°C          |
| <b>Bending radius</b>          | fixed   | min. 4 x D            |
|                                | flexing | min. 8 x D            |
| <b>Tensile strength</b>        | max.    | 110 N                 |
| <b>Crushing strength</b>       | min.    | 1000 N/10 cm          |
| <b>Impact strength</b>         | min.    | 10 impacts            |
| <b>Conductor resistance</b>    | max.    | 75 Ω/km               |
| <b>Resistance imbalance</b>    | max.    | 2%                    |
| <b>Insulation resistance</b>   | min.    | 5000 MΩ x m           |
| <b>Capacitance</b>             | nom.    | 42 pF/m               |
| <b>Capacity imbalance</b>      | max.    | 1600 pF/km            |
| <b>Rated impedance</b>         |         | 100 ± 5 Ω<br>@100 MHz |
| <b>Velocity of propagation</b> |         | 78-80%                |
| <b>Propagation delay</b>       | max.    | 430 ns/100 m          |
| <b>Signal delay</b>            | max.    | 25 ns/100 m           |
| <b>Test voltage</b>            |         | 1000 V                |
| <b>Operating voltage</b>       | max.    | 125 V                 |
| <b>TCL</b>                     | min.    | "Level 2"             |
| <b>Coupling attenuation</b>    |         | "Type Ib"             |
| <b>Transfer Impedance</b>      |         | "Class 1"             |
| <b>Segregation class</b>       |         | "d" EN 50174-2        |

## SYS900 S/F23 PE Category 7 S/FTP 4x2x23AWG

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               | 1.8                             | 2.0  | 100                | 80 | 97                    | 77 | 98                      | 78 | 95                         | 75 | 107                       | 80 | 104                          | 77 | 26               | 20   |
| 4               | 3.3                             | 3.7  | 100                | 80 | 97                    | 77 | 96                      | 77 | 93                         | 74 | 107                       | 80 | 104                          | 77 | 30               | 23   |
| 10              | 5.3                             | 5.9  | 100                | 80 | 97                    | 77 | 94                      | 74 | 91                         | 71 | 104                       | 74 | 101                          | 71 | 33               | 25   |
| 100             | 17.5                            | 19   | 100                | 72 | 97                    | 69 | 82                      | 54 | 79                         | 51 | 92                        | 54 | 89                           | 51 | 33               | 25.7 |
| 200             | 25.2                            | 27.5 | 100                | 68 | 97                    | 65 | 75                      | 41 | 72                         | 38 | 84                        | 48 | 81                           | 45 | 32               | 23.6 |
| 250             | 28.0                            | 31   | 100                | 66 | 97                    | 63 | 72                      | 36 | 69                         | 33 | 81                        | 46 | 78                           | 43 | 30               | 21.5 |
| 500             | 40.5                            | 45.3 | 96                 | 62 | 93                    | 59 | 55                      | 18 | 52                         | 15 | 68                        | 40 | 65                           | 37 | 27               | 20.1 |
| 600             | 44.5                            | 50.1 | 90                 | 61 | 87                    | 58 | 45                      | 12 | 42                         | 9  | 64                        | 38 | 61                           | 35 | 25               | 17.3 |
| 700             | 53.5                            | -    | 84                 | -  | 81                    | -  | 30                      | -  | 27                         | -  | 56                        | -  | 53                           | -  | 23               | 15.9 |
| 800             | 55.0                            | -    | 83                 | -  | 80                    | -  | 28                      | -  | 25                         | -  | 54                        | -  | 51                           | -  | 22               | 15.2 |
| 900             | 57.0                            | -    | 81                 | -  | 78                    | -  | 24                      | -  | 21                         | -  | 49                        | -  | 46                           | -  | 21               | -    |

IEC 61156-5, EN 50288-4-1

