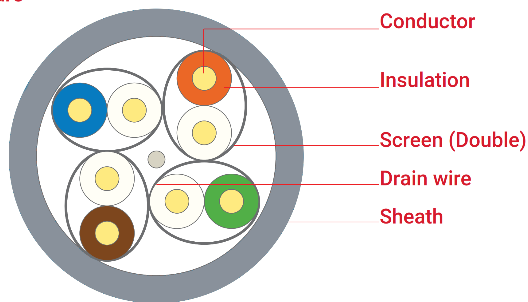


## SYS500 U/F23 LSZH Category 6A U/FTP 4x2x23AWG



### Cable structure



Conductor: Electrolytic copper wire,  $\varnothing$  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,  $\varnothing$  26AWG

Sheath: LSZH/LSOH - RAL 7001 Gray,  $\varnothing$  7.0 mm  
70°C, EN 50290-2-27

### 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, 10 Gbit/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 IEEE 802.5 16 MB; ISDN; TPDDI; ATM  
Power over Ethernet (PoE) / PoE+

### Standards

ISO/IEC 11801 2nd ed., IEC 61156-5  
EN 50173-1, EN 50288-10-1  
ANSI EIA/TIA 568-C.2

### 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

222722202

### 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 $\Omega$ /km                  |
| <b>Resistance imbalance</b>    | max.    | 2%                               |
| <b>Insulation resistance</b>   | min.    | 5000 M $\Omega$ x m              |
| <b>Capacitance</b>             | nom.    | 42 pF/m                          |
| <b>Capacity imbalance</b>      | max.    | 1600 pF/km                       |
| <b>Rated impedance</b>         |         | 100 $\pm$ 5 $\Omega$<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 II"                        |
| <b>Transfr Impedance</b>       |         | "Class 2"                        |
| <b>Segregation class</b>       |         | "c" EN 50174-2                   |

## SYS500 U/F23 LSZH Category 6A U/FTP 4x2x23AWG

Transmission characteristics @ 20°C

| Frequency<br>[MHz] | Attenuation<br>[dB/100 m]<br>typ.max. |      | NEXT<br>[dB]<br>typ.max. |      | PS-NEXT<br>[dB]<br>typ.max. |      | ACR<br>[dB/100 m]<br>typ.max. |       | PS-ACR<br>[dB/100 m]<br>typ.max. |       | ACR-F<br>[dB/100 m]<br>typ.max. |      | PS-ACR-F<br>[dB/100 m]<br>typ.max. |      | RL<br>[dB]<br>typ.max. |      |
|--------------------|---------------------------------------|------|--------------------------|------|-----------------------------|------|-------------------------------|-------|----------------------------------|-------|---------------------------------|------|------------------------------------|------|------------------------|------|
| 1                  | 1.9                                   | 2.1  | 95                       | 75.3 | 92                          | 72.3 | 93                            | 73.2  | 90                               | 70.2  | 100                             | 68   | 97                                 | 65   | 26                     | 20   |
| 4                  | 3.5                                   | 3.8  | 95                       | 66.3 | 92                          | 63.3 | 91                            | 62.5  | 88                               | 59.5  | 100                             | 56   | 97                                 | 53   | 27                     | 23   |
| 10                 | 5.6                                   | 5.9  | 95                       | 60.3 | 92                          | 57.3 | 89                            | 54.4  | 86                               | 51.4  | 92                              | 48   | 89                                 | 45   | 30                     | 25   |
| 16                 | 6.9                                   | 7.5  | 95                       | 57.2 | 92                          | 54.2 | 88                            | 49.8  | 85                               | 46.8  | 88                              | 43.9 | 85                                 | 40.9 | 30                     | 25.7 |
| 31.25              | 9.80                                  | 10.5 | 95                       | 52.9 | 92                          | 49.9 | 85                            | 42.4  | 82                               | 39.4  | 82                              | 38.1 | 79                                 | 35.1 | 30                     | 23.6 |
| 62.50              | 14.1                                  | 15   | 95                       | 48.4 | 92                          | 45.4 | 81                            | 33.4  | 78                               | 30.4  | 76                              | 32.1 | 73                                 | 29.1 | 30                     | 21.5 |
| 100                | 17.7                                  | 19.1 | 95                       | 45.3 | 92                          | 42.3 | 77                            | 26.2  | 74                               | 23.2  | 72                              | 28   | 69                                 | 25   | 30                     | 20.1 |
| 250                | 29.5                                  | 31.1 | 85                       | 39.3 | 82                          | 36.3 | 55                            | 8.3   | 52                               | 5.3   | 64                              | 20   | 61                                 | 17   | 24                     | 17.3 |
| 400                | 38.8                                  | 40.1 | 80                       | 36.3 | 77                          | 33.3 | 41                            | -3.8  | 38                               | -6.8  | 57                              | 16   | 54                                 | 13   | 23                     | 15.9 |
| 500                | 43.5                                  | 45.3 | 75                       | 34.8 | 72                          | 31.8 | 31                            | -10.4 | 28                               | -13.4 | 55                              | 14   | 52                                 | 11   | 22                     | 15.2 |

IEC 61156-5, EN 50288-10-1

