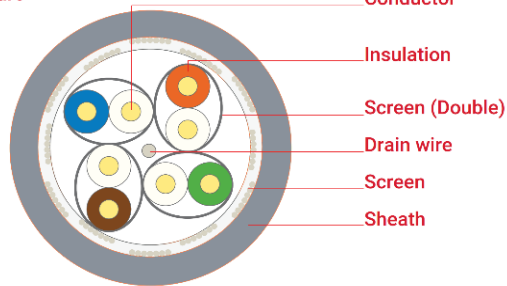


## SYS500 S/F23 LSZH Category 6A S/FTP 4x2x23AWG



Cable structure



Conductor

Insulation

Screen (Double)

Drain wire

Screen

Sheath

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

Screen: Tinned braided copper wire, 40% coverage

Sheath: LSZH/LSOH - RAL 7001 Grey,  $\varnothing$  7.4 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, 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 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

222722402

### 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 $\Omega$ @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 2"
<b>Segregation class</b>		"c" EN 50174-2

## SYS500 S/F23 LSZH Category 6A 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	2.1	95	75.3	92	72.3	93	73.2	90	70.2	100	6.8	97	6.5	26	20
4	3.6	3.8	95	66.3	92	63.3	91	62.5	88	59.5	100	5.6	97	5.3	27	23
10	5.3	5.9	95	60.3	92	57.3	89	54.4	86	51.4	92	4.8	89	4.5	30	25
16	6.8	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	9.9	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	14.2	15	95	48.4	92	45.4	81	33.4	78	30.4	76	32.1	73	29.1	30	21.5
100	18.0	19.1	95	45.3	92	42.3	77	26.2	74	23.2	72	28	69	25	30	20.1
250	28.9	31.1	85	39.3	82	36.3	56	8.3	52	5.3	64	20	61	17	24	17.3
400	37.0	40.1	80	36.3	77	33.3	43	-3.8	38	-6.8	57	16	54	13	23	15.9
500	41.5	45.3	75	34.8	72	31.8	33	-10.4	28	-13.4	55	14	52	11	22	15.2

IEC 61156-5, EN 50288-10-1

