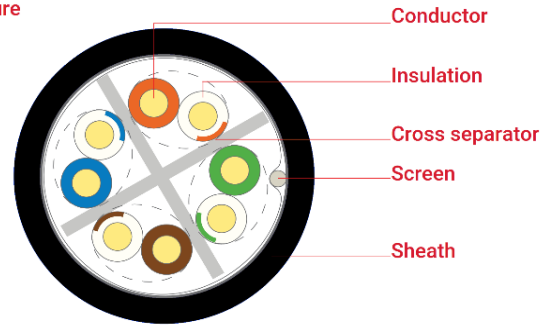
# SYS400 F/U23 PE Category 6 F/UTP 4x2x23AWG

Cable structure




Conductor:Electrolytic copper wire, Ø 23AWG

Insulation: HDPE in compliance with TIA 586 insulation colour coding 80°C, EN 50290-2-23

Screen: Pet tape min. 100% coverage
Tinned copper drain wire, Ø 26AWG
Al-Pet tape min. 100% covera

Sheath: PE - RAL 9011 Black, Ø 7.2 mm 80°C, EN 50290-2-24

## Applications

This data cable range is designed for analogue and digital signal transmission in audio, video and data applications in data communication systems supporting 250 MHz, 1.0 Gbit/s 1 Gigabit Ethernet. Cables meet the requirements of structural cabling standards including ANSI EIA/TIA 568, ISO/IEC 11801 and EN 50173 Class E.
IEEE 802.3:10Base-T; 100Base-T; 1000Base-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 50288-5-1
ANSI EIA/TIA 568-C.2

## EU declaration of conformity

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

## Product Code

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## 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. | 100 N |
| ***Crushing strength*** | | min. | 1000 N/10 cm |
| ***Impact strength*** | | min. | 10 impacts |
| ***Conductor resistance*** | | max. | 85 Ω/km |
| ***Resistance imbalance*** | | max. | 2% |
| ***Insulation resistance*** | | min. | 5000 MΩ x m |
| ***Capacitance*** | | nom. | 50 pF/m |
| ***Capacity imbalance*** | | max. | 1600 pF/km |
| ***Rated impedance*** | | | 100 ± 5 Ω @100 MHz |
| ***Velocity of propagation*** | | | 67-69% |
| ***Propagation delay*** | | max. | 537 ns/100 m |
| ***Signal delay*** | | max. | 45 ns/100 m |
| ***Test voltage*** | | | 1000 V |
| ***Operating voltage*** | | max. | 125 V |
| ***TCL*** | | min. | "Level 2" |
| ***Coupling attenuation*** | | | "Type II" |
| ***Transfer Impedance*** | | | "Class 2" |
| ***Segregation class*** | | | "c" EN 50174-2 |

# SYS400 F/U23 PE Category 6 F/UTP 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 | 1.9 | 2.1 | 82 | 66 | 79 | 64 | 80 | 63.9 | 77 | 61.9 | 85 | 66 | 82 | 64 | 26 | 20 |
| 4 | 3.8 | 3.8 | 76 | 65.3 | 73 | 63.3 | 72 | 61.4 | 69 | 59.4 | 77 | 58 | 74 | 55 | 31 | 23 |
| 10 | 5.9 | 6 | 70 | 59.3 | 67 | 57.3 | 64 | 53.3 | 61 | 51.3 | 68 | 50 | 64 | 47 | 32 | 25 |
| 16 | 7.4 | 7.6 | 65 | 56.2 | 62 | 54.2 | 58 | 48.6 | 55 | 46.6 | 63 | 45.9 | 60 | 42.9 | 34 | 25 |
| 31.25 | 10.5 | 10.7 | 60 | 51.9 | 57 | 49.9 | 49 | 41.1 | 46 | 39.1 | 51 | 40.1 | 48 | 37.1 | 36 | 23.6 |
| 62.50 | 15.1 | 15.5 | 58 | 47.4 | 55 | 45.4 | 43 | 31.9 | 40 | 29.9 | 44 | 34.1 | 41 | 31.1 | 32 | 21.5 |
| 100 | 19 | 19.9 | 52 | 44.3 | 49 | 42.3 | 33 | 24.4 | 30 | 22.4 | 35 | 30 | 32 | 27 | 32 | 20.1 |
| 250 | 31 | 33 | 48 | 38.3 | 45 | 36.3 | 17 | 5.3 | 14 | 3.3 | 19 | 22 | 16 | 19 | 30 | 173 |
| 300 | 36 | - | 43 | - | 40 | - | 13 | - | 10 | - | 14 | - | 11 | - | 28 | - |
| 400 | 41.6 | - | 40 | - | 37 | - | 8 | - | 5 | - | 8 | - | 5 | - | 26 | - |

IEC 61156-5, EN 50288-5-1