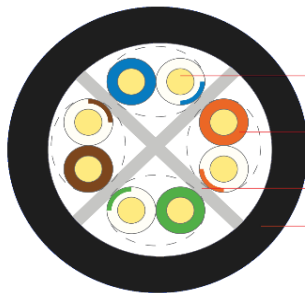




## Cable structure



Conductor

Insulation

Cross separator

Sheath

Conductor: Electrolytic copper wire, Ø 23AWG

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

Sheath: PE - RAL 9011 Black, Ø 6.0 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 50288-6-1

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

2222252622

## 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.	100 N
<b>Crushing strength</b>	min.	1000 N/10 cm
<b>Impact strength</b>	min.	10 impacts
<b>Conductor resistance</b>	max.	85 Ω/km
<b>Resistance imbalance</b>	max.	2%
<b>Insulation resistance</b>	min.	5000 MΩ x m
<b>Capacitance</b>	nom.	50 pF/m
<b>Capacity imbalance</b>	max.	1600 pF/km
<b>Rated impedance</b>		100 ± 5 Ω
<b>Velocity of propagation</b>		@100 MHz 67-69%
<b>Propagation delay</b>	max.	537 ns/100 m
<b>Signal delay</b>	max.	45 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 III"
<b>Segregation class</b>		"c" EN 50174-2

## SYS400 U23 PE Category 6 U/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	17.3
300	36	-	43	-	40	-	13	-	10	-	14	-	11	-	28	-
400	41.6	-	40	-	37	-	8	-	5	-	8	-	5	-	26	-

IEC 61156-5, EN 50288-6-1

