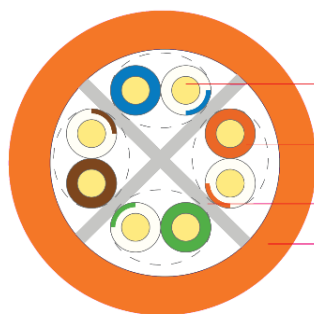




Cable structure



Conductor

Conductor: Electrolytic copper wire, Ø 23AWG

Insulation

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

Cross separator

Sheath: LSZH/LSOH - RAL 2003 Orange, Ø6.0 mm
70°C, EN 50290-2-27

Sheath

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

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

??????

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
Velocity of propagation		@100 MHz 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 III"
Segregation class		"b" EN 50174-2

SYS400 U23 LSZH 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

