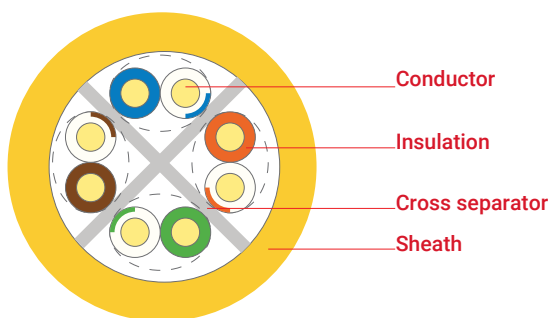




Cable structure



Electrolytic copper wire, Ø 23AWG

HDPE, in compliance with TIA 568 insulation colour coding
80°C, EN 50290-2-23

PE

LSZH/LS0H - RAL 1018 Yellow, Ø 6.0 mm

70°C, EN 50290-2-27

PVC - RAL 7001 Grey, Ø 6.0 mm

TM51 70°C, EN 50290-2-22

PE - RAL 9011 Black, Ø 6.0 mm

80°C, EN 50290-2-24

Application

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-PVC)

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

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	

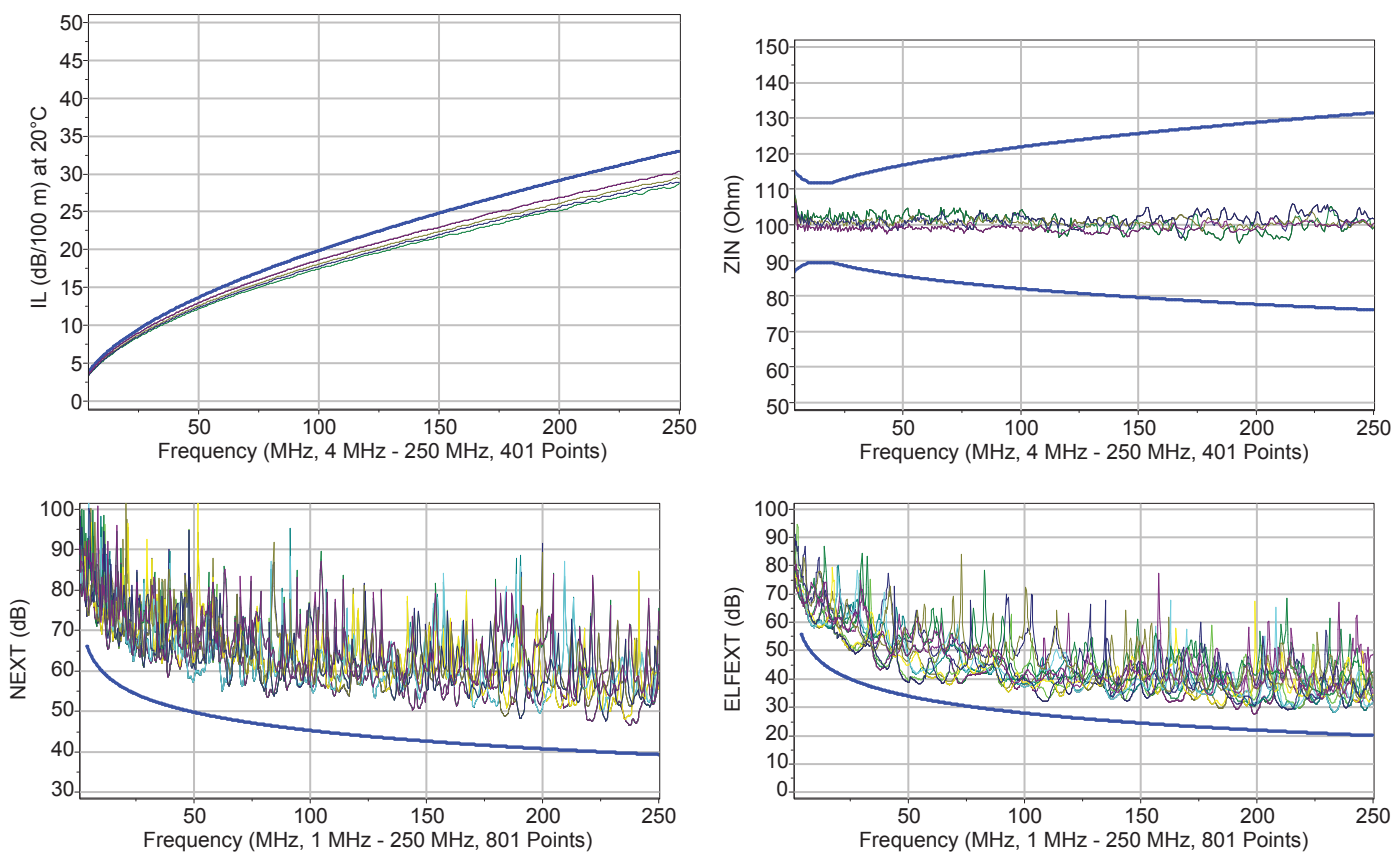
Conductor resistance	max.	85 Ω/km	
Resistance imbalance	max.	2%	
Insulation resistance	min.	5000 MΩ x m	
Capacitance	nom.	50 pF/m	
Capacity imbalance max.	1600 pF/km		
Rated impedance	100 ± 5 Ω @100 MHz		
Velocity of propagation	67-69%		
Propagation delay	max.	537 ns/100 m	
Signal delay	max.	45 ns/100 m	
Test voltage	1000 V		
Operating voltage	max.	125 V	

TCL	min.	"Level 2"	
Coupling attenuation	"Type III"		
Segregation class	"b" EN 50174-2		

Specifications may vary depending on technical modifications.

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	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
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 50288-6-1



Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]	Sheath colour	Packaging [m]
506022	SL400 U23 LSZH Cat 6 U/UTP 4x2x23AWG SL400	6.0	18	40	Yellow (RAL 1018)	Yellow (RAL 1018)
506076	U23 LSZH Cat 6 U/UTP 4x2x23AWG SL400 U23	6.0	18	40	Orange (RAL 2003)	Orange (RAL 2003)
506077	LSZH Cat 6 U/UTP 4x2x23AWG SL400 U23 LSZH	6.0	18	40	Blue (RAL 5015)	Blue (RAL 5015)
506075	Cat 6 U/UTP 4x2x23AWG SL400 U23 LSZH Cat	6.0	18	40	Grey (RAL 7001)	Grey (RAL 7001)
506082	6 U/UTP 4x2x23AWG SL400 U23Dx LSZH Cat 6	6.0	18	40	Green (RAL 6018)	Green (RAL 6018)
506031	U/UTP 2x(4x2x23AWG) SL400 U23 PVC Cat 6	6.0x12.0	36	80	Yellow (RAL 1018)	Yellow (RAL 1018)
506019	U/UTP 4x2x23AWG SL400 U23 PVC Cat 6 U/	6.0	18	39	Grey (RAL 7001)	Grey (RAL 7001)
506126	UTP 4x2x23AWG SL400 U23 PE Cat 6 U/UTP	6.0	18	39	Blue (RAL 5024)	Blue (RAL 5024)
506025	4x2x23AWG	6.0	18	35	Black (RAL 9011)	Black (RAL 9011)

Specifications may vary depending on technical modifications.