SL400 SF/U23

Data cable , Category 6

SF/UTP, Class E, 250MHz

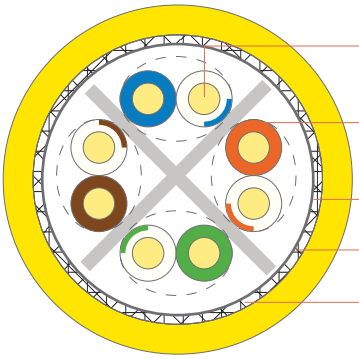
4x2xAWG23

Types
SL400 SF/U23 PVC
SL400 SF/U23 LSZH
SL400 SF/U23Dx LSZH
SL400 SF/U23 PE

PRODUCT INFORMATION

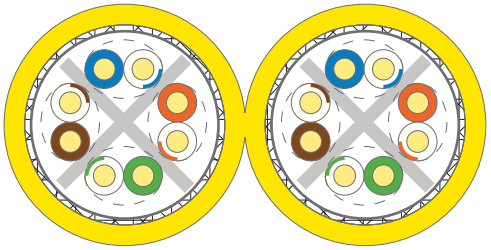
Cable constructions

SL400 SF/U23



Conductor	Bare copper wire Ø 0,55mm (AWG23)
Insulation	Solid PE Ø 1,10mm
Overall screen	Alu-Pet Foil
Overall shielding	Tinned copper braiding
Outer sheath	FRNC/LSZH *alt. FR-PVC or PE*

SL400 SF/U23Dx LSZH
Duplex construction



Features and applications

Recber SL400 SF/U23 is premium grade Class E data cable for building structured premises cabling, to support Ethernet protocol for installation in horizontal and backbone areas. They are characterized by large performance reserves and outstanding quality.It has excellent shielding efficiency due to overall foil screen and tinned copper braiding.

Suitable for applications up to Class E (250MHz) 1GbE acc.to IEEE 802.3 ab, VoIP, Power over Ethernet (PoE)/PoE+, transmission of digital and analogue signals,voice, video and data applications. Services such as Ethernet 10 Base-T, Fast Ethernet 100 Base-T, ATM155, FDDI, token ring 4/16 Mbit/s or ISDN.

Standards

• International standard	ISO/IEC 11801 2nd ed., IEC 61156-5
• European standard	EN 50173-1, EN 50288-5-1
• U.S. Standards	ANSI EIA/TIA 568-C.2

Flame resistancy

• Flame retardancy	IEC 60332-1-2 *(FR-PVC, FRNC/LSZH)*
• Halogen free	IEC 60754-1/2 *(FRNC/LSZH)*
• Smoke density	IEC 61034-1/2 *(FRNC/LSZH)*

CE
RoHS

Low Voltage Directive 2006/95/EC
EC Directive 2011/65/EU

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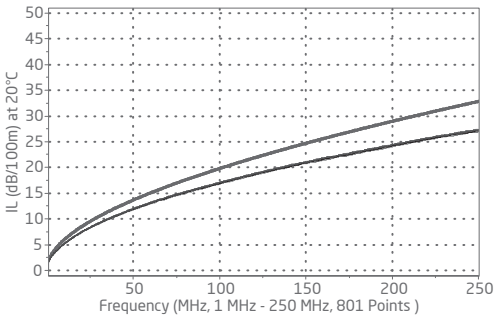
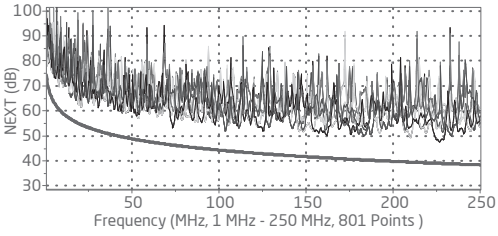
Electrical characteristics (HF) at 20 °C

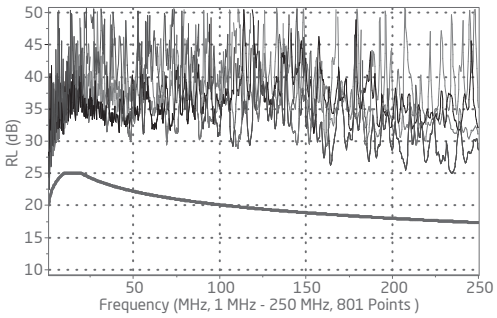
Frequency [MHz]	Attenuation [dB/100m]		NEXT [dB]		PS-NEXT [dB]		ACR [dB/100m]		PS-ACR [dB/100m]		ACR-F [dB/100m]		PS-ACR-F [dB/100m]		RL [dB]	
	typ.	max.	typ.	min.	typ.	min.	typ.	min.	typ.	min.	typ.	min.	typ.	min.	typ.	min.
1	1,9	2,1	84	66	81	64	82	63,9	79	61,9	85	66	82	64	26	20
4	3,8	3,8	78	65,3	75	63,3	74	61,4	71	59,4	77	58	74	55	31	23
10	5,9	6	72	59,3	69	57,3	66	53,3	63	51,3	68	50	64	47	32	25
16	7,4	7,6	67	56,2	64	54,2	60	48,6	57	46,6	63	45,9	60	42,9	34	25
31,25	10,5	10,7	62	51,9	59	49,9	51	41,1	48	39,1	51	40,1	48	37,1	36	23,6
62,50	15,1	15,5	60	47,4	57	45,4	45	31,9	42	29,9	44	34,1	41	31,1	32	21,5
100	19	19,9	54	44,3	51	42,3	35	24,4	32	22,4	35	30	32	27	32	20,1
250	31	33	50	38,3	47	36,3	19	5,3	16	3,3	19	22	16	19	30	17,3
300	36	-	45	-	42	-	15	-	12	-	14	-	11	-	28	-
400	41,6	-	42	-	39	-	10	-	7	-	8	-	5	-	26	-

Electrical characteristics (LF) at 20 °C

• DC resistance	max.	76 Ω/km
• Resistance unbalance	max.	2 %
• Insulation resistance	min.	2 G Ω x km
• Mutual capacitance	nom.	48 pF/m
• Capacitance unbalance	max.	1500 pF/km
• Characteristic impedance	@ 100MHz	100 ± 5 Ω
• Transfer impedance	@ 1/10/30MHz	12/10/30 mΩ/m
• Coupling attenuation	min.	80 dB (Type 1)
• Velocity of propagation	approx.	67 %
• Propagation delay	nom.	510 ns/100 m
• Skew at 100MHz	nom.	25 ns/100 m
• Testing voltage		1000 V
• Operating voltage	max.	125 V







Mechanical characteristics

• Bending radius		
during installation	min.	8 x D
as installed	min.	4 x D
• Tensile strength	max.	160 N (Sx) [1], 320 N (Dx) [1]
• Crush resistance	min.	1000 N/10cm
• Impact strength	min.	10 impacts
• Temperature range		
installation		0 °C to +50 °C
in operation		-20 °C to +60 °C *(FR-PVC / LSZH)*
		-40 °C to +80 °C *(PE)*

Part no.	Dimensions	Outer dia. approx.[mm]	Cu content [kg/km]	Cable weight [kg/km]	Fire load [MJ/m]	[kWh/m]	Sheath - Color	Packing [m]
506021	4 x 2 x 0,55	7,6	28	62	0,95	0,26	FR-PVC [2] (RAL 7035)	500/1000
506024	4 x 2 x 0,55	7,6	28	63	0,90	0,25	FRNC/LSZH [3] (RAL 1021)	500/1000
506033	2 x (4 x 2 x 0,55)	7,6 x 15,4	56	126	1,80	0,50	FRNC/LSZH [3] (RAL 1021)	500
506027	4 x 2 x 0,55	7,6	28	54	1,56	0,43	PE [4] (RAL 9011)	500/1000

[1] Sx= Simplex , Dx= Duplex
[2] FR-PVC=Flame Reterdant Polyvinyl Chloride
[3] FRNC/LSZH=Flame Reterdant Non Corrosive / Low Smoke Zero Halogen
[4] PE=Polyethylene

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