MegaLine® D1-20 SF/U flex

Category 5

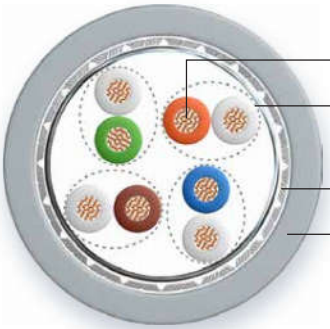
S_2 P_0 A_1 C_2 E_3

Advantages

- better than category 5
- bandwidth 200 MHz
- good shielding characteristics
- RoHS and REACh conformity

Type **KS-02YS(ST+C)Y 4x2xAWG 26/7**

Construction



Conductor	Bare stranded copper wire, AWG 26/7
Insulation	Cellular PE, core-diameter: max. 1.0 mm
Twisting element	Pair
Twisting	4 pairs
Overall shielding	Aluminium bonded polyester foil and Tinned copper braid
Outer sheath	PVC

Fire behaviour	
Flame retardancy	acc. to IEC 60332-1-2
Fire load (reference value)	0.4 MJ/m

Performance	
better than category 5 acc. to EN 50288 and IEC 61156	
excellent shielding characteristics	
Bandwidth 200 MHz	

Applications	
Connection cable and patch cord for use in generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (2nd edition).	
Ideal for all applications of class D up to 1 GbE acc. to IEEE 802.3 ab, VoIP, PoE.	

Mechanical characteristics		
Bending radius	in operation	5 x outer diameter
Tensile strength (max.)		60 N

Electromagnetic behaviour	
Transfer impedance at 10 MHz (nom.)	10 mΩ/m
Shield attenuation up to 1000 MHz (nom.)	50 dB
Coupling attenuation up to 1000 MHz (nom.)	65 dB

Security (fire behaviour)

S	1	2	3	4	5
	IEC 60332-2-2	IEC-60332-1-2	IEC-60332-3-24	EFP Grade 1	EFP Grade 2

Performance (cable class, bandwidth)

P	1	2	3	4	5
	> Class E > 250 MHz	> Class E_A > 500 MHz	> Class F > 600 MHz	> Class F_A > 1000 MHz	> Class G > 1200 MHz

Application (Ethernet, TV)

A	1	2	3	4	5
	> 100 MbE	> 1 GbE	up to 10 GbE	> 10 GbE	> 10 GbE TV

Construction (conductor dimension, tensile strength)

C	1	2	3	4	5
	AWG 27	AWG 26/25	AWG 24	AWG 23	AWG 22

EMC (coupling attenuation)

E	1	2	3	4	5
	> 40 dB	> 50 dB	> 60 dB	> 70 dB	> 80 dB

Electrical characteristics (HF) at 20 °C

Frequency MHz	Attenuation dB/10m		NEXT dB		PS-NEXT dB		ACR dB at 10m		PS-ACR dB at 10m		EL-FEXT dB at 10m		PS-ELFEXT dB at 10m		RL dB	
	typ.	Cat. 5 max.*	typ.	Cat. 5 min.*	typ.	Cat. 5 min.*	typ.	Cat. 5 min.*	typ.	Cat. 5 min.*	typ.	Cat. 5 min.*	typ.	Cat. 5 min.*	typ.	Cat. 5 min.*
1	0.24	0.32	76	65	73	62	76	65	73	62	91	64	88	61	24.9	–
4	0.44	0.60	71	56	68	53	70	56	67	53	76	52	73	49	29.8	23
10	0.80	0.95	64	50	61	47	63	49	60	47	68	44	65	41	38.2	25
16	1.01	1.21	60	47	57	44	59	46	56	44	64	40	61	37	39.3	25
31.25	1.44	1.71	56	43	53	40	54	41	51	40	58	34	55	31	36.7	23.6
62.5	2.07	2.48	52	38	49	35	50	36	47	35	52	28	49	25	35	21.5
100	2.66	3.2	48	35	45	32	45	32	42	32	47	24	44	21	29.9	20.1
155	3.26	–	45	–	42	–	42	–	39	–	42	–	39	–	26.2	–
200	3.86	–	42	–	39	–	39	–	36	–	37	–	34	–	23.5	–

* EN 50288-2-2(2004)/IEC 61156-6(2002)

Electrical characteristics (LF) at 20 °C

DC resistance	max.	145 Ω/km
Isolation resistance	min.	5 GΩ x km
Mutual capacitance	approx.	51 pF/m
Signal tempo (c)	approx.	0.65
Propagation delay	approx.	510 ns/100 m
Skew at 100 MHz	approx.	15 ns/100 m
Characteristic impedance	at 100 MHz	100 ± 5 Ω
Testing voltage U_{eff}		1000 V
Operating voltage	max.	125 V

Thermal characteristics

For fixed installation	–20 °C up to +60 °C
For mobile operation	0 °C up to +50 °C

Chemical characteristics

Free from hazardous substances acc. to RoHS 2011/65/EU

Cable printing

LEONI MegaLine D1-20 SF/U flex 4P Y SPACE Code 20123
"Production lot code" "Meter marking"

Colour code

whbu/bu, whor/or, whgn/gn, whbn/bn

Certificates and approvals

Link performance: LEONI MegaLine® systems and further commercial connector systems
Inspection certificates: acc. to DIN 55350-18-4.2.1 and/or EN 10204
Conforms to LVD (2006/95/EC): CE

Dimension	Outer diam. approx.	Weight approx.	Cu content	Colour of sheath	Order no.
	mm	kg/km	kg/km		
4P	5.5	33	21	Light grey, RAL 7035	LKD 7KS5 0008 0000
				Rape yellow RAL 1021	LKD 7KS5 0009 0000
				Turquoise, RAL 6016	LKD 7KS5 0010 0000
				Sky blue, RAL 5015	LKD 7KS5 0011 0000
				Fire red, RAL 3000	LKD 7KS5 0012 0000

Package: Drum 1,000 m