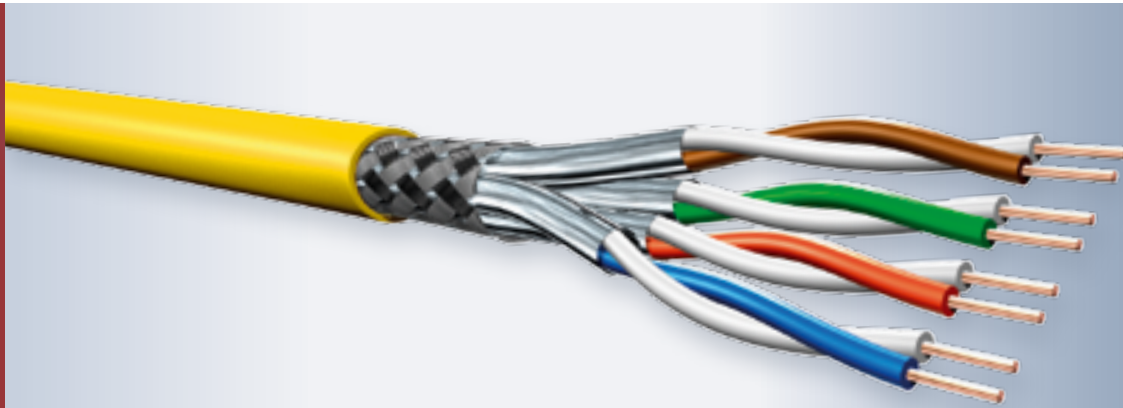


MegaLine® E5-70 S/F

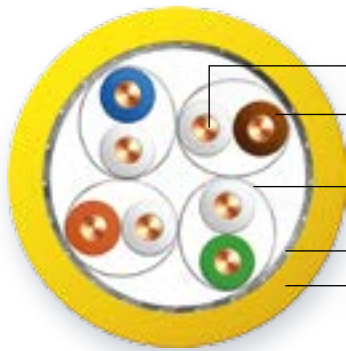
Category 6_A

Types KS-02YSCH 4x2xAWG 23/1 PIMF
KS-02YSCH 2x(4x2xAWG 23/1 PIMF)



S₃ P₂ A₃ C₄ E₄

Construction 4 p



Conductor	Bare copper wire, AWG 23/1
Insulation	Cellular-PE, core-diameter: nominal value 1.4 mm
Twisting element	Pair
Individual shielding	Aluminium-bonded polyester foil, metal side outside (PiMF)
Twisting	4 pairs
Overall shielding	Tinned copper braiding
Outer sheath	Halogen-free, flame-retardant compound

Fire behaviour	
Flame retardancy	acc. to IEC 60332-3-24
Halogen free	acc. to IEC 60754-1/2
Smoke density	acc. to IEC 61034-1/2
Calorific value (approx.)	0.60 MJ/m (Sx), 1.2 NJ/m (Dx)

Performance	
Better than Category 6, acc. to EN 50288 and IEC 61156	
very good NEXT,	
very good shielding characteristics (shielding of pairs and overall shielding),	
low skew, bandwidth 700 MHz	

Applications	
Installation cable for use in structured cabling systems	
acc. to ISO/IEC 11801 and EN 50173 (2nd edition).	
Ideal for all applications from Classes D to E _A , up to 10 GbE	
acc. to IEEE 802.3 an, cable sharing, VoIP, PoE.	

Mechanical characteristics	
Bending radius	8 x overall diameter (min.)
during installation	
after installation	4 x overall diameter (min.)
Tensile strength (max.)	110 N (Sx), 220 N (Dx)
Crush strength	1,000 N/100 mm
Impact strength (number of shocks)	10

Electromagnetic behaviour	
Transfer impedance at 10 MHz (nominal value)	5 mΩ/m
Shielding attenuation up to 1,000 MHz (nominal value)	60 dB
Coupling attenuation up to 1,000 MHz (nominal value)	80 dB

Security (Fire behaviour)

S	1 IEC 60332-2-2	2 IEC 60332-1-2	3 IEC 60332-3-24	4 EFP Grade 1	5 EFP Grade 2
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Performance (cabling class, bandwidth)

P	1 > Class E > 250 MHz	2 > Class E _A > 500 MHz	3 > Class F > 600 MHz	4 > Class F _A > 1000 MHz	5 > Class "G" > 1200 MHz
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Application (Ethernet, TV)

A	1 > 100 MbE	2 > 1 GbE	3 Up to 10 GbE	4 > 10 GbE	5 > 10 GbE TV
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Construction (conductor dimensions, tensile strength)

C	1 AWG 27	2 AWG 26/25	3 AWG 24	4 AWG 23	5 AWG 22
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EMC (coupling attenuation)

E	1 > 40 dB	2 > 50 dB	3 > 60 dB	4 > 70 dB	5 > 80 dB
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Electrical characteristics (HF) at 20 °C

Frequency MHz	Attenuation dB/100 m		NEXT dB		PSNEXT dB		ACR dB at 100 m		PSACR dB at 100 m		ACRF dB at 100 m		PSACRF dB at 100 m		RL dB	
	typ.	Cat. 6 _A max.*	typ.	Cat. 6 _A min.*	typ.	Cat. 6 _A min.*	typ.	Cat. 6 _A min.*	typ.	Cat. 6 _A min.*	typ.	Cat. 6 _A min.*	typ.	Cat. 6 _A min.*	typ.	Cat. 6 _A min.*
1	1.9	2.1	95	75.3	92	72.3	93	73.2	90	70.2	91	68	88	65	26	20
10	5.2	5.9	90	60.3	87	57.3	85	54.4	82	51.4	96	48	93	45	35.9	25
100	17.7	19.1	75	45.3	72	42.3	57	26.2	54	23.2	90	28	87	25	37.2	20.1
200	26.4	27.6	68	40.8	65	37.8	42	13.2	39	10.2	78	22	75	19	33.1	18
250	29.9	31.1	66	39.3	63	36.3	36	8.3	33	5.3	75	20	72	17	30.5	17.3
300	31.9	34.3	65	38.1	62	35.1	33	3.9	30	0.9	72	18.5	69	15.5	29.9	17.3
450	38.9	42.7	63	35.5	60	32.5	24	-7.2	21	-10.2	69	14.9	66	11.9	28.9	17.3
500	41.2	45.3	61	34.8	58	31.8	20	-10.4	17	-13.4	66	14	63	11	28.3	17.3
600	46.2	-	57	-	54	-	11	-	8	-	60	-	57	-	27.2	-
700	51.4	-	54	-	51	-	3	-	0	-	56	-	53	-	26.2	-

* EN 50288-10-1 (draft)/EN 50288-5-1 (2004)/IEC 61156-5 (2009)

Electrical characteristics (LF) at 20 °C

DC resistance	max.	82 Ω/km
Insulation resistance	min.	5 GΩ x km
Mutual capacitance	approx.	42 pF/m
Capacitive coupling (e)	approx.	1,500 pF/km
Signal velocity (c)	approx.	0.80
Propagation delay	approx.	420 ns/100 m
Skew at 100 MHz	approx.	7 ns/100 m
Characteristic impedance	at 100 MHz	100 ± 5 Ω
Testing voltage U _{eff}		1,000 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 2002/95/EC

Printing on outer sheath 4 p

LEONI MegaLine E5-70 S/F 4P H SPACE Code 32344
"VDE approval mark" "production lot code" "meter marking"

Colour code

wh/bu, wh/or, wh/gn, wh/bn

Certificates and approvals

Quality mark with production control: <VDE>
Link performance: LEONI MegaLine® systems
and further commercial connector systems
Inspection certificates: acc. to DIN 55350-18-4.2.1/EN 10204
Conforms to LVD (73/23/EEC): **CE**

Dimensions	Outer diam. approx.	Weight approx.	Cu content	Colour of sheath	Order no.
	mm	kg/km	kg/km		
4 p	7.4	55	30	● Rape yellow RAL 1021	LKD 7KS6 0024 0000
2 x 4 p	7.4 x 15.0	112	60	● Rape yellow RAL 1021	LKD 7KS6 0025 0000

Package: Drum 1,000 m