

MegaLine® F10-130 S/F

KS-02YSC2Y 4 x 2 x AWG 22/1 PIMF

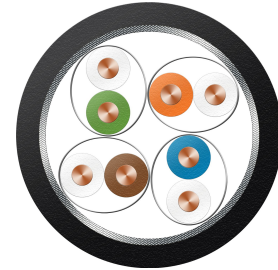
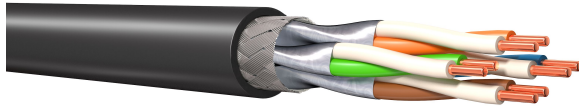
 Category 7_A S₀ P₄ A₄ C₅ E₅


Illustration similar

Construction

Conductor	tinned copper wire, AWG 22/1	Twisting	PiMF to cable core
Insulation	cellular-PE, core-Ø: nominal value 1.6 mm	Overall screen	tinned copper wire braid
Colour code	wh/bl, wh/or, wh/gn, wh/br	Outer sheath	PE
Element	cores to pair	Colour	Jet black
Pair shielding	aluminium-bonded polyester tape		

Cable marking

KERPEN DATACOM Made in Germany MegaLine F10-130 S/F 4P 2Y Cat.7A \$BA-Nr.\$ \$m-sign.\$

Fire Behaviour

Halogen-free	IEC 60754-1/2
Acidity	IEC 60754-2

S	0	1 IEC 60332-2-2	2 IEC-60332-1-2	3 IEC-60332-3-2	4 EFP Grade 1	5 EFP Grade 2
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Security (fire behaviour)

Performance

 better than Category 7 acc. to EN 50288 and IEC 61156
 excellent NEXT, low attenuation, exzellente screen properties
 (pair- and overall screen), low Skew
 Transmission bandwidth (typ.) 1300 MHz

P	0	1 >class E >250MHz	2 >class E >500MHz	3 >class F >600MHz	4 >class F >1000MHz	5 >class G >1200MHz
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Performance (class, bandwidth)

Applications

Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition) and also acc. to ISO/IEC 24702 and EN 50173-3. Ideal for all applications of class D up to FA Multimedia (Video, Data, Voice) >10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+/4PPoE. Suited for outdoor application and direct burial.

A	0	1 >100 MbE	2 > 1GbE	3 bis 10 GbE	4 >10 GbE	5 >10 GbE / TV
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Application (Ethernet, TV)

Mechanical characteristics (cable)

Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Tensile loading (max.)	110 N
Crush resistance (long term)	2000 N/100mm
Impact strength (quantity of impacts)	20

C	0	1 AWG 27	2 AWG 26/25	3 AWG 24	4 AWG 23	5 AWG 22
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Construction (conductor size, tensile strength)

Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	5 mΩ/m
Screen attenuation (nom.)	70 dB
Coupling attenuation (nom.)	85 dB
Segregation class according EN 50174-2	d

E	0	1 > 40 dB	2 > 50 dB	3 > 60 dB	4 > 70 dB	5 > 80 dB
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EMC (coupling attenuation)

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Electrical properties at 20°C

DC resistance (max.)	57.1 Ω/km
Insulation resistance (min.)	5 GΩ x km
Operating capacity (approx.)	40 pF/m
Capacitive coupling (e) (approx.)	1100 pF/km
Signal velocity (approx.)	0.77 x c
Phase delay	420 ns/100m
Skew @ 100 MHz (approx.)	5 ns/100m
Characteristic impedance @ 100 MHz	100 +/- 5 Ω
Test voltage	1000 V
Operating voltage (max.)	125 V

Thermal characteristics (cable)

Temperature (transport / storage)	-25 °C up to +70 °C
Temperature during installation	-10 °C up to +50 °C
Temperature after installation	-25 °C up to +70 °C

Chemical characteristics

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

frequenz MHz	attenuation dB/100m		NEXT dB		PS-NEXT dB		ACR dB@100m		PS-ACR dB@100m		ACR-F dB@100m		PSACR-F dB@100m		RL dB	
	typ.	Cat.7 _A max.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*
1	1,7	2,1	105	78	102	75	104	75,9	101	72,9	105	78	102	75	27,1	20
10	4,5	5,8	105	78	102	75	101	72,2	98	69,2	108	75,3	105	72,3	35,2	25
100	15,4	18,5	105	75,4	102	72,4	90	56,9	87	53,9	93	55,3	90	52,3	38,9	20,1
200	22,9	26,5	105	70,9	102	67,9	83	44,4	80	41,4	85	49,3	82	46,3	36,6	18
250	26	29,7	105	69,4	102	66,4	79	39,7	76	36,7	82	47,3	79	44,3	35,3	17,3
500	35,9	42,8	100	64,9	97	61,9	64	22,2	61	19,2	70	41,3	67	38,3	29,4	17,3
600	40,4	47,1	95	63,7	92	60,7	55	16,6	52	13,6	63	39,7	60	36,7	26,6	17,3
700	44,6	51,1	95	62,7	92	59,7	50	11,6	47	8,6	60	38,4	57	35,4	25,8	16,6
800	47,7	54,9	93	61,9	90	58,9	45	6,9	42	3,9	57	37,2	54	34,2	25	16,1
900	51,6	58,5	90	61,1	87	58,1	38	2,6	35	-4	53	36,2	50	33,2	23,6	15,5
1000	54,8	61,9	88	60,4	85	57,4	33	-1,5	30	-4,5	48	35,3	45	32,3	22,3	15,1
1100	56,9	-	87	-	84	-	30	-	27	-	44	-	41	-	21,4	-
1300	61,4	-	80	-	77	-	21	-	18	-	39	-	36	-	18,3	-

* EN 50288-9-1(2013)/IEC 61156-5(2020)

Standards, certificates and approvals

Conformity	acc. to LVD (2014/35/EU)
Quality seal with production control	GHMT PVP
Link Performance	KERPEN DATACOM MegaLine® systems and further commercial plug-in connector

Part number	Weight	copper weight	Outer Ø approx.	Colour
LKD7KS704220000	79 kg/km	45 kg/km	9.5 mm	Jet black