

MegaLine[®] F10-125 S/F Cca

4 x 2 x AWG 22/1 PIMF

Category 7_A S₄ P₄ A₄ C₅ E₅

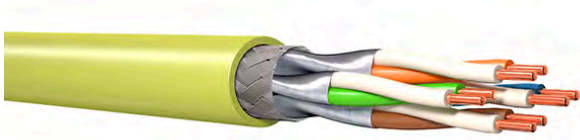


Illustration similar

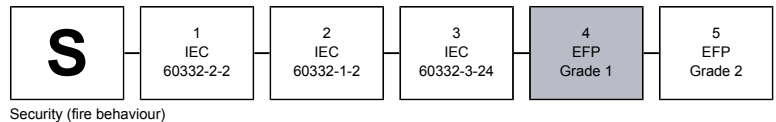
Construction

Conductor bare copper wire, 0.62 mm
 Insulation cellular-PE, core-Ø: nom. 1.5 mm
 Colour code WH/BU, WH/OG, WH/GN, WH/BN
 Element cores to pair
 Pair shielding aluminium-bonded polyester tape

Twisting PiMF to cable core
 Overall screen tinned copper wire braid
 Outer sheath Halogen free flame retardant compound (LSOH)
 Colour Lime green

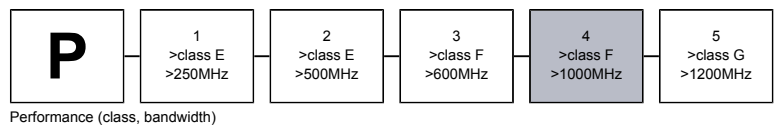
Fire Behaviour

Fire class / DoP Cca -s1,d1,a1 / CDESK0000034
 Fire performance EN 50575 / EN 50399
 Flame retardancy acc. to IEC 60332-3-24
 Halogen-free IEC 60754-1/2
 Acidity IEC 60754-2
 Smoke density IEC 61034-2
 Fire load (approx.) 0.76 MJ/m



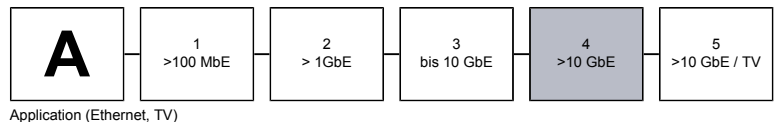
Performance

Better than Category 7_A acc. to EN 50288 and IEC 61156
 excellent NEXT, low attenuation, excellent screen properties
 (pair- and overall screen), low Skew
 Bandwidth (max.) 1300 MHz



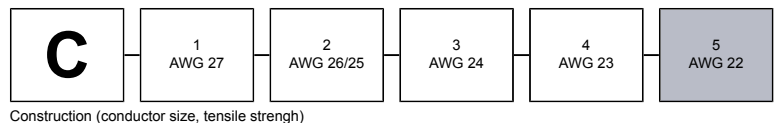
Applications

Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). 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



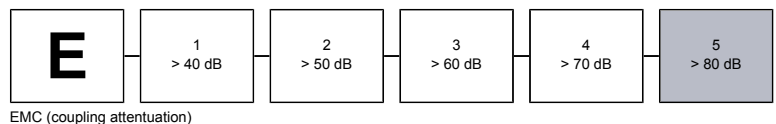
Mechanical characteristics (cable)

Bending radius (static) (min.) 4x outer-Ø
 Bending radius (dynamic) (min.) 8x outer-Ø
 Max. strain relief 110 N
 Crush resistance (long term) 1000 N/100mm
 Impact strength (quantity of impacts) 10



Electromagnetic behaviour

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



MegaLine[®] F10-125 S/F Cca

4 x 2 x AWG 22/1 PIMF

Category 7_A S₄ P₄ A₄ C₅ E₅

Electrical properties at 20°C

DC resistance (max.)	65 Ω/km
Insulation resistance (min.)	5 GΩ x km
Operating capacity (approx.)	42 pF/m
Capacitive coupling (e) (approx.)	1100 pF/km
Signal velocity (approx.)	0.8 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)	-20 °C up to +60 °C
Temperature during installation	0 °C up to +50 °C
Temperature after installation	-20 °C up to +60 °C

Chemical characteristics

Conform to RoHS and REACH

Frequency MHz	Attenuation dB/100m		NEXT dB		PSNEXT dB		ACR-N dB@100m		PSACR-N 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	1,8	2,1	105	78	102	75	104	75,9	101	72,9	105	78	102	75	32,6	-
10	4,7	5,8	105	78	102	75	104	75,9	101	72,9	105	78	102	75	31,5	25,0
100	15,9	18,5	105	75	102	72	89	56,9	86	53,9	93	65	90	62	29,0	20,1
200	23,5	26,5	105	71	102	68	81	44,4	78	41,4	85	59	82	56	25,4	18,0
250	26,6	29,7	105	69	102	68	79	39,7	76	36,7	82	57	79	54	24,1	17,3
500	37,0	42,8	100	65	97	62	63	22,1	60	19,1	70	51	67	48	21,6	17,3
600	41,8	47,1	95	64	92	61	53	16,6	50	13,6	60	50	60	47	19,8	17,3
700	45,2	51,1	95	63	92	60	50	11,6	47	8,6	60	48	57	45	21,1	16,6
800	48,0	54,9	93	62	90	59	45	7,0	42	4,0	57	47	54	44	21,0	16,1
900	52,3	58,5	90	61	87	58	38	2,6	35	-0,4	53	46	50	43	20,0	15,5
1000	55,2	61,9	88	60	85	57	33	-1,5	30	-4,5	48	45	45	42	20,0	15,1
1100	57,6	-	87	-	84	-	29	-	26	-	44	-	41	-	18,8	-
1300	64,9	-	80	-	77	-	15	-	13	-	39	-	36	-	17,6	-

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

Standards, certificates and approvals

Conformity	to CPR (EU/305/2011) 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
Inspection certificate	DIN 55350-18-4.2.1 respectively EN 10204

Part number	Weight	Copper weight	Outer Ø approx.	Colour
LKD7KS7C2530000	70 kg/km	38 kg/km	8.1 mm	Lime green

Packaging

- 1000 m cable drum
- 500 m cable drum
- 250 m carton
- 100 m packed in rings

FELTEN Wire and Cable Solutions BV reserves the right to make changes to the product described in this specification without prior notice. FELTEN does not assume any liability which may occur due to the use of the specification described herein. Drawings are not to scale unless otherwise specified and are provided for general and informational purposes only. All values represented in this specification should be used as a guide only and exact product details can be confirmed at point of enquiry.