

# MegaLine<sup>®</sup> F10-130 S/F Cca

## 4 x 2 x AWG 22/1 PIMF

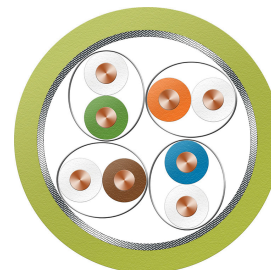
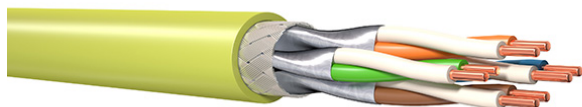
 Category 7<sub>A</sub> S<sub>4</sub> P<sub>4</sub> A<sub>4</sub> C<sub>5</sub> E<sub>5</sub>


Illustration similar

### Construction

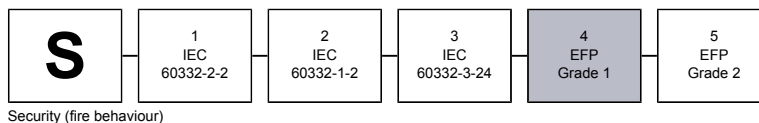
Conductor	bare copper wire, 0.64 mm Ø	Twisting	PiMF to cable core
Insulation	cellular-PE, Core-Ø: nominal value 1.60 mm	Overall screen	tinned copper wire braid
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Outer sheath	Halogen free flame retardant compound (FRNC)
Element	cores to pair	Colour	Lime green
Pair shielding	aluminium-bonded polyester tape		

### Cable marking

KERPEN DATACOM Made in Germany MegaLine F10-130 S/F 4P LSOH Cat.7A 1300MHz 25G 4PPoE 100W Cca s1 d1 a1 DoP: CDESK0000034 \$BA-Nr.\$ \$m-sign.\$

### Fire Behaviour

Fire class / DoP	Cca -s1,d1,a1 / CDESK0000034
Fire performance	EN 50575 / EN 50399
Circuit integrity	[-]
Flame retardancy	IEC 60332-3-24
Halogen-free	IEC 60754-1/2
Acidity	IEC 60754-2
Smoke density	IEC 61034-2
Fire load (approx.)	0.68 MJ/m

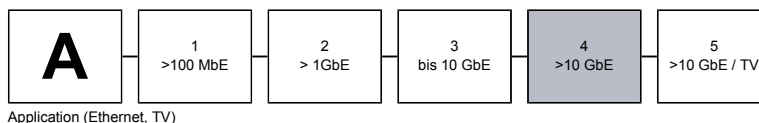


### Performance

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

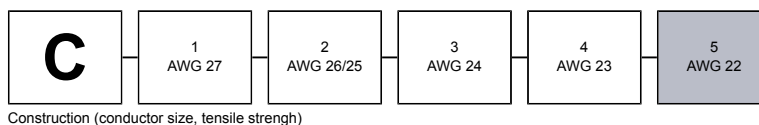

### Applications

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), 10-25 GbE acc. to IEEE 802.3 an/bq, Cable sharing, VoIP, PoE/PoE +/4PPoE.



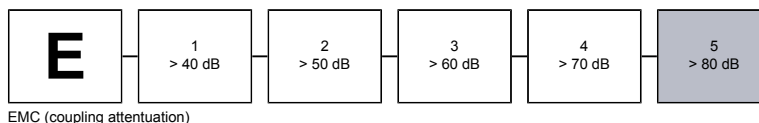
### Mechanical characteristics (cable)

Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Tensile strength	130 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



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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)**

Transport / storage	-20 °C up to +60 °C
During installation	0 °C up to +50 °C
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 <sub>A</sub> max.*	typ.	Cat.7 <sub>A</sub> min.*	typ.	Cat.7 <sub>A</sub> min.*	typ.	Cat.7 <sub>A</sub> min.*	typ.	Cat.7 <sub>A</sub> min.*	typ.	Cat.7 <sub>A</sub> min.*	typ.	Cat.7 <sub>A</sub> min.*	typ.	Cat.7 <sub>A</sub> min.*
1	1,7	2,1	105	78	102	75	104	75,9	101	72,9	105	78	102	75	27,1	-
10	4,5	5,8	105	78	102	75	101	72,2	98	69,2	108	78	105	75	35,2	25,0
100	15,4	18,5	105	75	102	72	90	56,9	87	53,9	93	65	90	62	38,9	20,1
200	22,9	26,5	105	71	102	68	83	44,4	80	41,4	85	59	82	56	36,6	18,0
250	26,0	29,7	105	69	102	66	79	39,7	76	36,7	82	57	79	54	35,3	17,3
500	35,9	42,8	100	65	97	62	64	22,1	61	19,1	70	51	67	48	29,4	17,3
600	40,4	47,1	95	64	92	61	55	16,6	52	13,6	63	50	60	47	26,6	17,3
700	44,6	51,1	95	63	92	60	50	11,6	47	8,6	60	48	57	45	25,8	16,6
800	47,7	54,9	93	62	90	59	45	7,0	42	4,0	57	47	54	44	25,0	16,1
900	51,6	58,5	90	61	87	58	38	2,6	35	-0,4	53	46	50	43	23,6	15,5
1000	54,8	61,9	88	60	85	57	33	-1,5	30	-4,5	48	45	45	42	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

 to CPR (EU/305/2011)  
 acc. to LVD (2014/35/EU)

Link Performance

 KERPEN DATACOM MegaLine<sup>®</sup> systems and further commercial plug-in connector

Inspection certificate

acc. to DIN 55350-18-4.2.1 bzw. EN 10204

Part number	Weight	Copper weight	Outer Ø approx.	Colour
KD7D67C3N060100	70 kg/km	45 kg/km	8.1 mm	Lime green