

# MegaLine<sup>®</sup> F10-130 S/F

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

Category 7<sub>A</sub> S<sub>0</sub> P<sub>4</sub> A<sub>4</sub> C<sub>5</sub> E<sub>5</sub>

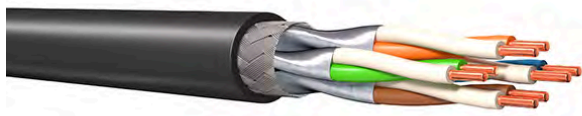


Illustration similar

### Construction

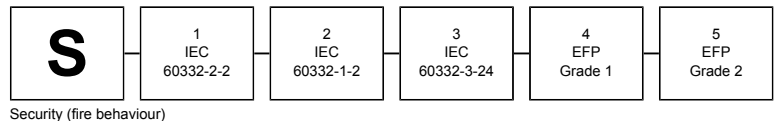
Conductor	bare copper wire, 0.64 mm	Twisting	PiMF to cable core
Insulation	cellular-PE, core-Ø: nominal value 1.6 mm	Overall screen	tinned copper wire braid
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Outer sheath	Polyethylene, UV resistant
Element	cores to pair	Colour	Jet black
Pair shielding	aluminium-bonded polyester tape		

### Cable marking

KERPEN DATACOM Made in Germany MegaLine F10-130 S/F 4P PE Heavy Duty Cat.7A 1300MHz 4PPoE 100W \$BA-Nr.\$ \$m-sign.\$

### Fire Behaviour

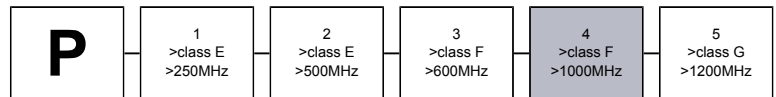
Halogen-free	IEC 60754-1/2
Acidity	IEC 60754-2
Fire load (approx.)	1.78 MJ/m



Security (fire behaviour)

### Performance

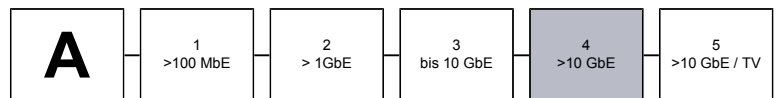
better than Category 7 acc. to EN 50288 and IEC 61156  
 excellent NEXT, low attenuation, exzellente screen properties  
 (pair- and overall screen), low Skew  
 Bandwidth (max.) 1300 MHz



Performance (class, bandwidth)

### Applications

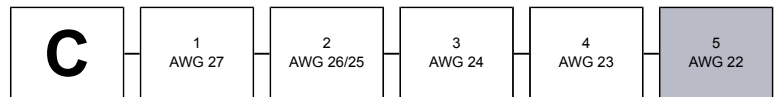
Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition) and also acc. to ISO/IEC 24702 and EN 50173-3. Ideal for all applications of class D up to FA Multimedia (Video, Data, Voice) >10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+/4PPoE. Suited for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



Application (Ethernet, TV)

### Mechanical characteristics (cable)

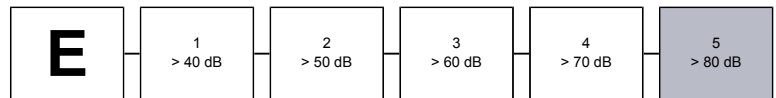
Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Max. strain relief	110 N
Crush resistance (long term)	2000 N/100mm
Impact strength (quantity of impacts)	20



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 to EN 50174-2	d



EMC (coupling attenuation)

# MegaLine<sup>®</sup> F10-130 S/F

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

Category 7<sub>A</sub> S<sub>0</sub> P<sub>4</sub> A<sub>4</sub> C<sub>5</sub> E<sub>5</sub>

### 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

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

Part number	Weight	Copper weight	Outer Ø approx.	Colour
LKD7KS704220000	78 kg/km	45 kg/km	9.5 mm	Jet black

### 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.

### FELTEN Wire & Cable Solutions BV

Habraken 2401  
5507 TM Veldhoven  
The Netherlands  
www.feltenwcs.com  
email: sales@feltenwcs.com  
phone: +31(0)40-8200950

Number: LKD7KS704220000  
Up-dating K: 12.12.2023  
Up-dating F: 28.12.2023