

# MegaLine® F10-130 S/F B2<sub>ca</sub>

## S<sub>5</sub> P<sub>4</sub> A<sub>4</sub> C<sub>5</sub> E<sub>5</sub>

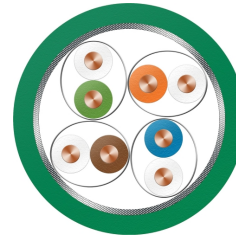


**Type:**  
KS-02YSCH 4x2xAWG 22/1 PIMF



**Category:** 7<sub>A</sub>

**Construction:**  
**1** Conductor: bare copper wire, AWG 22/1  
**2** Insulation: cellular-PE, core-Ø: nominal value 1.6 mm  
 Twisting element: pair  
**3** Individual screen: aluminium-bonded polyester tape  
 Twisting: 4 pairs  
**4** Overall screen: tinned copper wire braid  
**5** Outer sheath: halogen free, flame retardant compound (for B2<sub>ca</sub>)



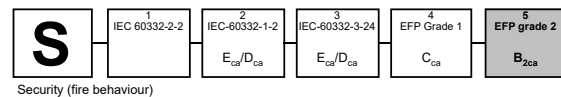
colour code: wh/bl, wh/or, wh/gn, wh/br  
 Colour outer sheath: yellowgreen, RAL-6018

printing outer sheath:  
 KERPEN MegaLine F10-130 S/F 4P H 25G 4PPoE B2<sub>ca</sub> s1a d1 a1 DoP: CDESK0000010 Made in Germany \$Production lot code\$  
 \$Meter marking\$

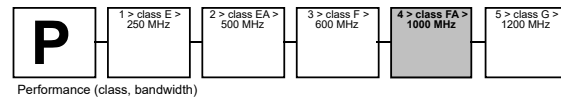
**OFFICE**



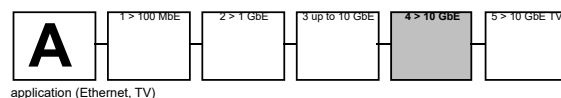
**fire behaviour:**  
 flame resistance: acc. to IEC 60332-3-24  
 halogen free: acc. to IEC 60754-1/2  
 smoke density: acc. to IEC 61034-1/2  
 Acidity: according EN 60754-2  
 fire load (MJ/m): 0.7 (approx.)  
 Class: B2<sub>ca</sub> s1a d1 a1  
 according EN 50575 / EN 50399



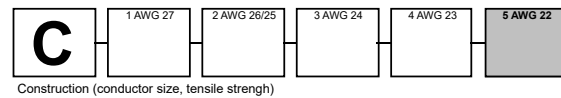
**performance:**  
 better than Category 7A acc. to EN 50288 and IEC 61156 excellent NEXT, low attenuation, excellent screen properties (pair- and overall screen), low Skew  
 bandwidth (typical): 1300 MHz



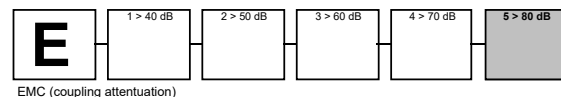
**applications:**  
 Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). Ideal for all applications of class D up to FA Multimedia (Video, Data, Voice) >10 GbE acc. to IEEE 802.3 an, 25G acc. to TR-11801-9905 (-9909 draft) as Channel-Link upto 30m (40,50,67,100m). Cable sharing, VoIP, PoE/PoE+/4PPoE.



**mechanical characteristics:**  
 bending radius:  
 during laying: 8 x outer diameter (min.)  
 acc. to Installation: 4 x outer diameter (min.)  
 tensile loading (N): 130 (max.)  
 crush resistance (N/100mm): 1000  
 impact strength (quantity of impacts): 10



**electromagnetic behaviour:**  
 transfer impedance at 10 MHz (mOhm/m): 5 (nominal value)  
 screen attenuation up to 1000 MHz (dB): 70 (nominal value)  
 coupling attenuation up to 1000 MHz (dB): 85 (nominal value)  
 Segregation class according EN 50174-2:: d

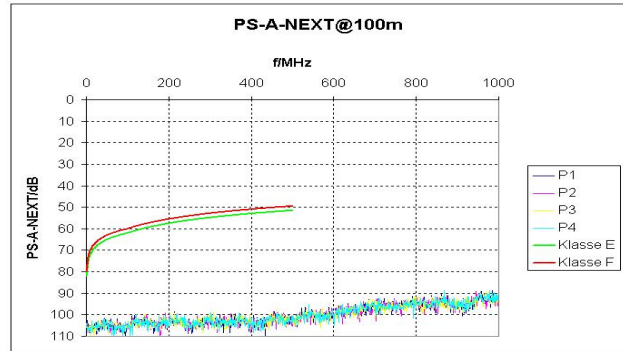


**Type:**  
 KS-02YSCH 4x2xAWG 22/1 PIMF



**Electrical characteristics at 20°C:**

conductor resistance (Ohm/km):	57.1 (max.)
insulation resistance (GOhm x km):	5 (min.)
mutual capacitance (pF/m):	40 (approx.)
capacitance unbalance (e) (pF/km):	1100 (approx.)
velocity of propagation (c):	0.77 (approx.)
phase delay (ns/100m):	420 (approx.)
delay skew at 100 MHz (ns/100m):	5 (approx.)
characteristic impedance at 100 MHz (Ohm):	100±5
test voltage U <sub>eff</sub> (V):	1000
operating voltage (V):	125 (max.)



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 <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	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	-0,4	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(2009)

OFFICE



**Chemical characteristics:**

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

**Thermal characteristics:**

Temperature range for fixed installation: -20°C up to +60°C  
 Temperature range for mobile operation: 0°C up to +50°C

**certificate and approbation:**

quality seal with production control:  
 Link Performance:  
 test certificate:  
 conform to LVD (2014/35/EU)  
 Conform to CPR (EU/305/2011)

GHMT PVP  
 KERPEN MegaLine® systems and further commercial plug-in connector  
 acc. to DIN 55350-18-4.2.1 bzw. EN 10204



Article Number:	Presentation (m)	Size:	Outer diameter (mm):	weight (kg/km):	copper sales factor (kg/km):	colour of outer sheath:
LKD7KS7B0010000	general	4P	8.6 (approx.)	80 (approx.)	45	yellowgreen, RAL-6018
LKD7KS7B0010100	1000					