

# MegaLine® G20 S/F B2<sub>ca</sub>

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

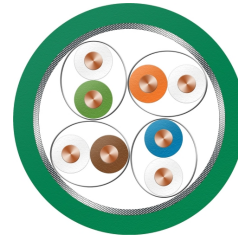


**Type:**  
KS-02YSCH 4x2x0.62 mm/~AWG 22/1 PIMF



**Category:** 8.2

**Construction:**  
**1 Conductor:** bare copper wire, 0.62 mm/~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>)



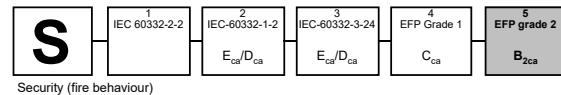
colour code: wh/bl, wh/or, wh/gn, wh/br  
 Colour outer sheath: yellowgreen, RAL-6018

printing outer sheath:  
 KERPEN MegaLine G20 S/F 4P H 25G 4PPoE B2<sub>ca</sub> s1a d1 a1 CDESK0000010 Made in Germany \$Production lot code\$ \$Meter marking\$

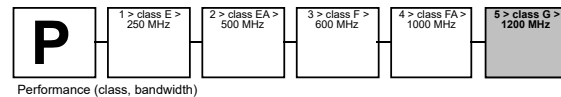
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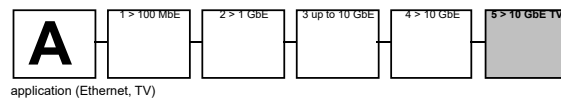
**fire behaviour:**  
 flame resistance: acc. to IEC 60332-3-24  
 halogen free: acc. to IEC 60754-1/2  
 smoke density: acc. to IEC 61034-1/2  
 Acidity: according EN 60754-2  
 fire load (MJ/m): 0.74 (approx.)  
 Class: B2<sub>ca</sub> s1a d1 a1  
 according EN 50575 / EN 50399



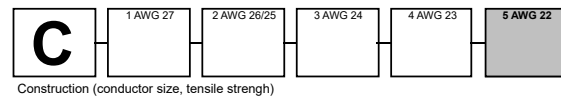
**performance:**  
 better than Category 8.2 acc. to IEC 61156-9, excellent NEXT, low attenuation, excellent screen properties (pair- and overall screen), low Skew  
 bandwidth (typical): 2000 MHz



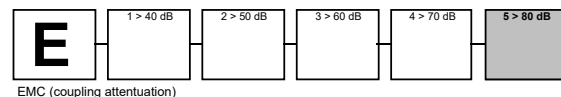
**applications:**  
 Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition) and for data centre cabling acc. to ISO/IEC 24764 and EN 50173-5 as well TR 11801-9901. Ideal for all applications of class D up to F<sub>A</sub> and Class II, Multimedia (TV, Video, Data, Voice), 25/40 GbE acc. to IEEE 802.3 bq, Cable sharing, VoIP, PoE/PoE+



**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): 2 (nominal value)  
 Screeningattenuation up to 1200 MHz (dB): 80 (nominal value)  
 Coupling attenuation up to 1200 MHz (dB): 90 (nominal value)  
 Segregation class according EN 50174-2:: d

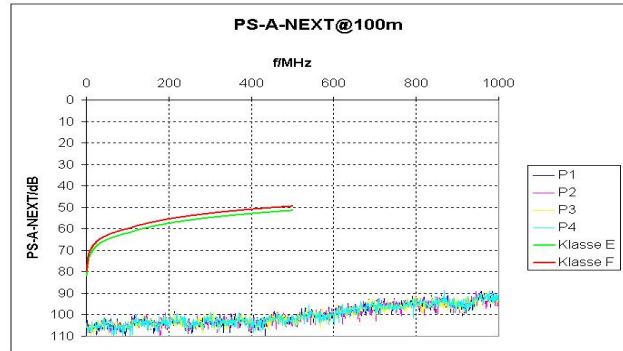


**Type:**  
 KS-02YSCH 4x2x0.62 mm/~AWG 22/1 PIMF



**Electrical characteristics at 20°C:**

conductor resistance (Ohm/km):	68 (max.)
insulation resistance (GOhm x km):	5 (min.)
mutual capacitance (pF/m):	43 (approx.)
capacitance unbalance (e) (pF/km):	1000 (approx.)
velocity of propagation (c):	0.76 (approx.)
phase delay (ns/100m):	440 (approx.)
delay skew at 100 MHz (ns/100m):	12 (approx.)
characteristic impedance at 100 MHz (Ohm):	100±5
test voltage Ueff (V):	1000
operating voltage (V):	125 (max.)



frequenz MHz	attenuation dB/100m		NEXT dB		PS-NEXT dB		ACR dB@100m		PS-ACR dB@100m		EL-FEXT dB@100m		PS-ELFEXT dB@100m		RL dB	
	typ.	Cat."8" max.*	typ.	Cat."8" min.*	typ.	Cat."8" min.*	typ.	Cat."8" min.*	typ.	Cat."8" min.*	typ.	Cat."8" min.*	typ.	Cat."8" min.*	typ.	Cat."8" min.*
10	2,4	2,9	100	78	97	75	97,6	75,1	94,6	72,1	90	78	87	75	32,3	25
100	8,6	9,3	100	75,4	97	72,4	91,4	66,1	88,4	63,1	90	60,6	87	57,6	36,2	22,5
250	13,7	14,7	100	69,5	97	66,5	86,3	54,8	83,3	51,8	84	52,6	81	49,6	34,8	20,1
500	18,9	21,4	100	64,9	97	61,9	81,1	43,5	78,1	40,5	79	46,6	76	43,6	31,8	17,3
600	22	23,6	100	63,7	97	60,7	78	40,2	75	37,2	78	45	75	42	28,5	17,3
800	25,6	27,5	95	61,9	92	58,9	69,4	34,4	66,4	31,4	71	42,5	68	39,5	25,3	16,1
1000	28,9	31	92	60,4	89	57,4	63,1	29,4	60,1	26,4	62	40,6	59	37,6	22,2	15,2
1200	31,6	34,2	88	59,2	85	56,2	56,4	25	53,4	22	60	39	57	36	20,2	14,7
1500	35,2	38,6	77	57,8	74	54,8	40,8	19,2	37,8	16,2	53	37,1	50	34,1	19,2	14
1600	36,6	40	75	57,3	72	54,3	37,8	17,3	34,8	14,3	50	36,5	47	33,5	18,4	13,8
1700	38,1	41,4	75	56,9	72	53,9	36,9	15,5	33,9	12,5	45	36	42	33	17,1	13,6
1800	39,5	42,7	75	56,6	72	53,6	35,5	13,9	32,5	10,9	42	35,5	39	32,5	16,3	13,4
1900	41,1	44	75	56,2	71	53,2	33,9	12,2	30,9	9,2	40	35	37	32	15,6	13,3
2000	43,5	45,3	75	55,9	72	52,9	31,5	10,7	28,5	7,7	40	34,6	37	31,6	15,1	13,1

\* EN 50288-12-1 (2017)/IEC 61156-9 (2016)  
 IF IO-FEXT min. 90 dB up to 1.000 MHz and min. 80dB up to 2.000 MHz, then EL-FEXT will be fulfilled per design.

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**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:	Size:	Outer diameter (mm):	weight (kg/km):	copper sales factor (kg/km):	colour of outer sheath:
LKD7KS8B0200000	4P	8.2 (approx.)	81 (approx.)	44	yellowgreen, RAL-6018