

# MegaLine<sup>®</sup> G20 S/F Cca

## KS-02YSCH 4x2x0.62 mm/ AWG 22/1 PIMF

Category 8.2



Illustration similar

### Construction

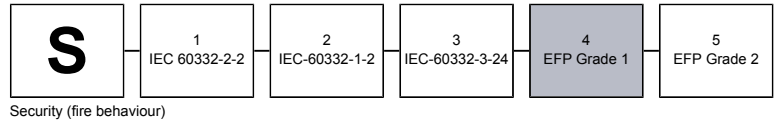
Conductor:	bare copper wire, 0.62 mm/~AWG 22/1	Twisting:	4 pairs
Insulation:	cellular-PE, core-Ø: nominal value 1.6 mm	Overall screen:	tinned copper wire braid
Colour code:	wh/bl, wh/or, wh/gn, wh/br	Outer sheath:	halogen free, flame retardant compound
Element:	cores to pair	Colour	Lime green
Pair shielding:	aluminium-bonded polyester tape		

### Cable marking:

KERPEN DATACOM GmbH MegaLine G20 S/F 4P H 25G 4PPoE Cca s1 d1 a1 DoP: CDESK0000034 Made in Germany \$BA-Nr.\$ \$m-sign.\$

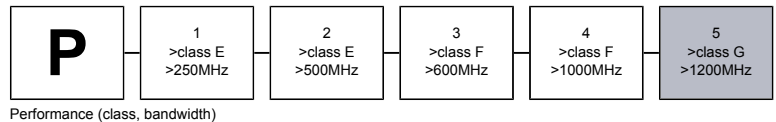
### Fire Behaviour

Fire class / DoP	Cca s1a 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 61034-1/2
Fire load (approx.)	0.74 MJ/m



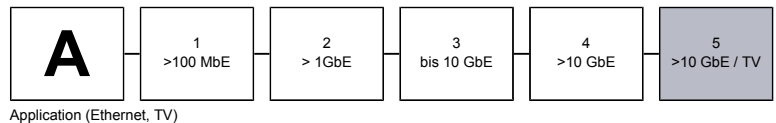
### Performance

better than Category 8.2 acc. to draft IEC 61156-9, excellent NEXT, low attenuation, excellent screen properties (pair- and overall screen), low Skew  
Transmission bandwidth (typ.) 2000 MHz



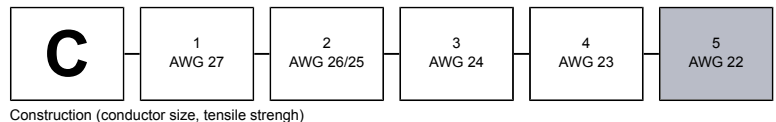
### Applications

Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (2nd edition) and for data centre cabling acc. to ISO/IEC 24764 and EN 50173-5 as well TR 11801-99-1. Ideal for all applications of class D up to F<sub>A</sub> and Class II, Multimedia (TV, Video, Data, Voice) >40 GbE acc. to IEEE 802.3 bq (draft), Cable sharing, VoIP, PoE/PoE+



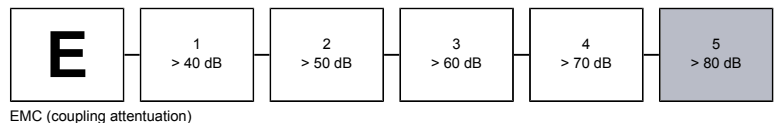
### Mechanical characteristics (cable)

Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Tensile loading (max.)	130 N
Crush resistance (long term)	1000 N/100mm
Impact strength (quantity of impacts)	10



### Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	2 mΩ/m
Screen attenuation (nom.)	80 dB
Coupling attenuation (nom.)	90 dB
Segregation class according EN 50174-2	d



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### Category 8.2

DC resistance (max.)	68 Ω/km	<b>Thermal characteristics (cable)</b>	
Insulation resistance (min.)	5 GΩ x km	Temperature (transport / storage)	8 °C up to +60 °C
Operating capacity (approx.)	43 pF/m	Temperature during installation	0 °C up to +50 °C
Capacitive coupling (e) (approx.)	1000 pF/km	Temperature after installation	-20 °C up to +60 °C
Signal velocity (approx.)	0.76 x c	<b>Chemical characteristics</b>	
Phase delay	440 ns/100m	Free of hazardous substances acc. to RoHS 2011/65/EU	
Skew @ 100 MHz (approx.)	12 ns/100m		
Characteristic impedance @ 100 MHz	100 +/- 5 Ω		
Test voltage	1000 V		
Operating voltage (max.)	125 V		

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. 8.2 max.*	typ.	Cat. 8.2 min.*	typ.	Cat. 8.2 min.*	typ.	Cat. 8.2 min.*	typ.	Cat. 8.2 min.*	typ.	Cat. 8.2 min.*	typ.	Cat. 8.2 min.*	typ.	Cat. 8.2 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)

### Standards, certificates and approvals

Quality seal with production control:	GHMT PVP
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
Conform to CPR (EU/305/2011)	\$CE_Logo\$
Compliant with LVD (2014/35/EU)	\$CE_Logo\$

Part number	Weight	copper weight:	Weight	Outer Ø approx.	Colour
LKD7KS8C0200000	81 kg/km	44 kg/km	81 kg/km	8 mm	Lime green