

# MegaLine<sup>®</sup> G20 S/F Dca

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

Category 8.2 **S<sub>3</sub> P<sub>5</sub> A<sub>5</sub> C<sub>5</sub> E<sub>5</sub>**

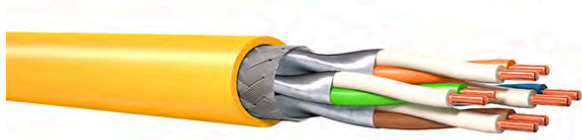


Illustration similar

### Construction

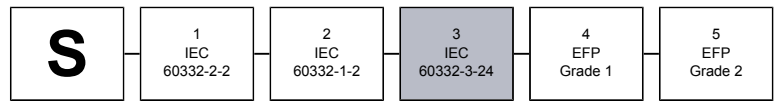
Conductor	bare copper wire, 0.62 mm	Twisting	4 pairs
Insulation	cellular-PE, core-Ø: nominal value 1.6 mm	Overall screen	tinned copper wire braid
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Outer sheath	Halogen free flame retardant compound (LSOH)
Element	cores to pair	Colour	Colza yellow
Pair shielding	aluminium-bonded polyester tape		

### Cable marking

KERPEN DATACOM Made in Germany MegaLine G20 S/F 4P LSOH Cat.8 2000MHz 25/40G 4PPoE Dca DoP: CDESK0000007 \$BA-Nr.\$ \$m-sign.\$

### Fire Behaviour

Fire class / DoP	Dca -s2,d2,a1 / CDESK0000007
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 61034-2
Fire load (approx.)	0.69 MJ/m



Security (fire behaviour)

### Performance

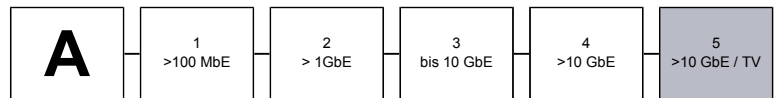
better than Category 8.2 acc. to draft IEC 61156-9, excellent NEXT, low attenuation, excellent screen properties (pair- and overall screen), low Skew  
Bandwidth (max.) 2000 MHz



Performance (class, bandwidth)

### Applications

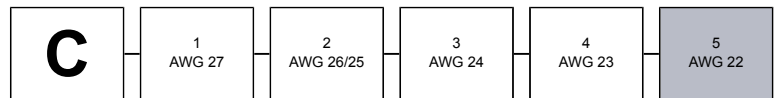
Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition) and for data centre cabling acc. to ISO/IEC 24764 and EN 50173-5 as well TR 11801-99-1. Ideal for all applications of class D up to F<sub>A</sub> and Class II, Multimedia (TV, Video, Data, Voice) >40 GbE acc. to IEEE 802.3 bq (draft), Cable sharing, VoIP, PoE/PoE+/4PPoE.



Application (Ethernet, TV)

### Mechanical characteristics (cable)

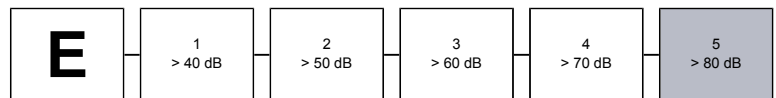
Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Max. strain relief	130 N
Crush resistance (long term)	1000 N/100mm
Impact strength (quantity of impacts)	10



Construction (conductor size, tensile strength)

### Electromagnetic behaviour

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



EMC (coupling attenuation)

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### Electrical properties at 20°C

DC resistance (max.)	68 Ω/km
Insulation resistance (min.)	5 GΩ x km
Operating capacity (approx.)	43 pF/m
Capacitive coupling (e) (approx.)	1000 pF/km
Signal velocity (approx.)	0.76 x c
Phase delay	440 ns/100m
Skew @ 100 MHz (approx.)	12 ns/100m
Characteristic impedance @ 100 MHz	100 +/- 5 Ω
Test voltage	1000 V
Operating voltage (max.)	125 V

### Thermal characteristics (cable)

Temperature (transport / storage)	-20 °C up to +60 °C
Temperature during installation	0 °C up to +50 °C
Temperature 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.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	4,8	5,8	100	78	97	75	97,6	72,2	94,6	69,2	90	78	87	75	32,3	25,0
100	17,2	18,5	100	75	97	72	91,4	56,9	88,4	53,9	90	61	87	58	36,2	22,2
250	27,4	29,7	100	69	97	66	86,3	39,7	83,3	36,7	84	53	81	50	34,8	19,4
500	37,8	42,8	100	65	97	62	81,1	22,1	78,1	19,1	79	47	76	44	31,8	17,3
600	44,0	47,1	100	64	97	61	78	16,6	75	13,6	78	45	75	42	28,5	16,8
800	51,2	54,9	95	62	92	59	69,4	7,0	66,4	4,0	71	43	68	40	25,3	15,9
1000	57,8	61,9	92	60	89	57	63,1	-1,5	60,1	-4,5	62	51	59	38	22,2	15,2
1200	63,2	68,4	88	59	85	56	56,4	-9,2	53,4	-12,2	60	39	57	36	20,2	14,7
1500	70,4	77,2	77	58	74	55	40,8	-19,4	37,8	-22,4	53	37	50	34	19,2	14,0
1600	73,2	80,0	75	57	72	54	37,8	-22,7	34,8	-25,7	50	37	47	34	18,4	13,8
1700	76,2	82,7	75	57	72	54	36,9	-25,8	33,9	-28,8	45	36	42	33	17,1	13,6
1800	79,0	85,4	75	57	72	54	35,5	-28,8	32,5	-31,8	42	36	39	33	16,3	13,4
1900	82,2	88,0	75	56	71	53	33,9	-31,8	30,9	-34,8	40	35	37	32	15,6	13,3
2000	87,0	90,5	75	56	72	53	31,5	-34,6	28,5	-37,6	40	35	37	32	15,1	13,1

\* IEC 61156-9 (Draft 2015)

### Standards, certificates and approvals

Conformity	to CPR (EU/305/2011) 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-inn connector
Inspection certificate	acc. to DIN 55350-18-4.2.1 bzw. EN 10204

Part number	Weight	Copper weight	Outer Ø approx.	Colour
LKD7KS800200000	74 kg/km	44 kg/km	8.1 mm	Colza yellow

### Packaging

1000 m cable drum  
500 m cable drum

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