

# MegaLine<sup>®</sup> G12-150 S/F B2ca KS-02YSCH 2x (4 x 2 x AWG 22/1 PIMF)

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

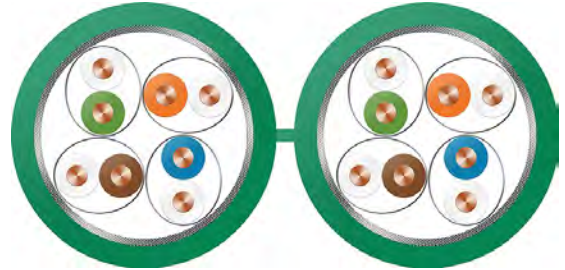
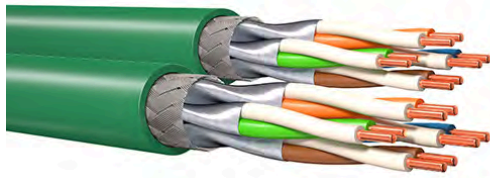


Illustration similar

### Construction

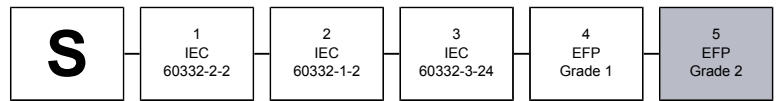
Conductor	bare copper wire, 0.64 mm	Twisting	PiMF to cable core
Insulation	cellular-PE, core-Ø: nominal value 1.6 mm	Overall screen	tinned copper wire braid
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Outer sheath	Halogen free flame retardant compound (LSOH)
Element	cores to pair	Colour	Yellow green
Pair shielding	aluminium-bonded polyester tape		

### Cable marking

KERPEN DATACOM Made in Germany MegaLine G12-150 S/F 2x4P LSOH Cat.7A 1500MHz 25G 4PPoE 100W B2ca s1a d1 a1 DoP: CDESK0000033 \$Ba-Nr.\$ \$m-sign\$

### Fire Behaviour

Fire class / DoP	B2ca -s1a,d1,a1 / CDESK0000033
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.)	1.62 MJ/m



Security (fire behaviour)

### Performance

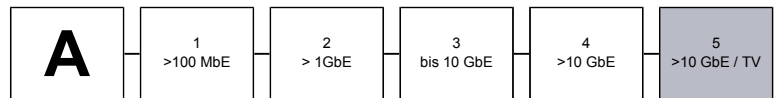
better than Category 7 (8) acc. to EN 50288 and IEC 61156  
excellent NEXT, niedrigste attenuation, exzellente screen  
properties (pair- and overall screen), low Skew  
Bandwidth (max.) 1500 MHz



Performance (class, bandwidth)

### Applications

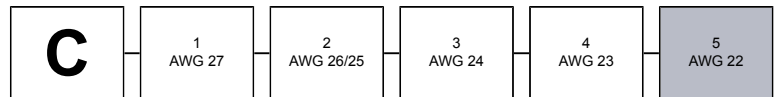
Installation cable for generic cabling systems acc. to ISO/ IEC 11801 and EN 50173 (2nd edition) and for residential cabling acc. to ISO/IEC 15018 and EN 50173-4. Ideal for all applications of class D up to FA Multimedia (TV, Video, Data, Voice) >10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+



Application (Ethernet, TV)

### Mechanical characteristics (cable)

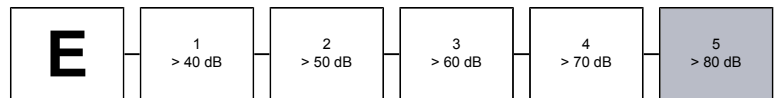
Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Max. strain relief	260 N
Crush resistance (long term)	1000 N/100mm
Impact strength (quantity of impacts)	10



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.)	57.1 Ω/km
Insulation resistance (min.)	5 GΩ x km
Operating capacity (approx.)	42 pF/m
Capacitive coupling (e) (approx.)	1000 pF/km
Signal velocity (approx.)	0.77 x c
Phase delay	420 ns/100m
Skew @ 100 MHz (approx.)	3 ns/100m
Characteristic impedance @ 100 MHz	100 +/- 5 Ω
Test voltage	1000 V
Operating voltage (max.)	125 V

### Thermal characteristics (cable)

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.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	1,6	2,1	110	78	107	75	108	75,9	105	72,9	109	78	106	75	26,1	-
10	4,2	5,8	110	78	107	75	106	72,2	103	69,2	109	78	106	75	32,3	25,0
100	14,4	18,5	110	75	107	72	96	56,9	93	53,9	93	65	90	62	36,2	20,1
200	21,5	26,5	110	71	107	68	88	44,4	85	41,4	86	59	83	56	35,5	18,0
250	24,5	29,7	105	69	102	66	81	39,7	78	36,7	83	57	80	54	34,8	17,3
500	34,0	42,8	105	65	102	62	71	22,1	68	19,1	70	51	67	48	31,8	17,3
600	37,7	47,1	100	64	97	61	62	16,6	59	13,6	64	50	61	47	28,5	17,3
800	44,5	54,9	95	62	92	59	50	7,0	47	4,0	58	47	55	44	25,3	16,1
900	48,1	58,5	95	61	92	58	47	2,6	44	-0,4	54	46	51	43	23,8	15,5
1000	49,0	61,9	92	60	89	57	43	-1,5	40	-4,5	49	45	46	42	22,2	15,1
1200	54,9	68,4	88	59	85	56	34	-9,2	31	-12,2	40	44	37	41	20,2	14,3
1300	57,0	-	81	-	78	-	24	-	21	-	35	-	32	-	18,3	-
1400	58,1	-	74	-	71	-	16	-	13	-	30	-	27	-	16,3	-
1500	62,0	-	73	-	70	-	11	-	8	-	25	-	22	-	12,3	-

\* EN 50288-9-1(2013) / IEC 61156-5(2020)

### 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-in connector
Inspection certificate	acc. to DIN 55350-18-4.2.1 bzw. EN 10204

Part number	Weight	Copper weight	Outer Ø approx.	Cable dimensions (W x H)	Colour
LKD7KS8B0100000	158 kg/km	96 kg/km	8.4 mm	17.5 x 8.5	Yellow green

### Packaging

- 1000 m cable drum
- 500 m cable drum

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