

MegaLine[®] G12-150 S/F Dca

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

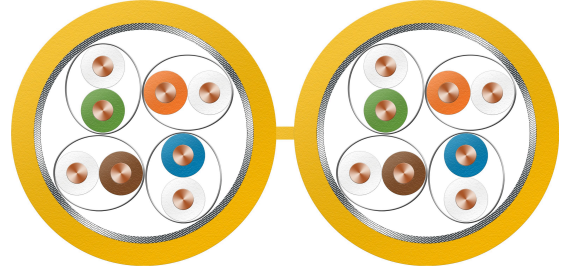
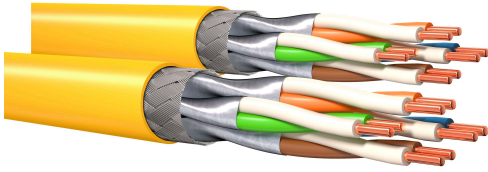
 Category 7_A **S₃ P₅ A₅ C₅ E₅**


Illustration similar

Construction

Conductor bare copper wire, AWG 22/1
 Insulation cellular-PE, core-Ø: nominal value 1.6 mm
 Colour code wh/bl, wh/or, wh/gn, wh/br
 Element cores to pair
 Pair shielding aluminium-bonded polyester tape

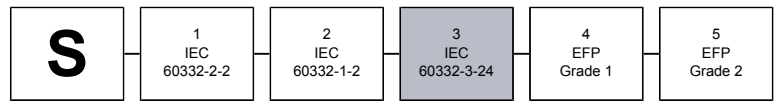
Twisting PIMF to cable core
 Outer sheath Halogen free flame retardant compound (LS0H)
 material
 Colour Colza yellow

Cable marking

KERPEN DATACOM Made in Germany MegaLine G12-150 S/F 2x4P H Cat.7A 25G 4PPoE Dca s2 d2 a1 DoP: CDESK0000008 \$Ba-Nr.\$ \$M-SIGN\$

Fire Behaviour

Fire class / DoP Dca -s2,d2,a1 / CDESK0000008
 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.) 1.5 MJ/m



Security (fire behaviour)

Performance

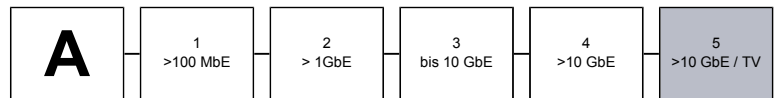
better than Category 7 (8) acc. to EN 50288 and IEC 61156
 excellent NEXT, niedrigste attenuation, exzellente screen
 properties (pair- and overall screen), low Skew
 Transmission bandwidth (typ.) 1500 MHz



Performance (class, bandwidth)

Applications

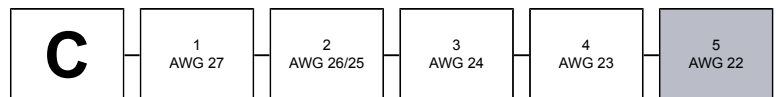
Installation cable for generic cabling systems acc. to ISO/
 IEC 11801 and EN 50173 (2nd edition) and for residential
 cabling acc. to ISO/IEC 15018 and EN 50173-4. Ideal for all
 applications of class D up to FA Multimedia (TV, Video, Data,
 Voice) >10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP,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



Application (Ethernet, TV)

Mechanical characteristics (cable)

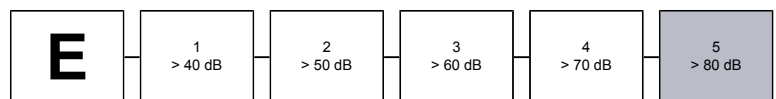
Bending radius (static) (min.) 4x outer-Ø
 Bending radius (dynamic) (min.) 8x outer-Ø
 Max. strain relief 260 N
 Crush resistance (long term) 1000 N/100mm
 Impact strength (quantity of impacts) 10



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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 Category 7_A **S₃ P₅ A₅ C₅ E₅**
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

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

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 _A max.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A 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® 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
LKD7KS800100050	154 kg/km	96 kg/km	8.4 mm	17.5 x 8.5	Colza yellow