KERPEN DATACOM

MegaLine® Pro 500 Dca

KS-02YSH 4 x 2 x AWG 23/1 PIMF

Category 6_A **S_3 P_2 A_3 C_4 E_3**



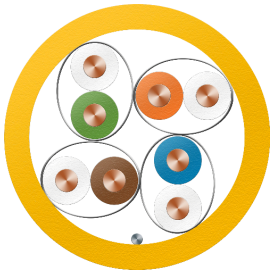


Illustration similar

Construction

Conductor	bare copper wire, 0.55 mm Ø
Insulation	cellular-PE, Core-Ø: nominal value 1.28 mm
Colour code	WH/BU, WH/OG, WH/GN, WH/BN
Element	cores to pair
Pair shielding	aluminium-bonded polyester tape
Twisting	4 pairs to cable core with tinned copper wire Ø 0,3 mm
Overall screen	unscreened
Outer sheath	Halogen free flame retardant compound (FRNC)
Colour	Colza yellow

Cable marking

KERPEN DATACOM Made in Germany MegaLine PRO 500 4P LSOH Cat.6A 10G 4PPoE Dca DoP: CDESK0000001 $BA-Nr.$ $m-sign.$

Fire Behaviour

Fire performance	EN 50575 / EN 50399
Halogen-free	IEC 60754-1, IEC 60754-2
Acidity	IEC 60754-2
Smoke density	IEC 61034-2
Fire load (approx.)	0.32 MJ/m

S	1	2	3	4	5
	IEC 60332-2-2	IEC 60332-1-2	IEC 60332-3-24	EFP Grade 1	EFP Grade 2

Security (fire behaviour)

Performance

better than Category 6A acc. to EN 50288 and IEC 61156 excellent NEXT, well screen properties (pair- and overall screen), low Skew

Bandwidth (max.) 500 MHz

P	1	2	3	4	5
	>class E >250MHz	>class E >500MHz	>class F >600MHz	>class F >1000MHz	>class G >1200MHz

Performance (class, bandwidth)

Applications

Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3nd edition). Ideal for all applications of class D up to EA up to 10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+/4PPoE.

A	1	2	3	4	5
	>100 MbE	> 1GbE	bis 10 GbE	>10 GbE	>10 GbE / TV

Application (Ethernet, TV)

Mechanical characteristics (cable)

Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Tensile strength	110 N
Crush resistance (long term)	1000 N/100mm

C	1	2	3	4	5
	AWG 27	AWG 26/25	AWG 24	AWG 23	AWG 22

Construction (conductor size, tensile strengh)

Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	50 mΩ/m
Screen attenuation (nom.)	55 dB
Coupling attenuation (nom.)	65 dB
Segregation class according to EN 50174-2	c

E	1	2	3	4	5
	> 40 dB	> 50 dB	> 60 dB	> 70 dB	> 80 dB

EMC (coupling attentuation)

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Electrical properties at 20°C

DC resistance (max.)	82 Ω/km
Insulation resistance (min.)	5 GΩ x km
Operating capacity (approx.)	42 pF/m
Capacitive coupling (e) (approx.)	1100 pF/km
Signal velocity (approx.)	0.8 x c
Phase delay	420 ns/100m
Skew @ 100 MHz (approx.)	7 ns/100m
Characteristic impedance @ 100 MHz	100 +/- 5 Ω
Test voltage	1000 V
Operating voltage (max.)	125 V

Thermal characteristics (cable)

Transport / storage	-20 °C up to +60 °C
During installation	0 °C up to +50 °C
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.	$Cat.6_A$ max.*	typ.	$Cat.6_A$ min.*	typ.	$Cat.6_A$ min.*	typ.	$Cat.6_A$ min.*	typ.	$Cat.6_A$ min.*	typ.	$Cat.6_A$ min.*	typ.	$Cat.6_A$ min.*	typ.	$Cat.6_A$ min.*
1	1,9	2,1	95	75,3	92	72,3	93	73,2	90	70,2	91	68	88	65	25,1	-
10	5,2	5,9	90	60,3	87	57,3	85	54,4	82	51,4	96	48	93	45	35,2	25,0
100	17,7	19,1	75	45,3	72	42,3	57	26,2	54	23,2	90	28	87	25	37,2	20,1
200	26,4	27,6	68	40,8	65	37,8	42	13,2	39	10,2	78	22	75	19	31,1	18,0
250	29,9	31,1	66	39,3	63	36,3	36	8,2	33	5,2	75	20	72	17	29,5	17,3
300	31,9	34,3	65	38,1	62	35,1	33	3,8	30	0,8	72	19	69	16	28,3	17,3
450	38,9	42,7	63	35,5	60	32,5	24	-7,2	21	-10,2	69	15	66	12	26,7	17,3
500	41,2	45,3	61	34,8	58	31,8	20	-10,5	17	-13,5	66	14	63	11	26,3	17,3

* EN 50288-10-1 (2013) / IEC 61156-5(2020)

Standards, certificates and approvals

Conformity	to CPR (EU/305/2011) acc. to LVD (2014/35/EU)
Link Performance	KERPEN DATACOM MegaLine® 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.	PU (pieces)	Colour
KD7D45D3Y010050	44 kg/km	21 kg/km	6.5 mm	1	Colza yellow

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