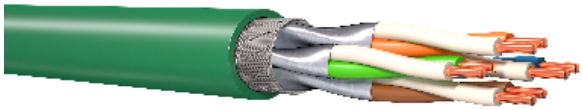
KERPEN DATACOM

MegaLine® F6-90 S/F B2ca

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

Category 7 **S_5 P_3 A_4 C_4 E_5**



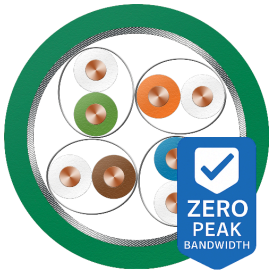


Illustration similar

Construction

Conductor	bare copper wire, 0.58 mm Ø	Twisting	PiMF to cable core
Insulation	cellular-PE, Core-Ø: nominal value 1.53 mm	Overall screen	tinned copper wire braid
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Outer sheath	Halogen free flame retardant compound (FRNC)
Element	cores to pair		
Pair shielding	aluminium-bonded polyester tape	Colour	Yellow green

Cable marking

KERPEN DATACOM Made in Germany MegaLine F6-90 S/F 4P LSOH Cat.7 1000MHz 4PPoE 90W B2ca s1a d1 a1 DoP: CDESK0000009 $BA-Nr.$ $m-sign.$

Fire Behaviour

Fire performance	EN 50575 / EN 50399
Flame retardancy	acc. to IEC 60332-3-24
Halogen-free	IEC 60754-1, IEC 60754-2
Acidity	IEC 60754-2
Smoke density	IEC 61034-2
Fire load (approx.)	0.62 MJ/m

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

Security (fire behaviour)

Performance

better than Category 7 acc. to EN 50288 and IEC 61156 excellent NEXT, exzellente screen properties (pair- and overall screen), low Skew

Bandwidth (max.) 1000 MHz

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

Performance (class, bandwidth)

Applications

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

A	1 >100 MbE	2 > 1GbE	3 bis 10 GbE	4 >10 GbE	5 >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
Impact strength (quantity of impacts)	10

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

Construction (conductor size, tensile strengh)

Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	5 mΩ/m
Screen attenuation (nom.)	70 dB
Coupling attenuation (nom.)	85 dB
Segregation class according to EN 50174-2	d

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

EMC (coupling attentuation)

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

Category 7 **S_5 P_3 A_4 C_4 E_5**

Electrical properties at 20°C

DC resistance (max.)	75 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.)	0.79 x c
Phase delay	420 ns/100m
Skew @ 100 MHz (approx.)	5 ns/100m
Characteristic impedance @ 100 MHz	100 +/- 5 Ω
Peak-Free Transmission Bandwidth	1015 MHz
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.7 max.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*
1	1,9	2,0	102	80	99	77	101	78,0	98	75,0	109	80	106	77	25,4	-
10	4,8	5,7	102	80	99	77	98	74,3	95	71,3	108	74	105	71	31,1	25,0
100	16,4	18,5	102	72	99	69	86	53,5	83	50,5	93	54	90	51	33,2	20,1
200	24,5	26,8	102	68	99	65	78	41,2	75	38,2	85	48	82	45	33,2	18,0
250	27,8	30,2	102	66	99	63	75	35,8	72	32,8	82	46	79	43	33,4	17,3
450	36,1	41,6	97	63	94	60	61	21,4	58	18,4	72	41	69	38	31,4	17,3
500	38,2	44,1	97	62	94	59	59	17,9	56	14,9	68	40	65	37	30,5	17,3
600	42,9	48,9	92	61	89	58	49	12,1	46	9,1	62	38	59	35	27,6	17,3
700	47,7	-	92	-	89	-	44	-	41	-	59	-	56	-	26,2	-
800	50,8	-	90	-	87	-	39	-	36	-	56	-	53	-	23,9	-
900	55,1	-	85	-	82	-	30	-	27	-	52	-	49	-	21,7	-
1000	58,0	-	80	-	77	-	22	-	19	-	42	-	39	-	18,0	-

* EN 50288-4-1(2014) / 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
KD7D66B3N010100	58 kg/km	35 kg/km	7.2 mm	1	Yellow green

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