

# MegaLine<sup>®</sup> E5-70 S/F Cca

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

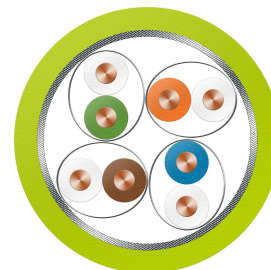
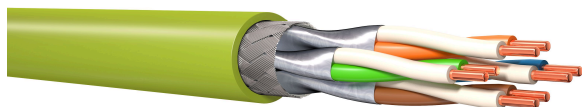
 Category 6<sub>A</sub>    **S<sub>4</sub> P<sub>2</sub> A<sub>3</sub> C<sub>4</sub> E<sub>4</sub>**


Illustration similar

### Construction

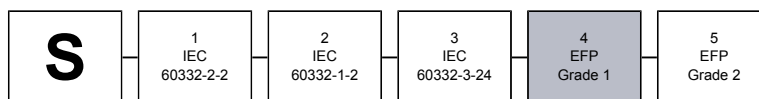
Conductor	bare copper wire, 0.55 mm	Twisting	4 pairs to cable core with tinned copper wire
Insulation	cellular-PE, core-Ø: nominal value 1.4 mm		AWG 24/1
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Overall screen	tinned copper wire braid
Element	cores to pair	Outer sheath	Halogen free flame retardant compound (LSOH)
Pair shielding	aluminium-bonded polyester tape	Colour	Lime green

### Cable marking

KERPEN DATACOM Made in Germany MegaLine E5-70 S/F 4P H Cat.6A 4PPoE Cca s1a d1 a1 DoP: CDESK0000035 \$BA-Nr.\$ \$m-sign.\$

### Fire Behaviour

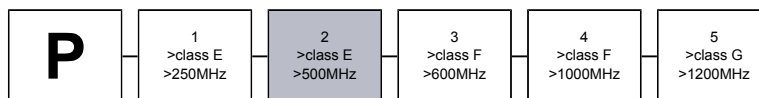
Fire class / DoP	Cca -s1a,d1,a1 / CDESK0000035
Halogen-free	IEC 60754-1/2
Fire load (approx.)	0.6 MJ/m



Security (fire behaviour)

### Performance

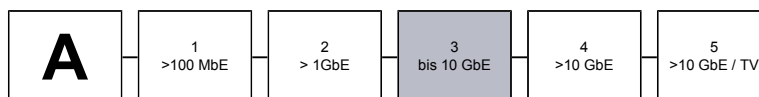
better than Category 6A acc. to EN 50288 and IEC 61156  
 excellent NEXT, well screen properties (pair- and overall screen), low Skew  
 Transmission bandwidth (typ.)                      700 MHz



Performance (class, bandwidth)

### Applications

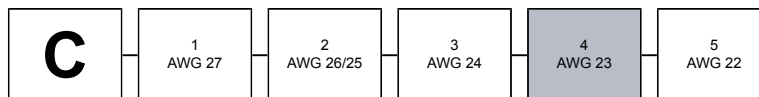
Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). Ideal for all applications of class D up to EA up to 10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+/4PPoE.



Application (Ethernet, TV)

### Mechanical characteristics (cable)

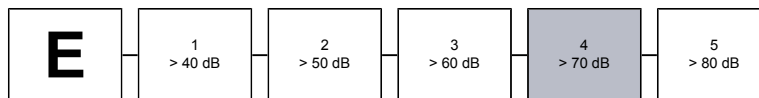
Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Max. strain relief	110 N
Crush resistance (long term)	1000 N/100mm
Impact strength (quantity of impacts)	10



Construction (conductor size, tensile strength)

### Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	5 mΩ/m
Screen attenuation (nom.)	60 dB
Coupling attenuation (nom.)	80 dB
Segregation class according to EN 50174-2	c



EMC (coupling attenuation)

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 Category 6<sub>A</sub> S<sub>4</sub> P<sub>2</sub> A<sub>3</sub> C<sub>4</sub> E<sub>4</sub>
**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)**

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

Frequenz 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 <sub>A</sub> max.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*
1	1,9	2,1	95	75,3	92	72,3	93	73,2	90	70,2	91	68,0	88	65,0	26,0	-
10	5,2	5,9	90	60,3	87	57,3	85	54,4	82	51,4	96	48,0	93	45,0	35,9	25,0
100	17,7	19,1	75	45,3	72	42,3	57	26,2	54	23,2	90	28,0	87	25,0	37,2	20,1
200	26,4	27,6	68	40,8	65	37,8	42	13,2	39	10,2	78	22,0	75	19,0	33,1	18,0
250	29,9	31,1	66	39,3	63	36,3	36	8,2	33	5,2	75	20,0	72	17,0	30,5	17,3
300	31,9	34,3	65	38,1	62	35,1	33	3,8	30	0,8	72	18,5	69	15,5	29,9	17,3
450	38,9	42,7	63	35,5	60	32,5	24	-7,2	21	-10,2	69	14,9	66	11,9	28,9	17,3
500	41,2	45,3	61	34,8	58	31,8	20	-10,5	17	-13,5	66	14,0	63	11,0	28,3	17,3
600	46,2	-	57	-	54	-	11	-	8	-	60	-	57	-	27,2	-
700	51,4	-	54	-	51	-	3	-	0	-	56	-	53	-	26,2	-

\* 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 <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.	Colour
KD7D65C3N000050	57 kg/km	26 kg/km	7.3 mm	Lime green

**Packaging**

500 m cable drum