

# MegaLine<sup>®</sup> E5-70 F/F

## KS-02YS(ST)H 4x2x0.55 mm/ AWG 23/1 PIMF

Category 6<sub>A</sub>

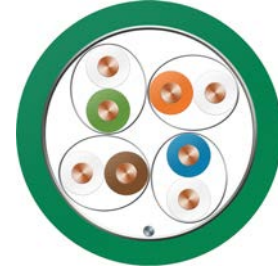


Illustration similar

### Construction

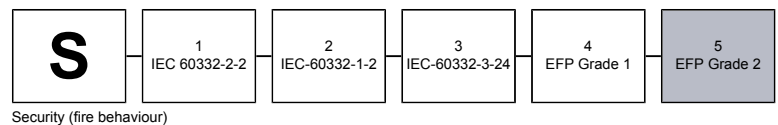
Conductor:	bare copper wire, AWG 23/1	Twisting:	4 pairs to cable core with tinned copper wire
Insulation:	cellular-PE, core-Ø: nominal value 1.4 mm		AWG 24/1
Colour code:	wh/bl, wh/or, wh/gn, wh/br	Overall screen:	aluminium-bonded polyester tape, metal side inside, with underlayered tinned copper drain wire
Element:	cores to pair	Outer sheath:	halogen free, flame retardant compound
Pair shielding:	aluminium-bonded polyester tape	Colour:	Yellow green

Cable marking:

KERPEN DATACOM GmbH Made in Germany MegaLine E5-70 F/F 4P H 4PPoE B2ca s1a d1 a1 DoP: CDESK0000041 \$BA-Nr.\$ \$m-sign. \$

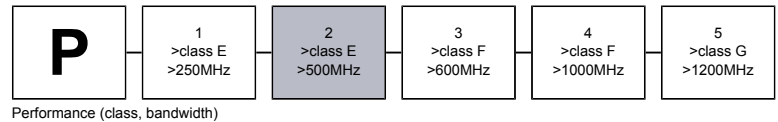
### Fire Behaviour

Fire class / DoP	/ CDESK0000041
Flame retardancy	acc. to IEC 60332-3-24
Halogen free	IEC 60754-1/2
Acidity	IEC 60754-2
Smoke density	IEC 61034-1/2
Fire load (approx.)	0.6 MJ/m



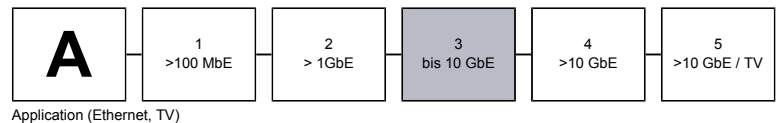
### Performance

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



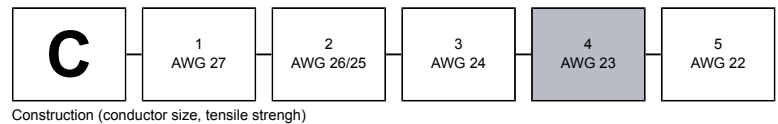
### Applications

Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (2nd 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+



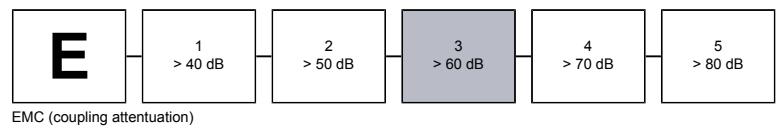
### Mechanical characteristics (cable)

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



### Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	50 mΩ/m
Screen attenuation (nom.)	60 dB
Coupling attenuation (nom.)	70 dB
Segregation class according EN 50174-2	c



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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	417 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

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

Frequenz MHz	Attenuation dB/100m		NEXT dB		PS-NEXT dB		ACR dB@100m		PS-ACR 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	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
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
250	29,9	31,1	66	39,3	63	36,3	36	8,3	33	5,3	75	20	72	17	29,5	17,3
300	31,9	34,3	65	38,1	62	35,1	33	3,9	30	,9	72	18,5	69	15,5	28,3	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	26,7	17,3
500	41,2	45,3	61	34,8	58	31,8	20	-10,4	17	-13,4	66	14	63	11	26,3	17,3
600	46,2	-	57	-	54	-	11	-	8	-	60	-	57	-	25,8	-
700	51,4	-	54	-	51	-	3	-	0	-	56	-	53	-	-	-

### Standards, certificates and approvals

Link Performance:

KERPEN MegaLine<sup>®</sup> systems and further commercial plug-in connector

Inspection certificate:

acc. to DIN 55350-18-4.2.1 bzw. EN 10204

Conform to CPR (EU/305/2011)

\$CE\_Logo\$

Compliant with LVD (2014/35/EU)

\$CE\_Logo\$

Part number	Weight	copper weight:	Weight	Outer Ø approx.	Colour
LKD7KS6B0220000	52 kg/km	24 kg/km	52 kg/km	7.1 mm	Yellow green