

# MegaLine<sup>®</sup> E5-60 U/F Dca

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

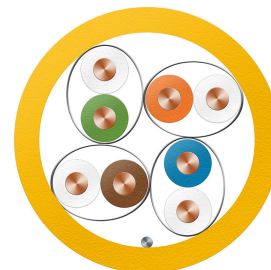
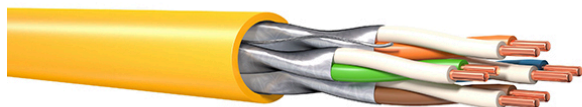
 Category 6<sub>A</sub>    **S<sub>3</sub> P<sub>2</sub> A<sub>3</sub> C<sub>4</sub> E<sub>3</sub>**


Illustration similar

### Construction

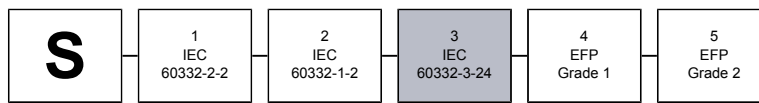
Conductor	bare copper wire, 0.55 mm	Twisting	4 pairs to cable core with tinned copper wire Ø 0,3 mm
Insulation	cellular-PE, Core-Ø: nominal value 1.40 mm	Overall screen	unscreened
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Outer sheath	Halogen free flame retardant compound (LSOH)
Element	cores to pair	Colour	Colza yellow
Pair shielding	aluminium-bonded polyester tape		

### Cable marking

KERPEN DATACOM Made in Germany MegaLine E5-60 U/F 4P LSOH Cat.6A 600MHz 10G 4PPoE 90W Dca DoP: CDESK0000001 \$BA-Nr.\$ \$m-sign.\$

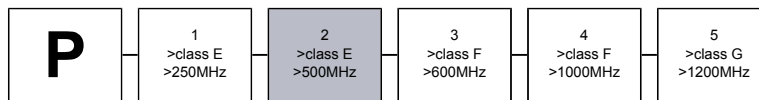
### Fire Behaviour

Fire class / DoP	Dca -s2,d2,a1 / CDESK0000001
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.)	0.32 MJ/m



Security (fire behaviour)

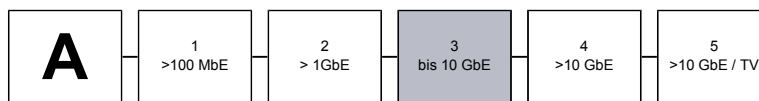
### Performance

 better than Category 6A acc. to EN 50288 and IEC 61156  
 excellent NEXT, well screen properties (pair- and overall screen), low Skew  
 Bandwidth (max.)                      600 MHz


Performance (class, bandwidth)

### Applications

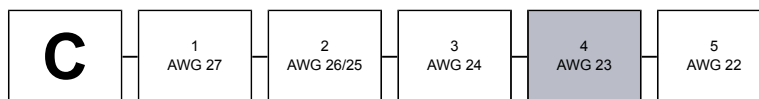
Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). Ideal for all applications of class D up to EA up to 10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+/4PPoE.



Application (Ethernet, TV)

### Mechanical characteristics (cable)

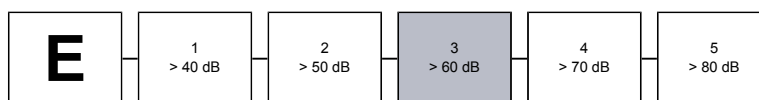
Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Tensile strength	110 N
Crush resistance (long term)	1000 N/100mm
Impact strength (quantity of impacts)	10



Construction (conductor size, tensile strength)

### Electromagnetic behaviour

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



EMC (coupling attenuation)

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

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

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

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	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
600	46,2	-	57	-	54	-	11	-	8	-	60	-	57	-	25,8	-

\* 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-inn connector

Inspection certificate

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

Part number	Weight	Copper weight	Outer Ø approx.	Colour
LKD7KS600350050	42 kg/km	23.5 kg/km	6.5 mm	Colza yellow