

# MegaLine<sup>®</sup> E2-45 U/F Dca

## KS-02YSH 4x2x0.55 mm/ AWG 23/1 PIMF

Category 6



Illustration similar

### Construction

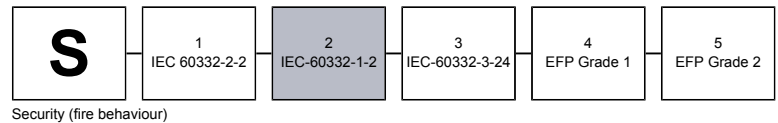
Conductor:	bare copper wire, AWG 23/1	Twisting:	4 pairs to cable core with tinned copper wire
Insulation:	cellular-PE, core-Ø: nominal value 1.4 mm		AWG 24/1
Colour code:	wh/bl, wh/or, wh/gn, wh/br	Outer sheath:	halogen free, flame retardant compound
Element:	cores to pair	Colour	Colza yellow
Pair shielding: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

### Cable marking:

KERPEN DATACOM GmbH Made in Germany MegaLine E2-45 U/F 4P H 4PPoE Dca s2 d2 a1 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 60332-1-2
Halogen free	IEC 60754-1/2
Acidity	IEC 60754-2
Smoke density	IEC 61034-1/2
Fire load (approx.)	0.6 MJ/m



Security (fire behaviour)

### Performance

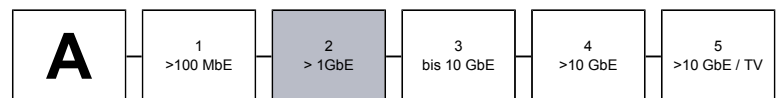
better than category 6 acc. to EN 50288 and IEC 61156  
 excellent NEXT, low Skew  
 Transmission bandwidth (typ.) 450 MHz



Performance (class, bandwidth)

### Applications

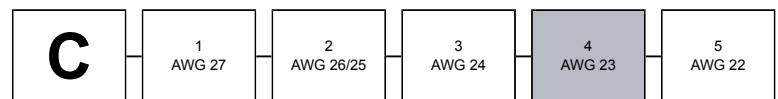
Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (2nd edition). Ideal for all applications of class D up to E up to 1 GbE acc. to IEEE 802.3 ab, Cable sharing, VoIP, PoE/PoE+



Application (Ethernet, TV)

### Mechanical characteristics (cable)

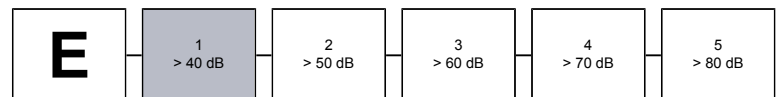
Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Tensile loading (max.)	110 N
Crush resistance (long term)	1000 N/100mm
Impact strength (quantity of impacts)	10



Construction (conductor size, tensile strength)

### Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	80 mΩ/m
Screen attenuation (nom.)	50 dB
Coupling attenuation (nom.)	60 dB
Segregation class according EN 50174-2	b



EMC (coupling attenuation)

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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
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 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		EL-FEXT dB@100m		PS-ELFEXT dB@100m		RL dB	
	typ.	Cat.6 max.*	typ.	Cat.6 min.*	typ.	Cat.6 min.*	typ.	Cat.6 min.*	typ.	Cat.6 min.*	typ.	Cat.6 min.*	typ.	Cat.6 min.*	typ.	Cat.6 min.*
1	1,9	2,1	95	66	92	64	93	64	90	62	88	66	85	64	25,4	-
4	3,2	3,8	95	65	92	63	92	61	89	59	89	58	86	55	28,6	23
10	5,2	6	90	59	87	57	85	53	82	51	92	50	89	47	33,5	25
16	7	7,6	90	56	87	54	83	49	80	47	98	46	95	43	35,6	25
31,25	9,9	10,7	85	52	82	50	75	41	72	39	98	40	95	37	37	23,6
62,5	13,5	15,5	80	47	77	45	66	32	63	30	95	34	92	31	35,9	21,5
100	17,9	19,9	75	44	72	42	57	24	54	22	88	30	85	27	34,3	20,1
155	22,5	25,3	72	41	69	39	49	16	46	14	81	26	78	23	32,2	18,8
200	26,9	29,1	68	40	65	38	41	11	38	9	75	24	72	21	31,3	18
250	30,4	33	66	38	63	36	36	5	33	3	72	22	69	19	29,2	17,3
300	33,1	-	65	-	62	-	32	-	29	-	69	-	66	-	28	-
450	39,3	-	63	-	60	-	24	-	21	-	64	-	61	-	27	-

\* EN 50288-5-1(2014)/IEC 61156-5(2009)

#### Standards, certificates and approvals

Quality seal with production control:

GHMT PVP

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

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
LKD7KS600050000	55 kg/km	24 kg/km	55 kg/km	7.4 mm	Colza yellow