

# MegaLine® E2-30 U/U flex

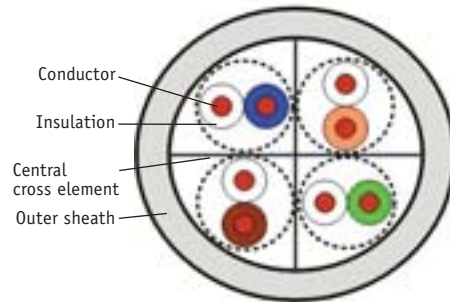
S<sub>2</sub>P<sub>1</sub>A<sub>2</sub>C<sub>3</sub>E<sub>1</sub>

Type: KS-02YSH 4x2xAWG 24/7



### Construction:

- Conductor: bare stranded copper wire, AWG 24/7
- Insulation: cellular-PE
- Twisting element: Pair
- Twisting: 4 pairs
- Outer sheath: halogen-free, flame retardend compound



### Printing outer sheath:

KERPEN MegaLine® E2-30 U/U flex 4P H  
SPACE CODE 21231  
"Production lot code" "Meter marking"

Colour code: whbu/bu, whor/or, whgn/gn, whbn/bn  
Colour outer sheath: grey, RAL 7035

### Fire behaviour:

Flame retardance: acc. to IEC 60332-1-2  
Halogen acid gas emission: acc. to IEC 60754-2  
Smoke density: acc. to IEC 61034  
Calorific value (MJ/m): 0.6 (approx.)

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

Security (Fire behaviour)

### Performance:

Better than category 6 acc. EN 50288 and IEC 61156  
Bandwidth 300 MHz

P	1	2	3	4	5
	> class E	> class E <sub>A</sub>	> class F	> class F <sub>A</sub>	> class "G"
	> 250 MHz	> 500 MHz	> 600 MHz	> 1,000 MHz	> 1,200 MHz

Performance (Cabling class, bandwidth)

### Applications:

Connecting cable and patch cord for generic cabling systems acc. ISO/IEC 11801 and EN 50173 (2. edition). Suitable for all applications of classes D up to E up to 1 GbE acc. IEEE 802.3 ab, VoIP, PoE

A	1	2	3	4	5
	> 100 MbE	> 1 GbE	up to 10 GbE	> 10 GbE	> 10 GbE TV

Application (Ethernet, TV)

### Mechanical characteristics:

Bending radius:  
during operation: min. 5 x overall diameter  
Tensile strength: 80 (max.)

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

Construction (Conductor size, Tensile strength)

### Electromagnetic behaviour:

Coupling attenuation up to 1,000 MHz (dB):  
45 (nominal value)

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

EMC (Coupling attenuation)

**Electrical characteristics at 20°C:**

- DC resistance (Ohm/km): 88 (max.)
- Insulation resistance (Gohm x km): 5 (min.)
- Mutual capacitance (pF/m): 50 (approx.)
- Signal velocity (c): 0.67 (approx.)
- Propagation delay (ns/100m): 500 (approx.)
- Skew at 100 MHz (ns/100m): 35 (approx.)
- Characteristic impedance at 100 MHz (Ohm): 100 ± 5
- Test voltage Ueff (V): 1,000
- Operating voltage Ueff (V): 125 (max.)

Frequency MHz	Attenuation dB/10m		NEXT dB		PS-NEXT dB		ACR dB@10m		PS-ACR dB@10m		EL-FEXT dB@10m		PS-ELFEXT dB@10m		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	0.23	0.31	88	66	85	64	88	66	85	64	82	66	79	64	24.7	-
4	0.42	0.57	75	65	72	63	75	65	72	63	77	58	74	55	29.2	23
10	0.68	0.9	70	59	67	57	69	58	66	57	70	50	67	47	32.5	25
16	0.93	1.14	66	56	63	54	65	55	62	54	63	46	60	43	33.1	25
31.25	1.41	1.61	63	52	60	50	61	50	58	50	56	40	53	37	33.1	23.6
62.5	1.92	2.32	60	47	57	45	58	45	55	45	50	34	47	31	33.6	21.5
100	2.58	2.99	57	44	54	42	55	41	52	42	43	30	40	27	31.6	20.1
155	3.07	3.79	55	41	52	39	52	38	49	39	35	26	32	23	29.7	18.8
200	3.66	4.37	53	40	50	38	50	35	47	38	27	24	24	21	26.9	18
250	4.14	4.95	52	38	49	36	48	33	45	36	21	22	18	19	25.8	17.3
300	4.68	-	50	-	47	-	46	-	43	-	14	-	11	-	25.2	-

\* EN 50288-6-2/IEC 61156-6

**Chemical characteristics:**

Free of hazardous substances acc. to RoHS 2002/95/EG

**Certificates and Approvals:**

Quality mark with production control: <VDE>

Link performance: KERPEN ELine™ systems and further commercial cabling systems

Inspection certificate: acc. to DIN 55350-18-4.2.1 respectively EN 10204

In agreement to LVD (73/23/EEC): 

**Thermal characteristics:**

Temperature range for fixed installation:

-20°C up to + 60°C

Temperature range for mobile operation:

0°C up to + 50°C

Article number	Size	Overall diameter mm	Weight kg/km	Copper number kg/km	Colour sheat
7KS60007	4P	6.2 (approx.)	45 (approx.)	19.5	grey, RAL 7035

Package: Drum 1,000 m