

MegaLine[®] F6-90 S/F Eca

KS-(02YS/V2Y)CH 6 x (4x2xAWG 26/1 PIMF) + 2 x AWG 28/7 S₃ P₃ A₄ C₂ E₅

Construction

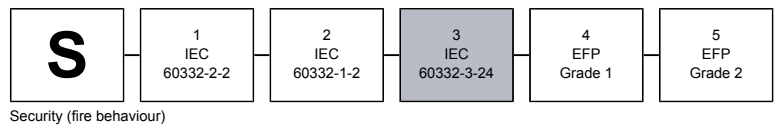
Conductor	bare copper wire, AWG 23/1	Pair shielding	*UNDEFINED TEXT*
Insulation	*UNDEFINED TEXT*	Twisting	*UNDEFINED TEXT*
Colour code	wh/bu, wh/or, wh/gn, wh/bn + ye,bk + numbered tape with 1 to n	Overall screen	tinned copper wire braid
Element	cores to pair	Outer sheath	Halogen free flame retardant compound (LSOH)
		Colour	Colza yellow

Cable marking

KERPEN DATACOM Made in Germany MegaLine Data Centre Link 24P LSOH Cat.7 700MHz 4PPoE Eca DoP: CDESK0000029 \$BA-Nr.\$ \$m-sign.\$

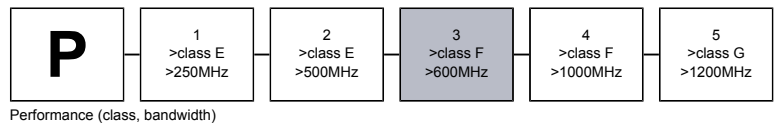
Fire Behaviour

Fire class / DoP	Eca /
Flame retardancy	IEC 60332-3-24
Halogen-free	IEC 60754-1, IEC 60754-2
Acidity	IEC 60754-2
Smoke density	IEC 61034-1, IEC 61034-2
Fire load (approx.)	1.48 MJ/m



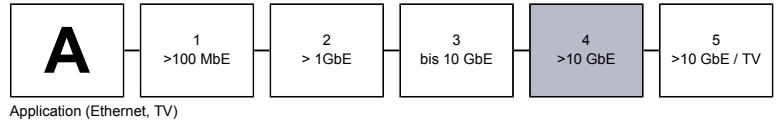
Performance

better than Category 7 acc. to EN 50288 and IEC 61156
 excellent NEXT, low attenuation, exzellente screen properties (pair- and overall screen), low Skew
 Bandwidth (max.) 700 MHz



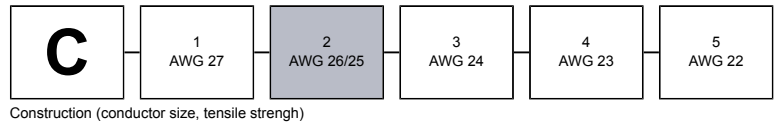
Applications

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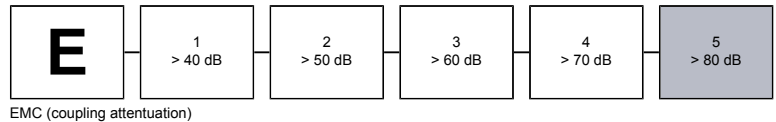
Mechanical characteristics (cable)

Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Max. strain relief	300 N
Impact strength (quantity of impacts)	10



Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	5 mΩ/m
Screen attenuation (nom.)	70 dB
Coupling attenuation (nom.)	85 dB
Segregation class according to EN 50174-2	d



Electrical properties at 20°C

DC resistance (max.)	150 Ω/km
Insulation resistance (min.)	5 GΩ x km
Operating capacity (approx.)	47 pF/m
Capacitive coupling (e) (approx.)	1100 pF/km
Signal velocity (approx.)	0.7 x c
Phase delay	480 ns/100m
Skew @ 100 MHz (approx.)	5 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

MegaLine[®] F6-90 S/F Eca

KS-(02YS/V2Y)CH 6 x (4x2xAWG 26/1 PIMF) + 2 x AWG 28/7 S₃ P₃ A₄ C₂ E₅

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.7 max.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*	typ.	Cat.7 min.*
1	1,9	2,0	102	80	99	77	101	78,0	98	75,0	109	80	106	77	25,4	-
10	4,8	5,7	102	80	99	77	98	74,3	95	71,3	108	74	105	71	31,1	25,0
100	16,4	18,5	102	72	99	69	86	53,5	83	50,5	93	54	90	51	33,2	20,1
200	24,5	26,8	102	68	99	65	78	41,2	75	38,2	85	48	82	45	33,2	18,0
250	27,8	30,2	102	66	99	63	75	35,8	72	32,8	82	46	79	43	33,4	17,3
450	36,1	41,6	97	63	94	60	61	21,4	58	18,4	72	41	69	38	31,4	17,3
500	38,2	44,1	97	62	94	59	59	17,9	56	14,9	68	40	65	37	30,5	17,3
600	42,9	48,9	92	61	89	58	49	12,1	46	9,1	62	38	59	35	27,6	17,3
700	47,7	-	92	-	89	-	44	-	41	-	59	-	56	-	26,2	-
800	50,8	-	90	-	87	-	39	-	36	-	56	-	53	-	23,9	-
900	55,1	-	85	-	82	-	30	-	27	-	52	-	49	-	21,7	-
1000	58,0	-	80	-	77	-	22	-	19	-	42	-	39	-	18,0	-

* EN 50288-4-2(2014)/IEC 61156-6(2020)

Standards, certificates and approvals

Conformity

to CPR (EU/305/2011)

acc. to LVD (2014/35/EU)

Link Performance

KERPEN DATACOM MegaLine[®] 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
LKD7KS703090000	226 kg/km	106 kg/km	16 mm	Colza yellow

Packaging

500 m cable drum

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