

MegaLine® F6-90 S/F flex Dca

KS-02YSCH 4 x 2 x AWG 27/7 PIMF

Category 7 S₂ P₃ A₄ C₁ E₅



Illustration similar

Construction

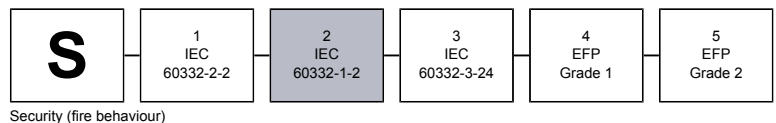
Conductor	bare copper wire, AWG27/7	Twisting	4 pairs
Insulation	cellular-PE, Core-Ø: nominal value 1.00 mm	Overall screen	tinned copper wire braid
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Outer sheath	Halogen free flame retardant compound (LSOH)
Element	cores to pair	Colour	Flame red
Pair shielding	aluminium-bonded polyester tape		

Cable marking

KERPEN DATACOM Made in Germany MegaLine F6-90 S/F flex 4P LSOH Cat.7 Dca DoP: CDESK0000022 \$BA-Nr.\$ \$m-sign.\$

Fire Behaviour

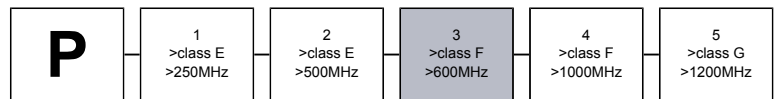
Fire class / DoP	Dca -s2,d1,a1 / CDESK0000022
Fire performance	EN 50575 / EN 50399
Flame retardancy	IEC 60332-1-2
Halogen-free	IEC 60754-1/2
Acidity	IEC 60754-2
Smoke density	IEC 61034-2
Fire load (approx.)	0.39 MJ/m



Security (fire behaviour)

Performance

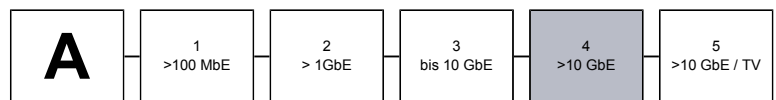
better than Category 7 acc. to EN 50288 and IEC 61156
excellent NEXT, exzellente screen properties (pair- and overall screen), low Skew
Bandwidth (max.) 900 MHz



Performance (class, bandwidth)

Applications

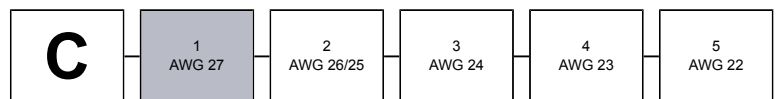
Connecting cable and patch cord for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). Ideal for all applications of class D up to F Multimedia (Video, Data, Voice) >10 GbE acc. to IEEE 802.3an, Cable sharing, VoIP, PoE/PoE +4PPoE.



Application (Ethernet, TV)

Mechanical characteristics (cable)

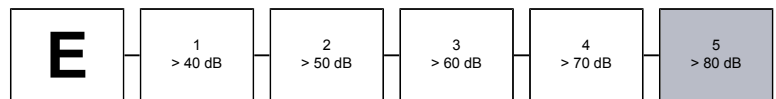
Bending radius (static) (min.)	5x outer-Ø
Max. strain relief	40 N
Crush resistance (long term)	1000 N/100mm



Construction (conductor size, tensile strength)

Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	5 mΩ/m
Screen attenuation (nom.)	60 dB
Coupling attenuation (nom.)	80 dB
Segregation class according to EN 50174-2	d



EMC (coupling attenuation)

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Electrical properties at 20°C

DC resistance (max.)	170 Ω/km
Insulation resistance (min.)	5 GΩ x km
Operating capacity (approx.)	44 pF/m
Signal velocity (approx.)	0.78 x c
Phase delay	430 ns/100m
Skew @ 100 MHz (approx.)	2.5 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

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	2,6	2,9	95	80	92	77	95	77,1	92	74,1	92	80	89	77	21,8	-
10	8,3	8,5	94	80	91	77	95	77,1	92	74,1	92	80	89	77	29,7	25,0
100	27,4	27,8	90	72	87	69	88	44,2	85	41,2	70	54	67	51	35,0	20,1
200	39,0	40,1	87	68	84	65	83	27,9	80	24,9	60	48	57	45	33,0	18,0
250	43,9	45,3	85	66	82	63	81	20,7	78	17,7	56	46	53	43	31,6	17,3
500	62,1	66,2	78	62	75	59	72	-4,2	69	-7,2	52	40	49	37	28,8	17,3
600	69,1	73,3	76	61	73	58	69	-12,3	66	-15,3	48	38	45	35	27,1	17,3
700	74,8	-	75	-	72	-	67	-	64	-	34	-	31	-	26,4	-
800	80,6	-	72	-	69	-	64	-	61	-	34	-	31	-	24,7	-
900	86,2	-	70	-	67	-	62	-	59	-	11	-	8	-	24,4	-

* 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
LKD7KS700180000	34 kg/km	17 kg/km	5.7 mm	Flame red

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FELTEN Wire & Cable Solutions BV

Habraken 2401
5507 TM Veldhoven
The Netherlands

www.feltenwcs.com
email: sales@feltenwcs.com
phone: +31(0)40-8200950

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