

MegaLine[®] F6-90 S/F flex Dca

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

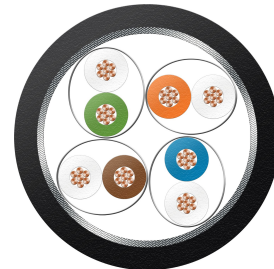
 Category 7 **S₂ P₃ A₄ C₁ E₅**


Illustration similar

Construction

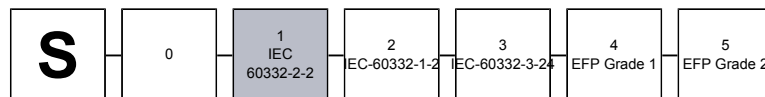
Conductor	bare copper wire, AWG27/7	Twisting	4 pairs
Insulation	cellular-PE, core-Ø: max. 1.0 mm	Overall screen	tinned copper wire braid
Colour code	wh/bl, wh/or, wh/gn, wh/br	Outer sheath	halogen free, flame retardant compound
Element	cores to pair	Colour	Jet black
Pair shielding	aluminium-bonded polyester tape		

Cable marking

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

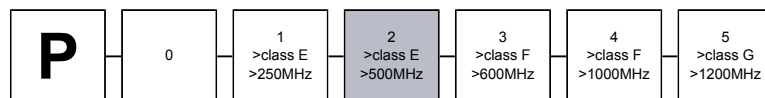
Fire Behaviour

Fire class / DoP	Dca -s2,d2,a1 /
Flame retardancy	IEC 60332-1-2
Halogen-free	IEC 60754-1/2
Fire load (approx.)	0.42 MJ/m

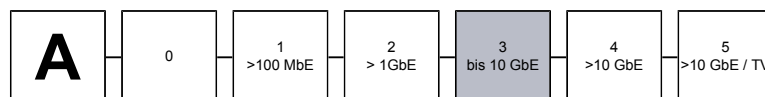


Security (fire behaviour)

Performance

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


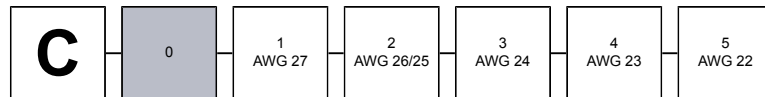
Performance (class, bandwidth)



Application (Ethernet, TV)

Mechanical characteristics (cable)

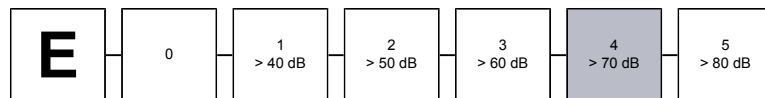
Bending radius (static) (min.)	5x outer-Ø
Tensile loading (max.)	40 N



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 EN 50174-2	d



EMC (coupling attenuation)

MegaLine® F6-90 S/F flex Dca

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

 Category 7 **S₂ P₃ A₄ C₁ E₅**
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 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	-25 °C up to +70 °C

Chemical characteristics

Free of hazardous substances acc. to RoHS 2011/65/EU

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	-

Standards, certificates and approvals

Conformity

 to CPR (EU/305/2011)
 acc. to LVD (2014/35/EU)

Link Performance

KERPEN MegaLine® systems and further commercial plug-in connector

Part number	Weight	copper weight	Outer Ø approx.	Colour
LKD7KS704120000	37 kg/km	17 kg/km	5.9 mm	Jet black