

MegaLine[®] F10-125 S/F Dca

KS-02YSCH 4 x 2 x AWG 22/1 PIMF

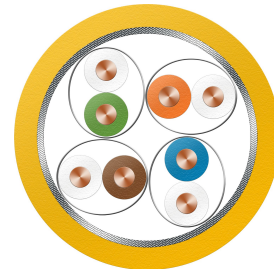
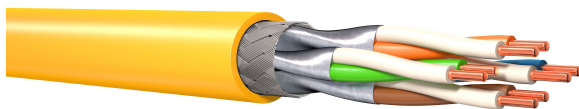
 Category 7_A **S₃ P₄ A₄ C₅ E₅**


Illustration similar

Construction

Conductor bare copper wire, 0.62 mm / ~AWG 22/1
 Insulation cellular-PE, core-Ø: nom. 1.5 mm
 Colour code wh/bl, wh/or, wh/gn, wh/br
 Element cores to pair
 Pair shielding aluminium-bonded polyester tape

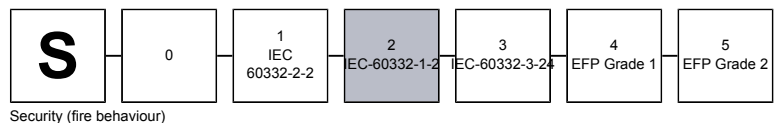
Twisting PiMF to cable core
 Overall screen tinned copper wire braid
 Outer sheath halogen free, flame retardant compound
 Colour Colza yellow

Cable marking

KERPEN DATACOM Made in Germany MegaLine F10-125 S/F 4P H Cat.7A 25G 4PPoE Dca s2 d2 a1 DoP: CDESK0000007 \$BA-Nr.\$ \$m-sign.\$

Fire Behaviour

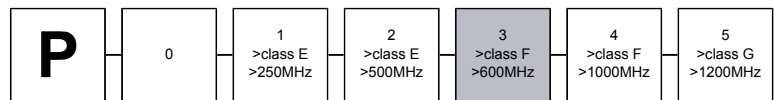
Fire class / DoP Dca -s2,d2,a1 / CDESK0000007
 Fire performance EN 50575 / EN 50399
 Flame retardancy IEC 60332-3-24
 Halogen-free IEC 60754-1/2
 Acidity IEC 60754-2
 Smoke density IEC 61034-1/2
 Fire load (approx.) 0.65 MJ/m



Security (fire behaviour)

Performance

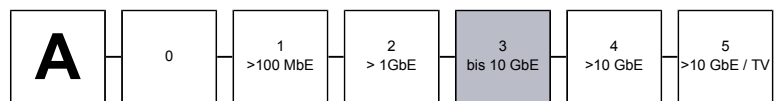
Better than Category 7_A acc. to EN 50288 and IEC 61156
 excellent NEXT, low attenuation, excellent screen properties
 (pair- and overall screen), low Skew
 Transmission bandwidth (typ.) 1300 MHz



Performance (class, bandwidth)

Applications

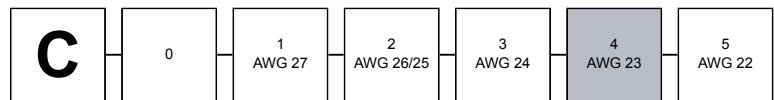
Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). Ideal for all applications of class D up to FA Multimedia (Video, Data, Voice) >10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+/4PPoE



Application (Ethernet, TV)

Mechanical characteristics (cable)

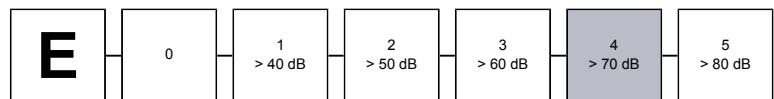
Bending radius (static) (min.) 4x outer-Ø
 Bending radius (dynamic) (min.) 8x outer-Ø
 Tensile loading (max.) 110 N
 Crush resistance (long term) 1000 N/100mm
 Impact strength (quantity of impacts) 10



Construction (conductor size, tensile strength)

Electromagnetic behaviour

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



EMC (coupling attenuation)

MegaLine® F10-125 S/F Dca

KS-02YSCH 4 x 2 x AWG 22/1 PIMF

 Category 7_A S₃ P₄ A₄ C₅ E₅
Electrical properties at 20°C

DC resistance (max.)	65 Ω/km
Insulation resistance (min.)	5 GΩ x km
Operating capacity (approx.)	42 pF/m
Capacitive coupling (e) (approx.)	1100 pF/km
Signal velocity (approx.)	0.8 x c
Phase delay	420 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

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.7 _A max.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*	typ.	Cat.7 _A min.*
1	1,8	2,1	105	78	102	75	104	75,9	101	72,9	105	78	102	75	27,1	20
10	4,7	5,8	105	78	102	75	101	72,2	98	69,2	108	75,3	105	72,3	35,2	25
100	15,9	18,5	105	75,4	102	72,4	89	56,9	86	53,9	93	55,3	90	52,3	38,9	20,1
200	23,5	26,5	105	70,9	102	67,9	81	44,4	78	41,4	85	49,3	82	46,3	36,6	18
250	26,6	29,7	105	69,4	102	66,4	79	39,7	76	36,7	82	47,3	79	44,3	35,3	17,3
500	37	42,8	100	64,9	97	61,9	63	22,2	60	19,2	70	41,3	67	38,3	29,4	17,3
600	41,8	47,1	95	63,7	92	60,7	53	16,6	50	13,6	63	39,7	60	36,7	26,6	17,3
700	45,2	51,1	95	62,7	92	59,7	50	11,6	47	8,6	60	38,4	57	35,4	25,8	16,6
800	48	54,9	93	61,9	90	58,9	45	6,9	42	3,9	57	37,2	54	34,2	25	16,1
900	52,3	58,5	90	61,1	87	58,1	38	2,6	35	-4	53	36,2	50	33,2	23,6	15,5
1000	55,2	61,9	88	60,4	85	57,4	33	-1,5	30	-4,5	48	35,3	45	32,3	22,3	15,1
1100	57,6	-	87	-	84	-	29	-	26	-	44	-	41	-	21,4	-
1300	64,9	-	80	-	77	-	15	-	13	-	39	-	36	-	18,3	-

* EN 50288-9-1(2013)/IEC 61156-5(2020)

Standards, certificates and approvals

Conformity	to CPR (EU/305/2011) acc. to LVD (2014/35/EU)
Quality seal with production control	GHMT PVP
Link Performance	KERPEN DATACOM MegaLine® systems and further commercial plug-in connector
Inspection certificate	DIN 55350-18-4.2.1 respectively EN 10204

Part number	Drum packing	Weight	copper weight	Outer Ø approx.	Colour
LKD7KS702530100	1000 m	67 kg/km	38 kg/km	8.1 mm	Colza yellow

Packaging

 1000 m cabel drum
 500 m cabel drum
 250 m carton
 100 m packed in rings