

MegaLine[®] F10-125 S/F Dca

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

Category 7_A S₃ P₄ A₄ C₅ E₅

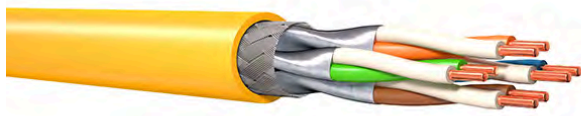


Illustration similar

Construction

Conductor bare copper wire, 0.62 mm
Insulation cellular-PE, core-Ø: nom. 1.5 mm
Colour code WH/BU, WH/OG, WH/GN, WH/BN
Element cores to pair
Pair shielding aluminium-bonded polyester tape

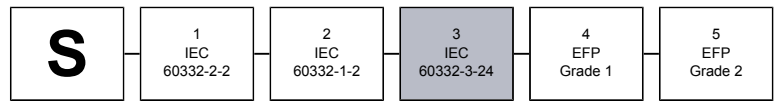
Twisting PiMF to cable core
Overall screen tinned copper wire braid
Outer sheath Halogen free flame retardant compound (LSOH)
Colour Colza yellow

Cable marking

KERPEN DATACOM Made in Germany MegaLine F10-125 S/F 4P LSOH Cat.7A 1300MHz 25G 4PPoE 100W Dca 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 61034-2
Fire load (approx.) 0.66 MJ/m



Security (fire behaviour)

Performance

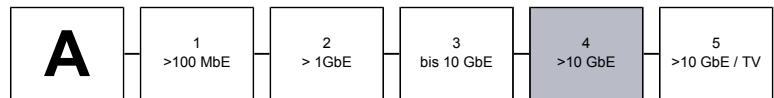
Better than Category 7_A acc. to EN 50288 and IEC 61156
excellent NEXT, low attenuation, excellent screen properties
(pair- and overall screen), low Skew
Bandwidth (max.) 1300 MHz



Performance (class, bandwidth)

Applications

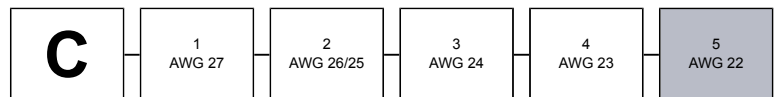
Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). Ideal for all applications of class D up to FA Multimedia (Video, Data, Voice) >10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+/4PPoE



Application (Ethernet, TV)

Mechanical characteristics (cable)

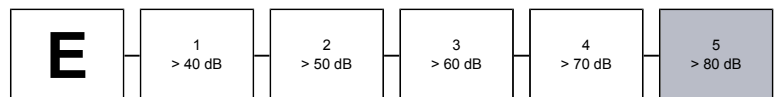
Bending radius (static) (min.) 4x outer-Ø
Bending radius (dynamic) (min.) 8x outer-Ø
Max. strain relief 110 N
Crush resistance (long term) 1000 N/100mm
Impact strength (quantity of impacts) 10



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 to 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

Conform to RoHS and REACH

Frequency 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 _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	32,6	-
10	4,7	5,8	105	78	102	75	104	75,9	101	72,9	105	78	102	75	31,5	25,0
100	15,9	18,5	105	75	102	72	89	56,9	86	53,9	93	65	90	62	29,0	20,1
200	23,5	26,5	105	71	102	68	81	44,4	78	41,4	85	59	82	56	25,4	18,0
250	26,6	29,7	105	69	102	68	79	39,7	76	36,7	82	57	79	54	24,1	17,3
500	37,0	42,8	100	65	97	62	63	22,1	60	19,1	70	51	67	48	21,6	17,3
600	41,8	47,1	95	64	92	61	53	16,6	50	13,6	60	50	60	47	19,8	17,3
700	45,2	51,1	95	63	92	60	50	11,6	47	8,6	60	48	57	45	21,1	16,6
800	48,0	54,9	93	62	90	59	45	7,0	42	4,0	57	47	54	44	21,0	16,1
900	52,3	58,5	90	61	87	58	38	2,6	35	-0,4	53	46	50	43	20,0	15,5
1000	55,2	61,9	88	60	85	57	33	-1,5	30	-4,5	48	45	45	42	20,0	15,1
1100	57,6	-	87	-	84	-	29	-	26	-	44	-	41	-	18,8	-
1300	64,9	-	80	-	77	-	15	-	13	-	39	-	36	-	17,6	-

* 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	Weight	Copper weight	Outer Ø approx.	Colour
LKD7KS702530000	64 kg/km	38 kg/km	8.1 mm	Colza yellow

Packaging

1000 m cable drum

500 m cable drum

250 m carton

100 m packed in rings

FELTEN Wire and Cable Solutions BV reserves the right to make changes to the product described in this specification without prior notice. FELTEN does not assume any liability which may occur due to the use of the specification described herein. Drawings are not to scale unless otherwise specified and are provided for general and informational purposes only. All values represented in this specification should be used as a guide only and exact product details can be confirmed at point of enquiry.

FELTEN Wire & Cable Solutions BV

Habraken 2401
5507 TM Veldhoven
The Netherlands

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

Number: LKD7KS702530000
Up-dating K: 12.12.2023
Up-dating F: 28.12.2023