

F10-130 S/F 2Y

MegaLine® Category 7_A Cable

Data Sheet

Daro Connectivity is an authorised distributor for the Kerpen Datacom MegaLine® cabling systems in copper for Data Centres, Offices, Industry and the Home.

The Kerpen Datacom MegaLine® range of products encompasses everything from copper data cables, ready-made patch cords and trunk cables with connection components through to complete cabling systems.

MegaLine® F10-130 S/F (L)2Y (type KS-02YSCH(L)2Y / 4x2xAWG 22/1 PIMF), four shielded twisted pairs encompassed in a tinned copper braid. Halogen free, flame retardant inner jacket, aluminium foil and polyethylene (PE) outer jacket cable for use outdoors and underground (direct bury) installation.

Installation cable for use in structured cabling acc. to ISO/IEC 11801 and EN 50173 (3rd Edition). Performance greater than Category 7_A acc. to EN 50288 and IEC 61156, with a typical bandwidth of 1300 MHz.

Applications of classes D to F_A (defined in ISO/IEC 11801), multimedia (TV, video, data, voice) > 10 GbE acc. to IEEE 802.3 an, cable sharing, Voice over IP (VoIP), Power Over Ethernet (PoE)/PoE+/4PPoE.

The Kerpen Datacom SPACE concept is a pragmatic and clearly structured matrix.

A great, quick decision making tool to help you find the right data cable for your application faster.

The concept is based on the classification of the five main selection criteria for determining the potential overall performance of the data cable: Security, Performance, Application, Construction, EMC.

Security (fire behaviour)

S	1 IEC 60332-2-2	2 IEC 60332-1-2	3 IEC 60332-3-24	4 EFP GRADE 1	5 EFP GRADE 2
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Performance (cable class, bandwidth)

P	1 >Class E >250 MHz	2 >Class E _A >500 MHz	3 >Class F >600 MHz	4 >Class F _A >1000 MHz	5 >Class F _{A+} >1200 MHz
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Application (ethernet, TV)

A	1 100 MbE	2 1 GbE	3 Up to 10 GbE	4 10 GbE	5 10 GbE TV
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Construction (conductor dimension)

C	1 27 AWG	2 26/25 AWG	3 24 AWG	4 23 AWG	5 22 AWG
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EMC (coupling attenuation)

E	1 >40 dB	2 >50 dB	3 >60 dB	4 >70 dB	5 >80 dB
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Applications

- Structured Cabling
- Outdoor & Underground Installation
- Class D to F_A per ISO/IEC 11801
- > 10 GbE per IEEE 802.3an
- Cable sharing
- Voice over IP (VoIP)
- PoE / PoE+ / 4PPoE

Product Features

- Better than Category 7_A
- Bandwidth 1300 MHz
- Excellent shielding characteristics
- Excellent NEXT
- PVP-GHMT
- RoHS, REACH & CPR conformity
- Compliant with LVD (2014/35/EU)

Technical Information

Electrical characteristics (HF) at 20 °C

Frequency MHz	Attenuation dB/100 m		NEXT dB		PS-NEXT dB		ACR dB at 100 m		PS-ACR dB at 100 m		EL-FEXT dB at 100 m		PS-ELFEXT dB at 100 m		RL dB	
	typ.	Cat. 7 max.*	typ.	Cat. 7 max.*	typ.	Cat. 7 max.*	typ.	Cat. 7 max.*	typ.	Cat. 7 max.*	typ.	Cat. 7 max.*	typ.	Cat. 7 max.*	typ.	Cat. 7 max.*
1	1.7	2	105	80	102	77	104	78	101	75	105	80	102	77	27.1	23
10	4.5	5.7	105	80	102	77	101	74	98	71	108	74	105	71	35.2	25
100	15.4	18.5	105	72	102	69	90	54	87	51	93	54	90	51	38.9	20.1
200	22.9	26.8	105	68	102	65	83	41	80	38	85	48	82	45	36.6	18
250	26	30.2	105	66	102	63	79	36	76	33	82	46	79	43	35.3	17.3
500	35.9	44.1	100	62	97	59	64	18	61	15	70	40	67	37	29.4	17.3
600	40.4	48.9	95	61	92	58	55	12	52	9	63	38	60	35	26.6	17.3
700	44.6	-	95	-	92	-	50	-	47	-	60	-	57	-	25.8	-
800	47.7	-	93	-	90	-	45	-	42	-	57	-	54	-	25	-
900	51.6	-	90	-	87	-	38	-	35	-	53	-	50	-	23.6	-
1000	54.8	-	88	-	85	-	33	-	30	-	48	-	45	-	22.3	-
1100	56.9	-	87	-	84	-	30	-	27	-	44	-	41	-	21.4	-
1300	61.4	-	80	-	77	-	21	-	18	-	39	-	36	-	18.3	-

* EN 50288-4-1 (2014)/IEC 61156-5 (2009)

Electrical characteristics (LF) at 20 °C

Direct current resistance	max.	57.1 Ω/km
Insulation resistance	min.	5 GΩ x km
Mutual capacitance	approx.	40 pF/m
Capacitive coupling (e)	approx.	1100 pF/km
Signal tempo (c)	approx.	0.80
Propagation delay	approx.	420 ns/100 m
Skew at 100 MHz	approx.	5 ns/100 m
Charact. impedance	at 100 MHz	100 ± 5 Ω
Testing voltage U _{eff}		1000 V
Operating voltage	max.	125 V

Thermal properties

For fixed installation	-25 °C to +70 °C
For mobile operation	-10 °C to +50 °C

Chemical characteristics

Free of hazardous substances acc. to RoHS 2011/65/EU
UV resistance according to UL 1581 and ISO 4892

Ordering Information

Dimension	Outer Ø approx. mm	Weight approx. kg/km	Copper no.* kg/km	Sheath colour	Order number
4P	12.0	150	45	Jet black	DFP-LKD7KS7002Uxxxx

Packaging: xxxx

Standard length: 0100 = 1000 m 0000 = general


Cable printing

Inner sheath
Kerpen Datacom MegaLine® F10-130 S/F 4P H "CPR Class" "DoP no."
Made in Germany "Batch number" "Metre marking"
Outer sheath
Kerpen Datacom MegaLine® F10-130 S/F 4P H(L)2Y Made in Germany
"Batch number" "Metre marking"

Colour code

WH/BU, WH/OG, WH/GN, WH/BN

Certificates and approvals

Quality mark with production control:
GHMT PVP
Link performance: Kerpen Datacom MegaLine® systems and other commonly available connector systems
Test certificates: according to DIN 55350-18-4.2.1 or EN 10204
Compliant with LVD (2014/35/EU): 

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