

MegaLine[®] PRO 700 S/F Dca KS-02YSCH 4 x 2 x AWG 23/1 PIMF

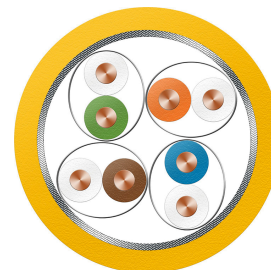
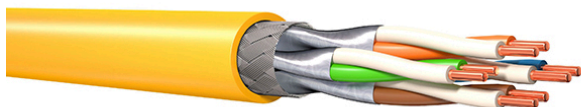
 Category 7 **S₃ P₃ A₃ C₄ E₄**


Illustration similar

Construction

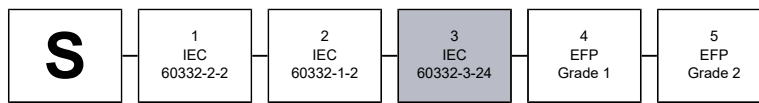
Conductor	bare copper wire, 0.55 mm	Twisting	4 pairs to cable core with tinned copper wire
Insulation	cellular-PE, Core-Ø: nominal value 1.40 mm		AWG 24/1
Colour code	WH/BU, WH/OG, WH/GN, WH/BN	Overall screen	tinned copper wire braid
Element	cores to pair	Outer sheath	Halogen free flame retardant compound (LSOH)
Pair shielding	aluminium-bonded polyester tape	Colour	Colza yellow

Cable marking

KERPEN DATACOM Made in Germany MegaLine PRO 700 S/F 4P LSOH Cat.7 700 MHz 4PPoE 90W Dca \$DOP\$ \$BA-Nr.\$ \$m-sign.\$

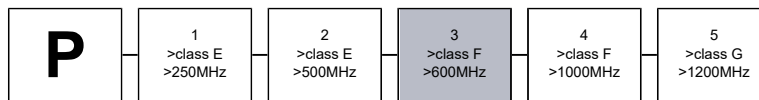
Fire Behaviour

Fire class / DoP	Dca -s2,d2,a1 / \$DOP\$
Fire performance	EN 50575 / EN 50399
Flame retardancy	acc. to IEC 60332-3-24
Halogen-free	IEC 60754-1/2
Acidity	IEC 60754-2
Smoke density	IEC 61034-2
Fire load (approx.)	0.44 MJ/m



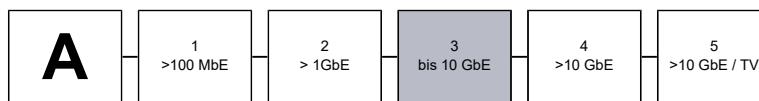
Security (fire behaviour)

Performance

 better than Category 7 acc. to EN 50288 and IEC 61156
 excellent NEXT, well screen properties (pair- and overall
 screen), low Skew
 Bandwidth (max.) 700 MHz


Performance (class, bandwidth)

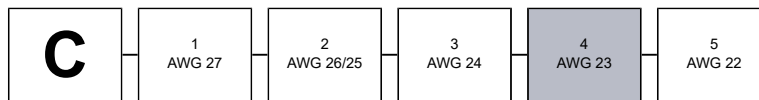
Applications

 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 EA up to 10 GbE acc. to IEEE 802.3 an, Cable
 sharing, VoIP, PoE/PoE+/4PPoE.


Application (Ethernet, TV)

Mechanical characteristics (cable)

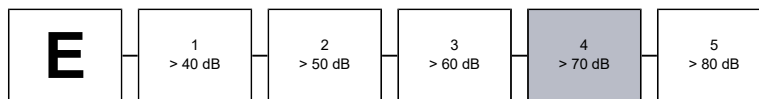
Bending radius (static) (min.)	4x outer-Ø
Bending radius (dynamic) (min.)	8x outer-Ø
Max. strain relief	110 N
Crush resistance (long term)	1000 N/100mm
Impact strength (quantity of impacts)	10



Construction (conductor size, tensile strength)

Electromagnetic behaviour

Coupling resistance @ 10 MHz (nom.)	Grade 2
Screen attenuation (nom.)	60 dB
Coupling attenuation (nom.)	80 dB
Segregation class according to EN 50174-2	c



EMC (coupling attenuation)

MegaLine[®] PRO 700 S/F Dca

KS-02YSCH 4 x 2 x AWG 23/1 PIMF

 Category 7 **S₃ P₃ A₃ C₄ E₄**
Electrical properties at 20°C

DC resistance (max.)	82 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.)	7 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.	Kat.7 max.*	typ.	Kat.7 min.*	typ.	Kat.7 min.*	typ.	Kat.7 min.*	typ.	Kat.7 min.*	typ.	Kat.7 min.*	typ.	Kat.7 min.*	typ.	Kat.7 min.*
1	1,9	2,0	87	80	84	77	85	78,0	82	75,0	85	80	82	77	28	-
10	5,4	5,7	85	80	82	77	80	74,3	77	71,3	80	74	77	71	27	25,0
100	18,1	18,5	75	72	72	69	57	53,5	54	50,5	78	54	75	51	26	20,1
200	26,4	26,8	69	68	66	65	43	41,2	40	38,2	75	48	72	45	20	18,0
250	29,9	30,2	67	66	64	63	37	35,8	34	32,8	73	46	70	43	19	17,3
300	31,9	33,3	66	65	63	62	34	31,7	31	28,7	72	44	69	41	19	17,3
450	38,9	41,6	64	63	61	60	25	21,4	22	18,4	65	41	62	38	19	17,3
500	41,2	44,1	63	62	60	59	22	17,9	19	14,9	63	40	60	37	19	17,3
600	46,2	48,9	62	61	59	58	16	12,1	13	9,1	60	38	57	35	19	17,3
700	51,4	-	58	-	55	-	7	-	4	-	56	-	53	-	18	-

* IEC 61156-5(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
KD7D66D3Y010000	46.7 kg/km	23.5 kg/km	6.9 mm	Colza yellow