

MegaLine[®] Dca

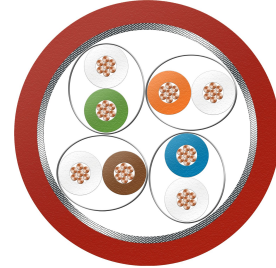
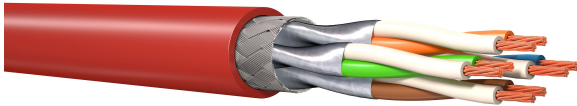
 Category 7 **S₂ P₃ A₄ C₁ E₅**


Illustration similar

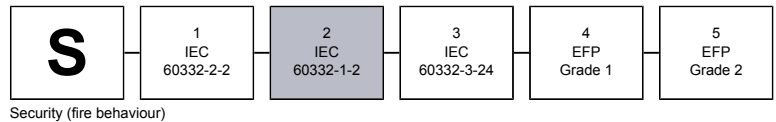
Construction

Conductor bare copper wire, AWG27/7
 Insulation cellular-PE, core-Ø: max. 1.0 mm
 Colour code wh/bl, wh/or, wh/gn, wh/br
 Element cores to pair

Pair shielding aluminium-bonded polyester tape
 Twisting 4 pairs
 Outer sheath Halogen free flame retardant compound (LSOH)
 Colour Flame red

Fire Behaviour

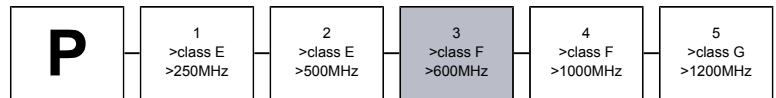
Fire class / DoP Dca -s2,d1,a1 / CDESK0000022
 Fire performance EN 50575 / EN 50399
 Flame retardancy acc. to IEC 60332-1-2
 Halogen-free IEC 60754-1/2
 Smoke density IEC 61034-2
 Fire load (approx.) 0.33 MJ/m



Security (fire behaviour)

Performance

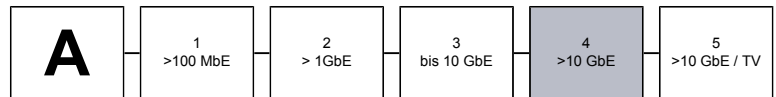
better than Category 7 acc. to EN 50288 and IEC 61156
 excellent NEXT, exzellente screen properties (pair- and overall screen), low Skew
 Transmission bandwidth (typ.) 900 MHz



Performance (class, bandwidth)

Applications

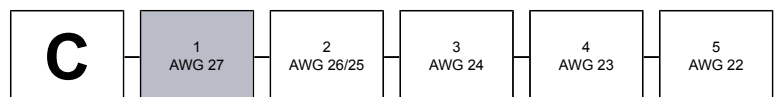
Connecting cable and patch cord for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). Ideal for all applications of class D up to F Multimedia (Video, Data, Voice) >10 GbE acc. to IEEE 802.3an, Cable sharing, VoIP, PoE/PoE +/4PPoE.



Application (Ethernet, TV)

Mechanical characteristics (cable)

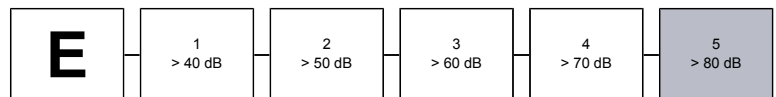
Bending radius (static) (min.) 5x outer-Ø
 Max. strain relief 40 N



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 to EN 50174-2 d



EMC (coupling attenuation)

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.) 2.5 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

MegaLine[®] Dca

Category 7 S₂ P₃ A₄ C₁ E₅

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	-

* EN 50288-4-2(2014)/IEC 61156-6(2020)

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
LKD7KS700180030	36 kg/km	17 kg/km	5.7 mm	Flame red