

MegaLine[®] G12-150 S/F Dca KS-02YSCH 4 x 2 x AWG 22/1 PIMF

Category 7_A S₃ P₅ A₅ C₅ E₅

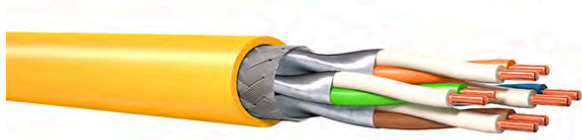


Illustration similar

Construction

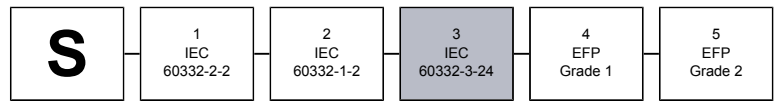
| | | | |
|----------------|---|----------------|--|
| Conductor | bare copper wire, 0.64 mm | Twisting | PiMF to cable core |
| Insulation | cellular-PE, core-Ø: nominal value 1.6 mm | Overall screen | tinned copper wire braid |
| Colour code | WH/BU, WH/OG, WH/GN, WH/BN | Outer sheath | Halogen free flame retardant compound (LSOH) |
| Element | cores to pair | Colour | Colza yellow |
| Pair shielding | aluminium-bonded polyester tape | | |

Cable marking

KERPEN DATACOM Made in Germany MegaLine G12-150 S/F 4P LSOH Cat.7A 1500MHz 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 | acc. to IEC 60332-3-24 |
| Halogen-free | IEC 60754-1/2 |
| Acidity | IEC 60754-2 |
| Smoke density | IEC 61034-2 |
| Fire load (approx.) | 0.66 MJ/m |



Security (fire behaviour)

Performance

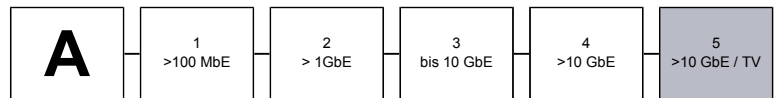
better than Category 7 (8) acc. to EN 50288 and IEC 61156
excellent NEXT, niedrigste attenuation, exzellente screen
properties (pair- and overall screen), low Skew
Bandwidth (max.) 1500 MHz



Performance (class, bandwidth)

Applications

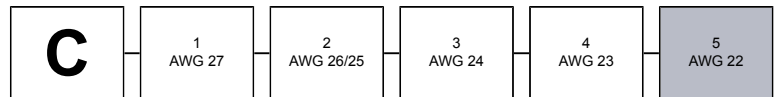
Installation cable for generic cabling systems acc. to ISO/ IEC 11801 and EN 50173 (2nd edition) and for residential cabling acc. to ISO/IEC 15018 and EN 50173-4. Ideal for all applications of class D up to FA Multimedia (TV, Video, Data, Voice) >10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+



Application (Ethernet, TV)

Mechanical characteristics (cable)

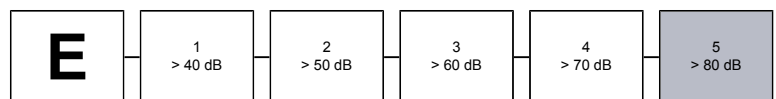
| | |
|---------------------------------------|--------------|
| Bending radius (static) (min.) | 4x outer-Ø |
| Bending radius (dynamic) (min.) | 8x outer-Ø |
| Max. strain relief | 130 N |
| Crush resistance (long term) | 1000 N/100mm |
| Impact strength (quantity of impacts) | 10 |



Construction (conductor size, tensile strength)

Electromagnetic behaviour

| | |
|---|--------|
| Coupling resistance @ 10 MHz (nom.) | 2 mΩ/m |
| Screen attenuation (nom.) | 80 dB |
| Coupling attenuation (nom.) | 90 dB |
| Segregation class according to EN 50174-2 | d |



EMC (coupling attenuation)

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Electrical properties at 20°C

| | |
|------------------------------------|-------------|
| DC resistance (max.) | 57.1 Ω/km |
| Insulation resistance (min.) | 5 GΩ x km |
| Operating capacity (approx.) | 42 pF/m |
| Capacitive coupling (e) (approx.) | 1000 pF/km |
| Signal velocity (approx.) | 0.77 x c |
| Phase delay | 420 ns/100m |
| Skew @ 100 MHz (approx.) | 3 ns/100m |
| Characteristic impedance @ 100 MHz | 100 +/- 5 Ω |
| Test voltage | 1000 V |
| Operating voltage (max.) | 125 V |

Thermal characteristics (cable)

| | |
|---------------------------------|---------------------|
| 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 | 1,6 | 2,1 | 110 | 78 | 107 | 75 | 108 | 75,9 | 105 | 72,9 | 109 | 78 | 106 | 75 | 26,1 | - |
| 10 | 4,2 | 5,8 | 110 | 78 | 107 | 75 | 106 | 72,2 | 103 | 69,2 | 109 | 78 | 106 | 75 | 32,3 | 25,0 |
| 100 | 14,4 | 18,5 | 110 | 75 | 107 | 72 | 96 | 56,9 | 93 | 53,9 | 93 | 65 | 90 | 62 | 36,2 | 20,1 |
| 200 | 21,5 | 26,5 | 110 | 71 | 107 | 68 | 88 | 44,4 | 85 | 41,4 | 86 | 59 | 83 | 56 | 35,5 | 18,0 |
| 250 | 24,5 | 29,7 | 105 | 69 | 102 | 66 | 81 | 39,7 | 78 | 36,7 | 83 | 57 | 80 | 54 | 34,8 | 17,3 |
| 500 | 34,0 | 42,8 | 105 | 65 | 102 | 62 | 71 | 22,1 | 68 | 19,1 | 70 | 51 | 67 | 48 | 31,8 | 17,3 |
| 600 | 37,7 | 47,1 | 100 | 64 | 97 | 61 | 62 | 16,6 | 59 | 13,6 | 64 | 50 | 61 | 47 | 28,5 | 17,3 |
| 800 | 44,5 | 54,9 | 95 | 62 | 92 | 59 | 50 | 7,0 | 47 | 4,0 | 58 | 47 | 55 | 44 | 25,3 | 16,1 |
| 900 | 48,1 | 58,5 | 95 | 61 | 92 | 58 | 47 | 2,6 | 44 | -0,4 | 54 | 46 | 51 | 43 | 23,8 | 15,5 |
| 1000 | 49,0 | 61,9 | 92 | 60 | 89 | 57 | 43 | -1,5 | 40 | -4,5 | 49 | 45 | 46 | 42 | 22,2 | 15,1 |
| 1200 | 54,9 | 68,4 | 88 | 59 | 85 | 56 | 34 | -9,2 | 31 | -12,2 | 40 | 44 | 37 | 41 | 20,2 | 14,3 |
| 1300 | 57,0 | - | 81 | - | 78 | - | 24 | - | 21 | - | 35 | - | 32 | - | 18,3 | - |
| 1400 | 58,1 | - | 74 | - | 71 | - | 16 | - | 13 | - | 30 | - | 27 | - | 16,3 | - |
| 1500 | 62,0 | - | 73 | - | 70 | - | 11 | - | 8 | - | 25 | - | 22 | - | 12,3 | - |

* 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 | acc. to DIN 55350-18-4.2.1 bzw. EN 10204 |

| Part number | Weight | Copper weight | Outer Ø approx. | Colour |
|-----------------|----------|---------------|-----------------|--------------|
| LKD7KS800010000 | 68 kg/km | 48 kg/km | 8.6 mm | Colza yellow |

Packaging

1000 m cable drum
500 m cable drum

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