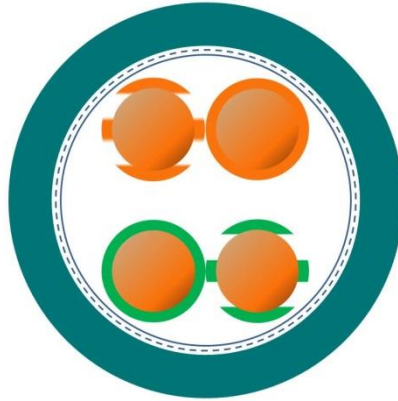


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Application

ETHERLINE® H Cat.5e is a halogen free CATEGORY 5e high speed data transmission cable suitable for application in the industrial environments. This data cable meets the requirements in accordance to the Standards EIA/TIA-568 TSB-36 and ISO/IEC 11801 „Generic Cabling for Customer Premises“ for CLASS D Links. The high quality double screening ensures a high security during data transmission in areas with electromagnetic fields. The cable is designed for stationary applications in dry and wet rooms.

Design



Certification	UL AWM styles 11117 and 21576 (1000 V, 80 °C) acc. to UL 758 cRU AWM I/II A/B (FT2) acc. to CSA C22.2 No.210-05
Conductor	Solid Bare Copper Wire 0.51 mm ϕ (AWG 24/1)
Insulation	Foam Skin, ca. 1 mm core ϕ
Core identification code	White/Orange - Orange White/Green - Green
Stranding	cores twisted to pairs, pairs twisted to cable core
Screen	Plastic Laminated Aluminium Foil Braiding with tinned copper wires Coverage ca. 85 %
Outer sheath	Halogen free compound HM2 acc. to VDE0207 Water Blue similar RAL 5021 Outer ϕ : ca. 5.6 mm

Electrical properties at 20°C

Loop resistance	max. 192 Ω /km
Insulation resistance	min. 5 G Ω xkm
Mutual capacitance	nom. 48 nF/km
Characteristic impedance	nom. 100 Ω acc. to IEC 61156-5 100 \pm 5 Ω (@ 100 MHz)
Velocity of propagation	ca. 0.77 c
Peak operating voltage	125 V (not for power purposes)
Test voltage	conductor/conductor 1000 V conductor/screen 500 V

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Electrical transmission properties at 20°C

f [MHz]	Attenuation [dB/100m] standard	NEXT [dB] standard	EL FEXT [dB] standard	Return Loss [dB] standard
1		52	64	64
4	4	44,3	52	52
10	6,4	39,8	44	44
16	8,1	37,6	39,9	39,9
31,25	11,4	34,6	34,1	34,1
62,5	16,5	31,5	28,1	28,1
100	21,4	29,4	24	24

Mechanical and thermal properties

Minimum bending radius	fixed installation: 7.5 x cable Ø
Temperature range	fixed installation: -30° C bis +80° C
Flammability	flame retardant acc. to IEC 603322-1
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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