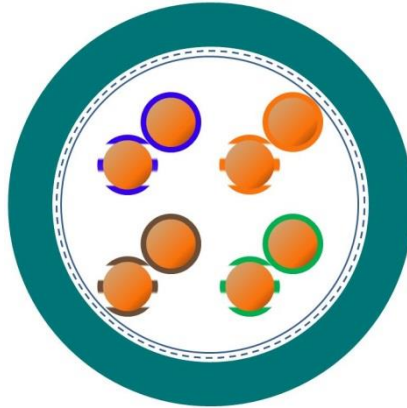


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Application

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




Conductor	Solid Bare Copper Wire 0.51 mm ϕ (AWG 24/1)
Insulation	Foam Skin, ca. 1 mm core ϕ
Core identification code	White/Blue - Blue White/Orange - Orange White/Green - Green White/Braun - Braun
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

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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