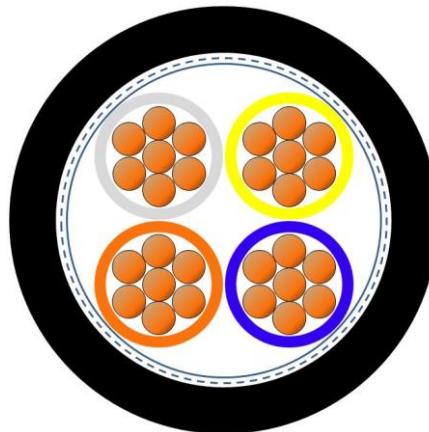


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**DATA SHEET**valid from:  
01.01.2019**ETHERLINE® Y CAT.5e BK**  
**2 x 2 x AWG 22/7****LAPP****Application**

ETHERLINE® Y CAT.5e BK 2x2xAWG22/7 is a CATEGORY 5e high speed data transmission cable suitable for application in the industrial environment according to PROFINET Type C. The cable has a black UV- resistant PVC outer sheath. The data cable meets the requirements of Standards EIA/TIA-568, TSB-36 and ISO/IEC 11801 "Generic Cabling for Customer Premises" for Class D Links.

The high quality screening ensures a high security during data transmission in areas with electromagnetic fields. The cable is designed for stationary applications and occasional movements in dry and wet rooms. It may be used outside regarding the thermal characteristics. At room temperature, the cable is widely resistant against impact of acids, soaps and certain oils. Permanent, operational movements, forced guidance respectively the use of cable reels or rolls or under tensile stress with more than 15 N/mm<sup>2</sup> conductor cross-section are not allowed.

**Design**

Conductor	stranded bare copper wire, AWG 22/7 conductor ø 0.75 mm
Insulation	Polyolefin core ø approx.. 1.5 mm
Core identification code	pair 1: white + blue pair 2: yellow + orange
Stranding	cores stranded to a quad, 1 layer plastic foil (overlapped)
Screen	aluminium laminated foil (metal side outside, overlapped) braid of tinned copper wires coverage approx. 85 %
Outer sheath	PVC mixture TM2 according to EN50363-4-1 Colour: black similar RAL 9005 Outer ø approx. 6.2 mm

**Electrical properties at 20°C**

Loop resistance	max. 115 Ω/km
Insulation resistance	min. 5 GΩ x km
Mutual capacitance	nom. 48 nF/km (@ 800 Hz)
Characteristic impedance	nom. 100 Ω acc. to IEC 61156-5 100 ± 15 Ω (1 MHz up to 100 MHz)
Peak operating voltage	125 V (not for power purposes)
Test voltage	conductor/conductor 1000 V conductor/screen 500 V

**AbN**  
automation

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**DATA SHEET**valid from:  
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**2 x 2 x AWG 22/7****LAPP****Electrical transmission properties at 20°C**

f [MHz]	Attenuation [dB/100m]	NEXT [dB]	EL FEXT [dB]	Return Loss [dB]
	standard	standard	standard	standard
<b>4</b>	4,1	56,3	52	23
<b>10</b>	6,7	50	43,3	25
<b>16</b>	8,3	47,2	40	25
<b>31,25</b>	11,7	42,8	34	23,6
<b>62,5</b>	17	38,4	28,1	21,6
<b>100</b>	22	35,3	24	20,1

**Mechanical and thermal properties**

Minimum bending radius

fixed installation: 10x cable Ø  
occasional flexing: 15x cable Ø

Temperature range

fixed installation: -40° C up to +80° C  
occasional flexing: -10° C up to +70° C

Flammability

flame retardant acc. to IEC 60332-1-2

General requirements

This cable is conform to the EU-Directive 2011/65/EU  
(RoHS, Restriction of the use of certain hazardous substances).