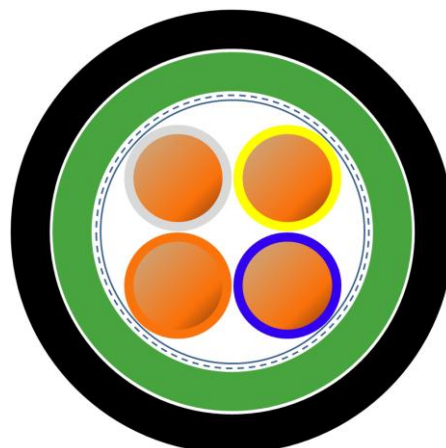


2170933	<b>DATA SHEET</b>	
Valid from: 26.07.2018	<b>ETHERLINE® PN Cat.5e YY</b>	

## Description

**ETHERLINE® PN Cat.5e YY** is 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 and for use outside.



## Approval

c(UL)us type CMG 75°C acc. to UL 444 & CSA-C22.2 No. 214

## General characteristics

Conductor	Solid bare copper wire, 0.64 mm ø or AWG 24/1
Insulation	solid polyethylene
Core identification code	White, Yellow, Blue, Orange
Stranding	Cores stranded to quad
Screening	aluminum laminated polyester foil <u>above:</u> braiding of tinned copper wires coverage approx. 85%
Inner sheath	PVC compound color: green, similar to RAL 6018 outer Ø: approx. 6.2 mm
Outer sheath	PVC compound color: black, similar to RAL 9005 outer Ø: approx. 7.7 mm

## Mechanical characteristics

Minimum bending radius	fixed installation: 8 x cable Ø
Permissible temperature range	fixed installation: -25 °C up to +80 °C
Flame propagation	flame retardant acc. to UL 1685 /CSA FT4

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## Electrical characteristics

DC-Resistance (loop)	max. 118.2 $\Omega$ /km
Insulation resistance	min. 5 G $\Omega$ x km
Mutual capacitance	nom. 48 nF/km
Characteristic impedance	nom. 100 $\Omega$ acc. to IEC 61156-5 100 $\pm$ 5 $\Omega$ (@100 MHz)
Operating peak voltage	125 V (not for power purposes)
velocity of propagation	approx. 0.66 c
Test voltage	core/core: 1000 V core/screen: 500 V

## Transmission properties

Transmission properties acc. to IEC 61156-5 for Category Cat.5e:

<b>f</b> <b>[MHz]</b>	<b>Attenuation</b> <b>max. [dB/100m]</b>	<b>NEXT</b> <b>[dB/100m]</b>
<b>1*</b>	2.1	65.3
<b>4</b>	4.0	56.3
<b>10</b>	6.3	50.3
<b>16</b>	8.0	47.2
<b>20</b>	9.0	45.8
<b>31,25</b>	11.4	42.9
<b>62.5</b>	16.5	38.4
<b>100</b>	21.3	35.3

\* Extract of normative minimum requirements

## Standard

EU-Directive	Dangerous and forbidden substances acc. to RoHS directive (2011/65/EU) are not allowed to the manufacturing.
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