
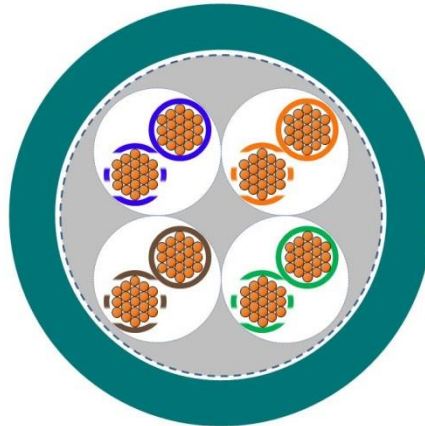


<b>2170489</b>	<b>DATA SHEET</b>	
<b>valid from: 01.01.2019</b>	<b>ETHERLINE® FD P CAT5e 4 x 2 x AWG26/19</b>	

## Application

ETHERLINE® FD P Cat. 5e 4x2x26/19 AWG is a CATEGORY 5e high speed data transmission cable for industrial environments. This 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 screen ensures high transmission reliability of data transfer in elec-tromagnetically polluted areas. The PUR sheath is widely resistant against mineral oils and abrasion. The cable is intended for highly flexible application in power chains or permanently moving machines and linear robots in dry and damp interiors and in harsh industrial environment.

## 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	fine-stranded bare copper wires, AWG26/19 or 0,14 mm <sup>2</sup>
Insulation	foam-skin polyolefin, outer Ø approx. 1.0 mm
Core identification code	acc. to IEC 60708-1 pair 1: white(-blue)/blue; pair 2: white(-orange)/orange; pair 3: white(-green)/green; pair 4: white(-brown)/brown
Stranding	2 cores twisted to pairs 4 pairs twisted together
Inner sheath	halogen free TPE compound
Screen	braid of tinned copper wires, coverage approx. 85 %
Outer sheath	PUR compound, Colour: blue similar RAL 5021, outer Ø: approx. 6.3 mm

## Electrical properties at 20°C

Loop resistance	max. 290 Ω/km
Insulation resistance	min. 5 GΩxkm
Mutual capacitance	nom. 50 nF/km
Characteristic impedance	nom. 100 Ω (±15%) (1 MHz up to 100 MHz)
Velocity of propagation	nom. 0.65 c
Signal transit time	<520 ns/100 m
Peak operating voltage	125 V
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
<b>4</b>	6	56,3	52	23
<b>10</b>	9,5	50,6	43,6	25
<b>16</b>	12,1	47,2	39,8	25
<b>31,25</b>	17,1	42,9	34,1	23,3
<b>62,5</b>	24,8	38,4	28,1	20,8
<b>100</b>	32	35,3	24,0	19

### Mechanical and thermal properties

Minimum bending radius	moved: 15 x cable Ø fixed installation: 8 x cable Ø
Temperature range	moved (VDE): -5° C up to +70° C fixed installation (VDE): -30° C up to +80° C moved (UL): -5° C up to +80° C fixed installation (UL): -30° C up to +80° C
Halogen free	acc. to VDE 0472-815
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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