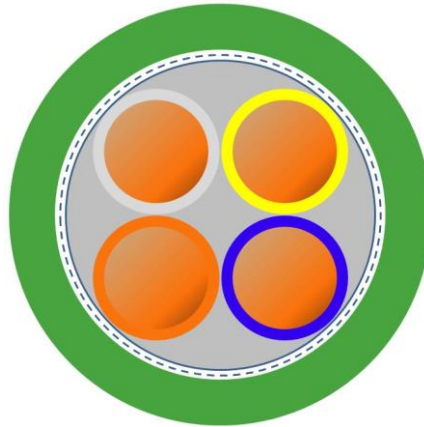


<b>2170893</b>	<b>DATA SHEET</b>	
<b>valid from: 01.01.2019</b>	<b>ETHERLINE® Y FC Cat.5</b>	

### Application

ETHERLINE® Y FC Cat. 5 is a CATEGORY 5 high speed data cable for industrial usage. The screening ensures high transmission reliability in areas with a high load of electromagnetic capacity. The cable is sunlight resistant and flame retardant.

### Design



Certification	(UL) PLTC, c(UL)us CMG 75 °C, UL AWM Style 21694
Conductor	bare copper-wire ca. 0.64 mm $\phi$ (22 AWG)
Insulation	PE, ca. 1.5 mm outer $\phi$
Core identification code	acc. to IEC 60708-1: white, yellow, blue, orange
Stranding	Star quad
Inner sheath	PVC
Screen	plastic laminated aluminum foil (overlapping) on top: braid of copper wire tinned wire, coverage ca. 85 %
Taping	plastic tape (overlapping)
Outer sheath	PVC, green similar to RAL 6018, outer $\phi$ : ca. 6.5 mm

### Electrical properties at 20°C

Loop resistance	max. 115,0 $\Omega$ /km
Insulation resistance	min. 500 M $\Omega$ xkm
Characteristic impedance	100 $\Omega$ $\pm$ 15 $\Omega$ (1MHz up to 100 MHz)
Signal transit time	<5.3 ns/m
Peak operating voltage	UL-rating 600 V
Test voltage	conductor/conductor 2000 V conductor/screen 2000 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>1</b>		52	64	64
<b>4</b>	4	44,3	52	52
<b>10</b>	6,4	39,8	44	44
<b>16</b>	8,1	37,6	39,9	39,9
<b>31,25</b>	11,4	34,6	34,1	34,1
<b>62,5</b>	16,5	31,5	28,1	28,1
<b>100</b>	21,4	29,4	24	24

### Mechanical and thermal properties

Minimum bending radius	during laying: 15 x cable $\varnothing$ fixed installation: 10 x cable $\varnothing$
Temperature range	during laying: -20° C up to +60° C fixed installation: -40° C up to +80° C
Flammability	flame retardant acc. to UL 1685 (CSA FT 4)
UV resistance	sunlight resistant acc. to UL 1581 Sec. 1200
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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