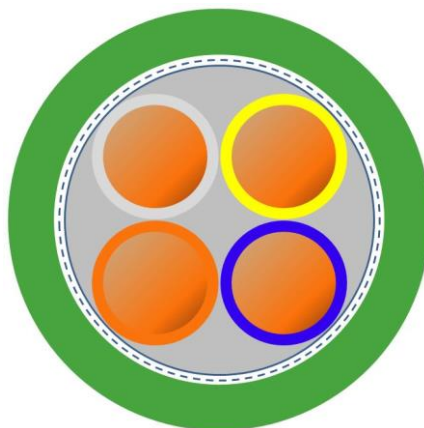


2170893	DATA SHEET	
valid from: 01.01.2019	ETHERLINE® Y FC Cat.5	

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 ϕ (22 AWG)
Insulation	PE, ca. 1.5 mm outer ϕ
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 ϕ : ca. 6.5 mm

Electrical properties at 20°C

Loop resistance	max. 115,0 Ω /km
Insulation resistance	min. 500 M Ω xkm
Characteristic impedance	100 Ω $\pm$ 15 Ω (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
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	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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