2170582

DATA SHEET

valid from: 01.02.2019

ETHERLINE® HEAT Cat. 7 FL09YBC11Y 4x2x0,22sn



Application

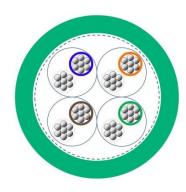
ETHERLINE® HEAT CAT. 7 FL09YBC11Y 4x2x0,22sn is a PUR sheathed CATEGORY 7 high speed data cable for industrial usage acc. To ISO 6722. The screening ensures a high reliability during data transmission. This cable is designed for fixed installation and limited moved applications in dry and damp areas. It is heat resistant up to 105 °C and also suitable for outdoor applications.

At room temperature the cable is widely resistant against acids and bases as well as certain oils. Per-manently moved applications with forcible control or usage on cable drums and reels with more than 15 N/mm2 tensile stress on the conductor cross-section is not allowed for this cable.

Naming acc. To ISO/IEC 11801: SF/FTP

Short mark naming acc. To DIN 76722: FL09YBC11Y 4x2x0,22sn

Design



Certification Tested acc. To LV 112-1, LV-212-2, LV 213-2 and certified acc. To ECE-R 118.

Conductor stranded, tinned copper wires

conductor Ø 0.61 mm

AWG 24/7

Insulation heat resistant polyolefin compound,

Foam-Skin

OuterØ max. 1.4 mm

Core identification code pair 1: white + blue; pair 2: white + orange;

pair 3: white + green; pair 4: white + brown

Stranding two cores stranded to pairs and covered with plastic laminated aluminum foil,

screend pairs stranded to bundle

Screen braid of tinned copper wire

coverage approx. 85%

Outer sheath special PUR-based compound

colour: RAL 5021 / waterblue outer Ø: approx. 8.1 mm

Electrical properties at 20°C

 $\begin{array}{lll} \mbox{Loop resistance} & \mbox{max. 173 } \Omega/\mbox{km} \\ \mbox{Insulation resistance} & \mbox{min. 5 } \mbox{G}\Omega \ \mbox{x km} \\ \end{array}$

 $\begin{array}{lll} \mbox{Mutual capacitance} & \mbox{nom. 48 nF/km (at 800 Hz)} \\ \mbox{Characteristic impedance} & \mbox{100} \pm 15 \ \Omega \ \mbox{acc. to IEC 61156-6} \\ \mbox{Peak operating voltage} & \mbox{125 V (not for power purposes)} \\ \mbox{Test voltage} & \mbox{Core/Core:} & \mbox{1000 V} \\ \end{array}$

Core/Screen: 500 V

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Electrical transmission properties at 20°C

f [MHz]	Attenuation [dB/100m]	NEXT [dB]	EL FEXT [dB]	Return Loss [dB]
	standard	standard	standard	standard
4	5,6	75	78	23
10	8,8	75	74	25
16	11,1	75	69,9	25
31,25	15,8	75	64,3	23,3
62,5	22,2	75	58,3	20,8
100	28,6	72,2	54	19
200	41,2	67,9	48	16,5
250	46,4	66,5	46	15,6
300	51,2	65,2	44,5	14,9
350	55,8	64,2	43,1	14,3
500	67,9	62	40,1	13
600	75,2	60,8	38,4	12,3

Mechanical and thermal properties

Minimum bending radius flexing: 15 x Cable \emptyset

fiexed installation: 10 x Cable \emptyset

Temperature range flexing: -30 °C bis +105 °C

fixed installation: -40°C bis +105°C

Flammability flame retardant acc. to ISO 6722-1 Halogen free 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).