



DATA SHEET	2170494
ETHERLINE[®] YY UL/CSA (CMG) CAT.5e 2x2xAWG22/1	Valid from: 06.06.2009

Application:

High speed cable for Industrial Ethernet for fixed installations in dry, wet, damp rooms or outside. Cable meets the transmission characteristics for Category 5e. The premium second screen assures high transmission reliability in electromagnetic loaded areas.

Wire

Bare copper wire (22AWG) ø 0.64 mm
Insulation of Polyethylene ø 1.5 mm

Core

4 wires twisted
Sequence of colours: white (WH)/ orange (OR) - orange (OR), white (WH)/green (GN) - green (GN)
Plastic tape, overlapped
Aluminium-laminated foil, overlapped
Shield braiding of tinned copper wires
Coverage about 90%

Inner-Jacket

Polyvinylchloride (PVC) yellow-green RAL 6018
Wall thickness about 0.85 mm ø 6,3mm

Outer-Jacket

Polyvinylchloride (PVC) BK, RAL 9005
Wall thickness about 0.7 mm ø 7,7mm

Electrical data at 20°C

Loop resistance	118.2	Ohm/km
Mutual capacitance	nom. 48	nF/km
Velocity of propagation (at 100 MHz)	nom. 66	%
Propagation delay (at 100 MHz)	max. 520	nsec/100m
Insulation resistance	5.0	GOhm*km
Characteristic impedance (1 - 100 MHz)	(100 ±15)	Ohm
Transfer impedance (20 MHz)	10	mOhm/m
Test voltage (core/core, 1min)	1000	V AC

Near-end crosstalk attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
min. value (dB)	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35.3

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Attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
max. value (dB/100m)	2.1	4.0	6.3	8.0	9.0	11.4	16.5	21.3

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Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
min. value (dB/100m)	63.2	52.3	44.0	39.2	36.8	31.5	21.9	14.0

Mechanical and thermal characteristics

Min. bending radius allowed (repeated): 8x \emptyset
Min. bending radius allowed (single): 4x \emptyset

Temperature range (fixed): -25°C up to +80°C
(flexing): -5°C up to +70°C

Flame retardant according to IEC 60332-1-2
Flame retardant according to CSA FT-4
Flame retardant according to UL 1685(CMG)

Other characteristics

RoHS compliant

Electrical values acc. to EIA/TIA-568, TSB-36 and ISO/IEC IS11801
Operating voltage : 125 V (not for power purposes)

2Y(ST)CYY 2X2X0.64/1.5-100

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