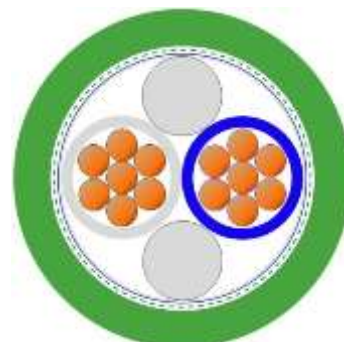


2170922	DATA SHEET	
valid from: 07.10.2020	ETHERLINE® T1 Y FLEX 1x2x22/7 AWG	

Application

Field of use:	Connecting cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173
Performance:	Bandwidth up to 600 MHz acc. to IEC 61156-11
Characteristics:	flame retardant, UV-resistant and largely resistant to acids, alkalis and certain oils
Applications:	For Single Pair Ethernet applications 100BaseT1 acc. to IEEE 802.3bw and 1000Base-T1 acc. to IEEE 802.3bp. The cable complies with the requirements of Power over Data Line acc. to IEEE 802.3bu.



Design

Certification	UL PLTC 75 °C acc. to UL 13 c(UL)us CM 75 °C, 300 V acc. to UL 444 c(RU)us AWM Style 21695 80 °C, 600 V acc. to UL 758
Conductor	stranded bare copper 22/7 AWG
Insulation	foamed polyolefine
Core identification code	white and blue
Stranding	2 cores twisted to a pair, with optional fillers on top: plastic tape (optional)
Screen	plastic laminated aluminium foil (overlapping) on top: braid of tinned copper wires (coverage 85 % ± 5 %)
Taping	non-woven tape (optional)
Outer sheath	PVC green, similar to RAL 6018 outer Ø: nom. 5.80 mm (± 0.3 mm)

Electrical properties at 20°C

Loop resistance	max. 11.8 Ω/100 m
Insulation resistance	min. 5 GΩxkm
Mutual capacitance	nom. 50 nF/km
Coupling attenuation	≥ 70 dB (30 up to 600 MHz)
Characteristic impedence	100 Ω ± 5 Ω acc. to IEC 61156-12
Velocity of propagation	0.76c
Signal propagation time	460 ns/100 m
Peak operating voltage	EN: 100 V (not for power purposes) UL: 300 V acc. to UL 444 and UL 13 600 V acc. to UL 758
Test voltage	core/core: 2000 V core/screen: 2000 V

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Mechanical and thermal properties

Minimum bending radius	fixed: 4x cable Ø flexing: 8x cable Ø
Temperature range	fixed: -40 °C up to +80 °C flexing: -10 °C up to +70 °C UL: 75 °C
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 FT2 acc. to UL 1581 §1090 FT1 acc. to UL 1581 §1060
UV resistance	acc. to UL 1581, §1200
Oil resistance	acc. to UL 13
General requirements	This cable is conform to EU-Directive 2014/35/EU (Low Voltage Directive) and to EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).
Environmental information	These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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