

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

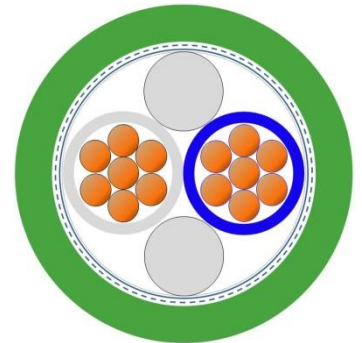
### Application

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 impedance: 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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