

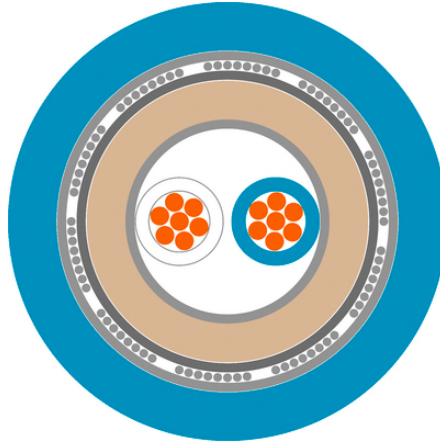
## ETHERLINE® T1L FLEX

Ethernet-APL data cable for flexible use

Flexible, shielded Ethernet APL data cable (10 Mbit/s) for hazardous areas in the process industry, bridging distances up to 1000 m, with UL approval.

### Info

Ethernet-APL



Supplementary automation components from Lapp



Oil & Gas



Suitable for outdoor use



Good chemical resistance



Flame-retardant



Assembly time



Oil-resistant



UV-resistant



Last Update (05.05.2025)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02\_03.16

## ETHERLINE® T1L FLEX

### Benefits

Ethernet Advanced Physical Layer (Ethernet-APL) enables data transmission via Ethernet up to the field level in hazardous environments of the process industry.

Fast and efficient transmission of large amounts of data via Ethernet at 10 Mbit/s for bridging long distances (trunk length up to 1000 m or spurs up to 200 m).

Ethernet-APL supports the "Intrinsically Safe" ignition protection type and is based on the 2-WISE (2-Wire Intrinsically Safe Ethernet) concept according to IEC TS 60079-47, thus achieving explosion protection technology with a high level of protection. Power-over-Data-Line (PoDL)-capable line according to IEEE 802.3bu for simultaneous power and data supply of SPE terminals with low power requirements (up to 50 W).

Ideal protection against electromagnetic interference due to double shielding of aluminum-clad foil and copper braided shield with high coverage (SF/UTP).

### Application range

Especially suitable for long transmission distances up to 1000 m according to IEC 61156-13.

For Single Pair Ethernet (SPE) applications 10Base-T1-L according to IEEE 802.3cg.

Especially for demanding applications in the process industry.

PLTC-ER approval for open wiring between cable tray and industrial machines/plants acc. to NEC 725.154 (D)

PVC outer sheath is resistant to acids and alkalis

### Product features

FC variant with

UL/CSA certification (CMG / PLTC)

High flame retardance acc. to IEC 60332-3-24 and CSA FT4

UL Cable Flame Test

UV-resistant UL SUN RES

Oil-resistant according to UL OIL RES I

### Norm references / Approvals

Transmission characteristics acc. to IEC 61156-13

10BASE-T1L (IEEE 802.3cg)

Power over Data Line (PoDL), IEEE 802.3bu

2 WISE Ethernet (IEC/TS 60079-47)

### Product Make-up

Stranded conductor, 7-wire, bare

Core insulation: Based on Polyolefin

Fast Connect (FC) cable design

Screening: wrapping of laminated aluminium foil in combination with tinned copper braiding

Outer sheath made of PVC

Outer sheath colour: sky blue (RAL 5015)

### Technical Data

Classification ETIM 5:

ETIM 5.0/6.0 Class-ID: EC000830

ETIM 5.0/6.0 Class-Description: Data cable

Classification ETIM 6:

ETIM 6.0 Class-ID: EC000830

ETIM 6.0 Class-Description: Data cable

Peak operating voltage:

(not for power applications) 125 V

Minimum bending radius:

Fixed installation: 4 x outer diameter

Flexing: 8 x outer diameter

Test voltage:

Core/core: 2000 V

Core/screen: 2000 V

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**ETHERLINE® T1L FLEX**

Characteristic impedance:	nom. 100 $\Omega$
Temperature range:	Fixed installation (IEC): -40°C bis +80°C UL: max. +80°C Flexing: -30°C to +70°C

**Note**

Photographs and graphics are not to scale and do not represent detailed images of the respective products.  
Prices are net prices without VAT and surcharges. Sale to business customers only.

**ETHERLINE® T1L FLEX**

Article number	Article designation	Number of pairs and AWG per conductor	Core diameter in mm	Outer diameter mm	Copper index (kg/km)	Weight (kg/km)
2170919	ETHERLINE T1L FLEX FC Y 1x2x18/7AWG	1x2x18/7AWG	2.55	8.0	0.001	95