

UNITRONIC® ST

Data transmission cable in reference to UL2919

- Low Capacitance
- Data Highway
(RS 232, RS 422, RS 485)
- UL Approved



Application

Designed for use as Data Highway, DH, (RS 232, RS 422, and RS 485 interface), control and instrumentation with minimum noise. Suitable for static laying in dry and damp condition.

Special Feature

Low capacitance. Aluminum foil screening 100% coverage plus twisted pairs offers optimum protection against external electrical interferences at medium and high frequencies. Flexible for use in environment where space is a constraint.

Note

For deviations to the standard range, e.g. cores, outer sheath, special screening and extended temperature range, please consult our technical adviser.

Cable Make-up

Multi strands of tinned copper wires, FPE core insulation, cores twisted together, overall screening of aluminum laminated plastic foil with tinned copper drain wire, PVC outer sheath, flame-retardant in accordance to IEC 60332-1.

Technical Data

Minimum bending radius for static: 10x cable diameter

Impedance: 100 Ohm

Insulation resistance: >2 GOhm x km

Test Voltage: 1000V

Temperature range: static: -30° C to +80° C

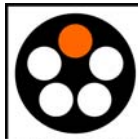
Core ident code: See Table Below

Inductance: approx. 0.7 mH/km

Working voltage: 30V

Mutual capacitance:
C/C approx. 42 pF/m
C/S approx. 72 pF/m

Part Number	Type Number	No. of pairs and AWG/strands	Core Insulation Material	Outer Sheath/Colour	Cores Colour	Cable OD.mm	Capacitance (pF/m)	
							C/C	C/S
3800950	1419A	2x2x24AWG/7	FPE	PVC/Chrome Grey RAL 7005	White/Blue stripe + Blue/White stripe	6.30	42	72
3800951	1421A	4x2x24AWG/7	FPE	PVC/Chrome Grey RAL 7005	White/Orange stripe + Orange/White Stripe White/Blue stripe + Blue/White stripe White/Orange stripe + Orange/white stripe White/Green stripe + Green/White stripe White/Brown stripe + Brown/White stripe	7.10	42	72

**Product Data Sheet****REV D
P/N 3800950****UNITRONIC® ST 2x2x24AWG****Date of issue:
21/10/2002****Cable Make Up:**

Tinned Copper Strands conductor, Foam/ Polyethylene Insulation, Cores twisted into pair, Pairs twisted in layer, Overall Polyester Aluminum Foil 100% shield coverage with 24AWG strands tinned copper drain wire, PVC Outer Sheath, and Flame Retardant.

Technical Data

Conductor	: Strands Tinned Anneal Copper
No of Pair	: 2 pairs
Cross Section	: 24AWG (7 x 0.20mm)
Insulation	: Foam/ Polyethylene : Thickness 0.30mm : Nominal Ø1.20mm
Core Color	: 1 st pair- White / Blue stripe, Blue / White stripe : 2 nd pair- White/Orange stripe, Orange/ White stripe
Shield Screen	: Overall wrapped with Polyester Aluminum Foil screen 100% coverage with 24AWG stranded drain copper wire.
Outer Sheath	: PVC Flame Retardant : Chrome Grey : Thickness 0.90mm
Cable Diameter	: Approx. Ø6.50mm
Marking on Cable	: LAPPKABEL UNITRONIC® ST 2x2x24AWG/7 <3800950> UL 2919 30V 80 °C

Electrical Data

Working Voltage	: 30V
Temperature Rating	: 80 °C Max.
Conductor Resistance	: Max. 78.7 ohm/km
Nominal Impedance	: 100 ohms
Nominal Capacitance	: 42.5pF/m (C/C) : 72.0pF/m (C/S)
Nom. Propagation Vel.	: 75%
Inductance	: Approx. 0.70mH/ km
Dielectric Test	: 1KV

Specifications

In accordance to UL 2919 30V 80 °C, UL 1581 Vertical Tray Flame Test