

## 1346F Multi-Conductor - High-Flex Thin DeviceBus® for ODVA DeviceNet™



For more Information  
please call

1-800-Belden1

**General Description:**

22 and 24 AWG stranded tinned copper conductors, PVC insulation (power), FPE insulation (Data), individually foil shielded (100% coverage) and an overall tinned copper braid (65% coverage), sunlight/oil-resistant TPE jacket.

**Physical Characteristics (Overall)****Conductor**

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material
4	1	22	154x44	TC - Tinned Copper
	1	24	105x44	TC - Tinned Copper

**Insulation**

Insulation Material:

Insulation Material	AWG
PVC - Polyvinyl Chloride	22
FPE - Foam Polyethylene	24

**Inner Shield**

Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
22 AWG Pair	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
24 AWG Pair	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG
22

Inner Shield Drain Wire Stranding: 26x36

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

**Outer Shield**

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	TC - Tinned Copper	65

**Outer Jacket**

Outer Jacket Material:

Outer Jacket Material
TPE - Thermoplastic Elastomer

**Overall Cable**

Overall Nominal Diameter: 6.985 mm

**Pair**

Pair Color Code Chart:

Number	Color
22 AWG Pair	Red & Black
24 AWG Pair	Blue & White

**Mechanical Characteristics (Overall)**

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Operating Temperature Range: -30°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 61.016 Kg/Km

Max. Recommended Pulling Tension: 289.133 N

Min. Bend Radius/Minor Axis: 69.850 mm

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

NEC/(UL) Specification: CMG, CL2

CEC/C(UL) Specification: CMG

CSA Specification: I/II A

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 05/03/2006

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire &amp; Cable): Yes

MII Order #39 (China RoHS): Yes

Other Specification: ODVA Class 2 Thin

**Flame Test**

UL Flame Test: UL1685 FT4 Loading

CSA Flame Test: FT4

**Suitability**

Sunlight Resistance: Yes

Oil Resistance: Yes

**Plenum/Non-Plenum**

Plenum (Y/N): No

**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Description	Impedance (Ohm)
24 AWG Pair	120

**Nom. Capacitance Conductor to Conductor:**

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/m)
24 AWG Pair	1			39.372

**Nominal Velocity of Propagation:**

Description	VP (%)
24 AWG Pair	75

**Maximum Delay:**

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Delay (ns/m)
24 AWG Pair				4.46216

**Maximum Conductor DC Resistance:**

Description	DCR @ 20°C (Ohm/100 m)
22 AWG	57.4175
24 AWG	91.868

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/km)
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10.4992

**Max. Attenuation:**

( )	Description	Freq. (MHz)
0.95149	24 AWG Pair Only	.125
1.6405		.500
2.2967		1.000

**Max. Operating Voltage - UL:**

Voltage	Description
300 V RMS	CL2, CMG
300 V RMS	C(UL) AWM

**Max. Recommended Current:**

Current
1.7 Amps per conductor @ 25°C (24 AWG)
5 Amps per conductor @ 25°C (22 AWG)

**Notes (Overall)**

**Notes:** Hi-Flex. Thin. Meter marks on jacket to aid users in installation.

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1346F T5U1000	305 MT	20.412 KG	GRAY T5U	C	2 #22, 2 #24 SH TPE

**Notes:**

C = CRATE REEL PUT-UP.

**Test Reports****a) UL**

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

**b) CSA**

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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