



**Product:** [87777](#)

Audio, Control & Instrument, #22-3pr, FEP, Individ. Foil, PVDF Jkt, CMP

### Product Description

Audio, Control & Instrument Cable, 22 AWG stranded (7x30) tinned copper conductor, FEP insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall jacket per table below, 22 AWG stranded tinned copper drain wire.

### Technical Specifications

#### Product Overview

Suitable Applications:	extreme high temperature environments; chemical resistant; outdoor and burial applications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; voice communications; panel wiring
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#### Physical Characteristics (Overall)

##### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
22	7x30	TC - Tinned Copper	0.03 in	3

Conductor Count:	6
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##### Insulation

Material	Nominal Wall Thickness
FEP - Fluorinated Ethylene Propylene	0.01 in

##### Color Chart

Number	Color
1	Black & Red
2	Black & White
3	Black & Green

##### Inner Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Poly)	Beldfoil® (Z-Fold®)	100%	TC - Tinned Copper	22	Stranded

##### Outer Shield

Material	Drainwire AWG
No Shield	22

##### Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVDF - Polyvinylidene Fluoride	0.234 in	0.014 in

#### Electrical Characteristics

##### Conductor DCR

Individual Pair Nominal Shield DCR	Max. Conductor DCR
11.3 Ohm/1000ft	160 Ohm/km

##### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield

31 pF/ft	67 pF/ft
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#### Inductance

<b>Nominal Inductance</b>
0.18 µH/ft

#### Impedance

<b>Nominal Characteristic Impedance</b>
50 Ohm

#### Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
69 ns/100m	1.47 ns/ft	69%

#### Current

<b>Max. Recommended Current [A]</b>
3.5 Amps per Conductor at 25°C

#### Voltage

<b>UL Voltage Rating</b>
300 V RMS

### Temperature Range

Operating Temperature Range:	-20°C To +150°C
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### Mechanical Characteristics

Bulk Cable Weight:	36 lbs/1000ft
Max. Pull Tension:	82 lbs
Min. Bend Radius/Minor Axis:	2.5 in

### Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP

### Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

### Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262 Plenum Flame Test (UL910)
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

### Plenum/Non-Plenum

Plenum (Y/N):	Yes
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### Related Part Numbers

Non-Plenum Number:	8777
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#### Variants

Item #	Color	UPC
87777 0021000	Red	612825216209
87777 002500	Red	612825216216

## History

Update and Revision:	Revision Number: 0.347 Revision Date: 05-05-2023
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