



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

Audio, Control & Instrument, #22-3pr, FEP, Indiv. 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

#### 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

## Inductance

### Nominal Inductance

0.18  $\mu$ H/ft

## Impedance

### Nominal Characteristic Impedance

50 Ohm

## Delay

### Max. Delay Skew Nominal Delay Nominal Velocity of Propagation (VP) [%]

69 ns/100m	1.47 ns/ft	69%
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## Current

### Max. Recommended Current [A]

3.5 Amps per Conductor at 25°C

## Voltage

### UL Voltage Rating

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, LSOH, 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

Footnote:	C - CRATE REEL PUT-UP.
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## History

Update and Revision:	Revision Number: 0.342 Revision Date: 04-08-2022
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