



**Part Number:** 8451

Audio & Instrumentation, #22-1pr, TC, O/A Foil, CM

## Product Description

22 AWG stranded (7x30) TC conductors, polypropylene insulation, paper wrap, twisted pair, overall Beldfoil® shield (100% coverage), 22 AWG stranded TC drain wire, PVC jacket.

## Technical Specifications

### Construction and Dimensions

#### Conductor:

AWG	Stranding	Material	No. of Pairs
22	7x30	TC - Tinned Copper	1
<b>Total Number of Conductors:</b>			2

#### Insulation:

Material	Nominal Wall Thickness
PP - Polypropylene	0.008 in

#### Color Chart 1:

Number	Color
1	Black & Red

#### Outershield 1:

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil® (Z-Fold®)	100 %	TC - Tinned Copper	22	7x30 mm

#### Outerjacket 1:

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.138 in

### Electrical Characteristics

## Conductor DCR:

Nominal Conductor DCR	Nominal Outer Shield DCR
14.5 Ohm/1000ft	14.1 Ohm/1000ft

## Capacitance:

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
34 pF/ft	67 pF/ft

## Impedance:

Nominal Characteristic Impedance
45 Ohm

## Delay:

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.5 ns/ft	66 %

## Current:

Max. Recommended Current [A]
2.9 Amps per conductor @ 25°C

## Inductance:

Nominal Inductance
0.17 $\mu$ H/ft

## Voltage:

UL Voltage Rating
300V RMS V

## Use

Max Recommended Pulling Tension:	27 lbs
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## Safety

CSA Flammability:	FT4
UL Flammability:	UL1666 Vertical Shaft

## Temperature Range

Operating Temp Range:	-20°C To +75°C °C
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## Mechanical Characteristics

Min Bend Radius/Minor Axis:	1.5 in
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## Part Number

Plenum (Y/N):	No
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## Standards

CA Prop 65 (CJ for Wire & Cable):	Yes
CEC/C(UL) Specification:	CMG
MII Order #39 (China RoHS):	Yes
NEC/(UL) Specification:	CMR
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

## History

Notes:	Unique paper separator facilitates jacket stripping.
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## Product Variants

Part Number	Color	Put-Up Type	Length
8451	GRAY	Reel	1000 ft
8451	GRAY	Reel	305 m
8451 0081000	GRAY	Reel	1000 ft
8451	GRAY	Reel	500 ft
8451	GRAY	Reel	152 m
8451 008500	GRAY	Reel	500 ft
8451	GRAY	UnReel	1000 ft
8451	GRAY	UnReel	305 m
8451 008U1000	GRAY	UnReel	1000 ft
8451	GRAY	UnReel	500 ft
8451	GRAY	UnReel	152 m
8451 008U500	GRAY	UnReel	500 ft
8451	BLACK	Reel	1000 ft
8451 01010000	BLACK	Reel	1000 ft
8451	BLACK	Reel	1000 ft
8451	BLACK	Reel	305 m
8451 0101000	BLACK	Reel	1000 ft

8451	BLACK	Reel	100 ft
8451	BLACK	Reel	30 m
8451 010100	BLACK	Reel	100 ft
8451	BLACK	Reel	5000 ft
8451	BLACK	Reel	4572 m
8451 01015000	BLACK	Reel	5000 ft
8451	BLACK	Reel	5000 ft
8451 0105000	BLACK	Reel	5000 ft
8451	BLACK	Reel	500 ft
8451	BLACK	Reel	152 m
8451 010500	BLACK	Reel	500 ft
8451	BLACK	UnReel	1000 ft
8451	BLACK	UnReel	305 m
8451 010U1000	BLACK	UnReel	1000 ft
8451	BLACK	UnReel	500 ft
8451	BLACK	UnReel	152 m
8451 010U500	BLACK	UnReel	500 ft
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