



Description:

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

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
1	22	7x30	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PP - Polypropylene	.008

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire	Conductor Material
22	7x30		TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.020

Overall Cabling

Overall Nominal Diameter: 0.135 in.

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red

Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.750	6.860

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	13.600 lbs/1000 ft.
Max. Recommended Pulling Tension:	27 lbs.
Min. Bend Radius (Install)/Minor Axis:	1.400 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
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):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
45

Nom. Inductance:

Inductance (µH/ft)
.17

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
35

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
67

Nominal Velocity of Propagation:

VP (%)
66

Nominal Delay:

Delay (ns/ft)
1.5

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
14.1

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
14.3

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current

9451 Multi-Conductor - Single-Pair Cables

2.9 Amps per conductor @ 25°C

Notes (Overall)

Notes: The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.
For cross-connect use with 1814R (et. al.) Snake Cables.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9451 N3UU1000	1,000 FT	16.000 LB	GREEN, MIL		2 #22 PP FS PVC FR
9451 N3U5000	5,000 FT	70.000 LB	GREEN, MIL	C N	2 #22 PP FS PVC FR
9451 001U1000	1,000 FT	16.000 LB	BROWN		2 #22 PP FS PVC FR
9451 0015000	5,000 FT	70.000 LB	BROWN	C N	2 #22 PP FS PVC FR
9451 002U1000	1,000 FT	16.000 LB	RED		2 #22 PP FS PVC FR
9451 0025000	5,000 FT	75.000 LB	RED	C N	2 #22 PP FS PVC FR
9451 003U1000	1,000 FT	16.000 LB	ORANGE		2 #22 PP FS PVC FR
9451 0035000	5,000 FT	75.000 LB	ORANGE	C N	2 #22 PP FS PVC FR
9451 004U1000	1,000 FT	16.000 LB	YELLOW		2 #22 PP FS PVC FR
9451 0045000	5,000 FT	75.000 LB	YELLOW	C N	2 #22 PP FS PVC FR
9451 006U1000	1,000 FT	16.000 LB	BLUE, LIGHT		2 #22 PP FS PVC FR
9451 0065000	5,000 FT	75.000 LB	BLUE, LIGHT	C N	2 #22 PP FS PVC FR
9451 007U1000	1,000 FT	16.000 LB	VIOLET		2 #22 PP FS PVC FR
9451 0075000	5,000 FT	75.000 LB	VIOLET	C N	2 #22 PP FS PVC FR
9451 008T1000	1,000 FT	16.000 LB	GRAY		2 #22 PP FS PVC FR
9451 008U1000	1,000 FT	16.000 LB	GRAY		2 #22 PP FS PVC FR
9451 008U500	500 FT	8.500 LB	GRAY		2 #22 PP FS PVC FR
9451 008500	500 FT	8.000 LB	GRAY		2 #22 PP FS PVC FR
9451 0085000	5,000 FT	75.000 LB	GRAY	C N	2 #22 PP FS PVC FR
9451 009U1000	1,000 FT	16.000 LB	WHITE		2 #22 PP FS PVC FR
9451 0095000	5,000 FT	75.000 LB	WHITE	C N	2 #22 PP FS PVC FR
9451 010U1000	1,000 FT	16.000 LB	BLACK		2 #22 PP FS PVC FR
9451 0105000	5,000 FT	75.000 LB	BLACK	C N	2 #22 PP FS PVC FR

Notes:

C = CRATE REEL PUT-UP.


N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

Overall Beldfoil® Shield


Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m


22 AWG Stranded (7x30) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire (continued)

Polypropylene Insulation • Paper Wrap • Gray or Black PVC Jacket																						
 <p>300V RMS 75°C</p> <p>Z-Fold®</p>	8451	NEC:	1	Black, Red	100*	30.5	2.3	1.1	.008	.20	.020	.51	.138	3.51	34	112	67	220				
		CMR			U-500	U-152.4	8.5	3.8														
		CEC:			500	152.4	8.0	3.6														
		CMG			U-1000	U-304.8	16.0	7.3														
					1000	304.8	16.0	7.3														

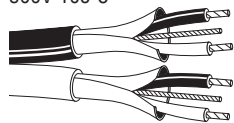
*100 ft. put-up available in Black only.
Unique paper separator facilitates jacket stripping.

Polypropylene Insulation • PVC Jacket (Available in Black, Gray, Brown, Red, Orange, Yellow, Green, Blue, Purple or White)																						
 <p>300V RMS 75°C</p>	9451	NEC:	1	Black, Red	U-500 [▲]	U-152.4	8.5	3.9	.008	.20	.020	.51	.135	3.43	35	115	67	220				
		CMR			500 [▲]	152.4	8.0	3.6														
		CEC:			T-1000 [▲]	T-304.8	18.0	8.2														
		CMG FT4			U-1000	U-304.8	15.0	6.8														
					5000	1524.0	75.0	34.0														

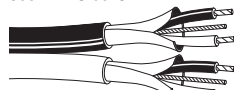
[▲]U-500 ft., 500 ft. and T-1000 ft. put-ups available in Gray only.
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

Polypropylene Insulation • Black Low-Smoke, Zero-Halogen Jacket																						
 <p>300V RMS 105°C</p>	9451SB <small>new</small>	NEC:	1	Black, Red	1000	304.8	20.0	9.1	.008	.20	.032	.81	.160	4.06	35	115	67	220				
		CMG-LS																				
		CEC:			CMG-LS FT4																	
		CMG-LS FT4			Limited Smoke																	

The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.


Polyolefin Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Black, Red & Purple or Red & Gray)																						
 <p>300V 105°C</p>	9451D	NEC:	2	Black, Red	U-1000	U-304.8	29.0	13.2	.008	.20	.020	.51	.135	3.43	34	112	67	220				
		CMR			2000*	620.8	62.0	28.1							x	x						
		CEC:														.270	6.86					
		CMR FT4																				

*2000 ft. put-up available in Red & Green only.
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.


Plenum • FEP Insulation • White Flamarrest® Jacket in Zip-Cord Construction																					
 <p>300V RMS 60°C</p>	9451DP <small>new</small>	NEC:	2	Black & Red, Black & White	1000	304.8	24.0	10.9	.007	.18	.017	.43	.127	3.23	35	115	67	220			
		CMP													x	x					
		CEC:			CMP FT6											.269	6.83				

The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

22 AWG Stranded (7x30) TC Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Stranded TC Drain Wire

Polypropylene Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black)																						
 <p>300V RMS</p>	1266A	NEC:	1	Black, Red	U-1000	U-304.8	15.0	6.8	.010	.25	.020	.51	.143	3.63	30	99	54	177				
		CM			1000†	304.8	15.0	6.8														
		CEC:																				
		CM																				

†1000 ft. put-up available in Black only.
Unique design features lower capacitance and greater flexibility than standard audio pair constructions.

PVC Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black)																						
 <p>300V 90°C</p>	1503A	NEC:	1	Black, Red	U-1000	U-304.8	16.0	7.3	.010	.25	.020	.51	.142	3.61	53	174	97	318				
		CM																				
		CEC:																				
		CM																				

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.