

# 8451 Paired - Single-Pair Cable





For more information please call 1-800-Belden1

See Put-ups and Colors

## **Description:**

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

### PHYSICAL CHARACTERISTICS:

### **CONDUCTOR:**

Number of Pairs	1	
Total Number of Conductors	2	
AWG	22	
Stranding	7x30	
Conductor Material	TC - Tinned Copper	

## **INSULATION:**

Insulation Material	PP - Polypropylene	
Nom. Insulation Wall Thickness	.008 in.	
Lay Length	1.75 in.	
Twists/ft.	6.86	
Pair Color Code Chart :		

Number	Color
1	Black & Red

## **OUTER SHIELD:**

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

### **OUTER SHIELD DRAIN WIRE:**

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

## **OUTER JACKET:**

Outer Jacket Material	PVC - Polyvinyl Chloride
Outer Jacket Nominal Wall Thickness	.020 in.

## **OVERALL NOMINAL DIAMETER:**



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Overall Nominal Diameter	.138 in.

### **MECHANICAL CHARACTERISTICS:**

Operating Temperature Range	-20°C To +75°C
Bulk Cable Weight	14.1 lbs/1000 ft.
Max. Recommended Pulling Tension	27 lbs.
Min. Bend Radius (Install)	1.4 in.

## APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

## **APPLICABLE STANDARDS:**

NEC/(UL) Specification	CMR
CEC/C(UL) Specification	CMG
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004

## FLAME TEST:

UL Flame Test	UL1666 Riser
CSA Flame Test	FT4

### PLENUM/NON-PLENUM:

Plenum (Y/N) N

## **ELECTRICAL CHARACTERISTICS:**

Nom. Characteristic Impedance	45 Ohms
Nom. Inductance	.17 μH/ft
Nom. Capacitance Conductor to Conductor @ 1 KHz	34 pF/ft
Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz	67 pF/ft
Nominal Velocity of Propagation	66 %
Nominal Delay	1.5 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	14.5 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20 Deg. C	14.1 Ohms/1000 ft
Max. Operating Voltage - UL	300 V RMS
Max. Recommended Current	2.9 Amps per conductor @ 25°C

### NOTES:

Notes Unique paper separator facilitates jacket stripping.

## **PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
8451 0081000	2 #22 PP SHLD PVC FR	1000	16	GRAY	С
8451 008500	2 #22 PP SHLD PVC FR	500	8	GRAY	

# Detailed Specifications & Technical Data



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8451 008U1000	2 #22 PP SHLD PVC FR	U1000	16	GRAY	
8451 008U500	2 #22 PP SHLD PVC FR	U500	8.5	GRAY	
8451 010100	2 #22 PP SHLD PVC FR	100	2.3	BLACK	
8451 0101000	2 #22 PP SHLD PVC FR	1000	16	BLACK	С
8451 010500	2 #22 PP SHLD PVC FR	500	8	BLACK	
8451 010U1000	2 #22 PP SHLD PVC FR	U1000	16	BLACK	
8451 010U500	2 #22 PP SHLD PVC FR	U500	8.5	BLACK	

#### C = CRATE REEL PUT-UP.

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