Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

8451 Multi-Conductor - Single-Pair Cable



For more Information
please call

1-800-Belden1

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 (Overall)

Conductor

AWG:

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

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
PP - Polypropylene	0.2032

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil® (Z-Fold®)	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 (mm)
PVC - Polyvinyl Chloride	0.508

Overall Cabling

Overall Nominal Diameter:	3.505 mm

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red

Pair Lay Length & Direction:

Lay Length (mm)	Twists/ft. (twist/m)
44.449825	22.508

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
Bulk Cable Weight:	22.323 Kg/Km
Max. Recommended Pulling Tension:	120.101 N
Min. Bend Radius (Install)/Minor Axis:	35.560 mm

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 Riser
CSA Flame Test:	FT4

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
45

Nom. Inductance:

Inductance (µH/m)
0.55777

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
111.554

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)
219.827

Nominal Velocity of Propagation:

VP (%)
66

Nominal Delay:

Delay (ns/m)
4.9215

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
47.5745

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
46.2621

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
2.9 Amps per conductor @ 25°C

Notes (Overall)

Notes: Unique paper separator facilitates jacket stripping.

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Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8451 008U1000	305 MT	7.258 KG	GRAY		2 #22 PP SHLD PVC FR
8451 008U500	152 MT	3.856 KG	GRAY		2 #22 PP SHLD PVC FR
8451 0081000	305 MT	7.258 KG	GRAY	C	2 #22 PP SHLD PVC FR
8451 008500	152 MT	3.629 KG	GRAY		2 #22 PP SHLD PVC FR
8451 010U1000	305 MT	7.258 KG	BLACK		2 #22 PP SHLD PVC FR
8451 010U500	152 MT	3.856 KG	BLACK		2 #22 PP SHLD PVC FR
8451 010100	30 MT	0.998 KG	BLACK		2 #22 PP SHLD PVC FR
8451 0101000	305 MT	7.258 KG	BLACK	C	2 #22 PP SHLD PVC FR
8451 010500	152 MT	3.629 KG	BLACK		2 #22 PP SHLD PVC FR

Notes:
C = CRATE REEL PUT-UP.

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