Belden



Product: 21451

TC- RW90 1000V, 3+G C #8 Str BC, XLPE Ins, Blk PVC Jkt, 90C Dry/Wet CSA HL SUN RES DIR BUR

Product Description

CSA Tray TC- RW90 1000V, 3+G Conductor 8 AWG (7x16) Bare Copper, XLPE Insulation, Black PVC Outer Jacket, 90C Dry/Wet CSA HL SUN RES DIR BUR

Technical Specifications

Product Overview

Suitable Applications:	CEC Power and Control Applications

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	8 AWG	7x16	BC - Bare Copper
Ground Wire	1	10 AWG	7x18	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLP, XLPO, XLPE (Thermoset)	0.045 in (1.1 mm)	0.234 in (5.94 mm)	Black, Red, Blue
Ground Wire	XLP, XLPO, XLPE (Thermoset)		0.234 in (5.94 mm)	Green

Outer Shield

Material
No Shield

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.0730 in (1.85 mm)	0.646 in	Yes

Overall Cable Diameter (Nominal):	0.646 in

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Current
Conductor(s)	0.64 Ohm/1000ft (2.1 Ohm/km)	55 Amps per Conductor at 30°C
Ground Wire	1.080 Ohm/1000ft (3.543 Ohm/km)	

Voltage

Voltage Rating
1000 V (CSA TC)

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C Dry, 90°C Wet	-25°C To +90°C

Bend Radius

Stationary Min.	Installation Min.
2.584 in (65.63 mm)	3.23 in

Max. Pull Tension:	772 lbs (350 kg)
Bulk Cable Weight:	314 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/OutdoorDirect Burial, Indoor, Outdoor, Sunlight Resistance, UV Resistance, Burial
Flammability / Reaction to Fire:	FT4
AWM Compliance:	C22.2 #230 Type TC
CEC / C(UL) Compliance:	1000V Type RW90 TC, CSA TC
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.50 Revision Date: 10-07-2026

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