Belden



Product: 24503D

ACIC 600V, 8 Pr #16 Str TC, XLPE Ins E1, IS/OS, PVC Jkt, AIA Armor, PVC Jkt, 90C Wet 105C Dry CSA HLABCD SUN RES -40C

Product Description

Canadian Instrumentation Cable TC-ACIC 600V, 8 Pair 16AWG (7x24) Tinned Copper, XLPE Insulation E1 Color Code, Individual & Overall Beldfoil® Shield, PVC Inner Jacket, Aluminum Interlock Armor, PVC Outer Jacket, 90C Wet 105C Dry CSA HLABCD SUN RES -40C

Technical Specifications

Product Overview

Suitable Applications:	Industrial Control, Raceways Cable trays and ducts, Digital Control, Instruments (4-20ma, 0-10v, ...),low voltage digital control (24v, …), encoders, control circuits, distributed control system (DCS),programmable logic controller (PLC), Solenoids, Valves, Actuators, Positioners

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	16	16 AWG	7x24	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	XLP, XLPO, XLPE (Thermoset)	0.017 in (0.43 mm)	0.090 in (2.3 mm)	Black & White Numbered 1, Black & White Numbered 2, Black & White Numbered 3, Black & White Numbered 4, Black & White Numbered 5, Black & White Numbered 6, Black & White Numbered 7, Black & White Numbered 8

Inner Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	18 AWG (7x26) TC

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	16 AWG (7x24) TC

Inner Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.083 in (2.1 mm)	0.898 in (22.8 mm)

Armor

Armor Type & Material	Armor Thickness
AIA - Aluminum Interlock Armor	1.16 in (29.5 mm)

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.052 in (1.3 mm)	1.26 in (32.0 mm)

Electrical Characteristics

Electricals

Nom. Conductor DCR	Nom. Inner Shield DCR	Max. Current
4.6 Ohm/1000ft	4.34 Ohm/1000ft (14.2 Ohm/km)	9 Amps per Conductor at 30ºC

Nom Outer Shield DCR:	3.08 Ohm/1000ft (10.1 Ohm/km)

Voltage

UL Voltage Rating
600 V RMS

Mechanical Characteristics

Temperature

UL Temperature	Operating
105°C Dry, 90°C Wet	-40°C To +105°C

Bend Radius

Stationary Min.	Installation Min.
15.12 in (384.0 mm)	15.12 in (384.0 mm)

Max. Pull Tension:	829 lbs (376 kg)
Bulk Cable Weight:	701 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, UV Resistance
Flammability / Reaction to Fire:	FT4
AWM Compliance:	C22.2#239, Type ACIC, C22.2#174, HLABCD, C22.2#0.3, Clause 4.31
CEC / C(UL) Compliance:	ACIC, HLABCD
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.100 Revision Date: 10-30-2026

Part Numbers

Variants

Item #	Putup Type	UPC
24503D 0605000	Reel	612825324348
24503D J22985	Reel	

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