Belden



Product: 24504D

ACIC 600V, 12 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, 12 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)	12	16 AWG	7x24	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	XLP, XLPO, XLPE (Thermoset)	0.030 in (0.76 mm)	0.118 in mm	Black, White

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	Ripcord	Color
PVC - Polyvinyl Chloride	0.083 in (2.1 mm)	1.081 in (27.46 mm)	Yes	Black

Armor

Armor Type & Material	Armor Thickness	Diameter Over Armor
AIA - Aluminum Interlock Armor	1.341 in (34.06 mm)	1.346 in (34.19 mm)

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.052 in (1.3 mm)	1.445 in

Overall Cable Diameter (Nominal):	1.445 in

Electrical Characteristics

Electricals

Nom. Conductor DCR	Nom. Inner Shield DCR	Max. Current
4.6 Ohm/1000ft	5.47 Ohm/1000ft (17.9 Ohm/km)	11.4 Amps per Conductor at 30ºC

Nom Outer Shield DCR:	3.26 Ohm/1000ft (10.7 Ohm/km)

Voltage

Voltage Rating
600 V

Mechanical Characteristics

Temperature

Operating
-40°C To +90°C Wet/105°C Dry

Bend Radius

Stationary Min.	Installation Min.
17.34 in (440.4 mm)	17.34 in

Max. Pull Tension:	1115 lbs (505.8 kg)
Bulk Cable Weight:	891 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, UV Resistance
CEC / C(UL) Compliance:	ACIC, HLABCD
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.252 Revision Date: 10-07-2026

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