BELDEN

Product: 31T1612

Inst PVC/PVC, 12 Tri #16 Str BC, PVC Ins E1, OS, Blk PVC Jkt, 300V PLTC ITC CMG

Product Description

UL Instrumentation, 12 Triad 16AWG (7x24) Bare Copper, PVC Insulation E1 Color Code, Overall Beldfoil® Shield, Black PVC Outer Jacket, PLTC ITC CMG AWM 2464 SUN RES

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

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter
16	7x24	BC - Bare Copper	0.057 in

Conductor Count:	36

Insulation

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.090 in	0.016 in

Color Chart

Number	Color
Triad 1	Black, White and Red Numbered 1
Triad 2	Black, White and Red Numbered 2
Triad 3	Black, White and Red Numbered 3
Triad 4	Black, White and Red Numbered 4
Triad 5	Black, White and Red Numbered 5
Triad 6	Black, White and Red Numbered 6
Triad 7	Black, White and Red Numbered 7
Triad 8	Black, White and Red Numbered 8
Triad 9	Black, White and Red Numbered 9
Triad 10	Black, White and Red Numbered 10
Triad 11	Black, White and Red Numbered 11
Triad 12	Black, White and Red Numbered 12

Outer Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire Diameter	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	0.036 in	20

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.934 in	0.074 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
4.2 Ohm/1000ft

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

UL Temp Rating:	105°C
Operating Temperature Range:	-25°C To +105°C

Mechanical Characteristics

Bulk Cable Weight:	495 lbs/1000ft
Min Bend Radius (Overall):	9.5 in

Standards

NEC/(UL) Compliance:	CMG, ITC, PLTC
UL AWM Style Compliance:	AWM 2464

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
CA Prop 65:	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

CSA/C(UL) Flammability:	FT4
IEEE Flammability:	1202
UL voltage rating:	300 V RMS (PLTC)

History

Update and Revision:	Revision Number: 0.45 Revision Date: 01-10-2024

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