Product: 3084A

DeviceBus®, 2 Pr #22+24 Str TC, PVC+FPE Ins, IS+OA TC Brd, PVC Jkt, CMG, CL2

Request Sample

Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 22+24AWG (19x34+19x36) Tinned Copper, PVC+Foam PE Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, PVC Outer Jacket, CMG, CL2

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, ODVA device-level communication, used with CIP (common Industrial Protocol) for control, configuration, and data collection between devices, such as sensors and actuators, and higher level devices such as PLC, and PC in industrial automation, bus topology, etc.

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Power Pair(s)	1	22 AWG	19x34	TC - Tinned Copper
Data Pair(s)	1	24 AWG	19x36	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Power Pair(s)	PVC - Polyvinyl Chloride	0.021 in (0.53 mm)	0.072 in (1.8 mm)	Red & Black
Data Pair(s)	PE - Polyethylene (Foam)	0.026 in (0.66 mm)	0.077 in (2.0 mm)	Blue & White

Inner Shield

Element	Shield Type	Material	Coverage
Power Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%
Data Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Braid	Tinned Copper (TC)	65%	22 AWG (19x34) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.032 in (0.81 mm)	0.280 in (7.11 mm)

Table Notes:	Jacket OD +/- 0.005
Overall Cable Diameter (Nominal):	0.280 in (7.11 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Conductor DCR	Nom. Inner Shield DCR	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Power Pair(s)	18.2 Ohm/1000ft	17.5 Ohm/1000ft	7.95 Ohm/1000ft (26.1 Ohm/km)				6 Amps per Conductor at 30ºC
Data Pair(s)	28.8 Ohm/1000ft (94.5 Ohm/km)	28 Ohm/100m	7.45 Ohm/1000ft (24.4 Ohm/km)	12 pF/ft (39 pF/m)	120 Ohm	75%	4 Amps per Conductor at 30ºC

Nom. Outer Shield DCR:	5 Ohm/1000ft (16 Ohm/km)

High Frequency

Element	Frequency [MHz]	Max. Insertion Loss (Attenuation)
Data Pair(s)	0.125	.95 dB/100ft
	0.5	1.64 dB/100ft
	1	2.3 dB/100ft

Voltage

UL Voltage Rating	Voltage Rating
300 V (CMG, CL2), 600 V (AWM 20201)	300 V (AWM I/II A)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-20°C to +60°C

Bend Radius

Stationary Min.	Installation Min.
2.8 in (71 mm)	2.8 in (71 mm)

Max. Pull Tension:	70.06 lbs (31.78 kg)
Bulk Cable Weight:	44 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL 1685 UL Loading, IEEE 1202 FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 725, Article 800, CL2, CMG
AWM Compliance:	AWM 20201, AWM I/II A
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	ODVA Class 2 Thin

Product Notes

Notes:	Flex Life: +/- 90 Degree Flex Test, 2" Diameter, 2 lbs. tension: 2000 Cycles minimum. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.

History

Update and Revision:	Revision Number: 0.608 Revision Date: 12-22-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
3084A T5U500	Gray T5U	Reel	500 ft	612825140900	C
3084A T5U1000	Gray T5U	Reel	1,000 ft	612825140887	C
3084A T5U2000	Gray T5U	Reel	2,000 ft	612825140894	C Z
3084A T5U5000	Gray T5U	Reel	5,000 ft	612825140917	C