Product: 3084F

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

Request Sample

Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 22+24AWG (154x44+105x44) Tinned Copper, PVC+Foam PE Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, PVC Outer Jacket, High Flex, 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	Number of Element	Size	Stranding	Material
Power Pair(s)	1	22 AWG	154x44	TC - Tinned Copper
Data Pair(s)	1	24 AWG	105x44	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Color Code
Power Pair(s)	PVC - Polyvinyl Chloride	0.016 in (0.41 mm)	Red & Black
Data Pair(s)	PE - Polyethylene (Foam)	0.026 in (0.66 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 (26x36) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.036 in (0.91 mm)	0.275 in (6.99 mm)

Overall Cable Diameter (Nominal):	0.275 in (6.99 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Power Pair(s)	17.5 Ohm/1000ft (57.4 Ohm/km)	17.5 Ohm/1000ft (57.4 Ohm/km)				4 Amps Per Conductor at 24 V (per NEC CL2) (Power Pair)
Data Pair(s)		28 Ohm/100m	12.0 pF/ft (39.4 pF/m)	120 Ohm	75%	4 Amps Per Conductor at 24 V (per NEC CL2) (Power Pair)

Nom. Outer Shield DCR:	3.2 Ohm/1000ft (10 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
300 V (CMG)

Mechanical Characteristics

Temperature

UL Temperature	Operating
75°C	-20°C to +75°C

Bend Radius

Stationary Min.	Installation Min.
2.75 in (69.9 mm)	2.75 in

Max. Pull Tension:	65 lbs (29 kg)
Bulk Cable Weight:	41 lbs/1000ft (61 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 FT4 Loading, 1202
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 725, Article 800, CL2, CMG
AWM Compliance:	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:	Hi-Flex. Thin. Flex Test Results: "S-Bend" Flex Test - 4" Diameter Wheels, 2 lbs. tension: 150, 000 Cycles Averaged. +/-90 Degree Flex Test: 2"" Diameter, 2 lbs. tension - 8500 Cycles Averaged. Flex tests were conducted at less than the recommeded cable minimum bend radius. Actual cable performance will depend on the individual application. Meter marks on jacket to aid users in installation.

History

Update and Revision:	Revision Number: 0.416 Revision Date: 05-05-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
3084F T5U500	Gray T5U	Reel	500 ft	612825140955
3084F T5U1000	Gray T5U	Reel	1,000 ft	612825140931
3084F T5U2000	Gray T5U	Reel	2,000 ft	612825140948
3084F T5U5000	Gray T5U	Reel	5,000 ft	612825140962

Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.