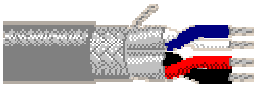

3082A

Multi-conductor DeviceBus® for ODVA DeviceNet®

Contact Cables
The Cable Specialists

Description

15 and 18 AWG stranded tinned copper conductors, PVC insulation (power), FPE insulation (data), individually foil shielded (100% coverage) plus an overall tinned copper braid (65% coverage), sunlight/oil-resistant PVC jacket.

Physical Characteristics (overall)

Conductor – AWG

# Pairs	AWG	Stranding	Conductor Material	Dia (m)
1	15	19x28	TC – Tinned Copper	
1	18	19x30	TC – Tinned Copper	

Insulation – Insulation Material

Layer #	Ins Trade Name	Ins Material	Wall Thickness (m)	Diam. (in.)	AWG
		PVC – Polyvinylchloride FPE – Foam Polyethylene			15 18

Inner Shield – Inner Shield Material

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	% Coverage (%)	Standing	Dia (m)	Conductor Material
15 AWG Pair		Tape	Aluminium Foil-Polyester Tape	100			
18 AWG Pair		Tape	Aluminium Foil-Polyester Tape	100			

Outer Shield

Outer Shield Material			Outer Shield Drain Wire AWG		
Type	Outer Shield Material	% Coverage (%)	AWG	Stranding	Drain Wire Conductor Material
Braid	TC – Tinned Copper	65	18	19x30	TC – Tinned Copper

Outer Jacket – Outer Jacket Material

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC – Polyvinylchloride	0.060

Overall Cabling – Overall Nominal Diameter: 0.480 in.

Pair – Pair Colour Code Chart

Number	Colour
1 (15 AWG)	Red & Black
2 (18 AWG)	Blue & White

Mechanical Characteristics (overall)

Operating Temperature Range	-20°C to +75°C
UL Temperature Range	75°C (UL AWM Style 20201)
Bulk Cable Weight	108lbs/1000ft
Max. Recommended Pulling Tension	190 lbs
Min. Bend Radius (Install)/Minor Axis	4.600 In.

Applicable Specifications and Agency Compliance (overall)

Application

NEC (UL) Specification	CMG, PLTC-ER
CEC/C (UL) Specification	CMG
AWM Specification	UL Style 20201 (600 V 75°C)
CSA Specification	I/II A
EU CE Mark	
EU RoHS Compliant (commence date: dd/mm/yyyy)	(01/04/2005)
Other Specification	ODVS Class 2 Thick

Flame Test

UL Flame Test	UL 1685 FT4 Loading
CSA Flame Test	FT4

Suitability

Sunlight resistance
Oil resistance

Plenum/Non-Plenum

Electrical Characteristics (overall)

Unaveraged Impedance

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
18 AWG Pair Only				120,000

Nom. Impedance

Description	Inductance (µH/ft)
15 AWG Pair Only	0.174

Nom. Capacitance Conductor to Conductor

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/ft)
18 AWG Pair Only	1.000			12,000

Nominal Velocity of Propagation

Description	VP (%)
18 AWG Pair Only	75

Maximum Delay

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Delay (ns/ft)
18 AWG Pair Only				1.360

Nom. Conductor DC Resistance

Description	DCR @ 20ºC (Ohm/1000 ft)
15 AWG	3.600
18 AWG	6.900

Nom. Outer Shield DC Resistance

DCR @ 20ºC (Ohm/1000 ft)
1.800

Max. Attenuation

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)
18 AWG Pair Only	0.125		
	0.500		
	1.000		

Max. Operating Voltage – UL

Voltage	Description
300 V RMS	C (UL) AWM

Max. Recommended Current

Voltage	Current
15 AWG	8.0 Amps
18 AWG	5.0 Amps

Notes (overall)

Thick. Metre marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. Trademark

Put Ups and Colours

Item #	Putup	Ship Weight	Jacket Colour	Notes	Item Description
3082A 00212000	1,000 ft	138.000 lbs	Red	C	2 #15, 2 #18 SHLD FRPVC RED
3082A T5U1000	1,000 ft	138.000 lbs	Gray T5U	C	2 #15, 2 #18 SHLD PVC GRYT5U
3082A T5U2000	2,000 ft	280.000 lbs	Gray T5U	C	2 #15, 2 #18 SHLD PVC GRYT5U
3082A T5U500	500 ft	71.000 lbs	Gray T5U	C	2 #15, 2 #18 SH PVC GRYT5U

Notes:

C = Create Reel Put-up