

## 3086A Multi-Conductor - DeviceBus® for Honeywell Smart Distributed System



For more Information  
please call

1-800-Belden1



### Description:

16 and 20 AWG stranded tinned copper conductors, PVC insulation (power), FPE insulation (data), each pair individually Beldfoil® shielded (100% coverage), PVC jacket

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
1	16	19x29	TC - Tinned Copper	1.7018
1	20	19x32	TC - Tinned Copper	1.0414

Total Number of Conductors: 4

#### Insulation

##### Insulation Material:

Insulation Material	AWG
PVC - Polyvinyl Chloride	16
FPE - Foam Polyethylene	20

Insulation Resistance: 10000 Mega-Ohm

#### Inner Shield

##### Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
16 AWG Pair	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
20 AWG Pair	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

#### Outer Shield

##### Outer Shield Material:

Outer Shield Material
Unshielded

##### Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
20	19x32	TC - Tinned Copper

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cable

Overall Nominal Diameter: 10.109 mm

#### Pair

##### Pair Color Code Chart:

Number	Color
1 (16 AWG)	Blue & Brown
2 (20 AWG)	Black & White

##### Pair Lay Length & Direction:

Lay Length (mm)
50.8

## 3086A Multi-Conductor - DeviceBus® for Honeywell Smart Distributed System

### Mechanical Characteristics (Overall)

Storage Temperature Range:	-40°C To +80°C
Operating Temperature Range:	-30°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2464)
Bulk Cable Weight:	117.270 Kg/Km
Max. Recommended Pulling Tension:	538.232 N
Min. Bend Radius/Minor Axis:	101.600 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CL2
AWM Specification:	UL Style 2464 (30 V 80°C) (I/II A)
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

#### Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT1

#### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Unaveraged Impedance:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
20 AWG Pair Only				120

#### Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/m)
20 AWG Pair Only	1			39.372

#### Nominal Velocity of Propagation:

Description	VP (%)
20 AWG Pair Only	76

#### Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/km)
16 AWG	11.8116
20 AWG	32.81

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
18.0455

#### Nom. Attenuation:

Description	Freq. (MHz)	Attenuation (dB/100m)
20 AWG Pair Only	.125	0.59058
	.500	1.14835
	1.0	1.54207

## METRIC MEASUREMENT VERSION

### 3086A Multi-Conductor - DeviceBus® for Honeywell Smart Distributed System

#### Max. Operating Voltage - UL:

Voltage
300 V RMS

#### Max. Recommended Current:

Description	Current
16 AWG	7.0 Amps
20 AWG	3.5 Amps

#### Notes (Overall)

**Notes:** Mini-Cable (Trunk)

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3086A U3R1000	305 MT	39.916 KG	GRAY U3R	C	#20 FS PR, #16 FSPR PVC
3086A U3R500	152 MT	19.731 KG	GRAY U3R	C	#20 FS PR, #16 FSPR PVC

#### Notes:

C = CRATE REEL PUT-UP.

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