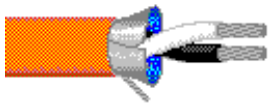
Detailed Specifications & Technical Data

BELDENCable™

3076F Paired - DataBus®/Profibus



For more information please call

1-800-Belden1

See Put-ups and Colors

Description:

Fieldbus/Profibus PA, 18 AWG stranded (7x26) tinned copper conductors, polyolefin insulation, Beldfoil® shield (100% coverage), tinned copper drain wire, PVC jacket.

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	1
Total Number of Conductors	2
AWG	18
Stranding	7x26
Conductor Diameter	.048 in.
Conductor Material	TC - Tinned Copper

INSULATION:

Insulation Material	PO - Polyolefin
Lay Length	2.25 in.

Pair Color Code Chart :

Number	Color
1	Blue & Orange

INNER SHIELD:

Inner Shield Material Trade Name	Beldfoil®
Inner Shield Type	Tape
Inner Shield Material	Aluminum Foil-Polyester Tape
Inner Shield % Coverage	100 %
Inner Shield Drain Wire AWG	20
Inner Shield Drain Wire Stranding	7x28
Inner Shield Drain Wire Conductor Material	TC - Tinned Copper

OUTER SHIELD:

Outer Shield Material	Unshielded

OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride

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OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.253 in.

MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-40°C To +105°C
UL Temperature Rating	75°C
Bulk Cable Weight	35 lbs/1000 ft.
Max. Recommended Pulling Tension	59 lbs.
Min. Bend Radius (Install)	2.6 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	PLTC, CM, ITC
CEC/C(UL) Specification	CM

FLAME TEST:

UL Flame Test	UL1581 Vertical Tray

PLENUM/NON-PLENUM:

Plenum (Y/N)	N

ELECTRICAL CHARACTERISTICS:

Unaveraged Impedance :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Unaveraged Impedance (Ohms)
	.03125			100

Nom. Inductance	.19 µH/ft
Nom. Capacitance Conductor to Shield @ 1 KHz	45.0 pF/ft
Nom. Mutual Capacitance @ 1 KHz	24.0 pF/ft
Maximum Capacitance Unbalance @ 1 KHz	3.6 pF/ft
Nominal Velocity of Propagation	66 %
Nom. Conductor DC Resistance @ 20 Deg. C	7.3 Ohms/1000 ft
Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C	7.5 Ohms/1000 ft

Nom. Attenuation (dB/100 ft) :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	.039			.08

Max. Attenuation (dB/100 ft.) :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100 ft.)
	.039			.091

Max. Operating Voltage - UL	300 V RMS

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Max. Recommended Current :

Description	Max. Recommended Current
Per Conductor	5.2 Amps

Other Electrical Characteristic 1	Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pF/ft
Other Electrical Characteristic 2	31.25 KBits/sec

NOTES:

Notes	Fieldbus: Orange jacket. Profibus PA: Intrinsically Safe Blue jacket. CPE Jacket is optional. Tape around pair has shorting fold. Capacitance unbalance not per ISA/SP-SO Fieldbus.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3076F 0031000	TWPR #18 PP FS PVC	1000	34	ORANGE	C N
3076F 003250	TWPR #18 PP FS PVC	250	10.5	ORANGE	C N
3076F 0032500	TWPR #18 PP FS PVC	2500	85	ORANGE	C N
3076F 003500	TWPR #18 PP FS PVC	500	18.5	ORANGE	C N
3076F 0035000	TWPR #18 PP FS PVC	5000	170	ORANGE	C N
3076F 0061000	TW PR #18 PP FS PVC	1000	37	BLUE, LIGHT	C N

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

Revision Number: 1 Revision Date: 11-02-2004