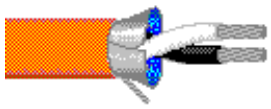
Detailed Specifications & Technical Data

BELDENCable

3076F Paired - DataBus®/Profibus



Metric Version

For more information please call

1-800-Belden1

See Put-ups and Colors

Description:

Fieldbus/Profibus PA, 18 AWG stranded (7x26) tinned copper, polyolefin insulation, Beldfoil® (100% shield 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	1.219 mm
Conductor Material	TC - Tinned Copper

INSULATION:

Insulation Material	PO - Polyolefin
Lay Length	5.715 cm

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:

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Outer Jacket Material	PVC - Polyvinyl Chloride

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	6.426 mm

MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-40°C To +105°C
Non-UL Temperature Rating	75°C
Bulk Cable Weight	52.087 Kg/Km
Max. Recommended Pulling Tension	262.444 N
Min. Bend Radius (Install)	66.04 mm

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

ELECTRICAL CHARACTERISTICS:

Unaveraged Impedance :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Unaveraged Impedance (Ohms)
	0.031			100

Nom. Inductance	0.623 µH/m
Nom. Capacitance Conductor to Shield @ 1 KHz	147.645 pF/m
Nom. Mutual Capacitance @ 1 KHz	78.744 pF/m
Maximum Capacitance Unbalance @ 1 KHz	11.812 pF/m
Nominal Velocity of Propagation	66 %
Nom. Conductor DC Resistance @ 20 Deg. C	23.951 Ohms/km
Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C	24.608 Ohms/km

Nom. Attenuation (dB/100 ft) :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100m)
	0.039			0.262

Max. Attenuation (dB/100 ft.) :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100m)
	0.039			0.299

Max. Operating Voltage - Other	300 V RMS
Max. Recommended Current :	

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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	Profibus PA: Intrinsically Safe Blue jacket. Fieldbus: Orange jacket.
Notes (Cont'd.)	CPE Jacket is optional. Tape around pair has shorting fold.

PUT-UPS AND COLORS:

Item	Description	Put-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
3076F 0031000	TWPR #18 PP FS PVC	304.8	15.436	ORANGE	C N
3076F 003250	TWPR #18 PP FS PVC	76.2	4.767	ORANGE	C N
3076F 0032500	TWPR #18 PP FS PVC	762	38.59	ORANGE	C N
3076F 003500	TWPR #18 PP FS PVC	152.4	8.399	ORANGE	C N
3076F 0035000	TWPR #18 PP FS PVC	1524	77.18	ORANGE	C N
3076F 0061000	TW PR #18 PP FS PVC	304.8	16.798	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: 06-11-2004