



Part Number: 3079E

Profibus DP, (1 pr) 22 AWG (7x30) BC, FRFPE/PVC,
Foil+TC Braid Shld, PLTC

Product Description

One 22 AWG pair stranded (7x30) bare copper conductors, flame retardant foam polyethylene (FRFPE) insulation, overall Beldfoil® shield (100% coverage) plus a tinned copper braid shield (65% coverage), PVC jacket.

Product Specifications

Technical Specifications

Construction and Dimensions

Conductor:

AWG	Stranding	Material	No. of Pairs
22	7x30	BC - Bare Copper	1
Total Number of Conductors:			2

Insulation:

Material
FRFPE - Flame Retardant Foam Polyethylene

Color Chart 1:

Number	Color
1	Red & Green

Stranding:

Lay Length
2.75 in

Outershield 1:

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum Foil-Polyester Tape	Beldfoil®	100 %
Braid	2	TC - Tinned Copper		65 %

Outerjacket 1:

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.315 in

Electrical Characteristics

Conductor DCR:

Individual Pair Nominal Shield DCR	Nominal Conductor DCR
3.9 Ohm/1000ft	16 Ohm/1000ft

Capacitance:

Nom.Mutual Capacitance	
8.5 pF/ft	
Other Electrical Characteristic 1:	Capacitance Unbalance @ 1 kHz: Less than 1000 pF/km

Delay:

Nominal Velocity of Propagation (VP) [%]
78 %

High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)
	0.51 db/100m
20 MHz	1.57 db/100m
3 MHz	4.8 db/100m
0.1 MHz	
1 MHz	
10 MHz	

Current:

Element	Max. Recommended Current [A]
Per Conductor	2.3 Amps

Inductance:

Nominal Inductance
0.267 µH/ft

Voltage:

UL Description	UL Voltage Rating
CMG	300 V RMS

Use

Suitability - Sunlight Resistance:	Yes
Max Recommended Pulling Tension:	50 lbs

Safety

CSA Flammability:	FT4
UL Flammability:	UL1685 FT4 Loading

Temperature Range

Operating Temp Range:	-30°C To +75°C
UL Temp Rating:	60°C

Mechanical Characteristics

Min Bend Radius/Minor Axis:	3.2 in
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Part Number

Plenum (Y/N):	No
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Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
CEC/C(UL) Specification:	CEC/C(UL) Specification
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)
NEC/(UL) Specification:	NEC/(UL) Specification
Other Specification:	Other Specification
UL AWM Style:	AWM Specification
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	EU CE Mark

History

Product Variants

Part Number	Color	Put-Up Type	Length
3079E B021000	PURPLE	Reel	1000 ft
3079E B021640	PURPLE	Reel	1640 ft
3079E B023280	PURPLE	Reel	3280 ft
3079E B025000	PURPLE	Reel	5000 ft

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.