

# Detailed Specifications & Technical Data



## METRIC MEASUREMENT VERSION

### 7962A Multi-Conductor - Category 5e DataTuff® 5 Million Flex Quad Cables



For more Information  
please call

1-800-Belden1



#### General Description:

22 AWG Symmetric quad stranded tinned copper conductors, polyolefin insulation, FRPE bedding, industrial grade sunlight- and oil-resistant TPE jacket, rip cord. Sequential marking at two foot intervals. PROFINET Type C trailing cable for continuous flex applications

#### Usage (Overall)

##### Suitable Applications:

Industrial Ethernet Cable, Harsh Environments, Category 5e, Profinet, 100BaseTX, CMX - Outdoor, PLTC Listed, Approved for Cable Tray Use in Class 1, Division 2, Hazardous Areas and Non-hazardous Areas, Cable Trays, Raceways, Conduit and Supported by Messenger Wires, Approved for Outdoor Usage

#### Physical Characteristics (Overall)

##### Conductor

###### AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (mm)
4	22	19x34	TC - Tinned Copper	0.711

Total Number of Conductors:

4

##### Insulation

###### Insulation Material:

Insulation Material	Dia. (mm)
PO - Polyolefin	1.626

##### Inner Jacket

###### Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (mm)
FRPE	4.242

##### Outer Shield

###### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil - Polyester Tape	100.000
2		Braid		85.000

##### Outer Jacket

###### Outer Jacket Material:

Outer Jacket Material
Industrial Grade TPE - Thermo Plastic Elastomer

#### Overall Cable

Overall Nominal Diameter: 7.010 mm

#### Pair

###### Pair Color Code Chart:

Number	Color
1	White
2	Blue
3	Yellow
4	Orange

#### Mechanical Characteristics (Overall)

Storage Temperature Range: -40°C To +80°C

Installation Temperature Range: -20°C To +60°C

Operating Temperature Range: -40°C To +80°C

Bulk Cable Weight: 68.457 Kg/Km

Max. Recommended Pulling Tension: 244.651 N

Min. Bend Radius/Minor Axis: 65.024 mm

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#### Applicable Specifications and Agency Compliance (Overall)

##### Applicable Standards & Environmental Programs

NEC/UL Specification: CM, CMX-Outdoor, ITC, PLTC

CEC/C(UL) Specification: CM

AWM Specification: UL Style 20626 (600V 80°C)

EU Directive 2011/65/EU (ROHS II): Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

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

Telecommunications Standards: Category 5e - TIA 568.C.2

Other Specification: Oil Res I, Oil Res 60811-2-1, Weldspatter Resistant

#### Flame Test

UL Flame Test: UL1666 Vertical Tray

C(UL) Flame Test: FT1

#### Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Sunlight Resistance: Yes

Oil Resistance: Yes

#### Plenum/Non-Plenum

Plenum (Y/N): No

#### Electrical Characteristics (Overall)

##### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)  
49.215

Maximum Capacitance Unbalance (pF/100 m): 66

##### Nominal Velocity of Propagation:

VP (%)  
70

##### Maximum Delay:

Delay (ns/100 m)  
552.000

##### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)  
5.700

##### Max. Operating Voltage - UL:

Voltage  
300 V RMS

##### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)  
3

#### Electrical Characteristics-Premise (Overall)

##### Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. ACR (dB)	Min RL (dB)
1	2.100	65.3	63.2	23.000
4	4.000	56.3	52.3	23.000
10	6.300	50.3	43.9	25.000
16	8.000	47.2	39.1	25.000
20	9.000	45.8	35.2	25.000
31.25	11.400	42.9	31.3	23.600

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62.5	16.500	38.4	21.6	21.500
100	21.300	35.3	17.1	20.100

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ACRF (dB)
1	100 ± 20.2	105 ± 10	64.0
4	100 ± 14.2	100 ± 10	52.0
10	100 ± 11.3	100 ± 10	44.0
16	100 ± 11.3	100 ± 10	39.9
20	100 ± 11.3	100 ± 10	38.0
31.25	100 ± 13.2	100 ± 10	34.1
62.5	100 ± 16.9	100 ± 10	28.1
100	100 ± 20.0	100 ± 10	24.0

### Notes (Overall)

Notes: Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581. Limits below 4 MHz are for information only.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7962A 1SW1000	1,000 FT	49.000 LB	GREEN, RAL 6018		PROFINET TYPE C TRAILING CABLE
7962A 1SW2000	2,000 FT	98.000 LB	GREEN, RAL 6018		PROFINET TYPE C TRAILING CABLE

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