

## 1213F Multi-Conductor - Category 5e Nonbonded-Pair Cable



For more Information  
please call

1-800-Belden1

**Description:**

24 AWG solid bare copper conductors, plenum, FEP Teflon® insulation, twisted pairs, overall Beldfoil® shield, drain wire, RJ-45 compatible, see color code chart (below), Flamarrest® jacket (red, orange, yellow, green, blue, gray or natural).

**Usage (Overall)****Suitable Applications:**

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG  
ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video,  
AES/EBU, Digital Video, RS-422, Noisy Environments, 100MHz Category 5e

**Physical Characteristics (Overall)****Conductor****AWG:**

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

**Insulation****Insulation Material:**

Insulation Material
FEP - Fluorinated Ethylene Propylene

**Outer Shield****Outer Shield Material:**

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material
24	7x32	TC - Tinned Copper

**Outer Jacket****Outer Jacket Material:**

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

**Overall Cable**

**Overall Nominal Diameter:** 0.235 in.

**Pair****Pair Color Code Chart:**

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

**Mechanical Characteristics (Overall)**

**Operating Temperature Range:** 0°C To +75°C

**Bulk Cable Weight:** 34 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 25 lbs.

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Min. Bend Radius (Install)/Minor Axis:	1 in.
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## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; Environmental Programs

CEC/C(UL) Specification:	CMP
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):	12/09/2011
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
Other Specification:	NEMA WC-63.1 Category 5e, UL Verified to Category 5e

## Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

## Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	1212F

## Electrical Characteristics (Overall)

## Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m):	330
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## Nominal Velocity of Propagation:

VP (%)
70

## Maximum Delay:

Delay (ns/100 m)
538 @ 100MHz

## Max. Delay Skew:

Delay Skew (ns/100 m)
45

## Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.38

## 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. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min. RL (dB)	Min. SRL (dB)
.772	1.800	72.0	70	72.2	68.2	19.400	

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1	2.000	70.3	68.3	70.3	66.3	20.000	23.0
4	4.000	61.3	59.3	59.3	55.3	23.000	23.0
8	5.700	56.8	54.8	53.1	49.1	24.500	24.5
10	6.400	55.3	53.3	50.9	46.9	25.000	25.0
16	8.100	52.2	50.2	46.1	42.1	25.000	25.0
20	9.100	50.8	48.8	43.7	39.7	25.000	25.0
25	10.200	49.3	47.3	41.1	37.1	24.300	24.3
31.25	11.400	47.9	45.9	38.5	34.5	23.600	23.6
62.5	16.400	43.4	41.4	29.0	25.0	21.500	21.5
100	21.000	40.3	38.3	21.3	17.3	20.100	20.1
155	26.600	37.4	35.4	12.8	8.9	18.800	
200	30.500	35.8	33.8	7.3	3.3	18.000	
250	34.400	34.3	32.3	1.9		17.300	
300	38.000	33.1	28.2			16.800	
350	41.400	32.1	27.2			16.300	
400	44.500	31.3	26.3			15.900	
450	47.600	30.5	25.6			15.500	

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	67.8	64.8
4	100 ± 15	100 ± 15	55.8	52.8
8	100 ± 15	100 ± 15	49.7	46.7
10	100 ± 15	100 ± 15	47.8	44.8
16	100 ± 15	100 ± 15	43.7	40.7
20	100 ± 15	100 ± 15	41.8	38.8
25	100 ± 15	100 ± 15	39.8	36.8
31.25	100 ± 15	100 ± 15	37.9	34.9
62.5	100 ± 15	100 ± 15	31.9	28.9
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 22	100 ± 15	24.0	21.0
200	100 ± 22	100 ± 15	21.8	18.8
250	100 ± 32	100 ± 15	19.8	16.8
300	100 ± 32	100 ± 15	18.2	15.2
350	100 ± 32	100 ± 15	16.9	13.9

## Notes (Overall)

**Notes:** Shield is bonded to jacket inner wall for electrical stability. RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e.

## Related Documents:

No related documents are available for this product

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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