



## Description:

18 AWG stranded (19x30) TC conductors, plenum, FEP insulation, twisted pair, overall Beldfoil® shield (100% coverage), 20 AWG stranded TC drain wire, Flamarrest® jacket.

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Pairs	AWG	Stranding	Conductor Material
1	18	19x30	TC - Tinned Copper

### Insulation

#### Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.007

### Outer Shield

#### Outer Shield Material:

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

#### Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire	Conductor Material
20	Stranded	TC - Tinned Copper	

### Outer Jacket

#### Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material	Nom. Wall Thickness (in.)
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride	.014

## Overall Cabling

Overall Nominal Diameter: 0.146 in.

## Pair

#### Pair Color Code Chart:

Number	Color
1	Black & Red

## Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

Bulk Cable Weight: 22.500 lbs/1000 ft.

Max. Recommended Pulling Tension: 64 lbs.

Min. Bend Radius (Install)/Minor Axis: 1.600 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

EU CE Mark: Yes

## 82760 Multi-Conductor - Single-Pair Cable

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MIL Order #39 (China RoHS):	Yes

### Flame Test

UL Flame Test:	NFPA 262
C(UL) Flame Test:	FT6

### Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	8760

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

35

### Nom. Inductance:

Inductance (µH/ft)

.15

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

51

### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

97

### Nominal Velocity of Propagation:

VP (%)

69

### Nominal Delay:

Delay (ns/ft)

1.47

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

5.5

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

7.3

### Max. Operating Voltage - UL:

Voltage

300 V RMS

### Max. Recommended Current:

Current

5.4 Amps per conductor @ 25°C

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
82760 877U1000	1,000 FT	21.000 LB	NATURAL		1 PR #18 FEP FS FLMRST
82760 877U500	500 FT	11.000 LB	NATURAL		1 PR #18 FEP FS FLMRST

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## 82760 Multi-Conductor - Single-Pair Cable

82760 8771000	1,000 FT	20.000 LB	NATURAL	C	1 PR #18 FEP FS FLMRST
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**Notes:**

C = CRATE REEL PUT-UP.

## Introduction

Belden® paired cable products are manufactured in a variety of gage sizes, dimensions, insulation materials, shielding configurations, and jacketing materials including Plenum and High-Temperature versions to meet the technical requirements of many different types of systems.

Paired cables allow balanced signal transmission, which results in lower crosstalk through common mode rejection. Due to the improved noise immunity of twisted pairs, they generally permit higher data speeds than multi-conductor cables.

As an aid to proper cable selection, both the suggested working voltages and the maximum temperature ratings are indicated for each applicable paired cable selection.

Most of our paired cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a paired cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

### Paired Cables Packaging

Belden's unique UnReel® cable dispenser is available for many of the paired cable products listed in this section. The letter "U" before the specified put-up length denotes UnReel packaging.

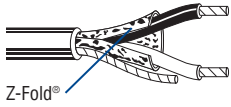
# Plenum-Rated

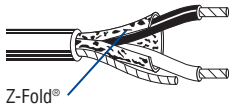
## Overall Beldfoil® Shield

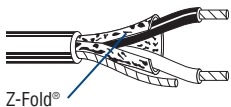
### Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

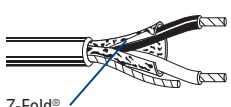
**22 AWG** Stranded (7x30) Tinned Copper Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire

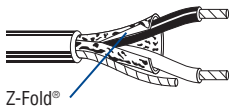
Plenum • FEP Insulation • Red FEP Jacket																					
300V RMS  Z-Fold®	<b>88761</b>	NEC:	1	Black, Red	100	30.5	2.7	1.2	.006	.15	.014	.36	.119	3.02	35	115	67	220			
		CMP			U-500	U-152.4	7.5	3.4													
		CEC:			500	152.4	7.5	3.4													
		CMP FT6			U-1000	U-304.8	15.0	6.8													
					1000	304.8	12.0	5.5													

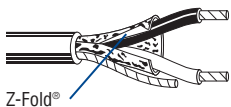
Plenum • FEP Insulation • Red Fluorocopolymer Jacket																					
300V RMS  Z-Fold®	<b>87761</b>	NEC:	1	Black, Red	500	152.4	7.0	3.2	.006	.15	.014	.36	.116	2.95	35	115	67	220			
		CMP			1000	304.8	11.0	5.0													
		CEC:																			
		CMP FT6																			

Plenum • FEP Insulation • Natural Flamarrest® Jacket																					
300V RMS  Z-Fold®	<b>82761</b>	NEC:	1	Black, Red	U-500	U-152.4	7.0	3.2	.006	.15	.014	.36	.116	2.95	35	115	67	220			
		CMP			U-1000	U-304.8	14.0	6.4													
		CEC:			1000	304.8	11.0	5.0													
		CMP FT6																			

**18 AWG** Stranded (19x30) Tinned Copper Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 20 AWG Stranded TC Drain Wire

Plenum • FEP Insulation • Red FEP Jacket																					
300V RMS  Z-Fold®	<b>88760</b>	NEC:	1	Black, Red	100	30.5	3.7	1.7	.007	.18	.014	.36	.150	3.81	51	167	97	318			
		CMP			U-500	U-152.4	12.5	5.7													
		CEC:			500	152.4	11.0	5.0													
		CMP FT6			U-1000	U-304.8	24.0	10.9													
					1000	304.8	22.0	10.0													

Plenum • FEP Insulation • Red Fluorocopolymer Jacket																					
300V RMS  Z-Fold®	<b>87760</b>	NEC:	1	Black, Red	U-500	U-152.4	12.5	5.7	.007	.18	.014	.36	.150	3.81	51	167	97	318			
		CMP			500	152.4	10.5	4.8													
		CEC:			1000	304.8	21.0	9.5													
		CMP FT6																			

Plenum • FEP Insulation • Natural Flamarrest Jacket																					
300V RMS  Z-Fold®	<b>82760</b>	NEC:	1	Black, Red	U-500	U-152.4	12.0	5.5	.007	.18	.014	.36	.150	3.81	51	167	97	318			
		CMP			U-1000	U-304.8	22.0	10.0													
		CEC:			1000	304.8	21.0	9.5													
		CMP FT6																			

TC = Tinned Copper

\*Capacitance between conductors.

\*\*Capacitance between one conductor and other conductors connected to shield.