

87740 Multi-Conductor - Audio, Control and Instrumentation Cable



Description:

18 AWG stranded (19x30) tinned copper conductors, plenum, FEP insulation, twisted pair, fluorocopolymer 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 Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVDF - Fluorocopolymer	.011

Overall Cabling

Overall Nominal Diameter: 0.136 in.

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +150°C
Bulk Cable Weight:	16.300 lbs/1000 ft.
Max. Recommended Pulling Tension:	49 lbs.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
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):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes

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EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Flame Test

UL Flame Test: NFPA 262

C(UL) Flame Test: FT4, FT6

Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 9740

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

72

Nom. Inductance:

Inductance (µH/ft)

0.14

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

20

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

5.5

Nominal Conductor Loop Resistance:

Resistance @ 20°C (Ohm/1000 ft)

11

Max. Operating Voltage - UL:

Voltage

300 V RMS

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
87740 0021000	1,000 FT	15.000 LB	RED	C	2#18 FEP SOLEF
87740 002500	500 FT	9.000 LB	RED	C	2#18 FEP SOLEF

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




Unshielded

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	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm

22 AWG Stranded (7x30) Tinned Copper Conductors • Twisted Pairs

Plenum • FEP Insulation • Red FEP Jacket


	88442	NEC:	1	Black & Red	100	30.5	2.3	1.0	.006	.15	.012	.30	.102	2.59
		CMP			500 [†]	152.4	5.5	2.5						
		CEC:			1000 [†]	304.8	8.0	3.6						
		CMP FT6												
	88741	NEC:	2	Black & Red, Black & White	500 [†]	152.4	8.0	3.6	.006	.15	.012	.30	.169	4.29
		CMP			1000 [†]	304.8	16.0	7.3						
		CEC:												
		CMP FT6												
	88757	NEC:	4	Black & Red, Black & White, Black & Green, Black & Blue	500 [†]	152.4	14.0	6.4	.006	.15	.012	.30	.200	5.08
		CMP			1000 [†]	304.8	28.0	12.7						
		CEC:												
		CMP FT6												

Plenum • FEP Insulation • Natural Flamarrest® Jacket

	82442	NEC:	1	Black & Red	U-1000 [†]	U-304.8	9.0	4.1	.006	.15	.014	.36	.112	2.84
		CMP			1000 [†]	304.8	8.0	3.6						
		CEC:												
		CMP FT6												
	82741	NEC:	2	Black & Red, Black & White	U-1000 [†]	U-304.8	18.0	8.2	.006	.15	.014	.36	.179	4.55
		CMP			1000 [†]	304.8	20.0	9.1						
		CEC:												
		CMP FT6												
	82742	NEC:	3	Black & Red, Black & White, Black & Green	U-1000 [†]	U-304.8	24.0	10.9	.006	.15	.014	.36	.191	4.85
		CMP			1000 [†]	304.8	26.0	11.8						
		CEC:												
		CMP FT6												
	82757	NEC:	4	Black & Red, Black & White, Black & Green, Black & Blue	1000	304.8	32.0	14.5	.006	.15	.014	.36	.210	5.33
		CMP												
		CEC:												
		CMP FT6												
	82743	NEC:	6	Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown	U-1000	U-304.8	44.0	20.0	.006	.15	.015	.38	.238	6.05
		CMP			1000	304.8	46.0	20.9						
		CEC:												
		CMP FT6												

18 AWG Stranded (19x30) Tinned Copper Conductors • Twisted Pair

Plenum • FEP Insulation • Red FEP Jacket

	89740	NEC:	1	Black & Red	100	30.5	3.0	1.4	.006	.15	.009	.23	.136	3.45
		CMP			500 [†]	152.4	9.0	4.1						
		CEC:			1000 [†]	304.8	15.0	6.8						
		CMP FT6												

Plenum • FEP Insulation • Red Fluorocopolymer Jacket

	87740	NEC:	1	Black & Red	500 [†]	152.4	9.0	4.1	.006	.15	.011	.28	.140	3.56
		CMP			1000 [†]	304.8	17.0	7.7						
		CEC:												
		CMP FT6												

Plenum • FEP Insulation • Natural Flamarrest Jacket

	82740	NEC:	1	Black & Red	U-1000	U-304.8	17.0	7.7	.006	.15	.015	.38	.147	3.73
		CMP			1000	304.8	16.0	7.3						
		CEC:												
		CMP FT6												

[†]Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.