

Description:

22 AWG stranded (7x30) TC conductor, FEP insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall jacket per table below, 22 AWG stranded TC drain wire.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
6	22	7x30	TC - Tinned Copper	.030

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	FEP - Fluorinated Ethylene Propylene	.050

Inner Shield

Inner Shield Material:

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

Inner Shield Drain Wire AWG:

AWG
22

Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Teflon®	FEP - Fluorinated Ethylene Propylene

Overall Cabling

Overall Nominal Diameter: 0.309 in.

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown

Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)	Direction

88778 Multi-Conductor - CMP Rated (Plenum) Cable

1.500	8.000	Left Hand Lay
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Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	72 lbs/1000 ft.
Max. Recommended Pulling Tension:	163 lbs.
Min. Bend Radius (Install)/Minor Axis:	3.500 in.

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
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:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	8778

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (µH/ft)
0.18

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
31

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
67

Nominal Velocity of Propagation:

VP (%)
69

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
16.0

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 11.300 Ohm/1000 ft

88778 Multi-Conductor - CMP Rated (Plenum) Cable

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
1.96 Amps per conductor @ 25°C

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
88778 002100	100 FT	7.000 LB	RED	C	6 SH PR #22 FEP FEP
88778 0021000	1,000 FT	70.000 LB	RED	C	6 SH PR #22 FEP FEP
88778 002500	500 FT	38.500 LB	RED	C	6 SH PR #22 FEP FEP

Notes:

C = CRATE REEL PUT-UP.

Plenum-Rated


Individually Shielded Pairs

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m


22 AWG Stranded (7x30) TC Conductors • Twisted Pairs • Individually Shielded Beldfoil® (100% Coverage) • 22 AWG Stranded TC Drain Wire††

Plenum • FEP Insulation • Natural Flamarrest® Jacket


 <p>300V RMS</p>	82723	NEC:	2	Red & Black	U-500	U-152.4	10.5	4.8	14.7Ω/M'	16.6Ω/M'	.153	3.89	36	62%	43	141	75	246
		CMP			U-1000	U-304.8	20.0	9.1	48.2Ω/km	54.5Ω/km								
		CEC:			1000	304.8	19.0	8.6										
		CMP FT6			U-2000	U-609.6	40.0	18.2										

Z-Fold®


††82723 has 24 AWG drain wire
Pairs cabled on common axis to reduce diameter.

 <p>300V RMS</p>	82777	NEC:	3	See Chart 3	U-500	U-152.4	19.5	8.9	14.7Ω/M'	11.3Ω/M'	.237	6.02	46	62%	35	115	76	249
		CMP			U-1000	U-304.8	38.0	17.3	48.2Ω/km	37.1Ω/km								
		CEC:			1000	304.8	39.0	17.7										
		CMP FT6			(Tech Info Section)													

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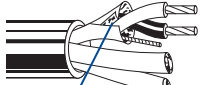
 <p>300V RMS</p>	82778	NEC:	6	See Chart 3	U-500	U-304.8	71.0	32.2	14.7Ω/M'	11.3Ω/M'	.314	7.98	46	62%	35	115	76	249
		CMP			U-1000	U-609.6	142.0	64.4	96.4Ω/km	74.2Ω/km								
		CEC:			(Tech Info Section)													
		CMP FT6																

Plenum • FEP Insulation • Red FEP Jacket


 <p>300V RMS</p>	88723	NEC:	2	Red & Black	U-500	U-152.4	3.4	1.5	14.7Ω/M'	16.6Ω/M'	.148	3.76	40	69%	35	115	67	220
		CMP			U-1000	U-304.8	11.0	5.0	48.2Ω/km	54.5Ω/km								
		CEC:			1000	304.8	19.0	8.6										
		CMP FT6			Green & White													

Z-Fold®

††88723 has 24 AWG drain wire


 <p>300V RMS</p>	88777	NEC:	3	See Chart 3	U-500	U-152.4	6.0	2.7	14.7Ω/M'	11.3Ω/M'	.234	5.94	50	69%	31	102	67	220
		CMP			U-1000	U-304.8	19.0	8.6	48.2Ω/km	37.1Ω/km								
		CEC:			1000	304.8	42.0	19.1										
		CMP FT6			(Tech Info Section)													

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 <p>300V RMS</p>	88778	NEC:	6	See Chart 3	U-500	U-304.8	7.0	3.2	14.7Ω/M'	11.3Ω/M'	.309	7.85	50	69%	31	102	67	220
		CMP			U-1000	U-609.6	14.0	6.4	48.2Ω/km	37.1Ω/km								
		CEC:			1000	304.8	75.0	34.1										
		CMP FT6			(Tech Info Section)													


Pairs cabled on common axis to reduce diameter.

Plenum • FEP Insulation • Red Fluorocopolymer Jacket


 <p>300V RMS</p>	87723	NEC:	2	Red & Black	U-500	U-152.4	11.0	5.0	14.7Ω/M'	15.0Ω/M'	.148	3.76	40	69%	35	115	67	220
		CMP			U-1000	U-304.8	18.0	8.2	48.2Ω/km	49.2Ω/km								
		CEC:			1000	304.8	19.0	8.6										
		CMP FT6			Green & White													

Z-Fold®

††87723 has 24 AWG drain wire.

 <p>300V RMS</p>	87777	NEC:	3	See Chart 3	U-500	U-152.4	18.0	8.2	14.7Ω/M'	11.3Ω/M'	.234	5.94	50	69%	31	102	67	220
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		CEC:			1000	304.8	42.0	19.1										
		CMP FT6			(Tech Info Section)													

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		CMP			U-1000	U-609.6	75.0	33.2	48.2Ω/km	37.1Ω/km								
		CEC:			1000	304.8	75.0	33.2										
		CMP FT6			(Tech Info Section)													

Pairs cabled on common axis to reduce diameter.

DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

*Capacitance between conductors.

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