Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

8723 Multi-Conductor - Shielded Twisted Pair Cable

Description:

22 AWG stranded (7x30) tinned copper conductors, polypropylene insulation, twisted pairs, individually Beldfoil® shielded (100% coverage), 24 AWG stranded tinned copper drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
2	22	7x30	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material
PP - Polypropylene

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
24

Inner Shield Drain Wire Stranding: 7x32

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 Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 0.160 in.

Pair

Pair Color Code Chart:

Number	Color
1	Red & Black
2	Green & White

Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.500	8.000

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +60°C

UL Temperature Rating:	60°C
Bulk Cable Weight:	18.300 lbs/1000 ft.
Max. Recommended Pulling Tension:	50 lbs.
Min. Bend Radius (Install)/Minor Axis:	1.600 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
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):	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

Flame Test

UL Flame Test:	UL1685 UL Loading

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	82723, 87723, 88723

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
45

Nom. Inductance:

Inductance (µH/ft)
0.17

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
35

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
62

Nominal Velocity of Propagation:

VP (%)
66

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
14.7

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	15 Ohm/1000 ft

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
2.3 Amps per conductor @ 25°C

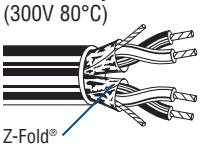
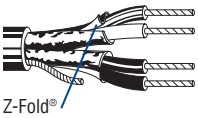
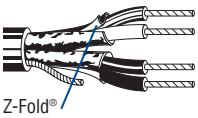
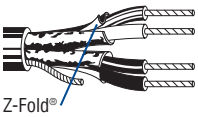
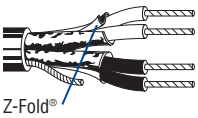
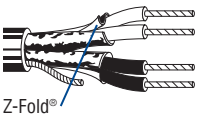
Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8723 060U1000	1,000 FT	19.000 LB	CHROME		2 SH PR #22 PP PVC
8723 060U2000	2,000 FT	36.000 LB	CHROME		2 SH PR #22 PP PVC
8723 060U500	500 FT	10.000 LB	CHROME		2 SH PR #22 PP PVC
8723 060100	100 FT	3.200 LB	CHROME		2 SH PR #22 PP PVC
8723 0601000	1,000 FT	19.000 LB	CHROME	C	2 SH PR #22 PP PVC
8723 06010000	10,000 FT	190.000 LB	CHROME	C Y	2 SH PR #22 PP PVC
8723 0601640	1,640 FT	32.800 LB	CHROME		2 SH PR #22 PP PVC
8723 0602000	2,000 FT	40.000 LB	CHROME	C	2 SH PR #22 PP PVC
8723 0603280	3,280 FT	62.320 LB	CHROME	C	2 SH PR #22 PP PVC
8723 060500	500 FT	9.500 LB	CHROME		2 SH PR #22 PP PVC
8723 0605000	5,000 FT	90.000 LB	CHROME	C	2 SH PR #22 PP PVC
8723 0609999	10,000 FT	190.000 LB	CHROME	C Y	2 SH PR #22 PP PVC

Notes:
C = CRATE REEL PUT-UP.
Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

Individually Shielded

Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/Ft.	Nom. Capacitance * pF/m	Nom. Capacitance ** pF/Ft.	Nom. Capacitance ** pF/m
22 AWG Stranded (7x30) TC Conductors • Twisted Pairs • Individually Shielded w/Beldfoil® (100% Coverage) • 22 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Pale Fawn Beige PVC Jacket (Shielded Pairs Parallel under Jacket)																		
UL AWM Style 2464 (300V 80°C)  Z-Fold®	**9406**	NEC: CMG CEC: CMG FT4	2	Black & White, Black & Yellow	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.8 16.5 17.0 32.0 33.0	1.7 7.5 7.7 14.5 15.0	15.0Ω/M′ 49.2Ω/km	13.0Ω/M′ 42.7Ω/km	.173 x .280	4.39 x 7.11	50	60%	50	164	95	312
22 AWG Stranded (7x30) TC Conductors • Twisted Pairs • Individually Shielded w/Beldfoil (100% Coverage) • 24 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS 60°C  Z-Fold®	**8723**	NEC: CM CEC: CM	2	Red & Black, Green & White	100 U-500 500 U-1000 1000 1640 U-2000 2000 3280 5000 10000	30.5 U-152.4 152.4 U-304.8 304.8 499.9 U-609.6 609.6 999.7 1524.0 3048.0	2.3 10.5 10.0 20.0 20.0 32.8 38.0 40.0 65.6 95.0 200.0	1.0 4.8 4.5 9.1 9.1 14.9 17.2 18.2 29.8 43.2 90.9	15.0Ω/M′ 49.2Ω/km	16.6Ω/M′ 54.5Ω/km	.160	4.06	45	66%	35	115	62	203
															For Plenum versions of 8723, see 88723, 87723 or 82723.			
Polypropylene Insulation • Black Low-Smoke, Zero-Halogen Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS 60°C  Z-Fold®	**8723SB** new	NEC: CMG-LS CEC: CMG-LS FT4 Limited Smoke	2	Red & Black, Green & White	1000	304.8	26.0	11.8	14.7Ω/M′ 48.2Ω/km	15.0Ω/M′ 49.2Ω/km	.196	4.98	45	66%	35	115	62	203
Plenum • FEP Insulation • Natural Flamarrest® Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**82723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	U-500† U-1000 1000† U-2000†	U-152.4 U-304.8 304.8 U-609.6	10.5 20.0 19.0 40.0	4.8 9.1 8.6 18.1	14.7Ω/M′ 48.2Ω/km	16.6Ω/M′ 54.5Ω/km	.153	3.89	36	62%	43	141	75	246
Plenum • FEP Insulation • Red FEP Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**88723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	100† 500† 1000†	30.5 152.4 304.8	3.4 11.0 19.0	1.5 5.0 8.6	16.0Ω/M′ 52.5Ω/km	14.7Ω/M′ 48.2Ω/km	.148	3.76	40	69%	35	115	67	220
Plenum • FEP Insulation • Red Fluorocopolymer Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**87723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	500† 1000†	152.4 304.8	11.0 20.0	5.0 9.1	14.7Ω/M′ 48.2Ω/km	15.0Ω/M′ 49.2Ω/km	.148	3.76	40	69%	35	115	67	220

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

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length show.