

**Description:**

24 AWG stranded (7x32) TC conductors, polyethylene insulation, twisted pair, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain wire, PVC jacket.

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

# Pairs	AWG	Stranding	Conductor Material
1	24	7x32	TC - Tinned Copper

Insulation**Insulation Material:**

Insulation Material	Wall Thickness (in.)
PE - Polyethylene	.016

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 Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.025

Overall Cabling

Overall Nominal Diameter: 0.168 in.

Pair**Pair Color Code Chart:**

Number	Color
1	Black & Clear

Pair Lay Length & Direction:

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

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	60°C (UL AWM Style 2092)
Bulk Cable Weight:	12.100 lbs/1000 ft.
Max. Recommended Pulling Tension:	11 lbs.
Min. Bend Radius (Install)/Minor Axis:	1.700 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2092 (300 V 60°C)
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
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Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88641, 82641

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
80

Nom. Inductance:

Inductance (μH/ft)
.22

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
22

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
42

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
25

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
14.6

Max. Operating Voltage - UL:

Voltage
300 V RMS (UL AWM Style 2092)

Max. Recommended Current:

Current
2.2 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8641 060U1000	1,000 FT	14.000 LB	CHROME		1 #24 FS PR PE PVC

8641 Multi-Conductor - Single-Pair Cable

8641 060U500	500 FT	7.500 LB	CHROME		1 #24 FS PR PE PVC
8641 060100	100 FT	2.000 LB	CHROME		1 #24 FS PR PE PVC
8641 0601000	1,000 FT	14.000 LB	CHROME	C	1 #24 FS PR PE PVC
8641 0602000	2,000 FT	28.000 LB	CHROME	C	1 #24 FS PR PE PVC
8641 060500	500 FT	7.000 LB	CHROME		1 #24 FS PR PE PVC

Notes:

C = CRATE REEL PUT-UP.

Overall Beldfoil® Shield

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		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

24 AWG Stranded (7x32) TC Conductors • Twisted Pair • Overall Beldfoil Shield[▲] (100% Coverage) • 24 AWG Stranded TC Drain Wire

Polyolefin Insulation • Black Matte PVC Jacket

High-Flex 300V RMS	1508A	NEC: CM	1	Black, Red	500	152.4	6.5	2.9	.008	.20	.024	.61	.131	3.33	31	102	58	190
					1000	304.8	11.0	5.0										



Jacket and shield are bonded so both can be removed with automatic stripping equipment.

Polypropylene Insulation • PVC Jacket (Available in Gray, Brown, Red, Green, Lt. Blue, Purple, White or Black)

300V RMS	1883A	NEC: CMR	1	Black, Red	U-1000	U-304.8	11.0	5.0	.008	.20	.020	.51	.123	3.12	31	102	58	190
					1000*	304.8	11.0	5.0										



Z-Fold[®]

* 1000 ft. put-up available in Gray only.

Jacket and shield are bonded so both can be removed with automatic stripping equipment. For cross-connect use with 1408R Snake Cables.

Polyethylene Insulation • Chrome PVC Jacket

UL AWM Style 2092 (300V 60°C)	8641	NEC: CM	1	Black, Clear	100	30.5	2.3	1.0	.016	.41	.025	.64	.168	4.27	22	72	42	138
					U-500	U-152.4	7.5	3.4										
					500	152.4	7.0	3.2										
					U-1000	U-304.8	14.0	6.4										
					1000	304.8	14.0	6.4										



For Plenum versions of 8641,
see 88641 or 82641.

Plenum • FEP Insulation • Red FEP Jacket

300V RMS, Non-conduit	88641	NEC: CMP	1	Black, Red	100	30.5	2.4	1.1	.006	.15	.014	.36	.106	2.69	31	102	59	194
					500†	152.4	6.0	2.7										
					1000†	304.8	9.0	4.1										



CMP FT6

Plenum • FEP Insulation • Natural Flamarrest® Jacket

300V RMS, Non-conduit	82641	NEC: CMP	1	Black, Red	U-1000†	U-304.8	9.0	4.1	.006	.15	.014	.36	.106	2.69	31	102	59	194
					1000†	304.8	8.0	3.6										



CMP FT6

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 shown.

▲ Beldfoil provides high reliability with ease of termination.