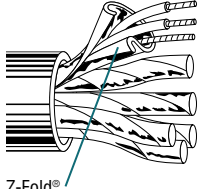
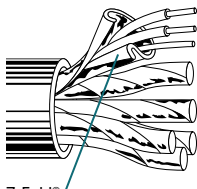


Individually Shielded

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. of Prop. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 24 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
 <p>Z-Fold®</p>	9990	NEC:	3	See Chart 3 (Tech Info Section)	500	152.4	18.0	8.2	24.0Ω/M'	18.0Ω/M'	.255	6.48	60	66%	25	82	47	154
		CM			1000	304.8	36.0	16.4	78.7Ω/km	59.1Ω/km								
		CEC:																
		CM																
		CM																
9991	NEC:	6	See Chart 3 (Tech Info Section)	100	30.5	6.7	3.1	24.0Ω/M'	18.0Ω/M'	.330	8.38	60	66%	25	82	47	154	
	CM			500	152.4	32.0	14.6	78.7Ω/km	59.1Ω/km									
	CEC:																	
	CM																	
	CM																	
9992	NEC:	9	See Chart 3 (Tech Info Section)	100	30.5	8.8	4.0	24.0Ω/M'	18.0Ω/M'	.383	9.73	60	66%	25	82	47	154	
	CM			500	152.4	44.0	20.0	78.7Ω/km	59.1Ω/km									
	CEC:																	
	CM																	
	CM																	
9993	NEC:	12	See Chart 3 (Tech Info Section)	100	30.5	11.5	5.2	24.0Ω/M'	18.0Ω/M'	.428	10.87	60	66%	25	82	47	154	
	CM			500	304.8	107.0	48.6	78.7Ω/km	59.1Ω/km									
	CEC:																	
	CM																	
	CM																	
9995	NEC:	25	See Chart 3 (Tech Info Section)	100	30.5	23.2	10.5	24.0Ω/M'	18.0Ω/M'	.636	16.15	60	66%	25	82	47	154	
	CM			500	152.4	116.0	52.7	78.7Ω/km	59.1Ω/km									
	CEC:																	
	CM																	
	CM																	

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 Solid Conductors • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Solid TC Drain Wire																		
PVC Insulation • Overall Chrome PVC Jacket																		
 <p>Z-Fold®</p>	8767	NEC:	3	See Chart 3 (Tech Info Section)	U-500	U-152.4	24.0	10.9	.013	.33	.037	.94	.279	7.10	40	131	77	253
		MPG, CMG			500	152.4	24.5	11.1										
		CEC: MPG, CMG FT4																
		CMG FT4																
		CMG FT4																
8768	NEC:	6	See Chart 3 (Tech Info Section)	500	152.4	46.5	21.1	.013	.33	.037	.94	.379	9.60	40	131	77	253	
	MPG, CMG			1000	304.8	92.0	41.8											
	CEC: MPG, CMG FT4																	
	CMG FT4																	
	CMG FT4																	
8764	NEC:	9	See Chart 3 (Tech Info Section)	1000	304.8	122.0	55.5	.013	.33	.040	1.02	.425	10.80	40	131	77	253	
	MPG, CMG																	
	CEC: MPG, CMG FT4																	
	CMG FT4																	
	CMG FT4																	
8765	NEC:	11	See Chart 3 (Tech Info Section)	500	152.4	76.5	34.8	.013	.33	.040	1.02	.470	11.90	40	131	77	253	
	MPG, CMG			1000	304.8	149.0	67.7											
	CEC: MPG, CMG FT4																	
	CMG FT4																	
	CMG FT4																	
8766	NEC:	15	See Chart 3 (Tech Info Section)	500	152.4	101.5	46.1	.013	.33	.045	1.14	.525	13.30	40	131	77	253	
	MPG, CMG			1000	304.8	196.0	89.1											
	CEC: MPG, CMG FT4																	
	CMG FT4																	
	CMG FT4																	

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.

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



Individually Shielded

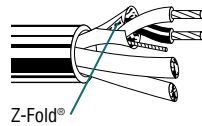
Audio, Control and Instrumentation Cables

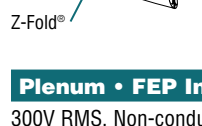
Plenum-Rated and Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		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

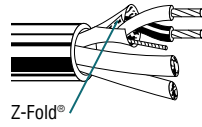
22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire


Plenum • Halar® Insulation • Natural Flamarrest® Jacket

 <p>Z-Fold®</p>	82777	NEC:	3	See Chart 3 (Tech Info Section)	U-500†	U-152.4	19.0	8.6	14.7Ω/M'	11.3Ω/M'	.234	5.94	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																

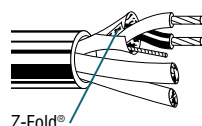
 <p>Z-Fold®</p>	82778	NEC:	6	See Chart 3 (Tech Info Section)	1000†	304.8	67.0	30.5	14.7Ω/M'	11.3Ω/M'	.330	8.38	46	62%	35	115	76	249
		CMP						48.2Ω/km	37.1Ω/km									
		CEC:																
		CMP FT6																


Plenum • FEP Insulation • Red FEP Jacket

 <p>Z-Fold®</p>	88777	NEC:	3	See Chart 3 (Tech Info Section)	100	30.5	6.0	2.7	14.7Ω/M'	11.3Ω/M'	.234	5.94	50	69%	31	102	67	220
		CMP			500†	152.4	21.0	9.5	48.2Ω/km	37.1Ω/km								
		CEC:			1000†	304.8	42.0	19.1										
		CMP FT6																

 <p>Z-Fold®</p>	88778	NEC:	6	See Chart 3 (Tech Info Section)	100	30.5	8.8	4.0	14.7Ω/M'	11.3Ω/M'	.309	7.85	50	69%	31	102	67	220
		CMP			500†	152.4	40.0	18.2	48.2Ω/km	37.1Ω/km								
		CEC:			1000†	304.8	75.0	34.1										
		CMP FT6																

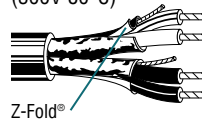
Plenum • FEP Insulation • Red Fluorocopolymer Jacket

 <p>Z-Fold®</p>	87777	NEC:	3	See Chart 3 (Tech Info Section)	500†	152.4	20.0	9.1	14.7Ω/M'	11.3Ω/M'	.234	5.94	50	69%	31	102	67	220
		CMP			1000†	304.8	40.0	18.2	48.2Ω/km	37.1Ω/km								
		CEC:																
		CMP FT6																

 <p>Z-Fold®</p>	87778	NEC:	6	See Chart 3 (Tech Info Section)	500†	152.4	37.5	17.0	14.7Ω/M'	11.3Ω/M'	.309	7.85	50	69%	31	102	67	220
		CMP			1000†	304.8	73.0	33.2	48.2Ω/km	37.1Ω/km								
		CEC:																
		CMP FT6																

20 AWG Stranded (7x28) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire

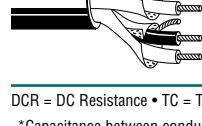
Semi-rigid PVC Insulation • Overall Chrome PVC Jacket

 <p>Z-Fold®</p>	9402	NEC:	2	Red & Black, Green & White	U-500	U-152.4	27.0	12.3	—	—	.300	7.62	—	—	55	180	95	312
		CMG			1000	304.8	53.0	24.1			Insulation Thickness .010 .25							
		CEC:								Jacket Thickness .041 1.04								
		CMG FT4																

20 AWG Stranded (10x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire

Polypropylene Insulation • Black High-density Polyethylene Jacket

 <p>Z-Fold®</p>	9883	NEC:	3	See Chart 3 (Tech Info Section)	500	152.4	28.0	12.8	6.4Ω/M'	8.3Ω/M'	.340	8.64	50	66%	30	98	55	180
		CMP			1000	304.8	56.0	25.5	21.0Ω/km	27.2Ω/km								
		CEC:																

 <p>Z-Fold®</p>	9886	NEC:	6	See Chart 3 (Tech Info Section)	500	152.4	56.5	25.8	6.4Ω/M'	8.3Ω/M'	.455	11.56	50	66%	30	98	55	180
		CMP			1000	304.8	109.0	49.7	21.0Ω/km	27.2Ω/km								
		CEC:																

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.

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

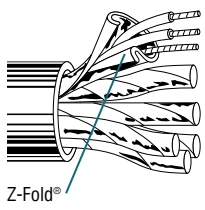
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length show.

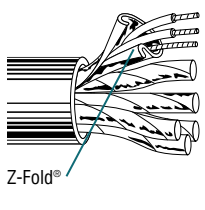
Halar is an Ausimont Corporation trademark.



Individually Shielded

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								
20 AWG Stranded (7x28) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire																										
Polyethylene Insulation • Overall Chrome PVC Jacket																										
 <p>Z-Fold®</p>	9873	NEC:	3	See Chart 3 (Tech Info Section)	100	30.5	7.0	3.2	10.5Ω/M'	14.0Ω/M'	.341	8.66	50	66%	30	98	55	180								
		CM			250	76.2	17.3	7.8	34.4Ω/km	45.9Ω/km																
		CEC:			500	152.4	33.5	15.2																		
		CM			1000	304.8	66.0	30.0																		
		NEC:			6	See Chart 3 (Tech Info Section)	100	30.5	13.1	6.0	10.5Ω/M'	11.3Ω/M'							.445	11.30	50	66%	30	98	55	180
		CM					250	76.2	31.0	14.1	34.4Ω/km	37.1Ω/km														
		CEC:					500	152.4	62.5	28.4																
CM	1000	304.8	125.0	56.8																						
NEC:	9	See Chart 3 (Tech Info Section)	100	30.5			19.7	9.0	10.5Ω/M'	11.3Ω/M'	.555	14.10	50	66%	30	98	55	180								
CM			250	76.2			44.3	34.4Ω/km	37.1Ω/km																	
CEC:			500	152.4			97.5	44.3																		
CM			1000	304.8	188.0	85.5																				
NEC:			11	See Chart 3 (Tech Info Section)	1000	304.8	220.0	100.0	10.5Ω/M'	11.3Ω/M'	.600	15.24							50	66%	30	98	55	180		
CM					34.4Ω/km	37.1Ω/km																				
CEC:																										
CM																										
NEC:	12	See Chart 3 (Tech Info Section)			100	30.5	24.1	11.0	10.5Ω/M'	11.3Ω/M'	.617	15.67	50	66%	30	98	55	180								
CM					250	76.2	54.1	34.4Ω/km	37.1Ω/km																	
CEC:					500	152.4	119.0	54.1																		
CM			1000	304.8	237.0	107.7																				
NEC:			15	See Chart 3 (Tech Info Section)	500	152.4	146.0	66.4	10.5Ω/M'	11.3Ω/M'	.689	17.50							50	66%	30	98	55	180		
CM					1000	304.8	296.0	134.5	34.4Ω/km	37.1Ω/km																
CEC:																										
CM																										

18 AWG Stranded (19x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 20 AWG Stranded TC Drain Wire																										
Polyethylene Insulation • Chrome PVC Jacket																										
 <p>Z-Fold®</p>	9773	NEC:	3	See Chart 3 (Tech Info Section)	100	30.5	9.4	4.3	6.4Ω/M'	8.3Ω/M'	.404	10.26	50	66%	30	98	55	180								
		CM			500	152.4	45.5	20.7	21.0Ω/km	27.2Ω/km																
		CEC:			1000	304.8	93.0	42.3																		
		CM																								
		NEC:			6	See Chart 3 (Tech Info Section)	100	30.5	19.4	8.8	6.4Ω/M'	8.3Ω/M'							.560	14.22	50	66%	30	98	55	180
		CM					250	76.2	43.4	21.0Ω/km	27.2Ω/km															
		CEC:					500	152.4	95.5	43.4																
CM	1000	304.8	189.0	85.9																						
NEC:	9	See Chart 3 (Tech Info Section)	100	30.5			26.6	12.1	6.4Ω/M'	8.3Ω/M'	.655	16.64	50	66%	30	98	55	180								
CM			250	76.2			60.0	21.0Ω/km	27.2Ω/km																	
CEC:			500	152.4			132.0	60.0																		
CM			1000	304.8	260.0	118.2																				
NEC:			12	See Chart 3 (Tech Info Section)	100	30.5	32.6	14.8	6.4Ω/M'	8.3Ω/M'	.735	18.67							50	66%	30	98	55	180		
CM					250	76.2	78.0	21.0Ω/km	27.2Ω/km																	
CEC:					500	152.4	171.5	78.0																		
CM	1000	304.8			328.0	149.1																				
NEC:	15	See Chart 3 (Tech Info Section)			100	30.5	43.5	19.8	6.4Ω/M'	8.3Ω/M'	.819	20.8	50	66%	30	98	55	180								
CM					250	76.2	95.0	21.0Ω/km	27.2Ω/km																	
CEC:					500	152.4	209.0	95.0																		
CM			1000	304.8	451.0	205.0																				

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.

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

See Attenuation, Rise Time and Bit Rate data for this series on page 5.39.



Line Level Analog Audio Cable

Single- and Double-Pair Cables

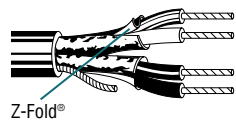


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

22 AWG Stranded (7x30) Tinned Copper • Twisted Pairs • Individually Shielded w/ 100% Beldfoil® • 24 AWG Stranded TC Common Drain Wire

Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

300V RMS 60°C	8723	NEC: CM	2	Red/Black, Green/White	100	30.5	2.3	1.0	15.0Ω/M'	16.6Ω/M'	.168	4.27	45	66%	35	115	62	203
		CEC: CM			U-500	U-152.4	10.5	4.8	49.2Ω/km	54.5Ω/km								
					500	152.4	10.0	4.5										
					U-1000	U-304.8	20.0	9.1										
					1000	304.8	20.0	9.1										
					1640	499.9	32.8	14.9										
					U-2000	U-609.6	40.0	18.2										
					2000	609.6	40.0	18.2										
					3280	999.7	65.6	29.8										
					5000	1524.0	95.0	43.2										
					10000	3048.0	200.0	90.9										

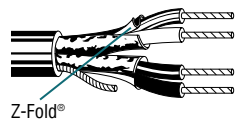


Z-Fold®

For Plenum versions of 8723, see 88723, 87723 or 82723.

Plenum • FEP Insulation • Red FEP Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

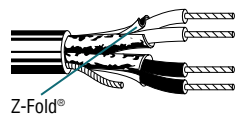
300V RMS, Non-conduit	88723	NEC: CMP	2	Red/Black, Green/White	100	30.5	3.4	1.5	16.0Ω/M'	14.7Ω/M'	.148	3.76	40	69%	35	115	67	220
		CEC: CMP FT6			500	152.4	11.0	5.0	52.5Ω/km	48.2Ω/km								
					1000	304.8	21.0	9.5										



Z-Fold®

Plenum • FEP Insulation • Red Fluorocopolymer Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

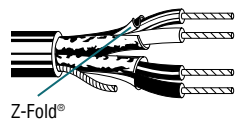
300V RMS, Non-conduit	87723	NEC: CMP	2	Red/Black, Green/White	500†	152.4	11.0	5.0	16.0Ω/M'	14.7Ω/M'	.148	3.76	40	69%	35	115	67	220
		CEC: CMP FT6			1000†	304.8	20.0	9.1	52.5Ω/km	48.2Ω/km								



Z-Fold®

Plenum • Halar® Insulation • Natural Flamarrest® Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

300V RMS, Non-conduit	82723	NEC: CMP	2	Red/Black, Green/White	U-500†	U-152.4	10.0	4.5	14.7Ω/M'	16.6Ω/M'	.148	3.76	36	62%	43	141	75	246
		CEC: CMP FT6			U-1000	U-304.8	19.0	8.6	48.2Ω/km	54.5Ω/km								
					1000†	304.8	20.0	9.1										
					U-2000†	U-609.6	38.0	17.3										



Z-Fold®

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.

Halar is an Ausimont Corporation trademark.



Analog Multi-Pair Snake Cable

CM Rated Cables

Individually Shielded Twisted Pairs



Individually Shielded and Jacketed Pairs

NEC: CM (CEC: CM)

Product Description

22 AWG stranded (7x30) tinned copper conductor. Polypropylene insulation. Twisted pairs individually shielded with 100% Beldfoil®. Overall Chrome PVC jacket and 22 AWG stranded tinned copper drain wire.

Color Code: See Chart 3 (in Technical Information Section)

Specifications

Nominal OD — Conductor .030" (.76mm)

Nominal OD — Insulation .050" (1.27mm)

Approvals

NEC CM
CEC CM

UL Ratings UL AWM Style 2919

Voltage Rating 30V

Temperature Rating 80°C

Nominal DCR

Conductor 16.0Ω/M' (52.5Ω/km)
Shield 10.6Ω/M' (34.8Ω/km)

Nominal Impedance 50Ω

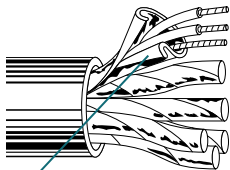
Nominal Velocity of Propagation 66%

Nominal Capacitance

Between Conductors 30 pF/Ft. (98 pF/m)
Between Conductor/Shield* 55 pF/Ft. (180 pF/m)

DCR = DC Resistance

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



Z-Fold®

Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm

CM Rated Twisted Pairs NEC: CM (CEC: CM)

22 AWG								
8777	3	100	30.5	5.3	2.4	.273	6.93	
		250	76.2	11.3	5.1			
	U-500	U-152.4	21.0	9.5	U-1000	U-304.8	41.0	18.6
		500	152.4	21.0		9.5		
	1000	304.8	42.0	19.1	1640	499.9	67.2	30.6
		3280	999.7	137.8		62.6		
		5000	1524.0	210.0		95.5		
		10000	3048.0	450.0		204.5		

For Plenum versions of 8777, see 88777, 87777 or 82777.

8778	6	100	30.5	8.4	3.8	.362	9.19
		250	76.2	20.8	9.4		
		500	152.4	43.0	19.5		
		1000	304.8	83.0	37.7		

For Plenum versions of 8778, see 88778, 87778 or 82778.

8774	9	100	30.5	11.6	5.3	.417	10.59
		250	76.2	28.8	13.1		
		500	152.4	58.0	26.4		
		1000	304.8	115.0	52.3		
8775	11	100	30.5	14.1	6.4	.464	11.79
		500	152.4	67.0	30.5		
		1000	304.8	133.0	60.5		
9768	12	100	30.5	14.9	6.8	.464	11.79
		250	76.2	35.5	16.1		
		500	152.4	73.5	33.4		
		1000	304.8	143.0	65.0		
8776	15	100	30.5	19.7	9.0	.548	13.92
		250	76.2	49.5	22.5		
		500	152.4	98.0	44.5		
		1000	304.8	197.0	89.5		
9769	17	100	30.5	22.0	10.0	.577	14.66
		500	152.4	109.0	49.5		
		1000	304.8	215.0	97.7		
8769	19	100	30.5	25.0	11.4	.603	15.32
		500	152.4	123.5	56.1		
		1000	304.8	245.0	111.4		
8773	27	100	30.5	33.8	15.4	.709	18.00
		250†	76.2	85.0	38.6		
		500†	152.4	166.0	75.5		
		1000†	304.8	346.0	157.3		
9767	37	500†	152.4	224.0	101.8	.800	20.32
		1000†	304.8	481.0	218.6		

†Spools are one piece, but length may vary -0 to +20% from length shown.



AES/EBU Digital Audio Cable

Plenum-Rated, Multi-Pair Snake Cables

Individually Shielded Pairs



Individually Shielded Pairs

NEC: CMP (CEC: CMP FT6)

Product Description

24 AWG stranded (7x32) tinned copper conductor. Foam FEP insulation. Twisted pairs individually shielded with 100% Beldfoil®. Overall Gray fluorocopolymer jacket (except 82729 which has Natural Flammarrest® jacket). 24 AWG stranded tinned copper drain wire.

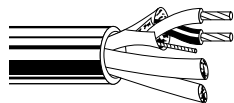
Color Code: See Chart 5 (in Technical Information Section)

Specifications

Nominal OD — Conductor	.024" (.60mm)
Nominal OD — Insulation	.062" (1.57mm)
Approvals	
NEC	CMP
CEC	CMP FT6
UL Ratings	Non-conduit
Voltage Rating	300V RMS
Nominal DCR	
Conductor	23.3Ω/M' (76.4Ω/km)
Shield	14.4Ω/M' (47.2Ω/km)
Nominal Impedance	100Ω
Nominal Velocity of Propagation	76%
Nominal Capacitance	
Between Conductors	13.5 pF/Ft. (44 pF/m)
Between Conductor/Shield*	22.5 pF/Ft. (73.8 pF/m)

DCR = DC Resistance

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



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm

Plenum Individually Shielded NEC: CMP (CEC: CMP FT6)

24 AWG							
82729	2	U-1000 1000	U-304.8 304.8	27.0 28.0	12.3 12.7	.255	6.48
89729	2	500 1000	152.4 304.8	18.5 31.0	8.4 14.1	.261	6.63
89730	3	500 1000	152.4 304.8	23.0 40.0	10.5 18.2	.278	7.06
89728	4	500 1000	152.4 304.8	26.5 50.0	12.0 22.7	.307	7.80
89705	5	500 1000	152.4 304.8	30.5 62.0	13.9 28.2	.327	8.31
89731	6	500 1000	152.4 304.8	35.0 71.0	15.9 32.3	.361	9.17
89757	7	500 1000	152.4 304.8	39.5 80.0	18.0 36.4	.361	9.17
89732	9	1000	304.8	106.0	48.2	.429	10.90
89734	12	500 1000	152.4 304.8	71.0 140.0	32.3 63.6	.498	12.65
89758	18	500 1000	152.4 304.8	100.5 204.0	45.7 92.7	.616	15.65

Spools are one piece, but length may vary ±10% from length shown.




Industrial Data Solutions® — Industrial Twinax

Blue Hose® and Other Twinaxial Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m


78 Ohm • 20 AWG Stranded (7x28) Tinned Copper • Overall Beldfoil® + 55% Tinned Copper Braid Shield (100% Coverage)

Aluminum Interlocked Armor • PE Insulation • Blue Sunlight-resistant PVC Outer Jacket* (Color Code: Clear, Blue)

Aluminum Armored Blue Hose 300V 60°C 	129463 new NEC: CMG CL2 CEC: CM, CMG FT4, HLBCD (Haz Loc)	1000	304.8	122.0	55.5	20 AWG (7x28)	.154	3.91	Beldfoil +55%	Core:	78	66%	19.7	64.6	1	.6	2.0	
		6000	1828.8	924.0	420.0	.038"	Tinned Copper			TC Braid	Armor:					10	2.1	6.9
							9.5Ω/M'			4.1Ω/M'						50	3.6	11.8
							31.0Ω/km			13.4Ω/km	.563	14.30				100	7.5	24.6
																200	11.0	36.1


*Blue PVC inner jacket.
Allen-Bradley P/N 1770-CD

Steel Interlocked Armor • PE Insulation • Blue Sunlight-resistant PVC Outer Jacket* (Color Code: Clear, Blue)

Steel Armored Blue Hose 300V 60°C 	139463 new NEC: CMG CL2 CEC: CM, CMG FT4, HLBCD (haz loc)	1000	304.8	220.0	100.0	20 AWG (7x28)	.154	3.91	Beldfoil +55%	Core:	78	66%	19.7	64.6	1	.6	2.0	
		6000	1828.8	1488.0	676.4	.038"	Tinned Copper			TC Braid	Armor:					10	2.1	6.9
							9.5Ω/M'			4.1Ω/M'						50	3.6	11.8
							31.0Ω/km			13.4Ω/km	.563	14.30				100	7.5	24.6
																200	11.0	36.1

*Blue PVC inner jacket.
Allen-Bradley P/N 1770-CD


Continuously Corrugated AL Armor • PE Insulation • Blue Sunlight-resistant PVC Outer Jacket* (Color Code: Clear, Blue)

Continuously Armored Blue Hose 300V 60°C 	189463 new NEC: PLTC	6000	1828.8	864.0	392.7	20 AWG (7x28)	.154	3.91	Beldfoil +55%	Core:	78	66%	19.7	64.6	1	.6	2.0	
						.038"	Tinned Copper			TC Braid	Armor:					10	2.1	6.9
							9.5Ω/M'			4.1Ω/M'						50	3.6	11.8
							31.0Ω/km			13.4Ω/km	.500	12.70				100	7.5	24.6
																200	11.0	36.1

*Blue PVC inner jacket.
Allen-Bradley P/N 1770-CD

78 Ohm • 20 AWG Stranded (7x28) .038" Tinned Copper • 93% Tinned Copper Braid Shield


Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)

UL AWM Style 2092 (300V 60°C) 	9272 NEC: CM CEC: CM	100	30.5	4.9	2.2	20 AWG (7x28)	.156	3.96	93% Shield	.244	6.20	78	66%	19.7	64.6	1	.6	2.0	
		U-500	U-152.4	20.0	9.1	.038"	Tinned Copper			TC Braid							10	2.1	6.9
		500	152.4	20.0	9.1		9.5Ω/M'			3.4Ω/M'						50	5.0	16.4	
		U-1000	U-304.8	39.0	17.7		31.0Ω/km			11.2Ω/km						100	7.5	24.6	
		1000	304.8	40.0	18.2											200	11.0	36.1	

For Plenum version of 9272, see 89272.
CPE jacket optional.

95 Ohm • RG-22B/U Type • 18 AWG Stranded (7x26) Bare Copper† • (2) Tinned Copper Braids (95% Coverage)

Polyethylene Insulation • Black Non-contaminating PVC Jacket

80°C VW-1 	9250 NEC: CM CEC: CM	500	152.4	64.5	29.3	18 AWG (7x26)	.285	7.24	2	.420	10.67	95	66%	16.0	52.5	1	.3	1.0	
		1000	304.8	128.0	58.2	.046"	BC			TC Braid							10	.9	3.0
							6.6Ω/M'			95% Shield						20	1.3	4.3	
							21.5Ω/km			.9Ω/M'						50	2.1	6.9	
										3.0Ω/km						100	3.0	9.8	

CPE jacket optional.

†1 conductor has tinned center strand.

AL = Aluminum • BC = Bare Copper • DCR = DC Resistance • PE = Polyethylene • TC = Tinned Copper

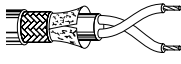


Industrial Data Solutions® — Industrial Twinax

Twinaxial Cables


Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m

100 Ohm • 20 AWG Stranded (7x28) .037" One Tinned, One Bare Copper • Duofoil® + 86% Tinned Copper Braid Shield (100% Shield Coverage)

Polyethylene Insulation • Black PVC Jacket																					
75°C		9207	NEC:	100	30.5	7.1	3.2	20 AWG	.236	5.99	Duofoil	.330	8.38	100	66%	15.5	50.9	1	.3	1.0	
		CMG CL2	U-500	U-152.4	34.0	15.5	(7x28)				+ 86%								10	1.2	3.9
		CEC:	500	152.4	33.5	15.2	.037"				TC Braid								50	2.8	9.2
		CMG FT4	1000	304.8	68.0	30.9	1 TC				2.5Ω/M'								100	4.1	13.5
			1640	500.0	111.5	50.7	1 BC				8.2Ω/km								200	6.4	21.0
			2000	609.6	136.0	61.8	9.5Ω/M'												400	10.2	33.5
			3280	1000.0	219.8	99.9	31.0Ω/km														
IBM P/N 7362211		5000	1524.0	350.0	159.1																


For Plenum version of 9207, see 89207.
CPE jacket optional.

124 Ohm • 25 AWG Stranded (7x33) .021" Tinned Copper • Beldfoil® (100% Shield Coverage) • Stranded Tinned Copper Drain Wire

Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)																					
UL AWM		9271	NEC:	100	30.5	3.7	1.7	25 AWG	.170	4.32	100%	.240	6.10	124	66%	12.2	40.0	1	.6	2.0	
Style 2092		CM	U-500	U-152.4	14.0	6.4	(7x33)				Beldfoil								10	1.7	5.6
(300V 60°C)		CEC:	500	152.4	14.0	6.4	.021"				Shield								50	3.6	11.8
		CM	U-1000	U-304.8	27.0	12.3	Tinned				12.0Ω/M'								100	5.0	16.4
			1000	304.8	28.0	12.7	Copper				39.4Ω/km								200	6.9	22.6
Shorting Fold						31.8Ω/M'												400	9.6	31.5	
						104.3Ω/km															


CPE jacket optional.

124 Ohm • 16 AWG Solid .051" Bare Copper • Duofoil + 90% Tinned Copper Braid Shield (100% Shield Coverage)


Foam Polyethylene Insulation • Black PVC Jacket (Color Code: White, Blue)																					
UL AWM		9860	NEC:	500	152.4	52.0	23.6	16 AWG	.322	8.18	Duofoil	.440	11.18	124	78%	10.9	35.8	1	.18	.6	
Style 2448		CMX	1000	304.8	103.0	46.8	(solid)				+90%								10	.71	2.3
(30V 60°C)		CEC:	2000	609.6	202.0	91.8	.051"				TC Braid								50	1.8	5.9
		CMX					Bare				1.3Ω/M'								100	2.9	9.5
							Copper				4.3Ω/km								200	4.1	13.5
						4.2Ω/M'												400	6.2	20.3	
						13.8Ω/km															

CPE jacket optional.

150 Ohm • 22 AWG Stranded (19x34) .031" Tinned Copper • Duofoil (100% Shield Coverage) • Stranded Tinned Copper Drain Wire

Datalene® Insulation • Black PVC Jacket (Color Code: Black, Yellow)																					
UL AWM		9182	NEC:	U-500	U-152.4	23.0	10.5	22 AWG	.275	6.98	100%	.345	8.76	150	78%	8.8	28.9	1	.4	1.3	
Style 2668		CL2X CMX	500	152.4	23.5	10.7	(19x34)				Duofoil								10	1.2	3.9
(30V 60°C)		CEC:	1000	304.8	45.0	20.5	.031"				Shield								50	2.7	8.7
VW-1		CMX					Tinned				6.3Ω/M'								100	4.3	14.1
							Copper				20.7Ω/km								200	6.2	20.3
						14.0Ω/M'												400	8.8	28.9	
						45.9Ω/km															

For Plenum version of 9182, see 89182.
Dual version: YR41609
CPE jacket optional.

Plenum • Foam FEP Insulation • Black FEP Jacket (Color Code: Black, Yellow)																					
		89182	NEC:	100	30.5	6.4	2.9	22 AWG	.278	7.06	100%	.307	7.80	150	78%	8.8	28.9	1	.4	1.3	
		CMP	500 [†]	152.4	28.0	12.7	(19x34)				Duofoil								10	1.2	3.9
		CL2P	1000 [†]	304.8	53.0	24.1	.031"				Shield								50	2.7	8.7
		CEC:					Tinned				6.3Ω/M'								100	4.3	14.1
		CMX					Copper				20.7Ω/km								200	6.2	20.3
						14.0Ω/M'												400	8.8	28.9	
						45.9Ω/km															

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene-propylene • TC = Tinned Copper

[†]Spools are one piece, but length may vary ±10% from length shown.



Introduction

When it's time to specify cabling to meet the needs of your current or future control, power, video or data applications, Belden's wide range of industrial automation, industrial equipment and instrumentation/process control cable products offer the consistent quality, versatility and proven performance to meet your long-term requirements. They're expressly designed with multiple armoring and jacketing options to meet the harsh conditions found in the petrochemical, pharmaceutical, mining, power generation, wastewater treatment, pulp and paper, food processing and transportation industries.

To satisfy the demanding applications found in these industries, Belden employs industry-standard quality control procedures and the very latest manufacturing processes to ensure absolute cable consistency during every production run.

In addition, to further ensure you get the right cable for your needs, our staff of highly knowledgeable application and technical specialists stand ready to guide you through the cable selection process.

Innovative Technology

When shielding is required, our innovative technology delivers maximum effectiveness. Belden's exclusive patented Beldfoil® design, with its aluminum/polyester foil, was the first shield to offer 100 percent cable protection against radiated emission and ingress at audio and radio frequencies.

Intrinsically Safe Wiring

In accordance with NEC Article 504, intrinsically safe cables are colored blue for easy identification. Belden offers several industrial cables in intrinsically safe blue to meet your requirements for intrinsically safe wiring. Contact the NEC and/or your local inspector for specific guidelines.

Custom Capabilities

UL PLTC and TC Listed constructions can be produced with XLPE (cross-linked polyethylene) insulation and/or a CPE Jacket. Other alternative insulating and jacketing materials are available for various hazardous environments with UL Listing.

Plus, most of our Industrial 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 an Industrial cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Armoring Capabilities

Belden also has the capability to protect electronic, instrumentation and control cables with interlocking armor and smooth or corrugated protective metal tapes.

To Specify Part Number:

1	2	3456
Overall Jacket Type	Armor Type	Core Trade Number

Overall Jacket Type Armor Type

Code	Material	Code	Material
1	PVC	2	Aluminum Interlock
3	CPE	3	Steel Interlock
4	TPE		
5	HDPE		
6	Oil Res II		
7	Haloarrest® I		

PLC/DCS Cable Cross Reference Guide

Part No.	Description
ABB/Bailey Controls	
Infinet	
9880	Network Trunk Cable
9463	Blue Hose® (Standard)
Masterpiece 200	
9880	Network Trunk Cable
9907	Thin Network Trunk Cable
MICRO-DCI	
3105A	1 Pair, RS-485
MICROLINK	
9860	Twinax, 16 AWG, 124 Ohm
Modcell	
3105A	1 Pair, RS-485
Allen-Bradley/Rockwell Automation	
ControlNet™	
See Protocol listings on page 15.4.	
DeviceNet™	
See Protocol listings on page 15.4.	
DH	
9463	Blue Hose (Standard)
9463F	Flexible Version (9463)
129463	Aluminum Armor (9463)
139463	Steel Armor (9463)
189463	Cast Aluminum (9463)
YR28826	Dual Version (9463)
9463DB	Direct Burial (9463)
YR29565	Various Color Jackets (9463)
3072F	600V TC Rated (9463)
YR41101	Low Smoke, Halogen Free
YR28764	Super Thick (PLTC)
89463	FEP* 200°C, Plenum
DH-485	
3074F	600V Tray Cable
3106A	1.5 Pair, RS-485 (PLTC)
9842	2 Pair, RS-485
YM39500	Flexible Version (3106A)
Longline Communications	
8723	Interface Cable
88723	Plenum Version
Cutler-Hammer/Westinghouse	
IMPACC System	
YR29090	Proprietary Trunk Cable
I/Q System	
9463	Blue Hose (Standard)

*Fluorinated Ethylene-propylene

ControlNet is a ControlNet International trademark.

DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.

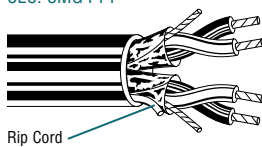


Instrumentation Cable

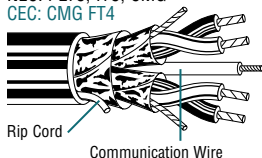
300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs/Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm


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


Individually Shielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	9328	2	E2	500 1000	152.4 304.8	22.5 46.0	10.2 20.9	.042	1.07	.323	8.20	54	240	3.00	76.20
	9329	3	E2	500 1000	152.4 304.8	29.0 60.0	13.2 27.3	.042	1.07	.341	8.66	54	240	3.50	88.90
	9330	4	E2	500 1000	152.4 304.8	37.0 72.0	16.8 32.7	.042	1.07	.372	9.45	65	289	3.50	88.90
	9331	6	E2	500 1000	152.4 304.8	54.0 108.0	24.5 49.1	.053	1.35	.457	11.61	101	449	4.33	109.98
	9332	9	E2	500 1000	152.4 304.8	75.0 145.0	34.1 65.9	.053	1.35	.530	13.46	160	711	5.00	127.00
	9333	11	E2	500 1000	152.4 304.8	89.0 177.0	40.5 80.5	.053	1.35	.592	15.04	160	711	5.50	139.70
	9335	19	E2	500 1000	152.4 304.8	141.5 287.0	64.3 130.5	.063	1.60	.711	18.06	264	1174	6.50	165.10
	9337	51	E2	500 1000	152.4 304.8	392.5 741.0	178.4 336.8	.074	1.88	1.132	28.75	658	2927	10.00	254.00

22 AWG Pairs Stranded (7x30) Bare Copper* • Twisted Pairs

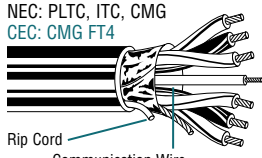
Individually Shielded + Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	3001A	2	E1	Bulk	Bulk	—	—	.042	1.07	.324	8.23	54	240	3.25	82.55
	3005A	4	E1	Bulk	Bulk	—	—	.043	1.09	.360	9.14	115	511	3.50	88.90
	3007A	8	E1	Bulk	Bulk	—	—	.053	1.35	.497	12.62	250	1112	5.25	133.35
	3009A	12	E1	Bulk	Bulk	—	—	.053	1.35	.570	14.48	300	1334	5.75	146.05
	3011A	16	E1	Bulk	Bulk	—	—	.064	1.63	.674	17.12	350	1557	6.25	158.75
	3013A	24	E1	Bulk	Bulk	—	—	.065	1.65	.800	20.32	540	2402	8.00	203.20
	3015A	50	E1	Bulk	Bulk	—	—	.075	1.91	1.050	26.67	1330	5916	10.50	266.70

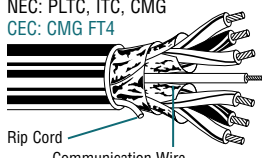
22 AWG Triads Stranded (7x30) Tinned Copper • Twisted Triads

Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	9491	1	E1	U-500 U-1000	U-152.4 U-304.8	12.0 24.0	5.5 10.9	.037	.94	.208	5.28	29	129	2.00	50.80
															

Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	9363	1	E1	U-500 U-1000	U-152.4 U-304.8	13.5 26.0	6.1 11.8	.037	.94	.210	5.33	29	129	2.00	50.80
															

22 AWG Triads Stranded (7x30) Bare Copper* • Twisted Triads

Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	3002A	2	E1	Bulk	Bulk	—	—	.043	1.09	.330	8.38	62	275	3.50	88.90
															

Individually Shielded + Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	3003A	2	E1	Bulk	Bulk	—	—	.043	1.09	.330	8.38	82	364	3.25	82.55
															

F-R = Flame-retardant

*For tinned copper conductors, order with B suffix.

E1, E2 = Refer to Industrial Technical Information section for color code. Alternate color coding available upon request. • Multiple pair or triad cables have each pair/triad numbered for ease of identification.

Bulk = Non-stocked item. Specify length, 1 piece per reel.



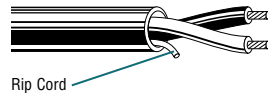
Instrumentation Cable

300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

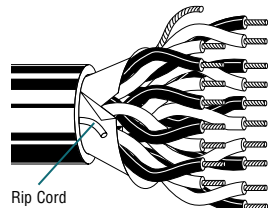
18 AWG Pairs Stranded (19x30) Tinned Copper • Twisted Pairs

Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	9409	1	E2	U-500	U-152.4	14.5	6.6	.037	.94	.230	5.84	49	218	2.25	57.15



Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket

NEC: PLTC, ITC, CMG CEC: CMG FT4	9318	1	E2	U-500	U-152.4	18.0	8.2	.037	.94	.233	5.92	60	267	2.25	57.15
				U-1000	U-304.8	35.0	15.9								
	9552	2	E2	500	152.4	35.5	16.1	.042	1.07	.375	9.53	65	289	3.75	95.25
				1000	304.8	69.0	31.4								
	9553	3	E2	500	152.4	48.5	22.0	.053	1.35	.420	10.67	145	645	4.25	107.95
				1000	304.8	95.0	43.2								
	9554	4	E2	500	152.4	55.0	25.0	.053	1.35	.447	11.35	187	832	4.50	114.30
				1000	304.8	109.0	49.5								
	9556	6	E2	500	152.4	78.5	35.7	.053	1.35	.497	12.62	270	1201	5.00	127.00
				1000	304.8	153.0	69.5								
	9559	9	E2	500	152.4	107.5	48.9	.053	1.35	.579	14.71	395	1757	6.00	152.40
				1000	304.8	213.0	96.8								
	9563	11	E2	500	152.4	134.5	61.1	.063	1.60	.665	16.89	478	2126	6.75	171.45
				1000	304.8	273.0	124.1								
	9565	15	E2	500	152.4	169.0	76.8	.063	1.60	.739	18.77	640	2847	7.50	190.50
				1000	304.8	342.0	155.5								



Individually Shielded • F-R PVC Insulation • F-R PVC Jacket

NEC: PLTC, ITC, CMG CEC: CMG FT4	9368	2	E2	500	152.4	37.5	17.0	.042	1.07	.378	9.60	125	556	3.75	95.25
				1000	304.8	73.0	33.2								
	9369	3	E2	500	152.4	55.0	25.0	.053	1.35	.423	10.74	220	979	4.25	107.95
				1000	304.8	109.0	49.5								
	3029A	4	E1	Bulk	Bulk	—	—	.053	1.35	.461	11.71	296	1317	4.50	114.30
	9388	4	E2	500	152.4	71.5	32.5	.053	1.35	.461	11.71	296	1317	4.50	114.30
				1000	304.8	135.0	61.4								
	9389	6	E2	500	152.4	97.0	44.1	.053	1.35	.538	13.67	440	1957	5.25	133.35
				1000	304.8	190.0	86.4								
	9390	9	E2	500	152.4	138.5	63.0	.064	1.63	.652	16.56	666	2963	6.50	165.10
				1000	304.8	272.0	123.6								
	9391	11	E2	500	152.4	158.5	72.0	.064	1.63	.729	18.52	815	3626	7.25	184.15
				1000	304.8	321.0	145.9								
	9392	15	E2	500	152.4	209.0	95.0	.064	1.63	.808	20.52	1100	4893	8.00	203.20
				1000	304.8	428.0	194.5								

F-R = Flame-retardant

E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

Bulk = Non-stocked item. Specify length, 1 piece per reel.



PVC

UL AWM Style 1015 600V, 105°C

(CSA Type TEW)
(JQA-F-)

VW-1

Product Description

Tinned copper, PVC insulated. Rated 105°C, 600V. Rated 2500V peak for electronic circuits, and internal wiring of electronic and electrical equipment.



Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	

600V, 105°C (UL & CSA)

UL AWM Style 1015 • CSA Type TEW • JQA-F-										
9924	24 (7x32)	.030	.76	.088	2.24	100	30.5	.7	.3	1-5, 9, 10, 13
						1000	304.8	6.0	2.7	1-5, 7-10, 13
						5000	1524.0	25.0	11.4	1-5, 7-10, 13
8920	22 (7x30)	.030	.76	.093	2.36	100	30.5	.8	.4	1-5, 9, 10, 13
						1000	304.8	7.0	3.2	1-5, 7-10, 13
						5000	1524.0	30.0	13.6	1-5, 7-10, 13
8919	20 (10x30)	.030	.76	.100	2.54	100	30.5	.9	.4	1-5, 9, 10, 13
						1000	304.8	8.0	3.6	1-5, 7-10, 13
						5000	1524.0	40.0	18.2	1-5, 7-10, 13
8918	18 (16x30)	.030	.76	.110	2.79	100	30.5	1.2	.5	1-5, 9, 10, 13, 189
						1000	304.8	10.0	4.5	1-5, 7-10, 13, 189
						5000	1524.0	50.0	22.7	1-5, 7-10, 13
8915	18 (solid)	.030	.76	.105	2.67	1000	304.8	10.0	4.5	1-5, 7-10, 13
						5000	1524.0	50.0	22.7	1-5, 7-10, 13
8917	16 (26x30)	.030	.76	.123	3.12	100	30.5	2.2	1.0	1-5, 9, 10, 13, 189
						500	152.4	8.0	3.6	1-5, 9, 10, 13
						1000	304.8	14.0	6.4	1-5, 7-10, 13, 189
8916	14 (41x30)	.030	.76	.138	3.51	100	30.5	2.8	1.3	1-5, 7-10, 13, 189
						500	152.4	10.5	4.8	1-5, 7-10, 13, 189
						4000	1219.2	80.0	36.4	1-5, 7-10, 13
9912	12 (65x30)	.030	.76	.158	4.01	100	30.5	3.7	1.7	1-5, 7-10, 13
						250	76.2	7.8	3.5	1-5, 7-10, 13
						2000	609.6	60.0	27.3	1-5, 7-10, 13
9910	10 (65x28)	.030	.76	.180	4.57	100	30.5	5.1	2.3	2, 4, 9, 10
						250	76.2	11.8	5.3	2, 4, 9, 10
						2000	609.6	86.0	39.1	2, 9, 10
8910	10 (105x30)	.030	.76	.186	4.72	500	152.4	23.5	10.7	1-5, 7-10, 13
						2000	609.6	92.0	41.8	1-5, 7-10, 13

UL AWM Style 1015 600V, 105°C

(CSA Type TEW)
(JQA-F-)

VW-1

Product Description

Uni-Strand® conductors.

Recommended maximum baking cycles:
48 hours @ 275°F (135°C) • 24 hours @ 300°F (149°C)



Stranded tinned copper conductor (Uni-Strand®)

Part No.	AWG (stranding) [sq. mm] (stranding in mm)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	

600V, 105°C (UL & CSA)

UL AWM Style 1015 • CSA Type TEW • JQA-F-										
32722	22 (7x30) [.36 (7x.25)]	.030	.76	.093	2.36	5000	1524.0	30.0	13.6	2, 4, 8, 9, 10, 13
						32720	20 (7x28) [.56 (7x.32)]	.030	.76	.099
32718	18 (7x26) [.90 (7x.40)]	.030	.76	.108	2.74	4000	1219.2	44.0	20.0	2-5, 7, 9, 10, 13



Teflon® High-Temperature

UL AWM Style 1371 — 105°C
(Type E) MIL-W-16878/4
Teflon — 600V, 200°C
VW-1

Product Description

Stranded silver-coated copper conductor insulated with extruded TFE Teflon.



UL AWM Style 1371 — 105°C
(Type ET) MIL-W-16878/6
Teflon — 250V, 200°C
VW-1

Product Description

Stranded silver-coated copper conductor insulated with extruded TFE Teflon.



Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	

105°C (UL) • 600V, 200°C (MIL-Spec)

UL AWM Style 1371 • (Type E) MIL-W-16878/4 — Teflon										
83009*	18 (19x30)	.011	.28	.068	1.73	100 [†]	30.5	1.0	.5	1-10
						500 [†]	152.4	4.5	2.0	1-10
						1000 [†]	304.8	9.0	4.1	1-10
83010*	16 (19x29)	.012	.30	.076	1.93	100 [†]	30.5	1.2	.5	1-10
						500 [†]	152.4	6.0	2.7	1-10
						1000 [†]	304.8	11.0	5.0	1-10

*Complies with MIL-W-16878 except stranding.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

105°C (UL) • 250V, 200°C (MIL-Spec)

UL AWM Style 1371 • (Type ET) MIL-W-16878/6 — Teflon										
83041	32 (7x40)	.006	.15	.022	.56	100 [†]	30.5	.1	.05	6, 7, 10
						1000 [†]	304.8	1.0	.50	6, 7, 10
83043	30 (7x38)	.006	.15	.024	.61	100 [†]	30.5	.1	.05	2, 5, 7-10
						1000 [†]	304.8	1.0	.50	2, 5, 7, 9, 10
83045	28 (7x36)	.006	.15	.027	.69	100 [†]	30.5	.1	.05	1, 2, 5, 6, 9, 10
						1000 [†]	304.8	1.0	.50	1, 2, 5, 6, 9, 10
83046	26 (7x34)	.006	.15	.031	.79	100 [†]	30.5	.2	.10	1-4, 6-9
						1000 [†]	304.8	2.0	.90	1-4, 6-10
83047	24 (7x32)	.006	.15	.036	.91	100 [†]	30.5	.2	.10	6, 8-10
						1000 [†]	304.8	2.0	.90	2, 6, 8-10
83048	24 (19x36)	.006	.15	.036	.91	100 [†]	30.5	.2	.10	1-3, 5, 7, 8, 10
						1000 [†]	304.8	2.0	.90	1-3, 5, 7, 8, 10
83049	22 (7x30)	.006	.15	.042	1.07	100 [†]	30.5	.3	.10	1-10
						1000 [†]	304.8	4.0	1.80	1-10
83050	22 (19x34)	.006	.15	.042	1.07	100 [†]	30.5	.3	.10	1-3, 5-9
						1000 [†]	304.8	4.0	1.80	1-3, 5-9

†Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.



EPDM

High-Temperature

UL AWM Style 3340 and 3374 600V, 125°C Flex/150°C No Flex (CSA Type CL1254)

Product Description

The insulation used for this High-Temperature lead wire is a chemically cross-linked ethylene-propylene diene elastomer. Never before could you find many of the characteristics that are found in Silicone and Hypalon® combined into one insulation. This 150°C EPDM wire offers more abrasion resistance than Hypalon... has the temperature rating of Silicone... at a price less than Silicone. EPDM has exceptional qualities that help you achieve new levels of economy and quality. 150°C EPDM wire is recommended for Class 130(B), 155(F) and also in some 180(H) systems. It's UL Recognized under Style 3374 as a 150°C—600V Appliance Wiring Material. The CSA Listing, as a coil lead, is 125°C, 600V. For additional technical information, see Technical Information pages at the end of this section.

Recommended maximum baking cycles:
24 hours @ 350°F (177°C) • 4 hours @ 375°F (190°C)

Stranded Conductor



Stranded tinned copper conductor

Separator Over Conductor



Separator

Part No.	AWG (stranding) (sq. mm) (stranding in mm)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
600V, 125°C Flex/150°C No Flex (UL) • 600V, 125°C (CSA)										
UL AWM Style 3340 and 3374 • CSA Type CL1254										
37118	18 (16x30) [.82 (16x.25)]	.045	1.14	.142	3.61	500 [†]	152.4	7.5	3.4	2, 4, 5, 9, 10, 13
						5000 [†]	1524.0	70.0	31.8	2, 4, 9, 10, 13
37116	16 (26x30) [1.32 (26x.25)]	.045	1.14	.154	3.91	500 [†]	152.4	9.5	4.3	2, 4, 5, 9, 10, 13
						4000 [†]	1219.2	72.0	32.7	10
						5000 [†]	1524.0	90.0	40.9	10
37114	14 (41x30) [2.08 (41x.25)]	.045	1.14	.169	4.29	500 [†]	152.4	12.5	5.7	2, 10
						4000 [†]	1219.2	96.0	43.6	2, 10
						5000 [†]	1524.0	125.0	56.8	10
37112	12 (65x30) [3.29 (65x.25)]	.045	1.14	.190	4.83	500 [†]	152.4	18.0	8.2	2, 10
						3000 [†]	914.4	105.0	47.7	10
						5000 [†]	1524.0	175.0	79.5	10
37110	10 (65x28) [5.23 (65x.32)]	.060	1.52	.240	6.10	500 [†]	152.4	27.5	12.5	10
						2000 [†]	609.6	108.0	49.2	10
						5000 [†]	1524.0	275.0	125.0	10
37108*	8 (84x27) [8.60 (84x.36)]	.080	2.03	.327	8.31	250 [†]	76.2	24.3	11.0	10
						500 [†]	152.4	50.0	22.7	10
						2500 [†]	762.0	235.0	106.8	10
37106*	6 (84x25) [13.66 (84x.46)]	.080	2.03	.383	9.73	100 [†]	30.5	14.2	6.5	10
						250 [†]	76.2	35.0	15.9	10
						500 [†]	152.4	70.5	32.0	10
						2500 [†]	762.0	345.0	156.8	10
37104*	4 (105x24) [21.53 (105x.51)]	.080	2.03	.432	10.97	100 [†]	30.5	20.3	9.2	10
						250 [†]	76.2	51.8	23.5	10
						500 [†]	152.4	98.5	44.8	10
37103*	3 (133x24) [27.28 (133x.51)]	.080	2.03	.453	11.51	100 [†]	30.5	24.4	11.1	10
						250 [†]	76.2	61.8	28.1	10
						500 [†]	152.4	123.6	56.2	10
37102*	2 (163x24) [33.43 (163x.51)]	.080	2.03	.494	12.55	100 [†]	30.5	31.1	14.1	10
						250 [†]	76.2	73.8	33.5	10
						1000 [†]	304.8	286.0	130.0	10
37101*	1 (210x24) [43.07 (210x.51)]	.095	2.41	.583	14.81	100 [†]	30.5	41.0	18.6	10
						250 [†]	76.2	95.0	43.2	10
						1000 [†]	304.8	376.0	170.9	10
37190*	1/0 (262x24) [53.73 (262x.51)]	.095	2.41	.633	16.08	50 [†]	15.2	24.7	11.2	10
						100 [†]	30.5	48.3	22.0	10
						250 [†]	76.2	115.5	52.5	10
						500 [†]	152.4	223.5	101.6	10
37100*	2/0 (504x26) [67.85 (504x.41)]	.095	2.41	.698	17.73	50 [†]	15.2	30.9	14.0	10
						100 [†]	30.5	58.8	26.7	10
						250 [†]	76.2	141.8	64.4	10
						500 [†]	152.4	279.5	127.0	10
37130*	3/0 (630x26) [84.81 (630x.41)]	.095	2.41	.758	19.25	50 [†]	15.2	38.5	17.5	10
						250 [†]	76.2	174.0	79.1	10
						500 [†]	152.4	346.0	157.3	10
37140*	4/0 (805x26) [108.37 (805x.41)]	.095	2.41	.849	21.57	50 [†]	15.2	46.3	21.0	10
						250 [†]	76.2	215.8	98.1	10
						500 [†]	152.4	429.5	195.2	10

*Separator over conductor.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

Hypalon is a DuPont trademark.



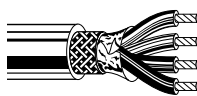
Plenum-Rated Fire Alarm

Power-Limited Fire Protective, Control and Instrumentation Cables

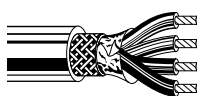
Subject 1424 (NEC Article 760, Type FPLP)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	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

14 AWG Stranded Conductors (7x22) • Tinned Copper • Conductors Cabled • 100% Beldfoil® + 85% Tinned Copper Braid Shield

Plenum • FEP Insulation • Red FEP Jacket																
	200°C, Non-conduit	83752	NEC: FPLP, CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	7.1 33.0 60.0	3.2 15.0 27.4	.016 .41	.015 .38	.267 6.78	30	98	52	171
		83753	NEC: FPLP, CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	44.0 82.0	20.1 37.4	.016 .41	.015 .38	.284 7.21	30	98	52	171
		83754	NEC: FPLP, CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	11.6 54.0 102.0	5.3 24.6 46.5	.016 .41	.015 .38	.311 7.90	30	98	52	171
		83756	NEC: FPLP, CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	15.9 74.5 150.0	7.2 34.0 68.4	.016 .41	.017 .43	.376 9.55	30	98	52	171

12 AWG Stranded Conductors (7x20) • Tinned Copper • Conductors Cabled • 100% Beldfoil + 85% Tinned Copper Braid Shield

Plenum • FEP Insulation • Red FEP Jacket																
	200°C, Non-conduit	83802	NEC: FPLP, CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	9.3 42.5 80.0	4.3 19.4 36.5	.016 .41	.015 .38	.303 7.70	32	105	55	180
		83803	NEC: FPLP, CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	12.4 56.5 111.0	5.7 25.8 50.6	.016 .41	.015 .38	.323 8.20	32	105	55	180
		83804	NEC: FPLP, CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	15.6 73.0 147.0	7.1 33.3 66.8	.016 .41	.017 .43	.359 9.12	32	105	55	180
		83806	NEC: FPLP, CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	21.7 213.0 96.8	9.9 96.8	.016 .41	.017 .43	.430 10.92	32	105	55	180

All cables on this page pass the UL 70,000 BTU Flame Test (comparable to IEEE 383 Flame Test) and are listed by the California State Fire Marshall. Component Recognized UL2464, 300V 80°C.

*Capacitance between conductors.

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

† Spools are one piece, but length may vary ±10% from length shown.




Instrumentation Cable


High-Temperature Thermocouple Extension Cables and Thermocouple Wire


Description	Part No.	ANSI Type	No. of Pairs/Cond.	Color Code	Jacket Color	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
						Ft.	m	Lbs.	kg	Inch	mm	Inch	mm

High-Temp Extension Cable • 20 AWG Solid Conductors • (See chart on page 15.52 for conductor specifications by ANSI Type)


Plenum • Unshielded • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P 	83932	KX	2/c	Yellow, Red	Yellow	500	152.4	7.0	3.2	.010	.25	.076	1.93
						1000	304.8	14.0	6.4			x	x
	83934	TX	2/c	Blue, Red	Blue	1000	304.8	15.0	6.8	.010	.25	.076	1.93
												x	x
												.128	3.25

High-Temp Extension Cable • 20 AWG Stranded (7x28) • (See chart on page 15.52 for conductor specifications by ANSI Type)

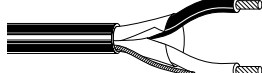
Plenum • Unshielded • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P 	83930	JX	2/c	White, Red	Black	500	152.4	7.5	3.4	.010	.25	.082	2.08
						1000	304.8	15.0	6.8			x	x
												.140	3.56

Plenum • Overall 100% Beldfoil® Shield • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P 	83955	EX	1 pr.	Purple, Red	Purple	500	152.4	9.0	4.1	.010	.25	.145	3.68
						1000	304.8	18.0	8.2				
	83950	JX	1 pr.	White, Red	Black	500	152.4	9.5	4.3	.010	.25	.145	3.68
						1000	304.8	18.0	8.2				
	83952	KX	1 pr.	Yellow, Red	Yellow	500	152.4	9.5	4.3	.010	.25	.145	3.68
						1000	304.8	18.0	8.2				
	83954	TX	1 pr.	Blue, Red	Blue	500	152.4	9.0	4.1	.010	.25	.145	3.68
						1000	304.8	18.0	8.6				

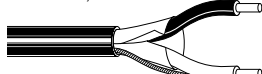
High-Temp Extension Cable • 16 AWG Pairs Solid Conductors • (See chart on page 15.52 for conductor specifications by ANSI Type)

Plenum • Overall 100% Beldfoil Shield • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P 	1114A	EX	1	Purple, Red	Purple	5000	1524.0	160.0	72.7	.010	.25	.172	4.37
	1115A	JX	1	White, Red	Black	5000	1524.0	155.0	70.5	.010	.25	.172	4.37
	1116A	KX	1	Yellow, Red	Yellow	5000	1524.0	160.0	72.7	.010	.25	.171	4.34
	1117A	TX	1	Blue, Red	Blue	5000	1524.0	160.0	72.7	.010	.25	.172	4.37

High-Temp Extension Cable • 16 AWG Pairs Stranded (7x24) • (See chart on page 15.52 for conductor specifications by ANSI Type)

Plenum • Overall 100% Beldfoil Shield • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P 	83951	JX	1	White, Red	Black	500	152.4	17.5	8.0	.010	.25	.189	4.80
						1000	304.8	37.0	16.8				
	83953	KX	1	Yellow, Red	Yellow	500	152.4	18.0	8.2	.010	.25	.187	4.75
						1000	304.8	34.0	15.5				

High-Temp Thermocouple Wire • 20 AWG Solid Conductors • (See chart on page 15.52 for conductor specifications by ANSI Type)

Plenum • Unshielded • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P 	83915	E	2/c	Purple, Red	Brown	500	152.4	8.0	3.6	.010	.25	.076	1.93
						1000	304.8	15.0	6.8			x	x
	83900	J	2/c	White, Red	Brown	100	30.5	2.1	1.0	.010	.25	.076	1.93
						500	152.4	7.5	3.4			x	x
						1000	304.8	14.0	6.4			.128	3.25
	83905	K	2/c	Yellow, Red	Brown	100	30.5	2.1	1.0	.010	.25	.076	1.93
						500	152.4	7.5	3.4			x	x
						1000	304.8	14.0	6.4			.128	3.25
	83910	T	2/c	Blue, Red	Brown	100	30.5	2.1	1.0	.010	.25	.076	1.93
						500	152.4	7.5	3.4			x	x
						1000	304.8	14.0	6.4			.128	3.25

FEP = Fluorinated Ethylene-propylene

Multiple pair cables have each pair numbered for ease of identification.

