

C1

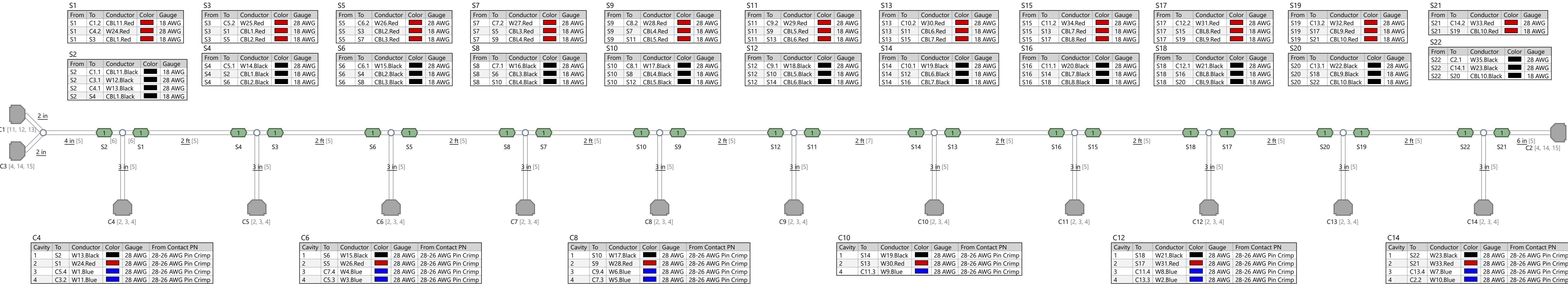
Cavity	To	Conductor	Color	Gauge	From Contact PN
1	S2	CBL11.Black	█	18 AWG	282109-1
2	S1	CBL11.Red	█	18 AWG	282109-1

C3

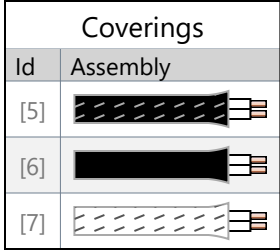
Cavity	To	Conductor	Color	Gauge	From Contact PN
1	S2	W12.Black	█	28 AWG	16-02-0069
2	C4.4	W11.Blue	█	28 AWG	16-02-0069

C2

Cavity	To	Conductor	Color	Gauge	From Contact PN
1	S22	W35.Black	█	28 AWG	16-02-0069
2	C14.4	W10.Blue	█	28 AWG	16-02-0069



























































Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Cable		2 Wire 18 AWG unshielded - Red/Black	≥ 20.5 ft
2	Connector	Molex, LLC	0050579004	11
3	Contact		28-26 AWG Pin Crimp	42
4	Heat Shrink		Generic Heat Shrink	13
5	Sleeving		Black Sleeving	259 in
6	Sleeving		Black Sleeving	
7	Sleeving		White Sleeving	2 ft
8	Wire		UL1061 28 AWG Black	≥ 45 in
9	Wire		UL1061 28 AWG Blue	≥ 288 in
10	Wire		UL1061 28 AWG Red	≥ 33 in
11	Connector	AMP	282104-1	1
12	Contact	AMP	282109-1	2
13	Wire Seal	AMP	281934-2	2
14	Connector	Molex	50-57-9402	2
15	Contact	Molex	16-02-0069	4



<b>Title:</b>	----
<b>Part Number:</b>	----
<b>Description:</b>	----

Id	Type	Manufacturer	Part Number	Description
1	Cable		2 Wire 18 AWG unshielded - Red/Black	Generic Cable
2	Connector	Molex, LLC	0050579004	CONN HOUSING 4POS .100 SINGLE
3	Contact		28-26 AWG Pin Crimp	Generic Contact
4	Heat Shrink		Generic Heat Shrink	Generic Heat Shrink
5	Sleeving		Black Sleeving	Generic Sleeving - Kevlar, Braided
6	Sleeving		Black Sleeving	Generic Sleeving - Kevlar
7	Sleeving		White Sleeving	Generic Sleeving - Kevlar, Braided
8	Wire		UL1061 28 AWG Black	UL 1061 rated 28 AWG Black SR-PVC Hook-up wire
9	Wire		UL1061 28 AWG Blue	UL 1061 rated 28 AWG Blue SR-PVC Hook-up wire
10	Wire		UL1061 28 AWG Red	UL 1061 rated 28 AWG Red SR-PVC Hook-up wire
11	Connector	AMP	282104-1	AMP SUPERSEAL 1.5 SERIES 2P CA
12	Contact	AMP	282109-1	AMP MINI MIC TAB CONTACT
13	Wire Seal	AMP	281934-2	Amp SuperSeal 1.5 Single Wire Seal
14	Connector	Molex	50-57-9402	2 Position Rectangular Housing Connector Receptacle Black 0.100" (2.54mm)
15	Contact	Molex	16-02-0069	Socket Contact Tin 24-30 AWG Crimp

<b>Title:</b>	----
<b>Part Number:</b>	----
<b>Description:</b>	----















































From	To	Conductor	Conductor PN	Twist With	Gauge	Length	From Contact PN	Notes
C1.1	S2	 CBL11.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 6 in	282109-1	
C1.2	S1	 CBL11.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 6 in	282109-1	
C2.1	S22	 W35.Black	UL1061 28 AWG Black		28 AWG	≥ 6 in	16-02-0069	
C2.2	C14.4	 W10.Blue	UL1061 28 AWG Blue		28 AWG	≥ 9 in	16-02-0069	
C3.1	S2	 W12.Black	UL1061 28 AWG Black		28 AWG	6 in	16-02-0069	
C3.2	C4.4	 W11.Blue	UL1061 28 AWG Blue		28 AWG	≥ 9 in	16-02-0069	
C4.1	S2	 W13.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C4.2	S1	 W24.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C4.3	C5.4	 W1.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
C5.1	S4	 W14.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C5.2	S3	 W25.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C5.3	C6.4	 W3.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
C6.1	S6	 W15.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C6.2	S5	 W26.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C6.3	C7.4	 W4.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
C7.1	S8	 W16.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C7.2	S7	 W27.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C7.3	C8.4	 W5.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
C8.1	S10	 W17.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C8.2	S9	 W28.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C8.3	C9.4	 W6.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
C9.1	S12	 W18.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C9.2	S11	 W29.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C10.1	S14	 W19.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C10.2	S13	 W30.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C11.1	S16	 W20.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C11.2	S15	 W34.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C11.3	C10.4	 W9.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
C12.1	S18	 W21.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C12.2	S17	 W31.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C12.3	C11.4	 W8.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
C13.1	S20	 W22.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C13.2	S19	 W32.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C13.3	C12.4	 W2.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
C14.1	S22	 W23.Black	UL1061 28 AWG Black		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C14.2	S21	 W33.Red	UL1061 28 AWG Red		28 AWG	≥ 3 in	28-26 AWG Pin Crimp	
C14.3	C13.4	 W7.Blue	UL1061 28 AWG Blue		28 AWG	≥ 30 in	28-26 AWG Pin Crimp	
S1	S3	 CBL1.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S2	S4	 CBL1.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S3	S5	 CBL2.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S4	S6	 CBL2.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S5	S7	 CBL3.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S6	S8	 CBL3.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S7	S9	 CBL4.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S8	S10	 CBL4.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S9	S11	 CBL5.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S10	S12	 CBL5.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S11	S13	 CBL6.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S13	S15	 CBL7.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S14	S12	 CBL6.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S14	S16	 CBL7.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S15	S17	 CBL8.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S16	S18	 CBL8.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S17	S19	 CBL9.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S18	S20	 CBL9.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		
S19	S21	 CBL10.Red	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		

Title:	----
Part Number:	----
Description:	----



From	To	Conductor	Conductor PN	Twist With	Gauge	Length	From Contact PN	Notes
S20	S22	█ CBL10.Black	2 Wire 18 AWG unshielded - Red/Black		18 AWG	≥ 2 ft		

<b>Title:</b>	----
<b>Part Number:</b>	----
<b>Description:</b>	----

#	Type	Reference Designator	Manufacturer	Part Number	Color	Gauge	Length	Twisted With
1	Cable	CBL1		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
2	Cable	CBL2		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
3	Cable	CBL3		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
4	Cable	CBL4		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
5	Cable	CBL5		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
6	Cable	CBL6		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
7	Cable	CBL7		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
8	Cable	CBL8		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
9	Cable	CBL9		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
10	Cable	CBL10		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 2 ft	
11	Cable	CBL11		2 Wire 18 AWG unshielded - Red/Black	 White		≥ 6 in	
12	Wire	W1		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
13	Wire	W2		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
14	Wire	W3		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
15	Wire	W4		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
16	Wire	W5		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
17	Wire	W6		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
18	Wire	W7		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
19	Wire	W8		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
20	Wire	W9		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 30 in	
21	Wire	W10		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 9 in	
22	Wire	W11		UL1061 28 AWG Blue	 Blue	28 AWG	≥ 9 in	
23	Wire	W12		UL1061 28 AWG Black	 Black	28 AWG	6 in	
24	Wire	W13		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
25	Wire	W14		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
26	Wire	W15		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
27	Wire	W16		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
28	Wire	W17		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
29	Wire	W18		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
30	Wire	W19		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
31	Wire	W20		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
32	Wire	W21		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
33	Wire	W22		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
34	Wire	W23		UL1061 28 AWG Black	 Black	28 AWG	≥ 3 in	
35	Wire	W24		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
36	Wire	W25		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
37	Wire	W26		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
38	Wire	W27		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
39	Wire	W28		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
40	Wire	W29		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
41	Wire	W30		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
42	Wire	W31		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
43	Wire	W32		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
44	Wire	W33		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
45	Wire	W34		UL1061 28 AWG Red	 Red	28 AWG	≥ 3 in	
46	Wire	W35		UL1061 28 AWG Black	 Black	28 AWG	≥ 6 in	

Title:	----
Part Number:	----
Description:	----



#	Manufacturer	Part Number	Description	Label Text