

MIL-C-22992, QWLD

insert arrangements

Insert Arrangement		Service Rating	Total Con- tacts	Contact Size				
MS Approved	Industrial			0	4	8	12	16
12-5		D	1				1	
	12-48	A	3					3
	12-49	A	2					2
14-3		A	1			1		
	14-53	Inst.	6					6
16-2		E	1				1	
16-7		A	3			1		2
16-9		A	4				2	2
16-10		A	3				3	
16-11		A	2				2	
16-12		A	1		1			
16-13		A	2				2	
	16-61	A	7				7	
18-1		B, C, F, G = A; Bal. = Inst.	10					10
	18-3	D	2				2	
18-4		D	4					4
18-5		D	3				2	1
18-6		D	1		1			
18-7		B	1			1		
18-8		A	8				1	7
18-9		Inst.	7				2	5
	18-10	A	4				4	
18-11		A	5				5	
	18-12	A	6					6
18-13		A	4			1	3	
18-14		A	2		1			1
18-15		A	4				4	
18-16		C	1				1	
	18-17	Inst.	7				2	5
	18-19	A	10					10
	18-20	A	5					5
	18-22	D	3					3
	18-24	B, C, F, G = A; Bal. = Inst.	10					10
	18-29	A	5					5
	18-30	A	5					5
	18-31	A	5					5
20-2		D	1	1				
	20-3	D	3				3	
20-4		D	4				4	
	20-6	D	3					3
20-7		A, B, H, G = D; C, D, E, F = A	8					8
20-8		Inst.	6			2		4

Insert Arrangement		Service Rating	Total Con- tacts	Contact Size				
MS Approved	Industrial			0	4	8	12	16
20-9		H = D; Bal. = A	8				1	7
	20-11	Inst.	13					13
	20-12	A	2		1			1
20-14		A	5			2	3	
20-15		A	7				7	
20-16		A	9				2	7
20-17		A	6				5	1
20-18		A	9				3	6
	20-19	A	3			3		
	20-20	A	4		1		3	
20-21		A	9				1	8
20-22		A	6			3		3
	20-23	A	2			2		
20-24		A	4			2		2
	20-25	Inst.	13					13
20-27		A	14					14
20-29		A	17					17
	20-30	Inst.	13					13
20-33		A	11					11
	22-1	D	2			2		
22-2		D	3			3		
	22-4	A	4			2	2	
22-5		D	6				2	4
	22-6	D	3			2		1
22-7		E	1	1				
	22-8	E	2				2	
22-9		E	3				3	
22-10		E	4					4
22-11		B	2					2
22-12		D	5			2		3
	22-13	E = D; A, B, C, D = A	5				4	1
22-14		A	19					19
22-15		D = E; A, B, C, E, F = A	6				5	1
	22-16	A	9				3	6
22-17		A = D; Bal. = A	9				1	8
22-18		A, B, F, G, H = D; C, D, E = A	8					8
22-19		A	14					14
	22-20	A	9					9
22-21		A	3	1				2
22-22		A	4			4		
22-23		H = D; Bal. = A	8				8	
	22-24	C, D, E = D; A, B, F = A	6				2	4

MIL-C-22992, QWLD

insert arrangements

Insert Arrangement		Service Rating	Total Contacts	Contact Size				
MS Approved	Industrial			0	4	8	12	16
22-27		J = D; Bal. = A	9			1		8
	22-28	A	7				7	
	22-33	A, B, C, D = D; E, F, G = A	7					7
	22-34	D	5				3	2
22-36		H = D; Bal. = A	8				8	
24-2		D	7				7	
	24-3	D	7				2	5
	24-5	A	16					16
24-6		A, G, H = D; Bal. = A	8				8	
24-7		A	16				2	14
	24-9	A	2		2			
24-10		A	7			7		
24-11		A	9			3	6	
24-12		A	5		2		3	
24-16		A, B, F, G = D; C, D, E = A	7			1	3	3
	24-17	D	5				2	3
24-20		D	11				2	9
24-21		D	10			1		9
24-22		D	4			4		
24-27		E	7					7
24-28		Inst.	24					24
28-1		A, J, E = D; Bal. = A	9			3	6	
28-2		D	14				2	12
28-3		E	3			3		
28-4		G, P, S = E; Bal. = D	9				2	7
28-5		D	5		2		1	2
	28-6	D	3		3			
	28-7	D	2		2			
28-8		L, M = E; B = D; Bal. = A	12				2	10
28-9		D	12				6	6
28-10		G = D; Bal. = A	7		2	2	3	
28-11		A	22				4	18
28-12		A	26					26
	28-13	A	26					26
28-15		A	35					35
	28-16	A	20					20
28-17		R = B; M, N, P = D; A to L = A	15					15
28-18		M = C; G, H, J, K, L = D; A, B = H; Bal. = Inst.	12					12
28-19		H, M = B; A, B = D; Bal. = A	10				4	6
28-20		A	14				10	4

Insert Arrangement		Service Rating	Total Contacts	Contact Size				
MS Approved	Industrial			0	4	8	12	16
28-21		A	37					37
28-22		D	6		3			3
32-1		A = E; Bal. = D	5	2			3	
32-2		E	5		3			2
32-3		D	9	1	2		2	4
	32-4	F, J, K, N = A; Bal. = D	14				2	12
	32-5	D	2	2				
32-6		A	23		2	3	2	16
32-7		A, B, h, j = Inst.; Bal. = A	35				7	28
	32-8	A	30				6	24
32-9		D	14		2			12
	32-10	A, F = E; G = B; B, E = D; C, D = A	7		2	2		3
	32-12	C, D, E, F, G = A; Bal. = D	15				5	10
32-13		D	23				5	18
32-15		D	8	2			6	
	32-16	A	23		2	3	2	16
32-17		D	4		4			
32-73		A	46					46
	36-1	D	22				4	18
36-3		D	6	3			3	
	36-4	A = D; B, C = A	3	3				
36-5		A	4	4				
36-6		A	6	2	4			
36-7		A	47				7	40
36-8		A	47				1	46
36-9		A	31		1	2	14	14
36-10		A	48					48
	36-11	A	48					48
	36-12	A	48					48
	36-13	N, P, Q = E; Bal. = A	17				2	15
	36-14	D	16			5	5	6
36-15		M = D; Bal. = A	35					35
	36-16	A	47				7	40
	36-17	A	47				7	40
	36-18	A	31		1	2	14	14
	36-20	A	34			2	2	30
36-52		A	52					52
40-1		D	30				6	24
40-9		A	47			1	22	24
40-56		A	85					85
44-52		A	104					104

QWLD

special insert arrangements

Insert Arrange- ment	Service Rating	Total Con- tacts	Contact Size									
			0	4	8	12	16	Coax**				
								0	4	8	12	
16-59	A	4				4						
20-51	A	3			3							
20-57	A	7				7*						
20-58	A	10				5	5					
20-59	A	3			3*							
20-66	A	6				5*	1					
20-79	A/D	8				1	7					
22-63	A	12				4	8					
22-65	A/D	8				8*						
22-70	A	13				8	5					
22-80	A	3			3*							
24-51	A	5			5							
24-52	Hi Volt.	1				1						
24-53	A	5			5							
24-58	A	13			3	3	7					
24-59	A	14				7	7					
24-60	A	7			7*							
24-65	A	15				11	4					
24-66	D	7				7						
24-67	Inst.	19				19						
24-71	A	7			7*							
24-75	A	7			7*							
24-79	A	5			5							
24-80	Inst.	23					23					
24-84	A	19				1						18
28-51	A	12				12						
28-59	A	17				7	10					
28-66	A	16			2	14						
28-72	Coax	3							3			
28-74	A	16			7*		9					
28-75	A	16			7*		9					
28-79	A	16			7		9					
28-82	D	6			2	4						
28-84	A	9			9							
32-52	D	8	2			6						
32-53	Inst./E	42				5	37					
32-56	A	30				6*	24					
32-57	Coax	8				6		2				
32-58	Coax	4							4			
32-60	A	23					15			8		
32-62	Coax	23		2	1	2	16			2		
32-64	Inst.	54					54					
32-68	A	16					12	4				
32-75	Coax	9				2				7		
32-76	A	19				19						
32-79	D	5		4	1							

Insert Arrange- ment	Service Rating	Total Con- tacts	Contact Size									
			0	4	8	12	16	Coax**				
								0	4	8	12	
36-51	D	4	2	2								
36-54	A	39			8		31					
36-55	A	39			8*		31					
36-59	A	53				3*	50					
36-60	A	47				7*	40					
36-64	Coax	4						4				
36-65	Coax	4						4				
36-71	A	53				3	50					
36-73	Coax	7							7			
36-74	A	44					43			1		
36-75	A	48					48*					
36-76	A	47					47					
36-77	D	7		7								
36-78	A	14			12		2					
36-79	A	20				20						
36-80	A	20				20*						
36-83	Coax	7							7			
36-85	A/D	35					35*					
40-53	A	60					60					
40-57	E	4	4									
40-61	A	59			1	3	55					
40-62	A	60					60					
40-63	A	61					61*					
40-64	Coax	36				3	20			13		
40-66	Coax	4						4				
40-67	A	11					1		10			
40-68	A	21			21							
40-70	A	61					61					
40-72	A	11					1		10			
40-73	A	61					61					
40-74	A	6				1		4	1			
40-75	E	5	4			1						
40-80	A	11		10			1					
40-81	A	62					62*					
40-82	A	62					62					
40-85	A	60					60*					
40-86	E	4						4				
40-87	D	7		7								
44-53	A	36					18			18		
48-51†	A	56			10		42	4				
48-52†	A	61					56	5				
48-53†	D	37				37						
48-54†	A	56			10		42	4				
48-55†	A	78		6	2	2	68					
48-57†	A	56	4		10		42					
48-60†	A	56			10		42	4				

* Crimp contacts accommodate wire the same size as the contact as well as wire of the next smaller, even size. Arrangements identified with an asterisk (*) are exceptions. See insert arrangement drawings on pages 39-47 for application wire size.

** Coaxial cable data can be found on insert arrangement drawings, pages 39-47. For further information on coaxial contacts and cable see catalog 12-130.

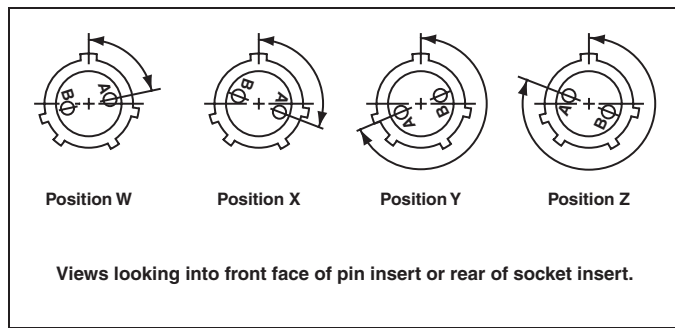
† Consult Sidney, NY for availability.

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alternate insert rotations

To avoid cross-plugging problems in applications requiring the use of more than one connector of the same size and arrangement, alternate insert rotations are available as indicated in the accompanying chart.

As shown in the diagram below, the front face of the pin insert is rotated within the shell in a clockwise direction from the normal shell key. The socket insert would be rotated counterclockwise the same number of degrees in respect to the normal shell key.



The following insert arrangements have the same alternate insert rotations for W, X, Y and Z which are:

Degrees			
W	X	Y	Z
80	110	250	280

16-7	20-14	22-16	24-3	24-21	28-16	32-9
18-5	20-16	22-17	24-4	24-28	28-17	32-10
18-9	20-20	22-18	24-5	28-1	28-19	32-12
18-13	20-22	22-19	24-6	28-4	28-20	32-13
18-14	22-3	22-21	24-7	28-8	28-21	36-1
20-7	22-6	22-24	24-12	28-9	32-1	36-7
20-8	22-12	22-25	24-16	28-10	32-3	36-8
20-9	22-14	22-33	24-17	28-11	32-4	36-13
20-12	22-15	22-34	24-20	28-15	32-6	

Insert Arrangement	Degrees			
	W	X	Y	Z
16-9	35	110	250	325
16-10	90	180	270	—
16-11	35	110	250	325
16-13	35	110	250	325
16-61	80	—	—	280
18-1	70	145	215	290
18-3	35	110	250	325
18-4	35	110	250	325
18-8	70	—	—	290
18-10	—	120	240	—
18-11	—	170	265	—
18-12	80	—	—	280
18-15	—	120	240	—
18-19	—	120	240	—
18-20	90	180	270	—
18-22	70	145	215	290
18-29	90	180	270	—
20-3	70	145	215	290
20-4	45	110	250	—
20-5	35	110	250	325
20-6	70	145	215	290
20-15	80	—	—	280
20-17	90	180	270	—
20-18	35	110	250	325
20-19	90	180	270	—
20-21	35	110	250	325
20-23	35	110	250	325

Insert Arrangement	Degrees			
	W	X	Y	Z
20-24	35	110	250	325
20-27	35	110	250	325
20-29	80	—	—	280
22-1	35	110	250	325
22-2	70	145	215	290
22-4	35	110	250	325
22-5	35	110	250	325
22-8	35	110	250	325
22-9	70	145	215	290
22-10	35	110	250	325
22-11	35	110	250	325
22-13	35	110	250	325
22-20	35	110	250	325
22-22	—	110	250	—
22-23	35	—	250	—
22-27	80	—	250	280
22-28	80	—	—	280
22-36	90	—	270	—
24-2	80	—	—	280
24-9	35	110	250	325
24-10	80	—	—	280
24-11	35	110	250	325
24-22	45	110	250	—
24-27	80	—	—	280
28-2	35	110	250	325
28-3	70	145	215	290
28-5	35	110	250	325

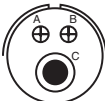
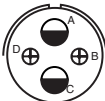
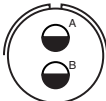
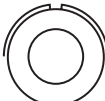
Insert Arrangement	Degrees			
	W	X	Y	Z
28-6	70	145	215	290
28-7	35	110	250	325
28-12	90	180	270	—
28-18	70	145	215	290
28-22	70	145	215	290
32-2	70	145	215	290
32-5	35	110	250	325
32-7	80	125	235	280
32-8	80	125	235	280
32-15	35	110	250	280
32-17	45	110	250	—
32-73	36	—	—	—
36-3	70	145	215	290
36-4	70	145	215	290
36-5	—	120	240	—
36-6	35	110	250	325
36-9	80	125	235	280
36-10	80	125	235	280
36-14	90	180	270	—
36-15	60	125	245	305
36-52	72	144	216	288
40-1	65	130	235	300
40-9	65	125	225	310
40-56	72	144	216	288
44-52	72	135	225	288

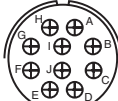
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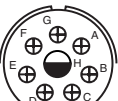
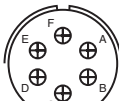
contact arrangements

front face of pin insert or rear of socket insert illustrated

						
Insert Arrangement	12-5	12-48	12-49	14-3	14-53	16-2
Service Rating	D	A	A	A	Inst.	E
Number of Contacts	1	3	2	1	6	1
Contact Size	12	16	16	8	16	12

						
Insert Arrangement	16-7	16-9	16-10	16-11	16-12	16-13
Service Rating	A	A	A	A	A	A
Number of Contacts	1 2	2 2	3	2	1	2*
Contact Size	8 16	12 16	12	12	4	12

						
Insert Arrangement	16-61	18-1	18-3	18-4	18-5	18-6
Service Rating	A	B, C, F, G = A; Bal. = Inst.	D	D	D	D
Number of Contacts	7	10	2	4	2 1	1
Contact Size	16	16	12	16	12 16	4

						
Insert Arrangement	18-7	18-8	18-9	18-10	18-11	18-12
Service Rating	B	A	Inst.	A	A	A
Number of Contacts	1	1 7	2 5	4	5	6
Contact Size	8	12 16	12 16	12	12	16

CONTACT LEGEND

 16
  12
  8
  4
  0

*A = Iron; B = Constantan

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contact arrangements

front face of pin insert or rear of socket insert illustrated

	100° Rotation of 18-9					
Insert Arrangement	18-13	18-14	18-15	18-16	18-17	18-19
Service Rating	A	A	A	C	Inst.	A
Number of Contacts	1 3	1 1	4**	1	2 5	10
Contact Size	8 12	4 16	12	12	12 16	16

			250° Rotation of 18-1		110° Rotation of 18-20	260° Rotation of 18-20
Insert Arrangement	18-20	18-22	18-24	18-29	18-30	18-31
Service Rating	A	D	B, C, F, G = A, Bal. = Inst.	A	A	A
Number of Contacts	5	3	10	5	5	5
Contact Size	16	16	16	16	16	16

Insert Arrangement	20-2	20-3	20-4	20-6	20-7	20-8
Service Rating	D	D	D	D	A, B, H, G = D; C, D, E, F = A	Inst.
Number of Contacts	1	3	4	3	8	2 4
Contact Size	0	12	12	16	16	8 16

**A, C = Iron; B, D = Constantan

CONTACT LEGEND

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●

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⊗

16

12

8

4

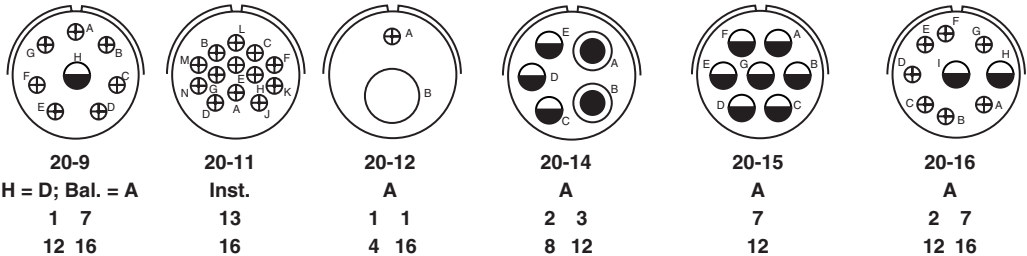
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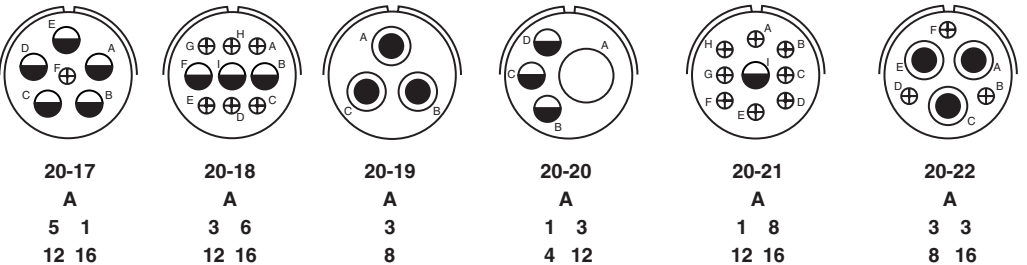
contact arrangements

front face of pin insert or rear of socket insert illustrated

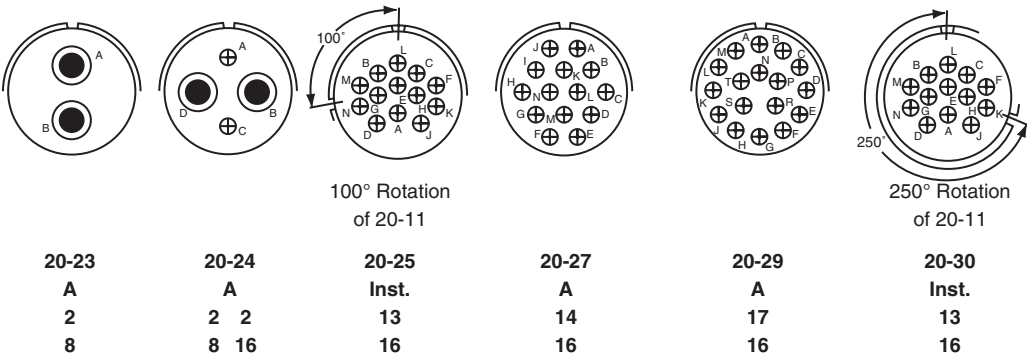
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Service Rating
Number of Contacts
Contact Size



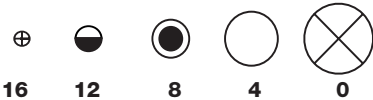
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



Insert Arrangement
Service Rating
Number of Contacts
Contact Size



CONTACT LEGEND

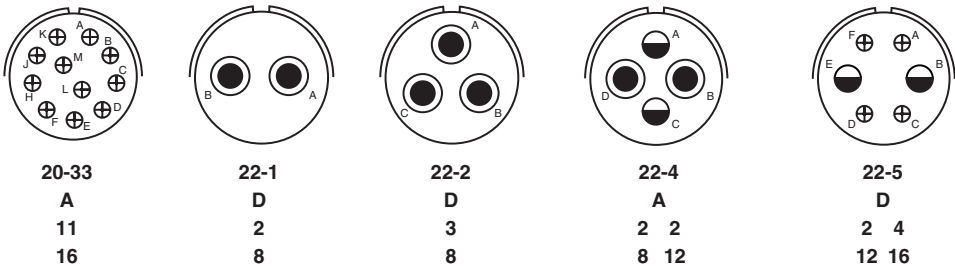


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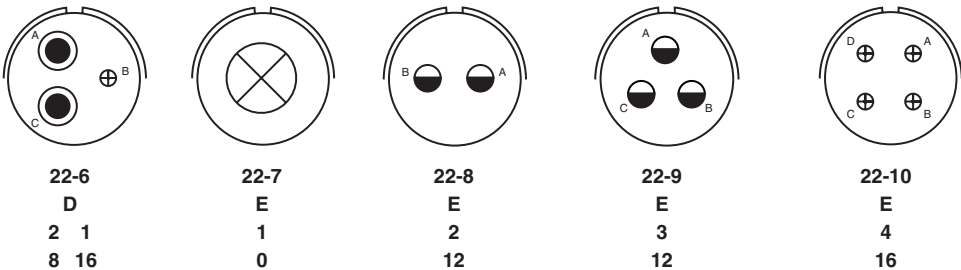
contact arrangements

front face of pin insert or rear of socket insert illustrated

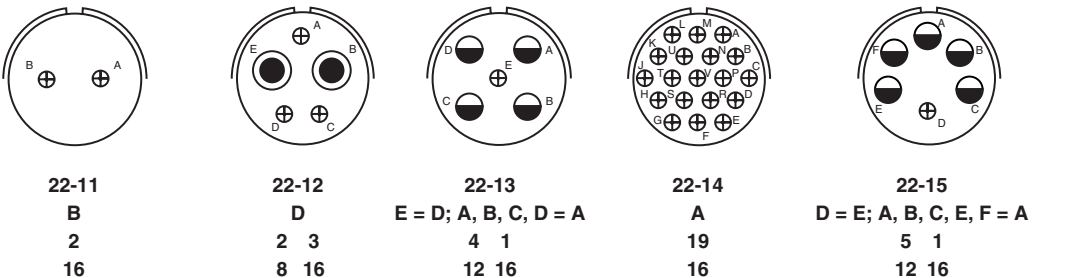
Insert Arrangements
Service Rating
Number of Contacts
Contact Size



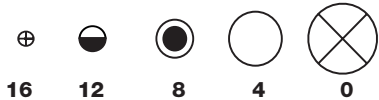
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



Insert Arrangement
Service Rating
Number of Contacts
Contact Size



CONTACT LEGEND



MIL-C-22992, QWLD

contact arrangements

front face of pin insert or rear of socket insert illustrated

Insert Arrangement
Service Rating
Number of Contacts
Contact Size

22-16	22-17	22-18	22-19	22-20
A	A = D; Bal. = A	A, B, F, G, H = D; C, D, E = A	A	A
3 6	1 8	8	14	9
12 16	12 16	16	16	16

Insert Arrangement
Service Rating
Number of Contacts
Contact Size

22-21	22-22	22-23	22-24	22-27
A	A	H = D; Bal. = A	C, D, E = D; A, B, F = A	J = D; Bal. = A
1 2	4	8	2 4	1 8
0 16	8	12	12 16	8 16

Insert Arrangement
Service Rating
Number of Contacts
Contact Size

22-28	22-33	22-34	22-36	24-2
A	A, B, C, D = D; E, F, G = A	D	H = D; Bal. = A	D
7	7	3 2	8	7
12	16	12 16	12	12

CONTACT LEGEND

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16

12

8

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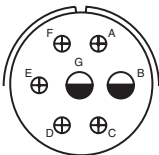
0

MIL-C-22992, QWLD

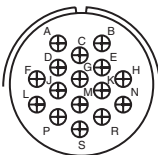
contact arrangements

front face of pin insert or rear of socket insert illustrated

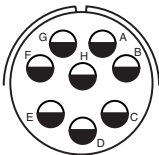
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



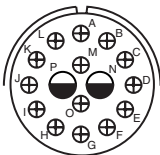
24-3
D
2 5
12 16



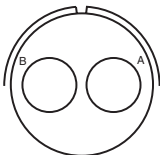
24-5
A
16
16



24-6
A, G, H = D; Bal. = A
8
12

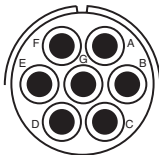


24-7
A
2 14
12 16

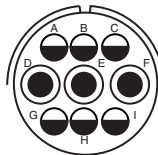


24-9
A
2
4

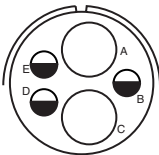
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



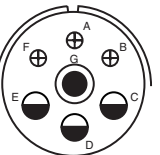
24-10
A
7
8



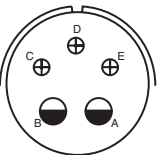
24-11
A
3 6
8 12



24-12
A
2 3
4 12

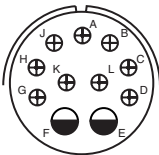


24-16
A, B, F, G = D; C, D, E = A
1 3 3
8 12 16

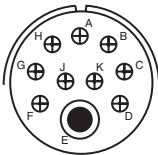


24-17
D
2 3
12 16

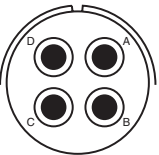
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



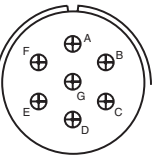
24-20
D
2 9
12 16



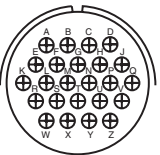
24-21
D
1 9
8 16



24-22
D
4
8

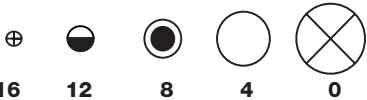


24-27
E
7
16



24-28
Inst.
24
16

CONTACT LEGEND

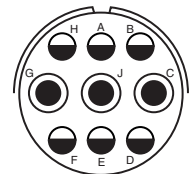


MIL-C-22992, QWLD

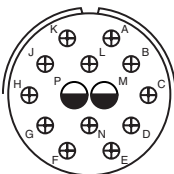
contact arrangements

front face of pin insert or rear of socket insert illustrated

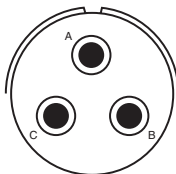
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



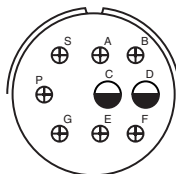
28-1
A, J, E = D; Bal. = A
3 6
8 12



28-2
D
2 12
12 16

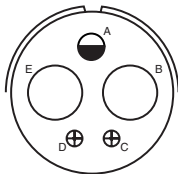


28-3
E
3
8

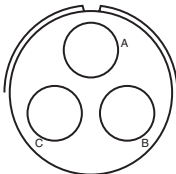


28-4
G, P, S = E; Bal. = D
2 7
12 16

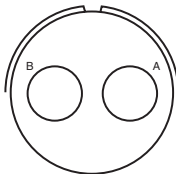
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



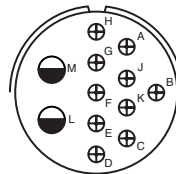
28-5
D
2 1 2
4 12 16



28-6
D
3
4

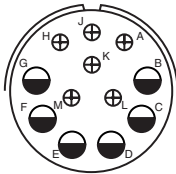


28-7
D
2
4

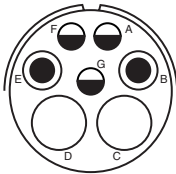


28-8
L, M = E; B = D; Bal. = A
2 10
12 16

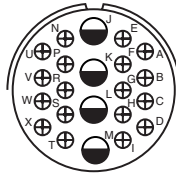
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



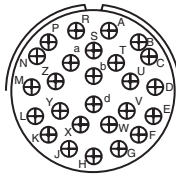
28-9
D
6 6
12 16



28-10
G = D; Bal. = A
2 2 3
4 8 12

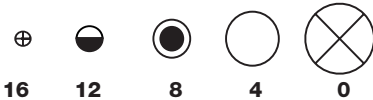


28-11
A
4 18
12 16



28-12
A
26
16

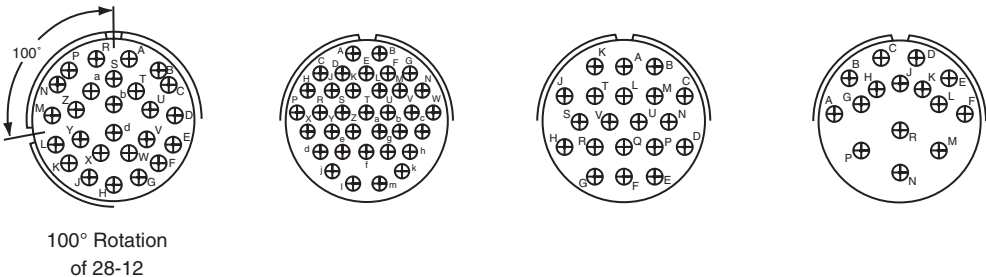
CONTACT LEGEND



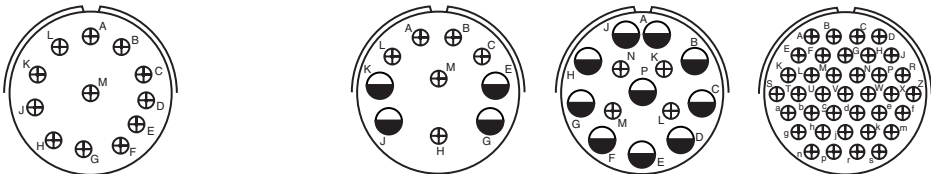
MIL-C-22992, QWLD

contact arrangements

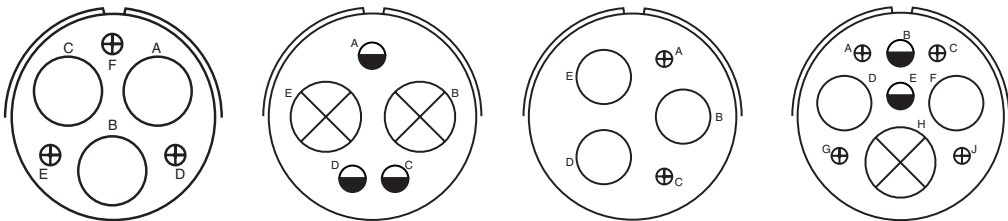
front face of pin insert or rear of socket insert illustrated



Insert Arrangement	28-13	28-15	28-16	28-17
Service Rating	A	A	A	R = B; M, N, P = D; A to L = A
Number of Contacts	26	35	20	15
Contact Size	16	16	16	16



Insert Arrangement	28-18	28-19	28-20	28-21
Service Rating	M = C; G, H, J, K, L = D; A, B = H; Bal. = Inst.	H, M = B; A = D; Bal = A	A	A
Number of Contacts	12	4 6	10 4	37
Contact Size	16	12 16	12 16	16



Insert Arrangement	28-22	32-1	32-2	32-3
Service Rating	D	A = E; Bal. = D	E	D
Number of Contacts	3 3	2 3	3 2	1 2 2 4
Contact Size	4 16	0 12	4 16	0 4 12 16

CONTACT LEGEND

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MIL-C-22992, QWLD

contact arrangements

front face of pin insert or rear of socket insert illustrated

Insert Arrangement Service Rating Number of Contacts Contact Size				
	32-4	32-5	32-6	32-7
	F, J, K, N = A; Bal. = D	D	A	A, B, h , j = Inst; Bal. = A
	2 12 12 16	2 0	2 3 2 16 4 8 12 16	7 28 12 16
Insert Arrangement Service Rating Number of Contacts Contact Size				
	32-8	32-9	32-10	32-12
	A	D	A, F = E, G = B; B, E = D; C, D = A	C, D, E, F, G = A; Bal. = D
	6 24 12 16	2 12 4 16	2 2 3 4 8 16	5 10 12 16
Insert Arrangement Service Rating Number of Contacts Contact Size				
	32-13	32-15	32-16	32-17
	D	D	A	D
	5 18 12 16	2 6 0 12	2 3 2 16 4 8 12 16	4 4

CONTACT LEGEND

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16

12

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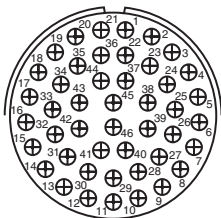
0

MIL-C-22992, QWLD

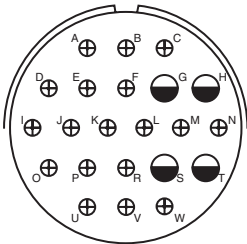
contact arrangements

front face of pin insert or rear of socket insert illustrated

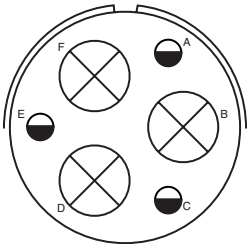
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



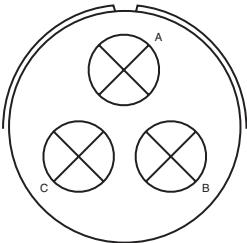
32-73
A
46
16



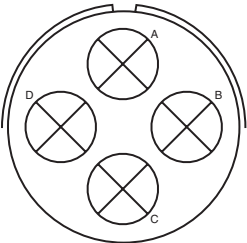
36-1
D
4 18
12 16



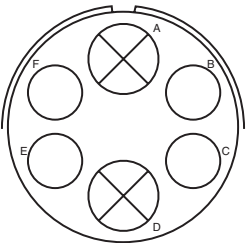
36-3
D
3 3
0 12



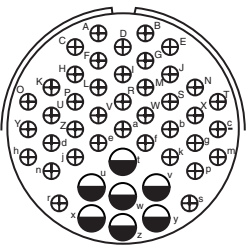
36-4
A = D; B, C = A
3
0



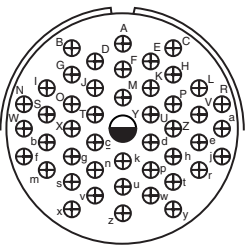
36-5
A
4
0



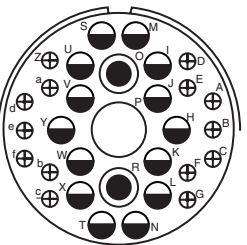
36-6
A
2 4
0 4



36-7
A
7 40
12 16



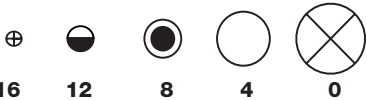
36-8
A
1 46
12 16



36-9
A
1 2 14 14
4 8 12 16

Insert Arrangement
Service Rating
Number of Contacts
Contact Size

CONTACT LEGEND

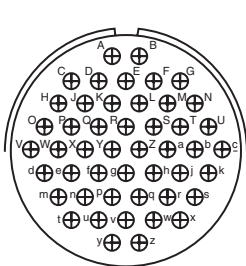


MIL-C-22992, QWLD

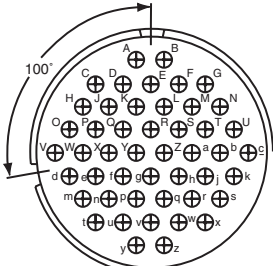
contact arrangements

front face of pin insert or rear of socket insert illustrated

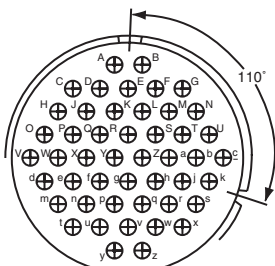
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



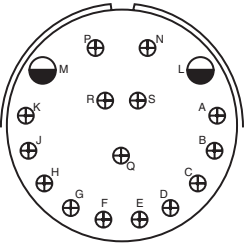
36-10
A
48
16



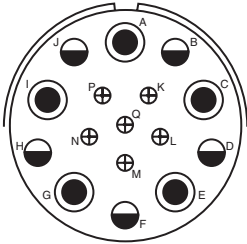
100° Rotation
of 36-10
36-11
A
48
16



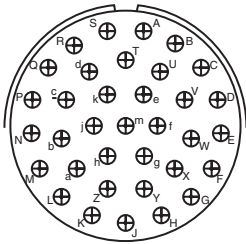
110° Rotation
of 36-10
36-12
A
48
16



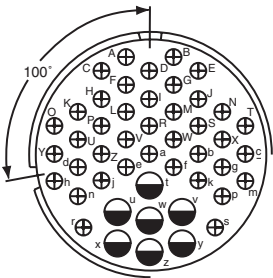
36-13
N, P, Q = E; Bal. = A
2 15
12 16



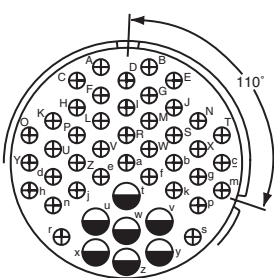
36-14
D
5 5 6
8 12 16



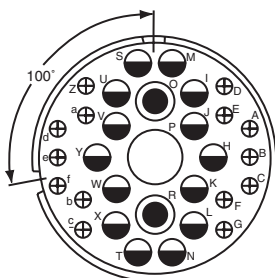
36-15
M = D; Bal. = A
35
16



100° Rotation
of 36-7
36-16
A
7 40
12 16



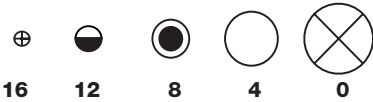
110° Rotation
of 36-7
36-17
A
7 40
12 16



100° Rotation
of 36-9
36-18
A
1 2 14 14
4 8 12 16

Insert Arrangements
Service Rating
Number of COntracts
Contact Size

CONTACT LEGEND

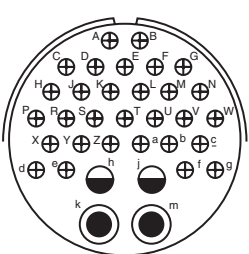


MIL-C-22992, QWLD

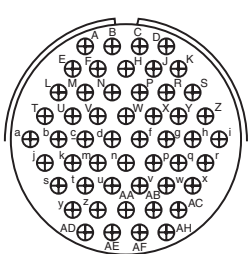
contact arrangements

front face of pin insert or rear of socket insert illustrated

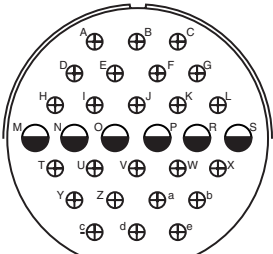
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



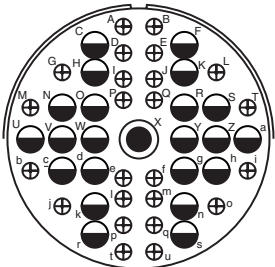
36-20
A
2 2 30
8 12 16



36-52
A
52
16

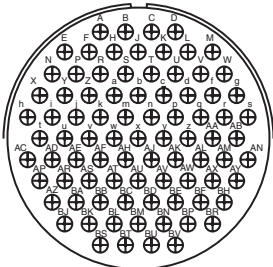


40-1
D
6 24
12 16

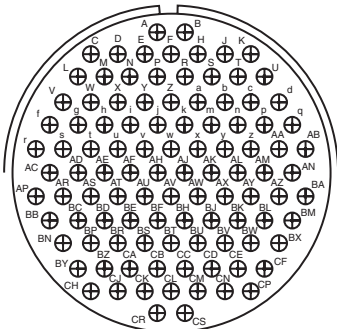


Insert Arrangement
Service Rating
Number of Contacts
Contact Size

40-9
A
1 22 24
8 12 16

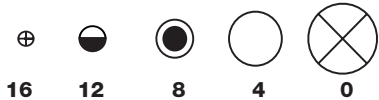


40-56
A
85
16



44-52
A
104
16

CONTACT LEGEND



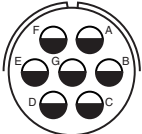
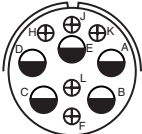
QWLD

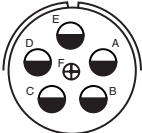
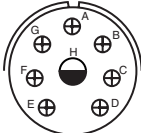
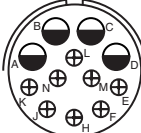
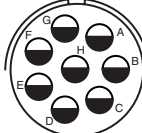
special arrangements

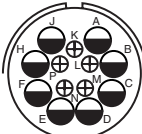
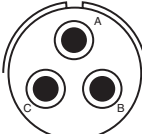
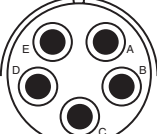
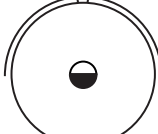
Ever expanding requirements for more complex circuits in ground equipment and elevated altitude applications has prompted Amphenol to provide inserts not covered by the MS drawings. Pictured here and on the following pages are insert layouts which have anywhere from one contact

(high tension) to the 78 contact insert in shell size 48. Many of these special inserts are also available in alternate keyway positions. Please contact Amphenol, Sidney, NY or your local Amphenol sales office for arrangements particular to your circuit application.

front face of pin insert or rear of socket insert illustrated

					
Insert Arrangement	16-59	20-51	20-57	20-58	20-59
Service Rating	A	A	A	A	A
Number of Contacts	4	3*	7*	5 5	3*
Contact Size	12	8	12 for #14 or 16 wire	12 16	8 for #10 or 12 wire

				
Insert Arrangement	20-66	20-79	22-63	22-65
Service Rating	A	H = D; Bal. = A	A	H = D; Bal. = A
Number of Contacts	1 5	7* 1*	4 8	8*
Contact Size	16 12 or #10 wire	16 12 for #16 wire	12 16	12 for #14 or 16 wire

				
Insert Arrangement	22-70	22-80	24-51	24-52
Service Rating	A	A	A	Hi-Volt
Number of Contacts	8 5	3*	5*	1
Contact Size	12 16	8 for #10 or 12 wire	B, E for AN #10 or 12 wire A, C, D for AN #8 wire	12

*Solderless

CONTACT LEGEND

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12

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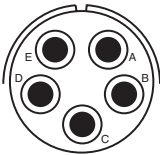
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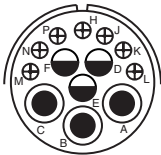
special arrangements

front face of pin insert or rear of socket insert illustrated

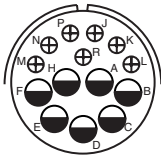
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



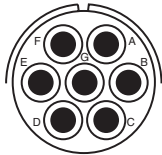
24-53
A
5*
8



24-58
A
3 3 7
8 12 16

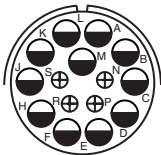


24-59
A
7 7
12 16

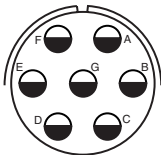


24-60
A
7*
8 for #10 or 12 wire

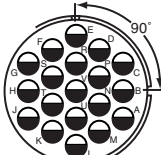
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



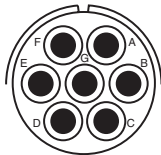
24-65
A
11 4
12 16



24-66
D
7
12

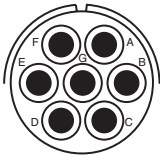


24-67
Inst.
19
12

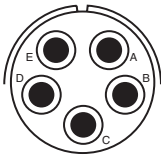


24-71
A
2* 5*
8 8 for #10 or 12 wire

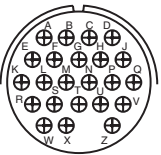
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



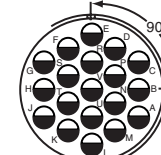
24-75
A
5 2
8 8 for #16 wire



24-79
A
5
8



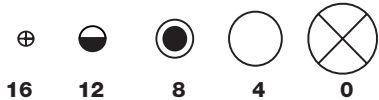
24-80
Inst.
23
16



24-84
A
1 18
12 12 (Coax) RG-188/U
or RG-174/U

*Solderless

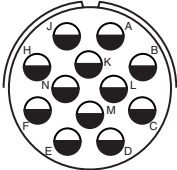
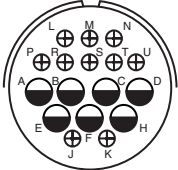
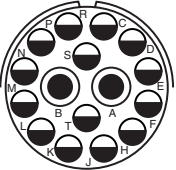
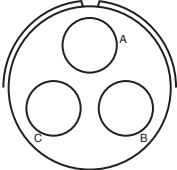
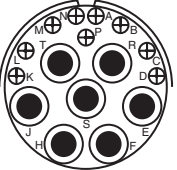
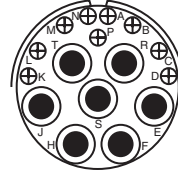
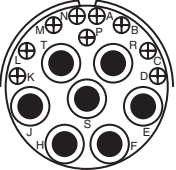
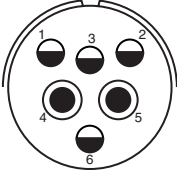
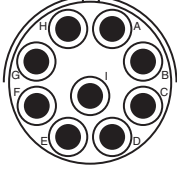
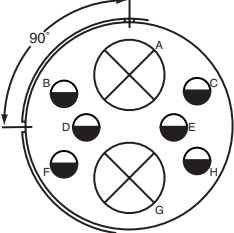
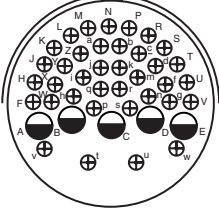
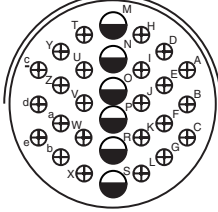
CONTACT LEGEND



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special arrangements

front face of pin insert or rear of socket insert illustrated

Insert Arrangement Service Rating Number of Contacts Contact Size				
	28-51	28-59	28-66	28-72
	A	A	A	—
	12	7 10 12 16	2 14 8 12	3 4 (Coax) RG-59A/U or RG-62A/U
Insert Arrangement Service Rating Number of Contacts Contact Size				
	28-74	28-75	28-79	28-82
	A	A	A	D
	9* 4* 3* 16 8 8 for #10 wire (S, T, R)	9* 7* 16 8 for #10 wire	7 9 8 16	2 4 8 12
Insert Arrangement Service Rating Number of Contacts Contact Size				
	28-84	32-52	32-53	32-56
	A	D	t, u = E; Bal. = Inst.	A
	9 8	6 2 12 0	5 37 12 16	24 6 16 12 for #10 wire

*Solderless

CONTACT LEGEND

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16

12

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special arrangements

front face of pin insert or rear of socket insert illustrated

Insert Arrangement Service Rating Number of Contacts Contact Size				
	32-57	32-58	32-60	32-62
	**	—	A	**
	6 2 12 0 (Coax) RG-71/U	4 4 (Coax) RG-161U or RG-179/U	15 8 16 8 (Coax) RG-124/U	2 1 2 16 2 4 8 12 16 8 (Coax)RG-124/U
Insert Arrangement Service Rating Number of Contacts Contact Size				
	32-64	32-68	32-75	32-76
	Inst.	A	8, 9 = D	A
	54 16	12 4 16 4 (Coax) RG-58C/U	2 7 12 8 (Coax) RG-180B/U	19 12
Insert Arrangement Service Rating Number of Contacts Contact Size				
	32-79	36-51	36-54	36-55
	D	D	A	A
	4 1 4 8	2 2 0 4	8 31 8 16	31 8 16 8 for #6 wire

**Consult Sidney, NY for service rating of power contacts.

CONTACT LEGEND

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16

12

8

4

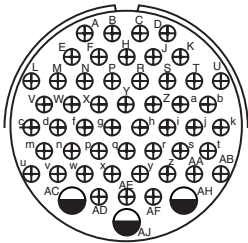
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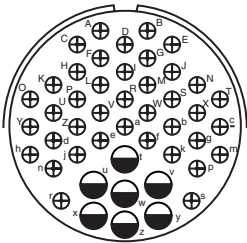
special arrangements

front face of pin insert or rear of socket insert illustrated

Insert Arrangement
Service Rating
Number of Contacts
Contact Size

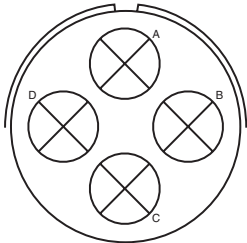


36-59
A
50 3
16 12 for #10 wire

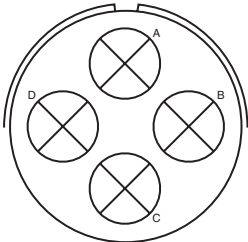


36-60

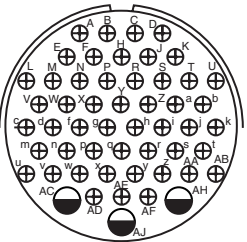
40 7
16 12 for #10 wire



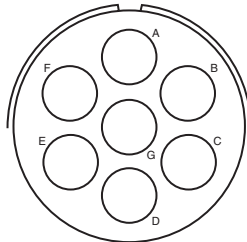
36-64
—
4
0 (Coax) RG-11/U
RG-12/U or RG-13/U



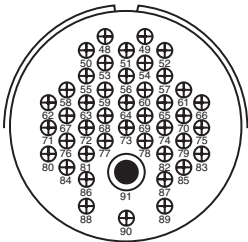
36-65
—
4
0 (Coax) RG-59/U, RG-62/U
or RG-71/U



36-71
A
3 50
12 16

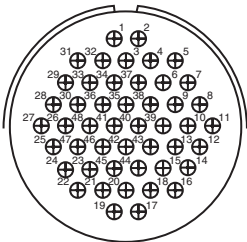


36-73
—
7
4 (Coax) RG-62B/U

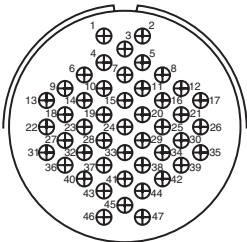


Insert Arrangement
Service Rating
Number of Contacts
Contact Size

36-74
A
43 1
16 8 (Coax) RG-187/U



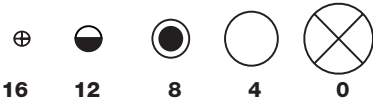
36-75
A
48
16 for #14 wire



36-76
A
47
16

**Consult Sidney, NY for service rating of power contacts.

CONTACT LEGEND

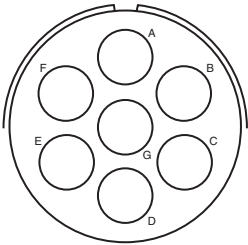


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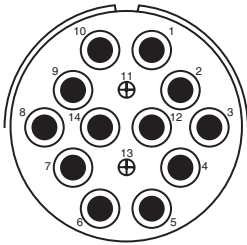
special arrangements

front face of pin insert or rear of socket insert illustrated

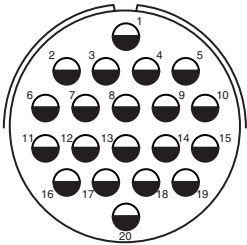
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



36-77
D
7
4

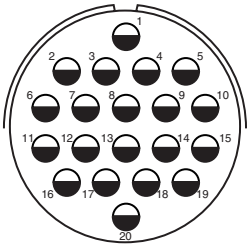


36-78
A
2 12
16 8

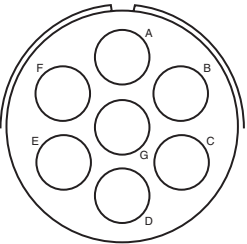


36-79
A
20
12

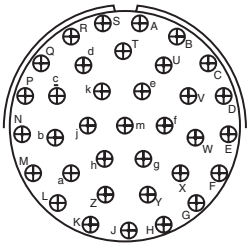
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



36-80
A
20
12 for #10 wire

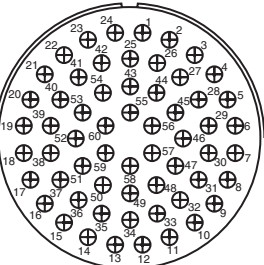


36-83
-
7
4 (Coax) RG-58/U

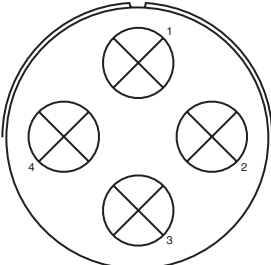


36-85
M = D; Bal. = A
35
16 for #12 wire

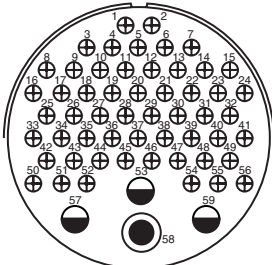
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



40-53
A
60
16

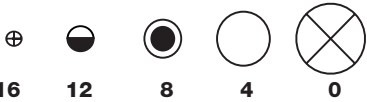


40-57
E
4
0



40-61
A
1 3 55
8 12 16

CONTACT LEGEND

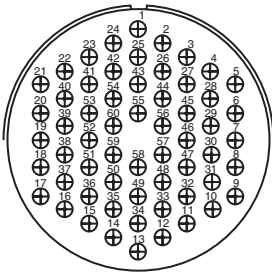


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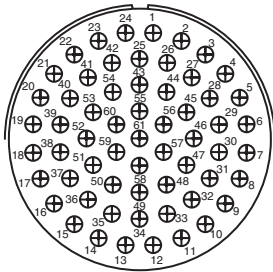
special arrangements

front face of pin insert or rear of socket insert illustrated

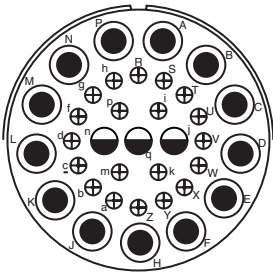
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



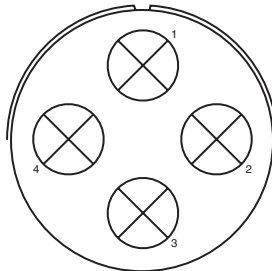
40-62
A
60
16



40-63
A
61
16 for #14 wire

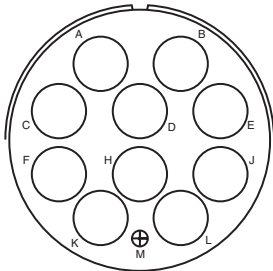


40-64
—
3 20 13
12 16 8 (Coax) RG-124/U

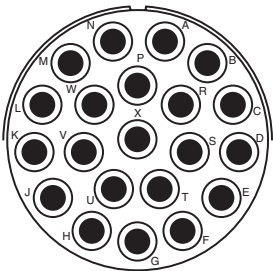


Insert Arrangement
Service Rating
Number of Contacts
Contact Size

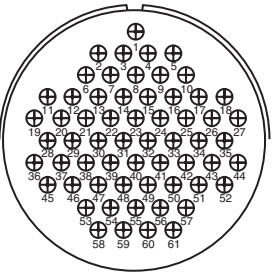
40-66
—
4
0 (Coax) RG-63B/U



40-67
A
1 10
16 4 (Coax) RG-59/U

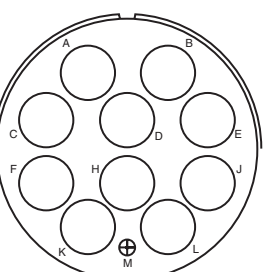


40-68
A
21
8

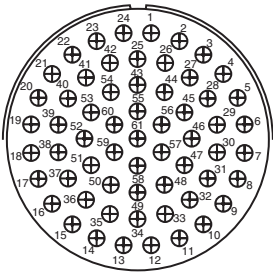


Insert Arrangement
Service Rating
Number of Contacts
Contact Size

40-70
A
61
16

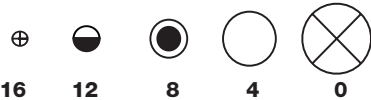


40-72
A
1 10
16 4 (Coax) RG-9B/U



40-73
A
61
16

CONTACT LEGEND

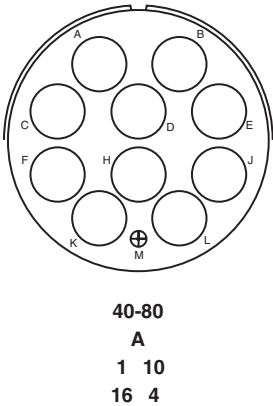
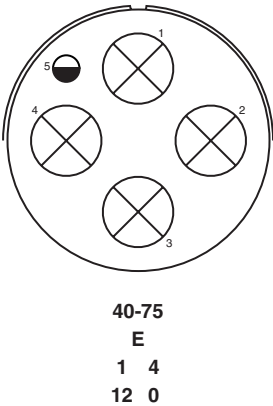
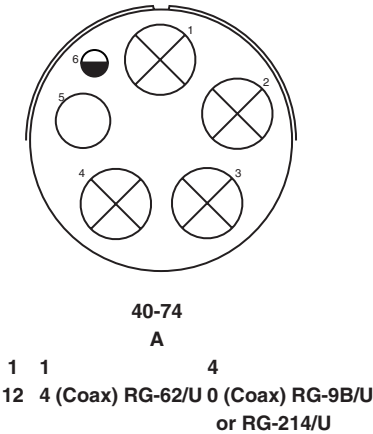


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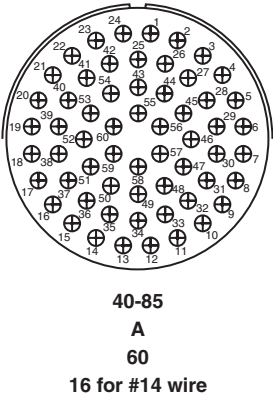
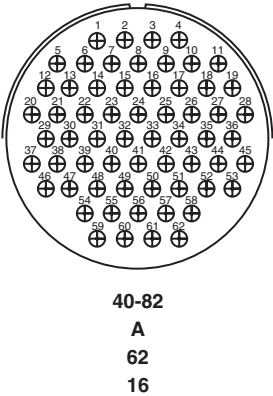
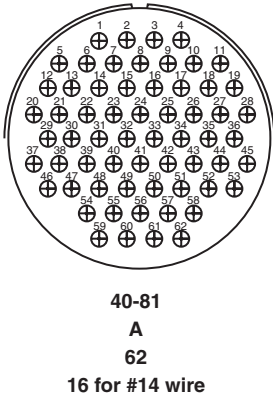
special arrangements

front face of pin insert or rear of socket insert illustrated

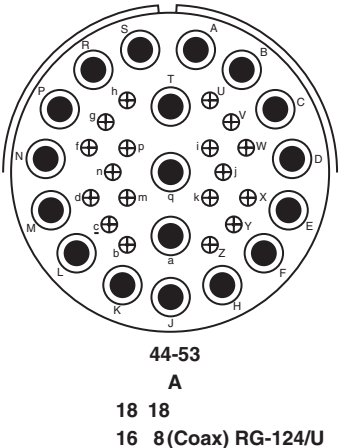
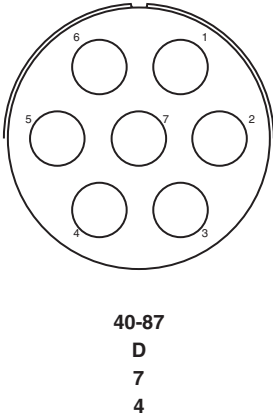
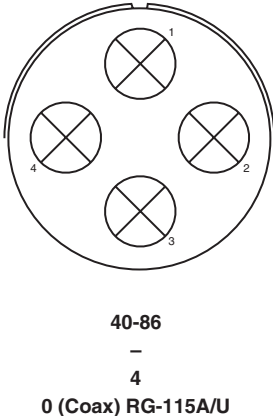
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



Insert Arrangement
Service Rating
Number of Contacts
Contact Size



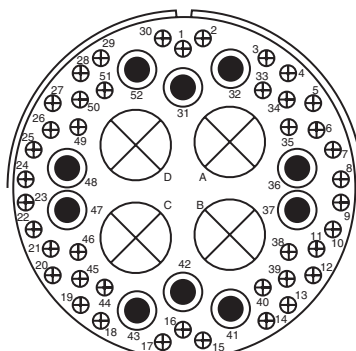
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



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special arrangements

front face of pin insert or rear of socket insert illustrated



48-51†

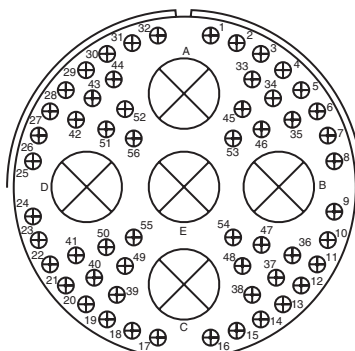
Insert Arrangement

Service Rating

Number of Contacts

Contact Size

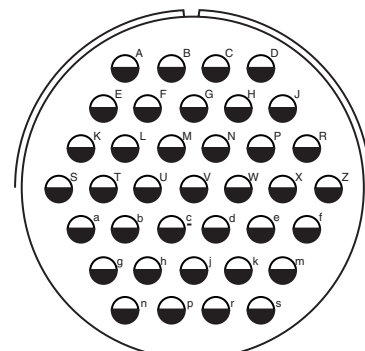
42 10 4
16 8 0 (Coax) RG-41/U



48-52†

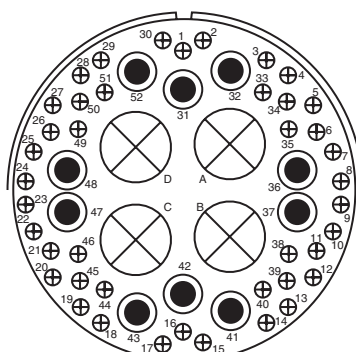
A

56 5
16 0 (Coax) RG-41/U



48-53†

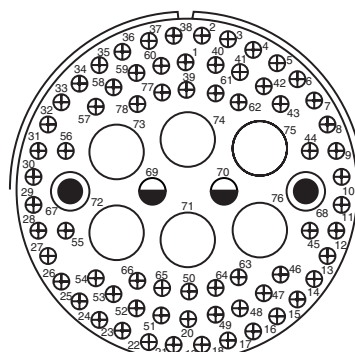
D

37
12

48-54†

A

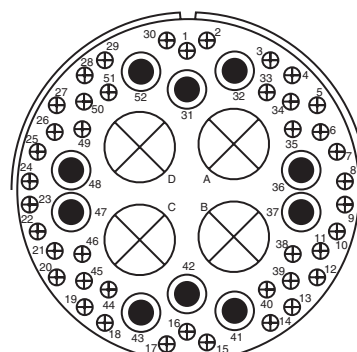
42 10 4
16 8 0 (Coax) RG-59/U



48-55†

A

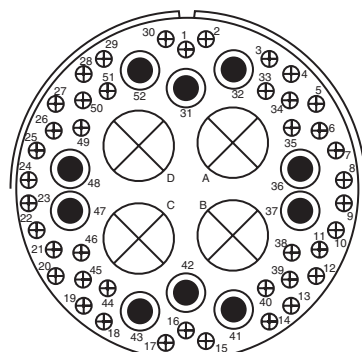
68	2	2	6
16	12	8	4



48-57†

A

42	10	4
16	8	0



48-60†

A

42 10 4
16 8 0 (Coax) RG-214/U

Insert Arrangement

Service Rating

Number of Contacts

Contact Size

†Consult Sidney, NY for availability

