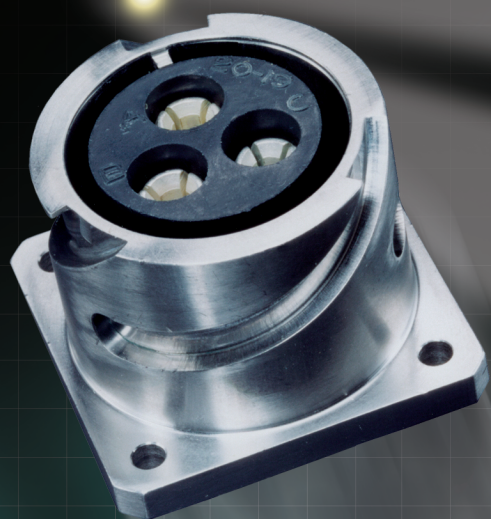
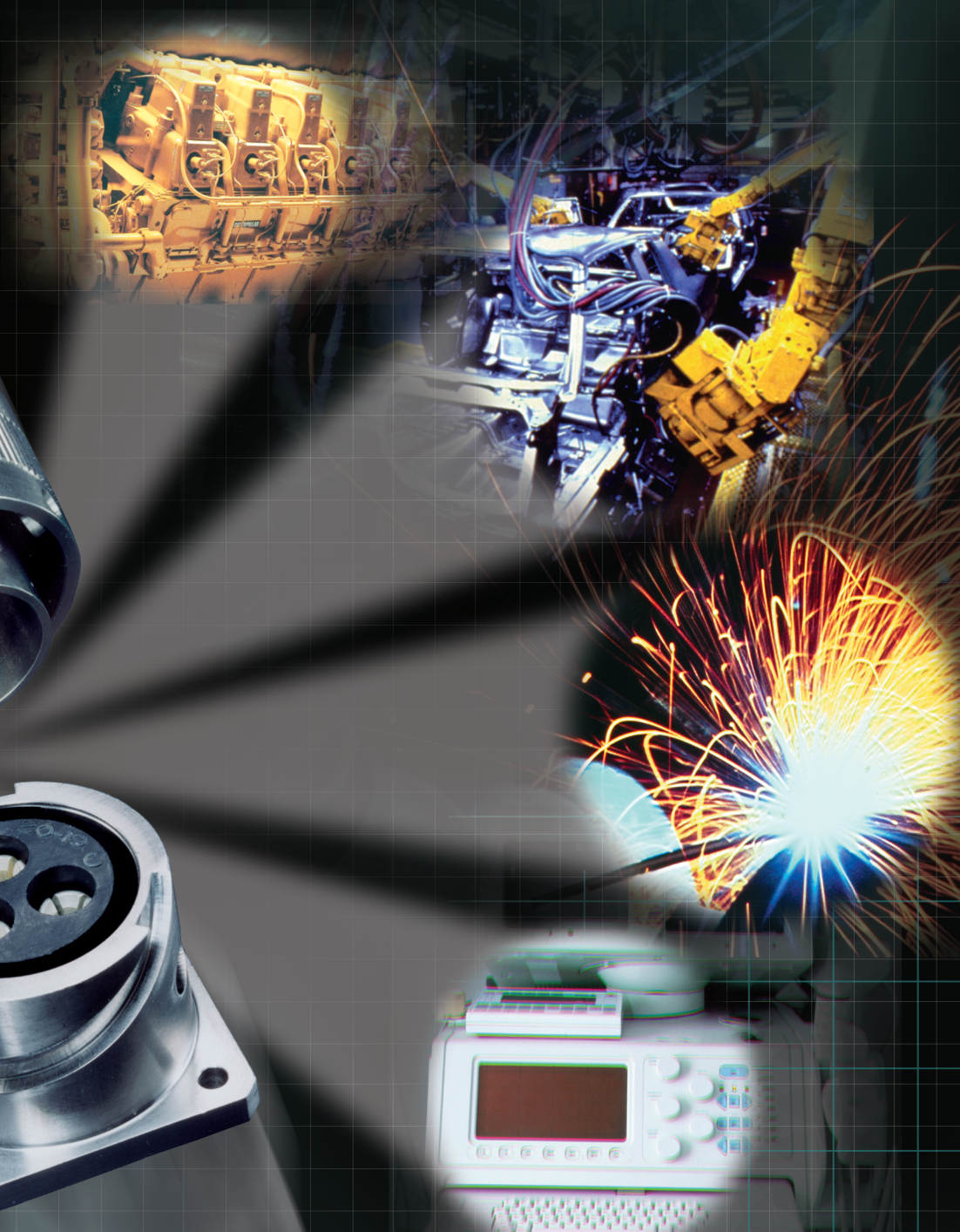


# Amphenol® ACA-B Reverse Bayonet Coupling Connectors

12-027



# Amphenol



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Amphenol Aerospace is a Certified ISO 9001 Manufacturer

# Amphenol® ACA-B Connectors

## with reverse bayonet coupling



### Features of the Amphenol® ACA-B reverse bayonet coupling connectors with MIL-C-5015 insert patterns:

- Quick positive coupling
- Audible and tactile indication of full coupling
- Waterproof
- No lockwiring required
- High shock and vibration capabilities
- Inserts available in Neoprene material (alternate insert materials available upon request)
- Operating temperature range with Neoprene inserts:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Available in both crimp and solder terminations
- Contacts available in gold and silver plating
- Numerous finishes available
- Zinc alloy plating (cadmium free) available
- Rugged construction; aluminum or stainless steel components
- Intermateable with existing VG95234 connectors
- 500 couplings minimum



The ACA-B is designed for commercial and Industrial environments requiring a rugged bayonet style connector for heavy duty power and signal applications. A comprehensive selection of insert arrangements and accessory hardware configurations are featured to accommodate heavy-duty, commercial wire and cable. ACA-B is manufactured in accordance with MIL-C-5015 and VG95234. The insulators are made of high quality polychloroprene material and can withstand temperatures of  $-55$  to  $+125$  degrees C. The rugged shell is made from aluminum alloy and plated with a variety of finishes to meet any application. Contacts are machined from copper alloy or brass and can be plated with gold or silver.

Common applications include automation, machine tool, robotics, instrumentation, process control, material handling, and test and measurement.



# ACA-B

## insert availability

Insert Arrangement	Service Rating	Total Contacts	Contact Size				
			0	4	8	12	16
10S-2	A	1					1
10SL-3	A	3					3
10SL-4†	A	2					2
12S-3	A	2					2
12S-4	D	1					1
12-5	D	1				1	
14S-2	Inst.	4					4
14S-4	D	1					1
14S-5	Inst.	5					5
14S-6	Inst.	6					6
14S-7	A	3					3
14S-9	A	2					2
14S-10	Inst.	4					4
14S-12	A	3					3
14-3	A	1			1		
16S-1	A	7					7
16S-3	B	1					1
16S-4	D	2					2
16S-5	A	3					3
16S-6	A	3					3
16S-8	A	5					5
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	
18-1	A/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	A/Inst.	10					10

Insert Arrangement	Service Rating	Total Contacts	Contact Size				
			0	4	8	12	16
18-29	A	5					5
18-30	A	5					5
18-31	A	5					5
20-3	D	3				3	
20-4	D	4				4	
20-6	D	3					3
20-7	D/A	8					8
20-8	Inst.	6			2		4
20-9	D/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	D/A	5				4	1
22-14	A	19					19
22-15	E/A	6				5	1
22-16	A	9				3	6
22-17	D/A	9				1	8
22-18	D/A	8					8
22-19	A	14					14
22-20	A	9					9
22-21	A	3	1				2
22-22	A	4			4		

† 10SL-4 arrangement available only with pin contacts in receptacle and socket contacts in plug

# ACA-B

## insert availability, cont.

Insert Arrangement	Service Rating	Total Contacts	Contact Size				
			0	4	8	12	16
22-23	D/A	8				8	
22-24	D/A	6				2	4
22-27	D/A	9			1		8
22-28	A	7				7	
22-33	D/A	7					7
22-34	D	5				3	2
24-2	D	7				7	
24-3	D	7				2	5
24-5	A	16					16
24-6	D/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	D/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	D/A	9			3	6	
28-2	D	14				2	12
28-3	E	3			3		
28-4	E/D	9				2	7
28-5	D	5		2		1	2
28-6	D	3		3			
28-7	D	2		2			
28-8	E/D/A	12				2	10
28-9	D	12				6	6
28-10	D/A	7		2	2	3	
28-11	A	22				4	18

Insert Arrangement	Service Rating	Total Contacts	Contact Size				
			0	4	8	12	16
28-12	A	26					26
28-13	A	26					26
28-15	A	35					35
28-16	A	20					20
28-17	B/D/A	15					15
28-18	C/D/A/Inst.	12					12
28-19	B/D/A	10				4	6
28-20	A	14				10	4
28-21	A	37					37
28-22	D	6		3			3
32-1	E/D	5	2			3	
32-3	D	9	1	2		2	4
32-4	A/D	14				2	12
32-8	A	30				6	24
36-1	D	22				4	18
36-3	D	6	3			3	
36-4	D/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	E/A	17				2	15
36-14	D	16			5	5	6
36-15	D/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

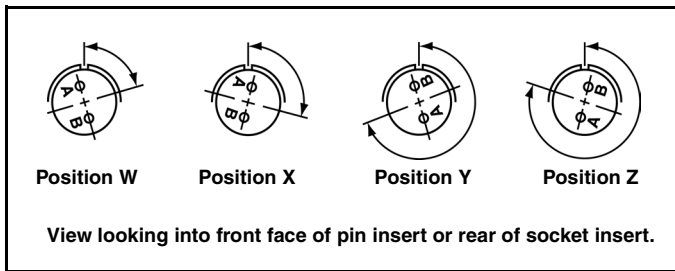
# ACA-B

## insert

### alternate positioning

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

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 counter-clockwise 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	22-3	22-33	24-20	28-17
18-5	22-6	22-34	24-21	28-19
18-9	22-12	24-1	24-28	28-20
18-13	22-14	24-3	28-1	28-21
18-14	22-15	24-4	28-4	32-1
20-7	22-16	24-5	28-8	32-3
20-8	22-17	24-6	28-9	32-4
20-9	22-18	24-7	28-10	36-1
20-12	22-19	24-12	28-11	36-7
20-14	22-21	24-14	28-14	36-8
20-16	22-24	24-16	28-15	36-13
20-20	22-25	24-17	28-16	
20-22	22-29			

Insert Arrangement	Degrees			
	W	X	Y	Z
12S-3	70	145	215	290
14S-2	-	120	240	-
14S-5	-	110	-	-
14S-7	90	180	270	-
14S-9	70	145	215	290
16-9	35	110	250	325
16-10	90	180	270	-
16-11	35	110	250	325
16-13	35	110	250	325
16S-1	80	-	-	280
16S-4	35	110	250	325
16S-5	70	145	215	290
16S-6	90	180	270	-
16S-8	-	170	265	-
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	-
18-20	90	180	270	-
18-22	70	145	215	290
18-29	90	180	270	-
20-3	70	145	215	290

Insert Arrangement	Degrees			
	W	X	Y	Z
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
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

Insert Arrangement	Degrees			
	W	X	Y	Z
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
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
32-8	80	125	235	280
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

Additional rotations available; consult Amphenol for information.

# ACA-B

## contact arrangements

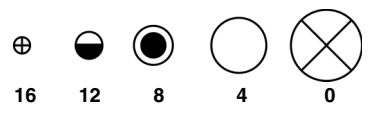
front face of pin insert or rear face of socket insert illustrated

		Front of Socket Insert	Front of Socket Insert			
<b>Insert Arrangement</b>	<b>10S-2</b>	<b>10SL-3</b>	<b>10SL-4</b>	<b>12S-3</b>	<b>12S-4</b>	<b>12-5</b>
<b>Service Rating</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>D</b>	<b>D</b>
<b>Number of Contacts</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>
<b>Contact Size</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>12</b>

<b>Insert Arrangement</b>	<b>14S-2</b>	<b>14S-4</b>	<b>14S-5</b>	<b>14S-6</b>	<b>14S-7</b>	<b>14S-9</b>
<b>Service Rating</b>	<b>Inst.</b>	<b>D</b>	<b>Inst.</b>	<b>Inst.</b>	<b>A</b>	<b>A</b>
<b>Number of Contacts</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>2</b>
<b>Contact Size</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>

	100° Rotation of 14S-2	100° Rotation of 14S-7				
<b>Insert Arrangement</b>	<b>14S-10</b>	<b>14S-12</b>	<b>14-3</b>	<b>16S-1</b>	<b>16S-3</b>	<b>16S-4</b>
<b>Service Rating</b>	<b>Inst.</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>B</b>	<b>D</b>
<b>Number of Contacts</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>2</b>
<b>Contact Size</b>	<b>16</b>	<b>16</b>	<b>8</b>	<b>16</b>	<b>16</b>	<b>16</b>

<b>Insert Arrangement</b>	<b>16S-5</b>	<b>16S-6</b>	<b>16S-8</b>	<b>16-2</b>	<b>16-7</b>	<b>16-9</b>
<b>Service Rating</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>E</b>	<b>A</b>	<b>A</b>
<b>Number of Contacts</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>1 2</b>	<b>2 2</b>
<b>Contact Size</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>12</b>	<b>8 16</b>	<b>12 16</b>



# ACA-B

## contact arrangements

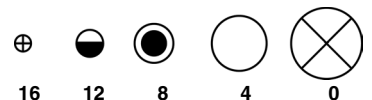
front face of pin insert or rear face of socket insert illustrated

<b>Insert Arrangement</b>	<b>16-10</b>	<b>16-11</b>	<b>16-12</b>	<b>16-13</b>	<b>18-1</b>	<b>18-3</b>
<b>Service Rating</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>B, C, F, G = A; Bal. = Inst.</b>	<b>D</b>
<b>Number of Contacts</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2*</b>	<b>10</b>	<b>2</b>
<b>Contact Size</b>	<b>12</b>	<b>12</b>	<b>4</b>	<b>12</b>	<b>16</b>	<b>12</b>

<b>Insert Arrangement</b>	<b>18-4</b>	<b>18-5</b>	<b>18-6</b>	<b>18-7</b>	<b>18-8</b>	<b>18-9</b>
<b>Service Rating</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>B</b>	<b>A</b>	<b>Inst.</b>
<b>Number of Contacts</b>	<b>4</b>	<b>2 1</b>	<b>1</b>	<b>1</b>	<b>1 7</b>	<b>2 5</b>
<b>Contact Size</b>	<b>16</b>	<b>12 16</b>	<b>4</b>	<b>8</b>	<b>12 16</b>	<b>12 16</b>

<b>Insert Arrangement</b>	<b>18-10</b>	<b>18-11</b>	<b>18-12</b>	<b>18-13</b>	<b>18-14</b>	<b>18-15</b>
<b>Service Rating</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>
<b>Number of Contacts</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>1 3</b>	<b>1 1</b>	<b>4**</b>
<b>Contact Size</b>	<b>12</b>	<b>12</b>	<b>16</b>	<b>8 12</b>	<b>4 16</b>	<b>12</b>

<b>Insert Arrangement</b>	<b>18-16</b>	<b>18-17</b>	<b>18-19</b>	<b>18-20</b>	<b>18-22</b>	<b>18-24</b>
<b>Service Rating</b>	<b>C</b>	<b>Inst.</b>	<b>A</b>	<b>A</b>	<b>D</b>	<b>B, C, F, G = A; Bal. = Inst.</b>
<b>Number of Contacts</b>	<b>1</b>	<b>2 5</b>	<b>10</b>	<b>5</b>	<b>3</b>	<b>10</b>
<b>Contact Size</b>	<b>12</b>	<b>12 16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>



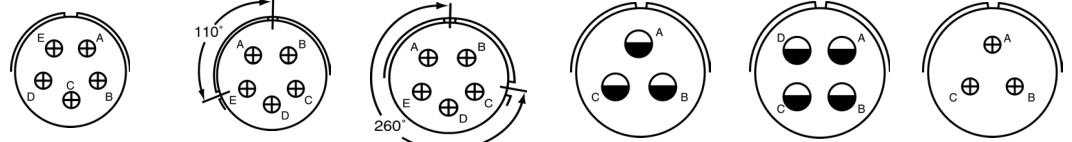
\* A = Iron; B = Constantan  
 \*\* A, C = Iron; B, D = Constantan



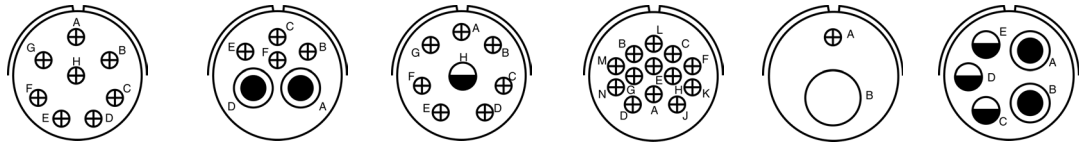
# ACA-B

## contact arrangements

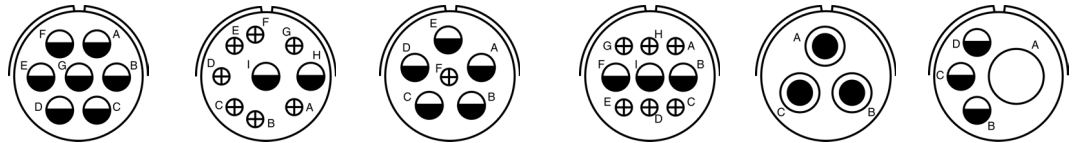
front face of pin insert or rear face of socket insert illustrated



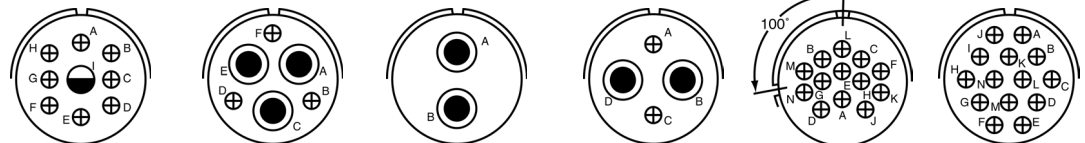
<b>Insert Arrangement</b>	<b>18-29</b>	<b>18-30</b>	<b>18-31</b>	<b>20-3</b>	<b>20-4</b>	<b>20-6</b>
<b>Service Rating</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>D</b>	<b>D</b>	<b>D</b>
<b>Number of Contacts</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>3</b>
<b>Contact Size</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>12</b>	<b>12</b>	<b>16</b>



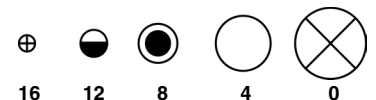
<b>Insert Arrangement</b>	<b>20-7</b>	<b>20-8</b>	<b>20-9</b>	<b>20-11</b>	<b>20-12</b>	<b>20-14</b>
<b>Service Rating</b>	<b>A, B, H, G = D; C, D, E, F = A</b>	<b>Inst.</b>	<b>H = D; Bal. = A</b>	<b>Inst.</b>	<b>A</b>	<b>A</b>
<b>Number of Contacts</b>	<b>8</b>	<b>2 4</b>	<b>1 7</b>	<b>13</b>	<b>1 1</b>	<b>2 3</b>
<b>Contact Size</b>	<b>16</b>	<b>8 16</b>	<b>12 16</b>	<b>16</b>	<b>4 16</b>	<b>8 12</b>



<b>Insert Arrangement</b>	<b>20-15</b>	<b>20-16</b>	<b>20-17</b>	<b>20-18</b>	<b>20-19</b>	<b>20-20</b>
<b>Service Rating</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>
<b>Number of Contacts</b>	<b>7</b>	<b>2 7</b>	<b>5 1</b>	<b>3 6</b>	<b>3</b>	<b>1 3</b>
<b>Contact Size</b>	<b>12</b>	<b>12 16</b>	<b>12 16</b>	<b>12 16</b>	<b>8</b>	<b>4 12</b>



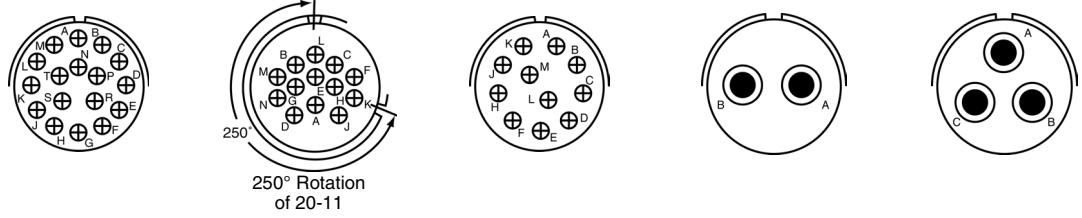
<b>Insert Arrangement</b>	<b>20-21</b>	<b>20-22</b>	<b>20-23</b>	<b>20-24</b>	<b>20-25</b>	<b>20-27</b>
<b>Service Rating</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>Inst.</b>	<b>A</b>
<b>Number of Contacts</b>	<b>1 8</b>	<b>3 3</b>	<b>2</b>	<b>2 2</b>	<b>13</b>	<b>14</b>
<b>Contact Size</b>	<b>12 16</b>	<b>8 16</b>	<b>8</b>	<b>8 16</b>	<b>16</b>	<b>16</b>



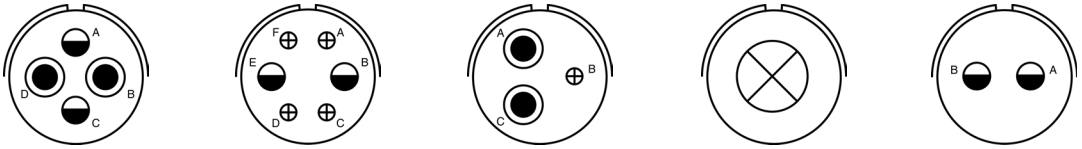
# ACA-B

## contact arrangements

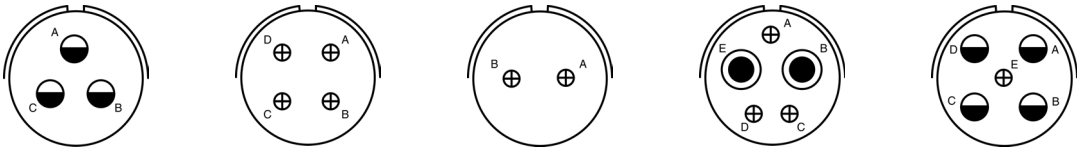
front face of pin insert or rear face of socket insert illustrated



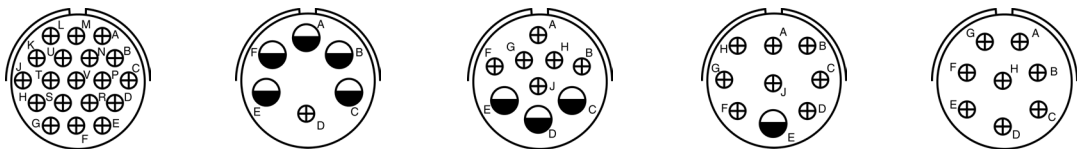
Insert Arrangement	20-29	20-30	20-33	22-1	22-2
Service Rating	A	Inst.	A	D	D
Number of Contacts	17	13	11	2	3
Contact Size	16	16	16	8	8



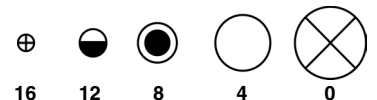
Insert Arrangement	22-4	22-5	22-6	22-7	22-8
Service Rating	A	D	D	E	E
Number of Contacts	2 2	2 4	2 1	1	2
Contact Size	8 12	12 16	8 16	0	12



Insert Arrangement	22-9	22-10	22-11	22-12	22-13
Service Rating	E	E	B	D	E = D; A, B, C, D = A
Number of Contacts	3	4	2	2 3	4 1
Contact Size	12	16	16	8 16	12 16



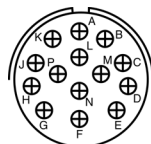
Insert Arrangement	22-14	22-15	22-16	22-17	22-18
Service Rating	A	D = E; A, B, C, E, F = A	A	A = D; Bal. = A	A, B, F, G, H = D; C, D, E = A
Number of Contacts	19	5 1	3 6	1 8	8
Contact Size	16	12 16	12 16	12 16	16



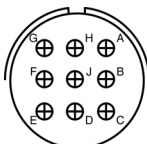
# ACA-B

## contact arrangements

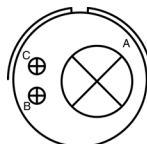
front face of pin insert or rear face of socket insert illustrated



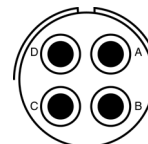
22-19



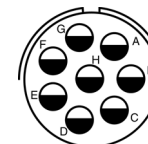
22-20



22-21



22-22



22-23

Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

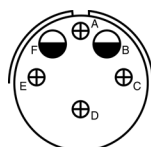
A  
14  
16

A  
9  
16

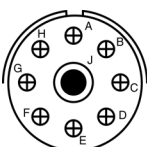
A  
1 2  
0 16

A  
4  
8

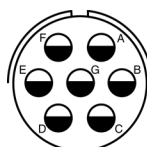
H = D; Bal. = A  
8  
12



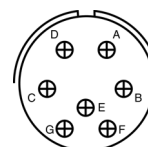
22-24



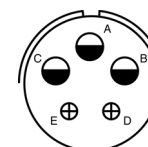
22-27



22-28



22-33



22-34

Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

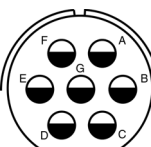
C, D, E = D; A, B, F = A  
2 4  
12 16

J = D; Bal. = A  
1 8  
8 16

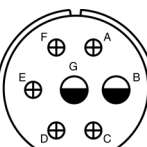
A  
7  
12

A, B, C, D = D; E, F, G = A  
7  
16

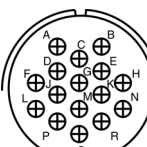
D  
3 2  
12 16



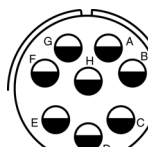
24-2



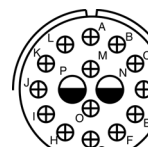
24-3



24-5



24-6



24-7

Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

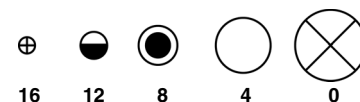
D  
7  
12

D  
2 5  
12 16

A  
16  
16

A, G, H = D; Bal. = A  
8  
12

A  
2 14  
12 16



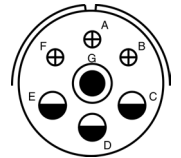
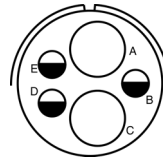
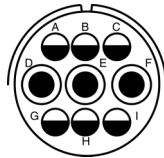
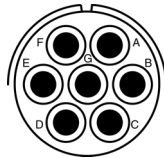
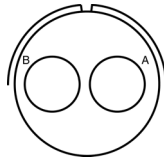
CONTACT LEGEND

16 12 8 4 0

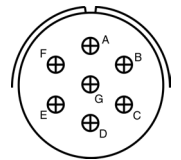
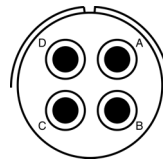
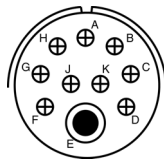
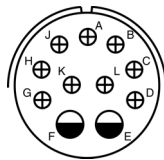
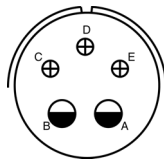
# ACA-B

## contact arrangements

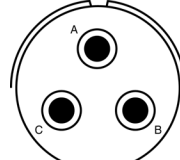
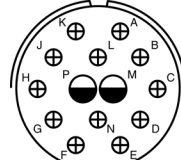
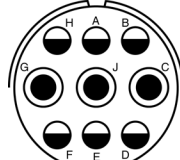
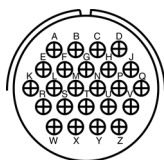
front face of pin insert or rear face of socket insert illustrated



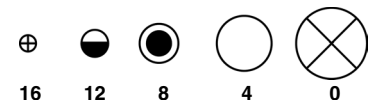
<b>Insert Arrangement</b>	24-9	24-10	24-11	24-12	24-16
<b>Service Rating</b>	A	A	A	A	A, B, F, G = D; C, D, E = A
<b>Number of Contacts</b>	2	7	3 6	2 3	1 3 3
<b>Contact Size</b>	4	8	8 12	4 12	8 12 16



<b>Insert Arrangement</b>	24-17	24-20	24-21	24-22	24-27
<b>Service Rating</b>	D	D	D	D	E
<b>Number of Contacts</b>	2 3	2 9	1 9	4	7
<b>Contact Size</b>	12 16	12 16	8 16	8	16



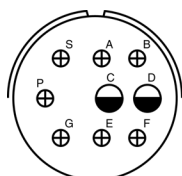
<b>Insert Arrangement</b>	24-28	28-1	28-2	28-3
<b>Service Rating</b>	Inst.	A, J, E = D; Bal. = A	D	E
<b>Number of Contacts</b>	24	3 6	2 12	3
<b>Contact Size</b>	16	8 12	12 16	8



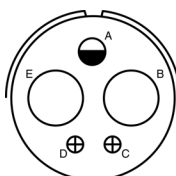
# ACA-B

## contact arrangements

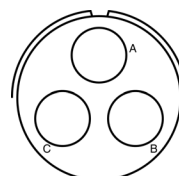
front face of pin insert or rear face of socket insert illustrated



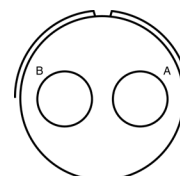
**28-4**  
**G, S, P = E; Bal. = D**  
**2 7**  
**12 16**



**28-5**  
**D**  
**2 1 2**  
**4 12 16**

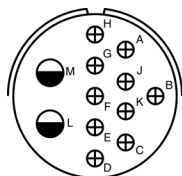


**28-6**  
**D**  
**3**  
**4**

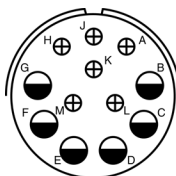


**28-7**  
**D**  
**2**  
**4**

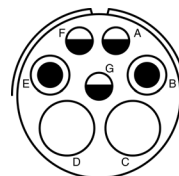
**Insert Arrangement**  
**Service Rating**  
**Number of Contacts**  
**Contact Size**



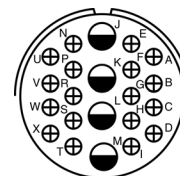
**28-8**  
**L, M = E; B = D; Bal. = A**  
**2 10**  
**12 16**



**28-9**  
**D**  
**6 6**  
**12 16**

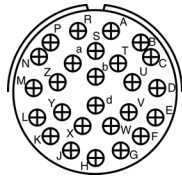


**28-10**  
**G = D; Bal. = A**  
**2 2 3**  
**4 8 12**

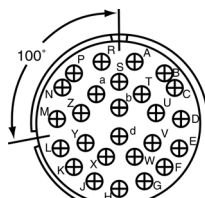


**28-11**  
**A**  
**4 18**  
**12 16**

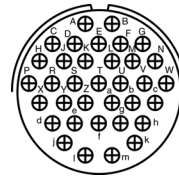
**Insert Arrangement**  
**Service Rating**  
**Number of Contacts**  
**Contact Size**



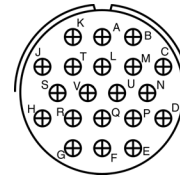
**28-12**  
**A**  
**26**  
**16**



**100° Rotation of 28-12**  
**28-13**  
**A**  
**26**  
**16**

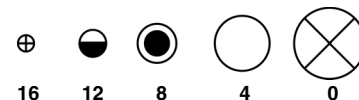


**28-15**  
**A**  
**35**  
**16**



**28-16**  
**A**  
**20**  
**16**

**Insert Arrangement**  
**Service Rating**  
**Number of Contacts**  
**Contact Size**



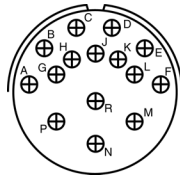
**CONTACT LEGEND**

**16 12 8 4 0**

# ACA-B

## contact arrangements

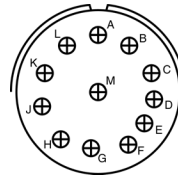
front face of pin insert or rear face of socket insert illustrated



28-17

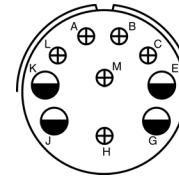
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

R = B; M, N, P = D; A to L = A  
15  
16



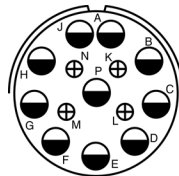
28-18

M = C; G, H, J, K, L = D; A, B = A; Bal. = Inst.  
12  
16



28-19

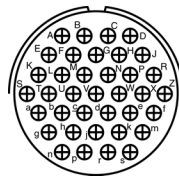
H, M = B; A, B = D; Bal. = A  
4 6  
12 16



28-20

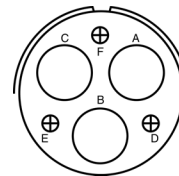
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

A  
10 4  
12 16



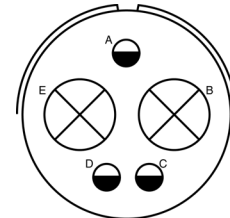
28-21

A  
37  
16



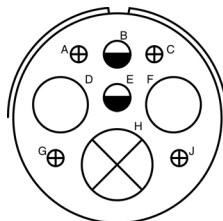
28-22

D  
3 3  
4 16



32-1

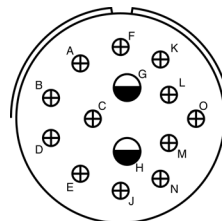
A = E; B, C, D, E = D  
2 3  
0 12



32-3

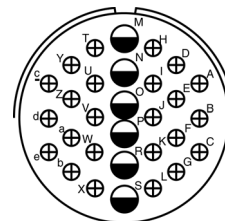
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

D  
1 2 2 4  
0 4 12 16



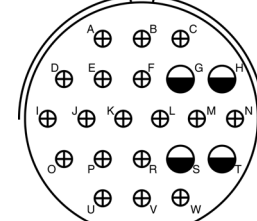
32-4

F, J, K, N = A; Bal. = D  
2 12  
12 16



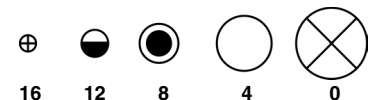
32-8

A  
6 24  
12 16



36-1

D  
4 18  
12 16



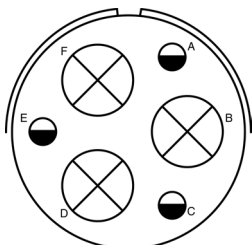
CONTACT LEGEND

16 12 8 4 0

# ACA-B

## contact arrangements

front face of pin insert or rear face of socket insert illustrated

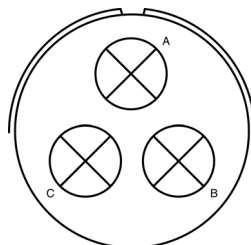


36-3

D

3 3

0 12

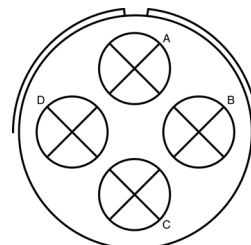


36-4

A = D; B, C = A

3

0



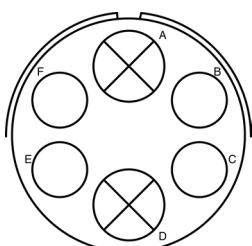
36-5

A

4

0

Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

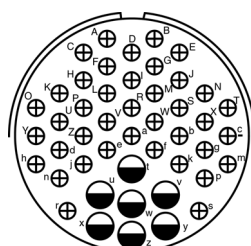


36-6

A

2 4

0 4



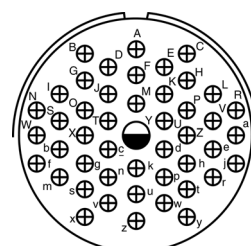
36-7

A

7 40

12 16

Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

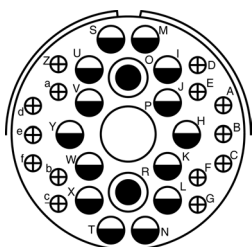


36-8

A

1 46

12 16

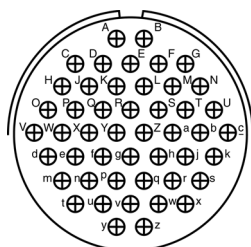


36-9

A

1 2 14 14

4 8 12 16



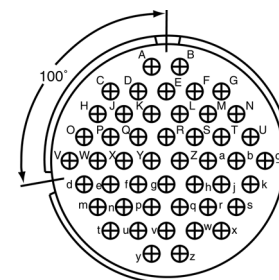
36-10

A

48

16

Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size



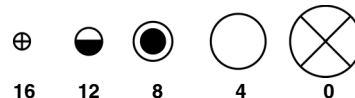
100° Rotation  
of 36-10

36-11

A

48

16



CONTACT LEGEND

16

12

8

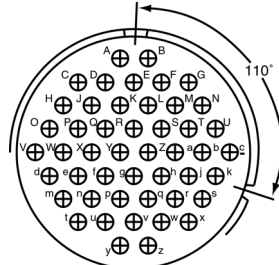
4

0

# ACA-B

## contact arrangements

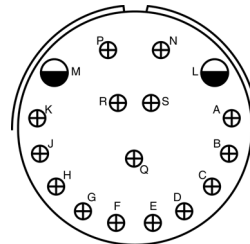
front face of pin insert or rear face of socket insert illustrated



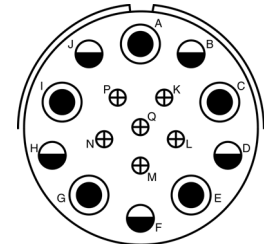
110° Rotation  
of 36-10

**Insert Arrangement**  
**Service Rating**  
**Number of Contacts**  
**Contact Size**

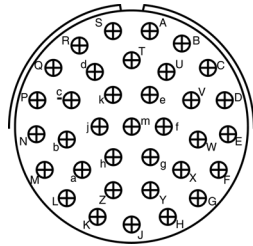
**36-12**  
**A**  
**48**  
**16**



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

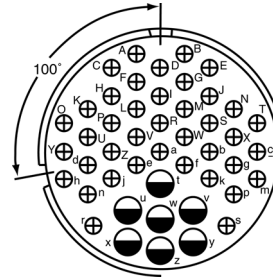


**36-14**  
**D**  
**5 5 6**  
**8 12 16**



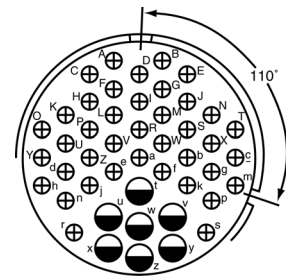
**Insert Arrangement**  
**Service Rating**  
**Number of Contacts**  
**Contact Size**

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



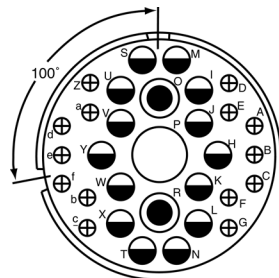
100° Rotation  
of 36-7

**36-16**  
**A**  
**7 40**  
**12 16**



110° Rotation  
of 36-7

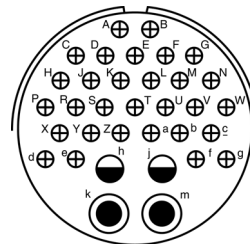
**36-17**  
**A**  
**7 40**  
**12 16**



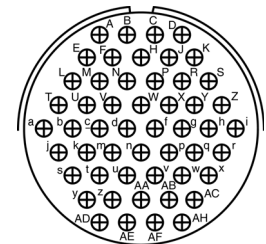
100° Rotation  
of 36-9

**Insert Arrangement**  
**Service Rating**  
**Number of Contacts**  
**Contact Size**

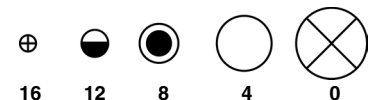
**36-18**  
**A**  
**1 2 14 16**  
**4 8 12 16**



**36-20**  
**A**  
**2 2 30**  
**8 12 16**



**36-52**  
**A**  
**52**  
**16**



CONTACT LEGEND

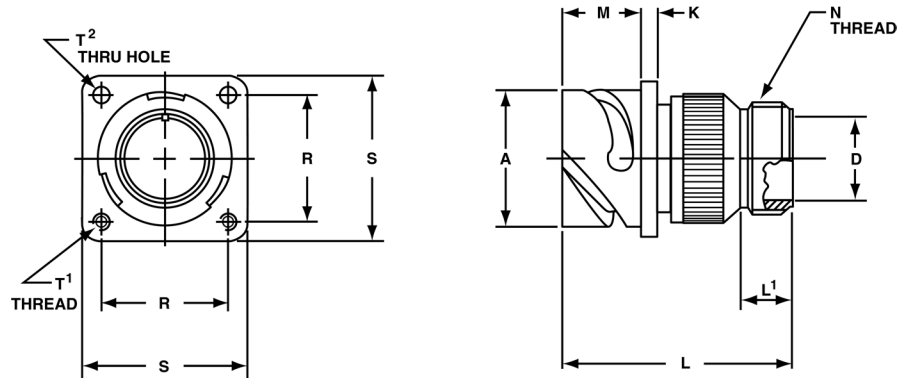
16 12 8 4 0



# ACA 3100F-B

## wall mount receptacle for front panel mounting

- Receptacle with solid backshell and rear accessory threads
- Four through mounting holes or optional metric threaded holes
- Includes grommet and grommet sleeve



Inches

Shell Size	A + .000 - .006	D Min.	K ± .008	L Max.	L <sup>1</sup> Min.	M + .016 - .000	N Thread in Inches Class 2A	R ± .004	S ± .012	T <sup>2</sup> Thru Hole + .004 - .000
10SL	.717	.323	.110	1.969	.374	.559	.6250-24 UNEF	.717	1.000	.126
14S	.969	.437	.126	1.969	.374	.559	.7500-20 UNEF	.906	1.181	.126
16S	1.079	.563	.126	1.969	.374	.559	.8750-20 UNEF	.969	1.280	.126
16	1.079	.563	.126	2.362	.374	.748	.8750-20 UNEF	.969	1.280	.126
18	1.213	.658	.157	2.362	.374	.748	1.0000-20 UNEF	1.063	1.378	.126
20	1.346	.780	.157	2.362	.374	.748	1.1875-18 UNEF	1.157	1.496	.126
22	1.472	.780	.157	2.362	.374	.748	1.1875-18 UNEF	1.252	1.614	.126
24	1.610	1.000	.157	2.560	.374	.811	1.4375-18 UNEF	1.374	1.752	.146
28	1.839	1.063	.157	2.560	.374	.811	1.4375-18 UNEF	1.563	2.000	.146
32	2.102	1.280	.157	2.560	.433	.874	1.7500-18 UNS	1.752	2.244	.169
36	2.346	1.406	.157	3.150	.465	.874	2.0000-18 UNS	1.937	2.500	.169

Millimeters

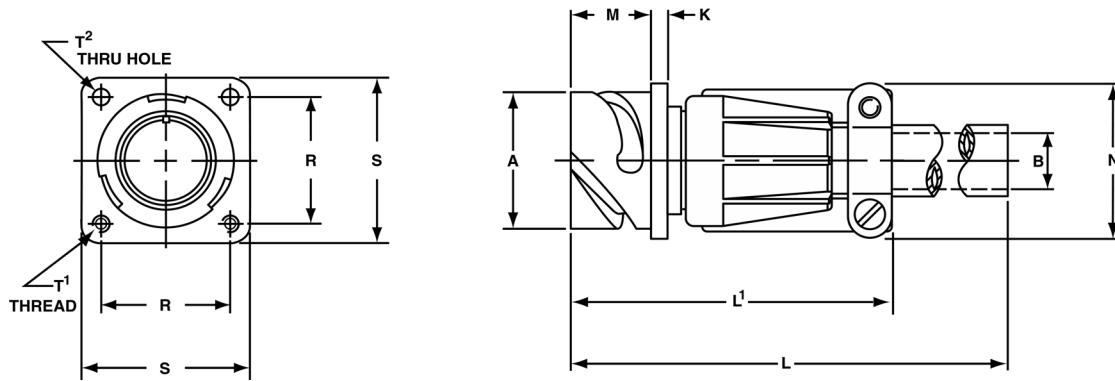
Shell Size	A + 0.00 - 0.15	D Min.	K ± 0.2	L Max.	L <sup>1</sup> Min.	M + 0.4 - 0.0	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	8.2	2.8	50	9.5	14.2	18.2	25.4	M4	3.2
14S	24.6	11.1	3.2	50	9.5	14.2	23.0	30.0	M4	3.2
16S	27.4	14.3	3.2	50	9.5	14.2	24.6	32.5	M4	3.2
16	27.4	14.3	3.2	60	9.5	19.0	24.6	32.5	M4	3.2
18	30.8	16.7	4.0	60	9.5	19.0	27.0	35.0	M4	3.2
20	34.2	19.8	4.0	60	9.5	19.0	29.4	38.0	M4	3.2
22	37.4	19.8	4.0	60	9.5	19.0	31.8	41.0	M4	3.2
24	40.9	25.4	4.0	65	9.5	20.6	34.9	44.5	M5	3.7
28	46.7	27.0	4.0	65	9.5	20.6	39.7	50.8	M5	3.7
32	53.4	32.5	4.0	65	11.0	22.2	44.5	57.0	M5	4.3
36	59.6	35.7	4.0	80	11.8	22.2	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3100E-B

## wall mount receptacle for front panel mounting

- Receptacle with cable clamp and telescopic bushing
- Includes grommet and grommet sleeve
- Four through mounting holes or optional metric threaded holes



Inches

Shell Size	A + .000 - .006	B Max.	K ± .008	L Max.	L <sup>1</sup> Max.	M + .016 - .000	N Max.	R ± .004	S ± .012	T <sup>2</sup> Thru Hole + .004 - .000
10SL	.717	.256	.110	4.720	2.362	.559	.894	.717	1.000	.126
14S	.969	.354	.126	4.720	2.440	.559	1.083	.906	1.181	.126
16S	1.079	.433	.126	4.720	2.756	.559	1.181	.969	1.280	.126
16	1.079	.433	.126	4.921	2.756	.748	1.181	.969	1.280	.126
18	1.213	.559	.157	4.921	3.031	.748	1.300	1.063	1.378	.126
20	1.346	.622	.157	4.921	3.031	.748	1.476	1.157	1.496	.126
22	1.472	.622	.157	4.921	3.031	.748	1.476	1.252	1.614	.126
24	1.610	.843	.157	4.921	3.346	.811	1.705	1.374	1.752	.146
28	1.839	.843	.157	4.921	3.346	.811	1.705	1.563	2.000	.146
32	2.102	1.051	.157	4.921	3.346	.874	2.035	1.752	2.244	.169
36	2.346	1.248	.157	5.315	4.134	.874	2.283	1.937	2.500	.169

Millimeters

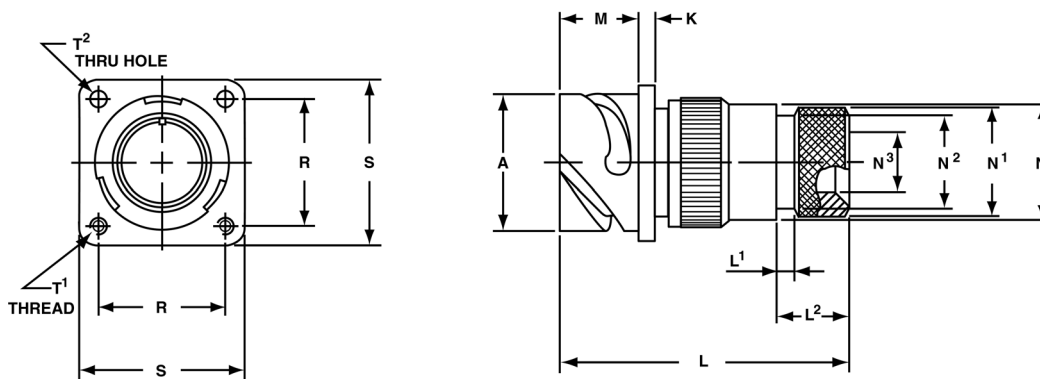
Shell Size	A + 0.00 - 0.15	B Max.	K ± 0.2	L Max.	L <sup>1</sup> Max.	M + 0.4 - 0.0	N Max.	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	6.5	2.8	120	60	14.2	22.7	18.2	25.4	M4	3.2
14S	24.6	9.0	3.2	120	62	14.2	27.5	23.0	30.0	M4	3.2
16S	27.4	11.0	3.2	120	70	14.2	30.0	24.6	32.5	M4	3.2
16	27.4	11.0	3.2	125	70	19.0	30.0	24.6	32.5	M4	3.2
18	30.8	14.2	4.0	125	77	19.0	33.0	27.0	35.0	M4	3.2
20	34.2	15.8	4.0	125	77	19.0	37.5	29.4	38.0	M4	3.2
22	37.4	15.8	4.0	125	77	19.0	37.5	31.8	41.0	M4	3.2
24	40.9	21.4	4.0	125	85	20.6	43.3	34.9	44.5	M5	3.7
28	46.7	21.4	4.0	125	85	20.6	43.3	39.7	50.8	M5	3.7
32	53.4	26.7	4.0	125	85	22.2	51.7	44.5	57.0	M5	4.3
36	59.6	31.7	4.0	135	105	22.2	58.0	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3100G-B

## wall mount receptacle for front panel mounting

- Receptacle with endbell for heat shrink termination
- Does not include grommet and grommet sleeve
- Four through mounting holes or optional metric threaded holes



Inches

Shell Size	A +.000 -.006	K ± .008	L Max.	L <sup>1</sup> ± .008	L <sup>2</sup> ± .020	M +.016 -.000	N ± .008	N <sup>1</sup> ± .008	N <sup>2</sup> Max.	N <sup>3</sup> Min.	R ± .004	S ± .012	T <sup>2</sup> Thru Hole +.004 -.000
10SL	.717	.110	1.969	.138	.461	.559	.669	.610	.524	.303	.717	1.000	.126
14S	.969	.126	1.969	.138	.461	.559	.791	.752	.669	.417	.906	1.181	.126
16S	1.079	.126	1.969	.138	.461	.559	.925	.941	.862	.531	.969	1.280	.126
16	1.079	.126	2.362	.138	.453	.748	.925	.941	.862	.531	.969	1.280	.126
18	1.213	.157	2.362	.138	.453	.748	1.043	.941	.862	.575	1.063	1.378	.126
20	1.346	.157	2.559	.138	.500	.748	1.189	1.165	1.031	.736	1.157	1.496	.126
22	1.472	.157	2.559	.138	.500	.748	1.323	1.165	1.031	.819	1.252	1.614	.126
24	1.610	.157	2.559	.138	.500	.811	1.421	1.488	1.358	.969	1.374	1.752	.146
28	1.839	.157	2.559	.138	.500	.811	1.630	1.488	1.358	1.062	1.563	2.000	.146
32	2.102	.157	2.756	.138	.598	.874	1.913	1.882	1.717	1.311	1.752	2.244	.169
36	2.346	.157	3.150	.138	.598	.874	2.157	1.882	1.717	1.516	1.937	2.500	.169

Millimeters

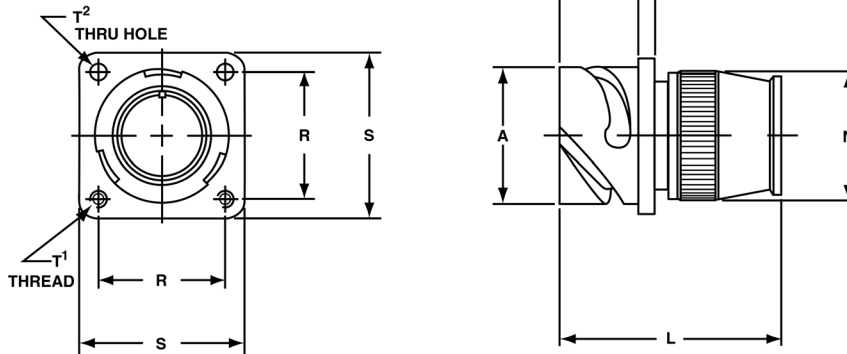
Shell Size	A + 0.00 - 0.15	K ± 0.2	L Max.	L <sup>1</sup> ± 0.2	L <sup>2</sup> ± 0.5	M + 0.4 - 0.0	N ± 0.2	N <sup>1</sup> ± 0.2	N <sup>2</sup> Max.	N <sup>3</sup> Min.	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	2.8	50	3.5	11.7	14.2	17.0	15.5	13.3	7.7	18.2	25.4	M4	3.2
14S	24.6	3.2	50	3.5	11.7	14.2	20.1	19.1	17.0	10.6	23.0	30.0	M4	3.2
16S	27.4	3.2	50	3.5	11.7	14.2	23.5	23.9	21.9	13.5	24.6	32.5	M4	3.2
16	27.4	3.2	60	3.5	11.5	19.0	23.5	23.9	21.9	13.5	24.6	32.5	M4	3.2
18	30.8	4.0	60	3.5	11.5	19.0	26.5	23.9	21.9	14.6	27.0	35.0	M4	3.2
20	34.2	4.0	65	3.5	12.7	19.0	30.2	29.6	26.2	18.7	29.4	38.0	M4	3.2
22	37.4	4.0	65	3.5	12.7	19.0	33.6	29.6	26.2	20.8	31.8	41.0	M4	3.2
24	40.9	4.0	65	3.5	12.7	20.6	36.1	37.8	34.5	24.6	34.9	44.5	M5	3.7
28	46.7	4.0	65	3.5	12.7	20.6	41.4	37.8	34.5	27.0	39.7	50.8	M5	3.7
32	53.4	4.0	70	3.5	15.2	22.2	48.6	47.8	43.6	33.3	44.5	57.0	M5	4.3
36	59.6	4.0	80	3.5	15.2	22.2	54.8	47.8	43.6	38.5	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3100R-B

## wall mount receptacle for front panel mounting

- Receptacle with short endbell for individual wire sealing
- Includes grommet and grommet sleeve
- Four through mounting holes or optional metric threaded holes



Inches

Shell Size	A + .000 - .006	K ± .008	L Max.	M + .016 - .000	N Max.	R ± .004	S ± .012	T <sup>2</sup> Thru Hole + .004 - .000
10SL	.717	.110	1.969	.559	.787	.717	1.000	.126
14S	.969	.126	1.969	.559	.945	.906	1.181	.126
16S	1.079	.126	1.969	.559	1.024	.969	1.280	.126
16	1.079	.126	2.362	.748	1.024	.969	1.280	.126
18	1.213	.157	2.362	.748	1.161	1.063	1.378	.126
20	1.346	.157	2.559	.748	1.299	1.157	1.496	.126
22	1.472	.157	2.559	.748	1.417	1.252	1.614	.126
24	1.610	.157	2.559	.811	1.575	1.374	1.752	.146
28	1.839	.157	2.559	.811	1.811	1.563	2.000	.146
32	2.102	.157	2.756	.874	2.028	1.752	2.244	.169
36	2.346	.157	3.150	.874	2.283	1.937	2.500	.169

Millimeters

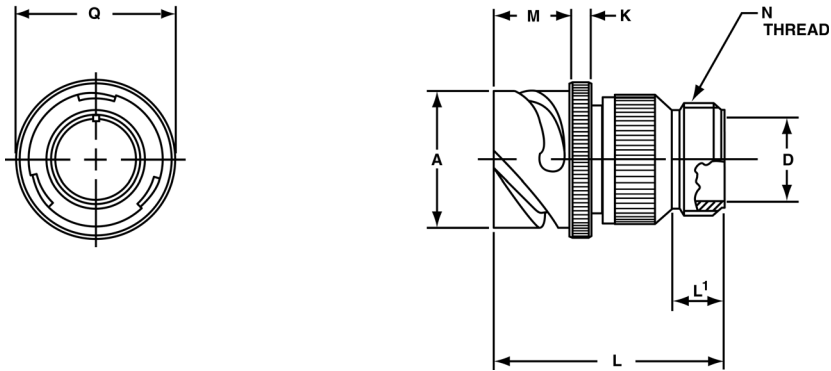
Shell Size	A + 0.00 - 0.15	K ± 0.2	L Max.	M + 0.4 - 0.0	N Max.	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	2.8	50	14.2	20.0	18.2	25.4	M4	3.2
14S	24.6	3.2	50	14.2	24.0	23.0	30.0	M4	3.2
16S	27.4	3.2	50	14.2	26.0	24.6	32.5	M4	3.2
16	27.4	3.2	60	19.0	26.0	24.6	32.5	M4	3.2
18	30.8	4.0	60	19.0	29.5	27.0	35.0	M4	3.2
20	34.2	4.0	65	19.0	33.0	29.4	38.0	M4	3.2
22	37.4	4.0	65	19.0	36.0	31.8	41.0	M4	3.2
24	40.9	4.0	65	20.6	40.0	34.9	44.5	M5	3.7
28	46.7	4.0	65	20.6	46.0	39.7	50.8	M5	3.7
32	53.4	4.0	70	22.2	51.5	44.5	57.0	M5	4.3
36	59.6	4.0	80	22.2	58.0	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3101F-B

## cable connecting receptacle

- Receptacle with solid backshell and rear accessory threads
- Includes grommet and grommet sleeve



Inches

Shell Size	A + .000 - .006	D Max.	K ± .008	L Max.	L <sup>1</sup> Min.	M + .016 - .000	N Thread in Inches Class 2A	Q Max.
10SL	.717	.323	.110	1.969	.374	.559	.6250-24 UNEF	.886
14S	.969	.437	.126	1.969	.374	.559	.7500-20 UNEF	1.161
16S	1.079	.563	.126	1.969	.374	.559	.8750-20 UNEF	1.240
16	1.079	.563	.126	2.362	.374	.748	.8750-20 UNEF	1.240
18	1.213	.658	.157	2.362	.374	.748	1.0000-20 UNEF	1.358
20	1.346	.780	.157	2.362	.374	.748	1.1875-18 UNEF	1.476
22	1.472	.780	.157	2.362	.374	.748	1.1875-18 UNEF	1.594
24	1.610	1.000	.157	2.560	.374	.811	1.4375-18 UNEF	1.752
28	1.839	1.063	.157	2.560	.374	.811	1.4375-18 UNEF	1.969
32	2.102	1.280	.157	2.560	.433	.874	1.7500-18 UNS	2.224
36	2.346	1.406	.157	3.150	.465	.874	2.0000-18 UNS	2.480

Millimeters

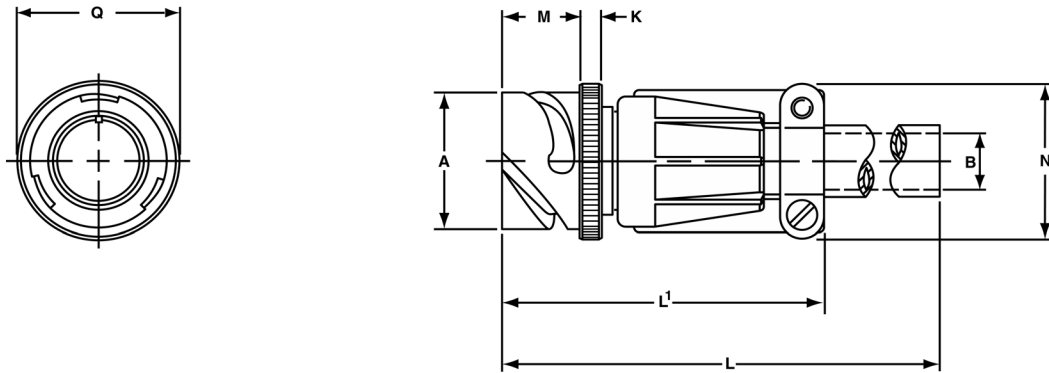
Shell Size	A + 0.00 - 0.15	D Max.	K ± 0.2	L Max.	L <sup>1</sup> Min.	M + 0.4 - 0.0	Q Max.
10SL	18.2	8.2	2.8	50	9.5	14.2	22.5
14S	24.6	11.1	3.2	50	9.5	14.2	29.5
16S	27.4	14.3	3.2	50	9.5	14.2	31.5
16	27.4	14.3	3.2	60	9.5	19.0	31.5
18	30.8	16.7	4.0	60	9.5	19.0	34.5
20	34.2	19.8	4.0	65	9.5	19.0	37.5
22	37.4	19.8	4.0	65	9.5	19.0	40.5
24	40.9	25.4	4.0	65	9.5	20.6	44.5
28	46.7	27.0	4.0	65	9.5	20.6	50.0
32	53.4	32.5	4.0	70	11.0	22.2	56.5
36	59.6	35.7	4.0	80	11.8	22.2	63.0

All dimensions for reference only.

# ACA 3101E-B

## cable connecting receptacle

- Receptacle with cable clamp and telescopic bushing
- Includes grommet and grommet sleeve



Inches

Shell Size	A + .000 - .006	B Max.	K ± .008	L Max.	L <sup>1</sup> Max.	M + .016 - .000	N Max.	Q Max.
10SL	.717	.256	.110	4.720	2.362	.559	.894	.886
14S	.969	.354	.126	4.720	2.440	.559	1.083	1.161
16S	1.079	.433	.126	4.720	2.756	.559	1.181	1.240
16	1.079	.433	.126	4.921	2.756	.748	1.181	1.240
18	1.213	.559	.157	4.921	3.031	.748	1.300	1.358
20	1.346	.622	.157	4.921	3.031	.748	1.476	1.476
22	1.472	.622	.157	4.921	3.031	.748	1.476	1.594
24	1.610	.843	.157	4.921	3.346	.811	1.705	1.752
28	1.839	.843	.157	4.921	3.346	.811	1.705	1.969
32	2.102	1.051	.157	4.921	3.346	.874	2.035	2.224
36	2.346	1.248	.157	5.315	4.134	.874	2.283	2.480

Millimeters

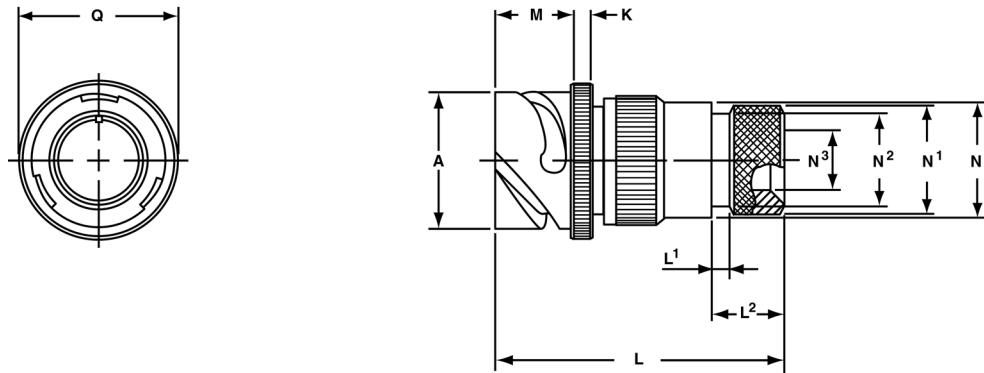
Shell Size	A + 0.00 - 0.15	B Max.	K ± 0.2	L Max.	L <sup>1</sup> Max.	M + 0.4 - 0.0	N Max.	Q Max.
10SL	18.2	6.5	2.8	120	60	14.2	22.7	22.5
14S	24.6	9.0	3.2	120	62	14.2	27.5	29.5
16S	27.4	11.0	3.2	120	70	14.2	30.0	31.5
16	27.4	11.0	3.2	125	70	19.0	30.0	31.5
18	30.8	14.2	4.0	125	77	19.0	33.0	34.5
20	34.2	15.8	4.0	125	77	19.0	37.5	37.5
22	37.4	15.8	4.0	125	77	19.0	37.5	40.5
24	40.9	21.4	4.0	125	85	20.6	43.3	44.5
28	46.7	21.4	4.0	125	85	20.6	43.3	50.0
32	53.4	26.7	4.0	125	85	22.2	51.7	56.5
36	59.6	31.7	4.0	135	105	22.2	58.0	63.0

All dimensions for reference only.

# ACA 3101G-B

## cable connecting receptacle

- Receptacle with backshell for heat shrink termination
- Does not include grommet and grommet sleeve



Inches

Shell Size	A + .000 - .006	K ± .008	L Max.	L <sup>1</sup> ± .008	L <sup>2</sup> ± .020	M + .016 - .000	N ± .008	N <sup>1</sup> ± .008	N <sup>2</sup> Max.	N <sup>3</sup> Min.	Q Max.
10SL	.717	.110	1.969	.138	.461	.559	.669	.610	.524	.303	.886
14S	.969	.126	1.969	.138	.461	.559	.791	.752	.669	.417	1.161
16S	1.079	.126	1.969	.138	.461	.559	.925	.941	.862	.531	1.240
16	1.079	.126	2.362	.138	.453	.748	.925	.941	.862	.531	1.240
18	1.213	.157	2.362	.138	.453	.748	1.043	.941	.862	.575	1.358
20	1.346	.157	2.559	.138	.500	.748	1.189	1.165	1.031	.736	1.476
22	1.472	.157	2.559	.138	.500	.748	1.323	1.165	1.031	.819	1.594
24	1.610	.157	2.559	.138	.500	.811	1.421	1.488	1.358	.969	1.752
28	1.839	.157	2.559	.138	.500	.811	1.630	1.488	1.358	1.062	1.969
32	2.102	.157	2.756	.138	.598	.874	1.913	1.882	1.717	1.311	2.224
36	2.346	.157	3.150	.138	.598	.874	2.157	1.882	1.717	1.516	2.480

Millimeters

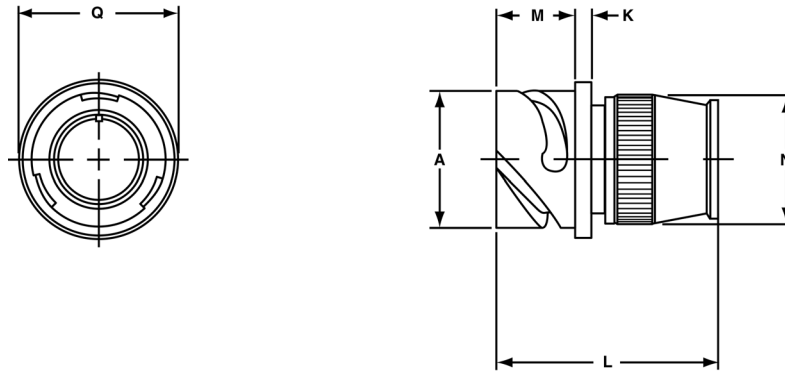
Shell Size	A + 0.00 - 0.15	K ± 0.2	L Max.	L <sup>1</sup> ± 0.2	L <sup>2</sup> ± 0.5	M + 0.4 - 0.0	N ± 0.2	N <sup>1</sup> ± 0.2	N <sup>2</sup> Max.	N <sup>3</sup> Min.	Q Max.
10SL	18.2	2.8	50	3.5	11.7	14.2	17.0	15.5	13.3	7.7	22.5
14S	24.6	3.2	50	3.5	11.7	14.2	20.1	19.1	17.0	10.6	29.5
16S	27.4	3.2	50	3.5	11.7	14.2	23.5	23.9	21.9	13.5	31.5
16	27.4	3.2	60	3.5	11.5	19.0	23.5	23.9	21.9	13.5	31.5
18	30.8	4.0	60	3.5	11.5	19.0	26.5	23.9	21.9	14.6	34.5
20	34.2	4.0	65	3.5	12.7	19.0	30.2	29.6	26.2	18.7	37.5
22	37.4	4.0	65	3.5	12.7	19.0	33.6	29.6	26.2	20.8	40.5
24	40.9	4.0	65	3.5	12.7	20.6	36.1	37.8	34.5	24.6	44.5
28	46.7	4.0	65	3.5	12.7	20.6	41.4	37.8	34.5	27.0	50.0
32	53.4	4.0	70	3.5	15.2	22.2	48.6	47.8	43.6	33.3	56.5
36	59.6	4.0	80	3.5	15.2	22.2	54.8	47.8	43.6	38.5	63.0

All dimensions for reference only.

# ACA 3101R-B

## cable connecting receptacle

- Receptacle with short endbell for individual wire sealing
- Includes grommet and grommet sleeve



Inches

Shell Size	A + .000 - .006	K ± .008	L Max.	M + .016 - .000	N Max.	Q Max.
10SL	.717	.110	1.890	.559	.787	.886
14S	.969	.126	1.890	.559	.945	1.161
16S	1.079	.126	1.890	.559	1.024	1.240
16	1.079	.126	2.205	.748	1.024	1.240
18	1.213	.157	2.244	.748	1.161	1.358
20	1.346	.157	2.244	.748	1.299	1.476
22	1.472	.157	2.244	.748	1.417	1.594
24	1.610	.157	2.244	.811	1.575	1.752
28	1.839	.157	2.244	.811	1.811	1.969
32	2.102	.157	2.362	.874	2.028	2.224
36	2.346	.157	2.362	.874	2.283	2.480

Millimeters

Shell Size	A + 0.00 - 0.15	K ± 0.2	L Max.	M + 0.4 - 0.0	N Max.	Q Max.
10SL	18.2	2.8	48.0	14.2	20.0	22.5
14S	24.6	3.2	48.0	14.2	24.0	29.5
16S	27.4	3.2	48.0	14.2	26.0	31.5
16	27.4	3.2	56.0	19.0	26.0	31.5
18	30.8	4.0	57.0	19.0	29.5	34.5
20	34.2	4.0	57.0	19.0	33.0	37.5
22	37.4	4.0	57.0	19.0	36.0	40.5
24	40.9	4.0	57.0	20.6	40.0	44.5
28	46.7	4.0	57.0	20.6	46.0	50.0
32	53.4	4.0	60.0	22.2	51.5	56.5
36	59.6	4.0	60.0	22.2	58.0	63.0

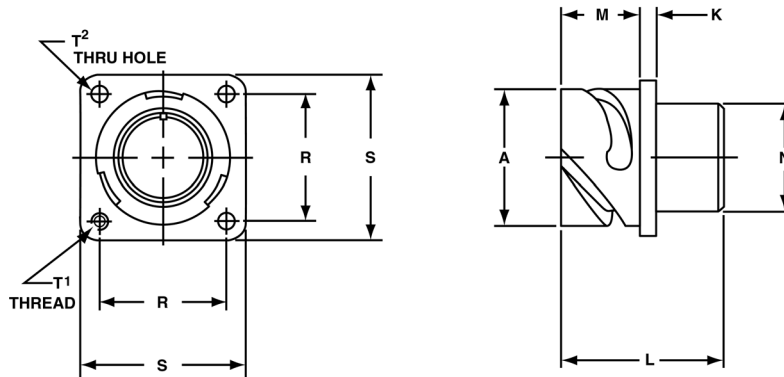
All dimensions for reference only.



# ACA 3102E-B

## box mount receptacle for front panel mounting

- Receptacle without threads for panel mounting
- Four through mounting holes or optional metric threaded holes



Inches

Shell Size	A + .000 - .006	K ± .008	L ± .012	M + .016 - .000	N Max.	R ± .004	S ± .012	T <sup>2</sup> Thru Hole + .004 - .000
10SL	.717	.110	.972	.559	.656	.717	1.000	.126
14S	.969	.126	.972	.559	.756	.906	1.181	.126
16S	1.079	.126	.972	.559	.882	.969	1.280	.126
16	1.079	.126	1.331	.748	.882	.969	1.280	.126
18	1.213	.157	1.358	.748	1.008	1.063	1.378	.126
20	1.346	.157	1.358	.748	1.142	1.157	1.496	.126
22	1.472	.157	1.358	.748	1.268	1.252	1.614	.126
24	1.610	.157	1.406	.811	1.390	1.374	1.752	.146
28	1.839	.157	1.406	.811	1.630	1.563	2.000	.146
32	2.102	.157	1.469	.874	1.882	1.752	2.244	.169
36	2.346	.157	1.469	.874	2.063	1.937	2.500	.169

Millimeters

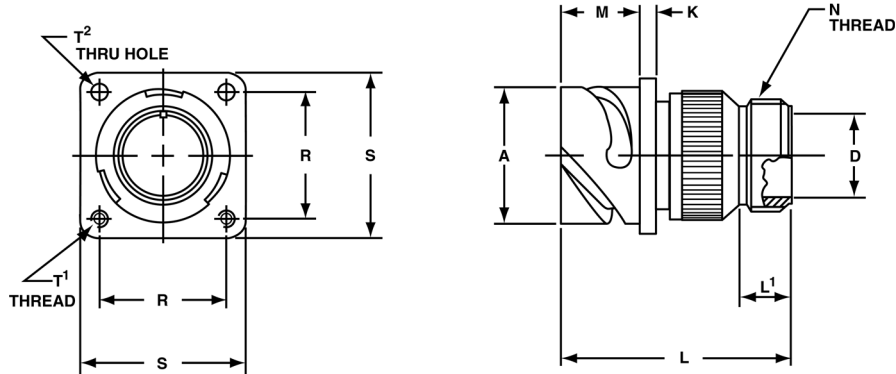
Shell Size	A + 0.00 - 0.15	K ± 0.2	L ± 0.3	M + 0.4 - 0.0	N Max.	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	2.8	24.7	14.2	15.9	18.2	25.4	M4	3.2
14S	24.6	3.2	24.7	14.2	19.2	23.0	30.0	M4	3.2
16S	27.4	3.2	24.7	14.2	22.4	24.6	32.5	M4	3.2
16	27.4	3.2	33.8	19.0	22.4	24.6	32.5	M4	3.2
18	30.8	4.0	34.5	19.0	25.6	27.0	35.0	M4	3.2
20	34.2	4.0	34.5	19.0	29.0	29.4	38.0	M4	3.2
22	37.4	4.0	34.5	19.0	32.2	31.8	41.0	M4	3.2
24	40.9	4.0	35.7	20.6	35.3	34.9	44.5	M5	3.7
28	46.7	4.0	35.7	20.6	41.4	39.7	50.8	M5	3.7
32	53.4	4.0	37.3	22.2	47.8	44.5	57.0	M5	4.3
36	59.6	4.0	37.3	22.2	52.4	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3103F-B

## wall mounting receptacle for rear panel mounting

- Receptacle with backshell and rear accessory threads
- Includes wire sealing grommet and grommet sleeve for individual wires
- Four through mounting holes or optional metric threaded holes



Inches

Shell Size	A + .000 - .006	D Min.	K ± .008	L Max.	L <sup>1</sup> Min.	M + .016 - .000	N Thread in Inches Class 2A	R ± .004	S ± .012	T <sup>2</sup> Thru Hole + .004 - .000
10SL	.717	.323	.110	1.969	.374	.717	.6250-24 UNEF	.717	1.000	.126
14S	.969	.437	.126	1.969	.374	.717	.7500-20 UNEF	.906	1.181	.126
16S	1.079	.563	.126	1.969	.374	.717	.8750-20 UNEF	.969	1.280	.126
16	1.079	.563	.126	2.362	.374	.847	.8750-20 UNEF	.969	1.280	.126
18	1.213	.658	.157	2.362	.374	.908	1.0000-20 UNEF	1.063	1.378	.126
20	1.346	.780	.157	2.362	.374	.908	1.1875-18 UNEF	1.157	1.496	.126
22	1.472	.780	.157	2.362	.374	.908	1.1875-18 UNEF	1.252	1.614	.126
24	1.610	1.000	.157	2.560	.374	.908	1.4375-18 UNEF	1.374	1.752	.146
28	1.839	1.063	.157	2.560	.374	.947	1.4375-18 UNEF	1.563	2.000	.146
32	2.102	1.280	.157	2.560	.433	.947	1.7500-18 UNS	1.752	2.244	.169
36	2.346	1.406	.157	3.150	.465	.947	2.0000-18 UNS	1.937	2.500	.169

Millimeters

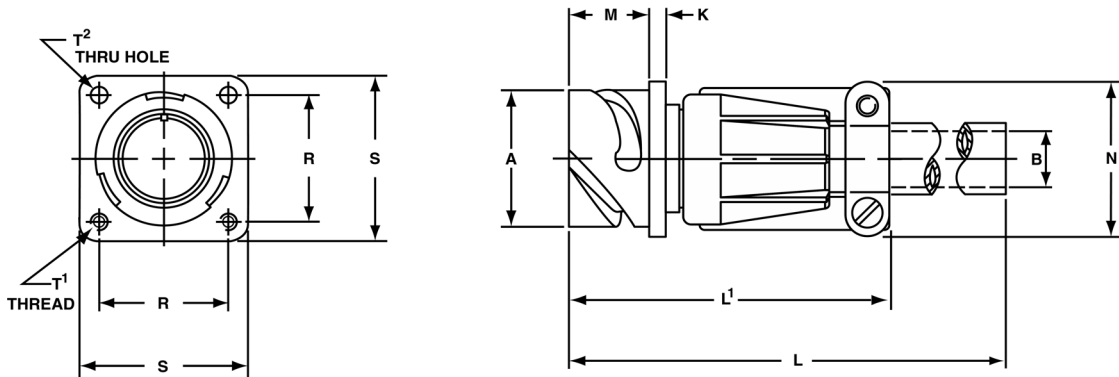
Shell Size	A + 0.00 - 0.15	D Min.	K ± 0.2	L Max.	L <sup>1</sup> Min.	M + 0.4 - 0.0	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	8.2	2.8	50	9.5	18.2	18.2	25.4	M4	3.2
14S	24.6	11.1	3.2	50	9.5	18.2	23.0	30.0	M4	3.2
16S	27.4	14.3	3.2	50	9.5	18.2	24.6	32.5	M4	3.2
16	27.4	14.3	3.2	60	9.5	21.5	24.6	32.5	M4	3.2
18	30.8	16.7	4.0	60	9.5	23.05	27.0	35.0	M4	3.2
20	34.2	19.8	4.0	60	9.5	23.05	29.4	38.0	M4	3.2
22	37.4	19.8	4.0	60	9.5	23.05	31.8	41.0	M4	3.2
24	40.9	25.4	4.0	65	9.5	23.05	34.9	44.5	M5	3.7
28	46.7	27.0	4.0	65	9.5	24.05	39.7	50.8	M5	3.7
32	53.4	32.5	4.0	65	11.0	24.05	44.5	57.0	M5	4.3
36	59.6	35.7	4.0	80	11.8	24.05	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3103E-B

## wall mount receptacle for rear panel mounting

- Receptacle with cable clamp and telescopic bushing
- Includes grommet and grommet sleeve
- Four through mounting holes or optional metric threaded holes



Inches

Shell Size	A + .000 - .006	B Max.	K ± .008	L Max.	L <sup>1</sup> Max.	M + .016 - .000	N Max.	R ± .004	S ± .012	T <sup>2</sup> Thru Hole + .004 - .000
10SL	.717	.256	.110	4.720	2.362	.717	.894	.717	1.000	.126
14S	.969	.354	.126	4.720	2.440	.717	1.083	.906	1.181	.126
16S	1.079	.433	.126	4.720	2.756	.717	1.181	.969	1.280	.126
16	1.079	.433	.126	4.921	2.756	.847	1.181	.969	1.280	.126
18	1.213	.559	.157	4.921	3.031	.908	1.300	1.063	1.378	.126
20	1.346	.622	.157	4.921	3.031	.908	1.476	1.157	1.496	.126
22	1.472	.622	.157	4.921	3.031	.908	1.476	1.252	1.614	.126
24	1.610	.843	.157	4.921	3.346	.908	1.705	1.374	1.752	.146
28	1.839	.843	.157	4.921	3.346	.947	1.705	1.563	2.000	.146
32	2.102	1.051	.157	4.921	3.346	.947	2.035	1.752	2.244	.169
36	2.346	1.248	.157	5.315	4.134	.947	2.283	1.937	2.500	.169

Millimeters

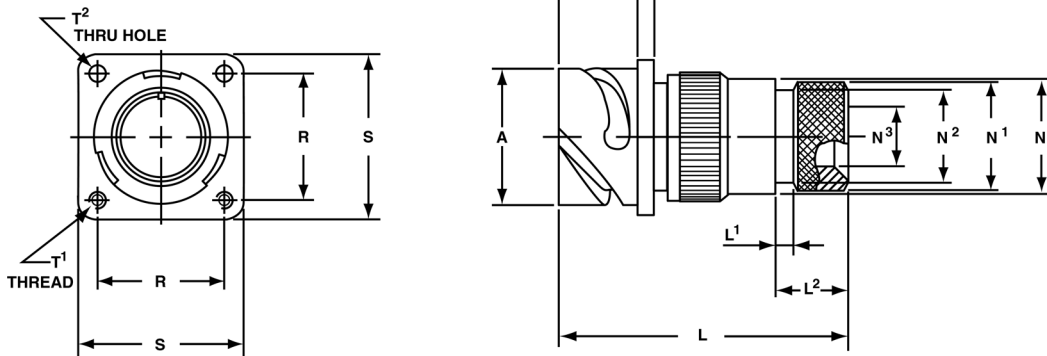
Shell Size	A + 0.00 - 0.15	B Max.	K ± 0.2	L Max.	L <sup>1</sup> Max.	M + 0.4 - 0.0	N Max.	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	6.5	2.8	120	60	18.2	22.7	18.2	25.4	M4	3.2
14S	24.6	9.0	3.2	120	62	18.2	27.5	23.0	30.0	M4	3.2
16S	27.4	11.0	3.2	120	70	18.2	30.0	24.6	32.5	M4	3.2
16	27.4	11.0	3.2	125	70	21.5	30.0	24.6	32.5	M4	3.2
18	30.8	14.2	4.0	125	77	23.05	33.0	27.0	35.0	M4	3.2
20	34.2	15.8	4.0	125	77	23.05	37.5	29.4	38.0	M4	3.2
22	37.4	15.8	4.0	125	77	23.05	37.5	31.8	41.0	M4	3.2
24	40.9	21.4	4.0	125	85	23.05	43.3	34.9	44.5	M5	3.7
28	46.7	21.4	4.0	125	85	24.05	43.3	39.7	50.8	M5	3.7
32	53.4	26.7	4.0	125	85	24.05	51.7	44.5	57.0	M5	4.3
36	59.6	31.7	4.0	135	105	24.05	58.0	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3103G-B

## wall mount receptacle for rear panel mounting

- Receptacle with endbell for heat shrink termination
- Does not include grommet and grommet sleeve
- Four through mounting holes or optional metric threaded holes



Inches

Shell Size	A +.000 -.006	K ± .008	L Max.	L <sup>1</sup> ± .008	L <sup>2</sup> ± .020	M +.016 -.000	N ± .008	N <sup>1</sup> ± .008	N <sup>2</sup> Max.	N <sup>3</sup> Min.	R ± .004	S ± .012	T <sup>2</sup> Thru Hole +.004 -.000
10SL	.717	.110	1.969	.138	.461	.717	.669	.610	.524	.303	.717	1.000	.126
14S	.969	.126	1.969	.138	.461	.717	.791	.752	.669	.417	.906	1.181	.126
16S	1.079	.126	1.969	.138	.461	.717	.925	.941	.862	.531	.969	1.280	.126
16	1.079	.126	2.362	.138	.453	.847	.925	.941	.862	.531	.969	1.280	.126
18	1.213	.157	2.362	.138	.453	.908	1.043	.941	.862	.575	1.063	1.378	.126
20	1.346	.157	2.559	.138	.500	.908	1.189	1.165	1.031	.736	1.157	1.496	.126
22	1.472	.157	2.559	.138	.500	.908	1.323	1.165	1.031	.819	1.252	1.614	.126
24	1.610	.157	2.559	.138	.500	.908	1.421	1.488	1.358	.969	1.374	1.752	.146
28	1.839	.157	2.559	.138	.500	.947	1.630	1.488	1.358	1.062	1.563	2.000	.146
32	2.102	.157	2.756	.138	.598	.947	1.913	1.882	1.717	1.311	1.752	2.244	.169
36	2.346	.157	3.150	.138	.598	.947	2.157	1.882	1.717	1.516	1.937	2.500	.169

Millimeters

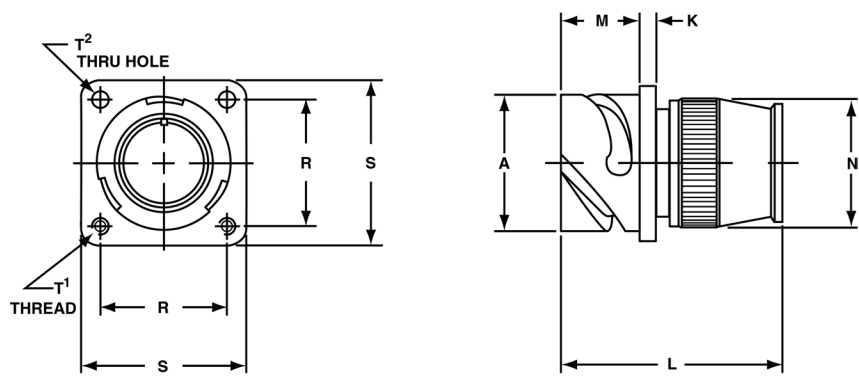
Shell Size	A + 0.00 - 0.15	K ± 0.2	L Max.	L <sup>1</sup> ± 0.2	L <sup>2</sup> ± 0.5	M + 0.4 - 0.0	N ± 0.2	N <sup>1</sup> ± 0.2	N <sup>2</sup> Max.	N <sup>3</sup> Min.	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	2.8	50	3.5	11.7	18.2	17.0	15.5	13.3	7.7	18.2	25.4	M4	3.2
14S	24.6	3.2	50	3.5	11.7	18.2	20.1	19.1	17.0	10.6	23.0	30.0	M4	3.2
16S	27.4	3.2	50	3.5	11.7	18.2	23.5	23.9	21.9	13.5	24.6	32.5	M4	3.2
16	27.4	3.2	60	3.5	11.5	21.5	23.5	23.9	21.9	13.5	24.6	32.5	M4	3.2
18	30.8	4.0	60	3.5	11.5	23.05	26.5	23.9	21.9	14.6	27.0	35.0	M4	3.2
20	34.2	4.0	65	3.5	12.7	23.05	30.2	29.6	26.2	18.7	29.4	38.0	M4	3.2
22	37.4	4.0	65	3.5	12.7	23.05	33.6	29.6	26.2	20.8	31.8	41.0	M4	3.2
24	40.9	4.0	65	3.5	12.7	23.05	36.1	37.8	34.5	24.6	34.9	44.5	M5	3.7
28	46.7	4.0	65	3.5	12.7	24.05	41.4	37.8	34.5	27.0	39.7	50.8	M5	3.7
32	53.4	4.0	70	3.5	15.2	24.05	48.6	47.8	43.6	33.3	44.5	57.0	M5	4.3
36	59.6	4.0	80	3.5	15.2	24.05	54.8	47.8	43.6	38.5	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3103R-B

## wall mount receptacle for rear panel mounting

- Receptacle with short endbell for individual wire sealing
- Includes grommet and grommet sleeve
- Four through mounting holes or optional metric threaded holes



Inches

Shell Size	A + .000 - .006	K ± .008	L Max.	M + .016 - .000	N Max.	R ± .004	S ± .012	T <sup>2</sup> Thru Hole + .004 - .000
10SL	.717	.110	1.890	.717	.787	.717	1.000	.126
14S	.969	.126	1.890	.717	.945	.906	1.181	.126
16S	1.079	.126	1.890	.717	1.024	.969	1.280	.126
16	1.079	.126	2.205	.847	1.024	.969	1.280	.126
18	1.213	.157	2.244	.908	1.161	1.063	1.378	.126
20	1.346	.157	2.244	.908	1.299	1.157	1.496	.126
22	1.472	.157	2.244	.908	1.417	1.252	1.614	.126
24	1.610	.157	2.244	.908	1.575	1.374	1.752	.146
28	1.839	.157	2.244	.947	1.811	1.563	2.000	.146
32	2.102	.157	2.362	.947	2.028	1.752	2.244	.169
36	2.346	.157	2.362	.947	2.283	1.937	2.500	.169

Millimeters

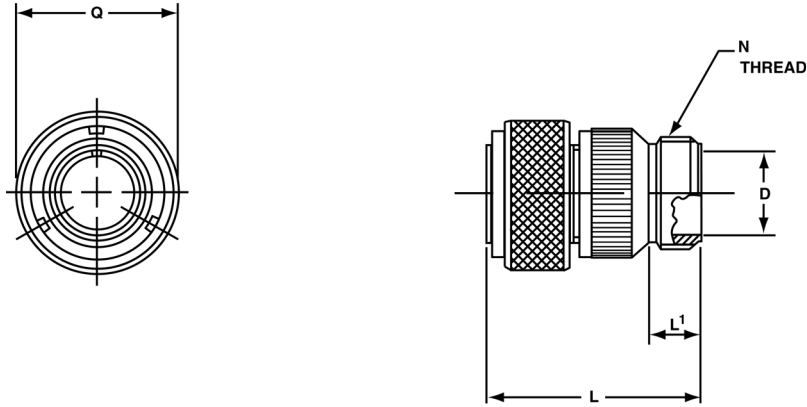
Shell Size	A + 0.00 - 0.15	K ± 0.2	L Max.	M + 0.4 - 0.0	N Max.	R ± 0.1	S ± 0.3	T <sup>1</sup> Metric Thread	T <sup>2</sup> Thru Hole + 0.1 - 0.0
10SL	18.2	2.8	48	18.2	20.0	18.2	25.4	M4	3.2
14S	24.6	3.2	48	18.2	24.0	23.0	30.0	M4	3.2
16S	27.4	3.2	48	18.2	26.0	24.6	32.5	M4	3.2
16	27.4	3.2	56	21.5	26.0	24.6	32.5	M4	3.2
18	30.8	4.0	57	23.05	29.5	27.0	35.0	M4	3.2
20	34.2	4.0	57	23.05	33.0	29.4	38.0	M4	3.2
22	37.4	4.0	57	23.05	36.0	31.8	41.0	M4	3.2
24	40.9	4.0	57	23.05	40.0	34.9	44.5	M5	3.7
28	46.7	4.0	57	24.05	46.0	39.7	50.8	M5	3.7
32	53.4	4.0	60	24.05	51.5	44.5	57.0	M5	4.3
36	59.6	4.0	60	24.05	58.0	49.2	63.5	M5	4.3

All dimensions for reference only.

# ACA 3106F-B

## straight plug

- Plug with backshell and rear accessory threads
- Includes grommet and grommet sleeve



Inches

Shell Size	D Min.	L Max.	L <sup>1</sup> Min.	N Thread in Inches Class 2A	Q Max.
10SL	.323	1.969	.374	.6250-24 UNEF	.898
14S	.437	1.969	.374	.7500-20 UNEF	1.150
16S	.563	1.969	.374	.8750-20 UNEF	1.260
16	.563	2.362	.374	.8750-20 UNEF	1.260
18	.658	2.362	.374	1.0000-20 UNEF	1.437
20	.780	2.362	.374	1.1875-18 UNEF	1.571
22	.780	2.362	.374	1.1875-18 UNEF	1.697
24	1.000	2.560	.374	1.4375-18 UNEF	1.835
28	1.063	2.560	.374	1.4375-18 UNEF	2.102
32	1.280	2.560	.433	1.7500-18 UNS	2.366
36	1.406	3.150	.465	2.0000-18 UNS	2.610

Millimeters

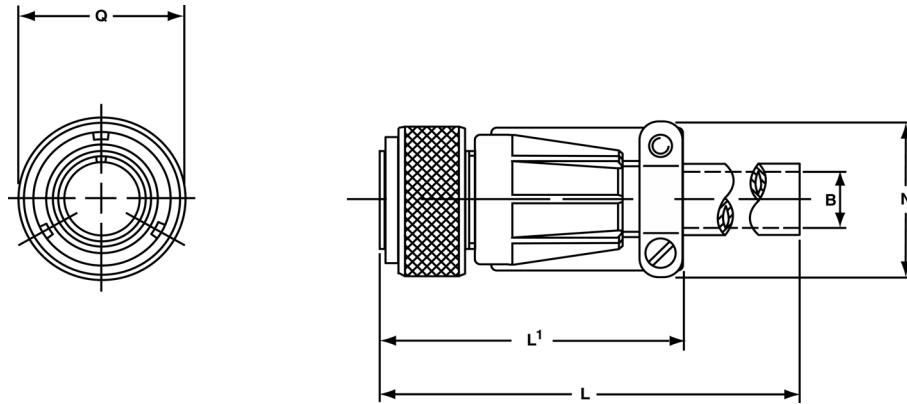
Shell Size	D Min.	L Max.	L <sup>1</sup> Min.	Q Max.
10SL	8.2	50	9.5	22.8
14S	11.1	50	9.5	29.2
16S	14.3	50	9.5	32.0
16	14.3	60	9.5	32.0
18	16.7	60	9.5	36.5
20	19.8	60	9.5	39.9
22	19.8	60	9.5	43.1
24	25.4	65	9.5	46.6
28	27.0	65	9.5	53.4
32	32.5	65	11.0	60.1
36	35.7	80	11.8	66.3

All dimensions for reference only.

# ACA 3106E-B

## straight plug

- Plug with cable clamp and telescopic bushing
- Includes grommet and grommet sleeve



Inches

Shell Size	B Max.	L Max.	L <sup>1</sup> Max.	N Max.	Q Max.
10SL	.256	4.528	2.165	.894	.898
14S	.354	4.528	2.362	1.083	1.150
16S	.433	4.528	2.362	1.181	1.260
16	.433	4.724	2.756	1.181	1.260
18	.559	4.724	2.756	1.268	1.437
20	.622	4.724	2.953	1.476	1.571
22	.622	4.724	2.953	1.476	1.697
24	.843	4.724	3.543	1.705	1.835
28	.843	4.724	3.543	1.705	2.102
32	1.051	4.724	3.543	2.035	2.366
36	1.248	5.118	3.937	2.283	2.610

Millimeters

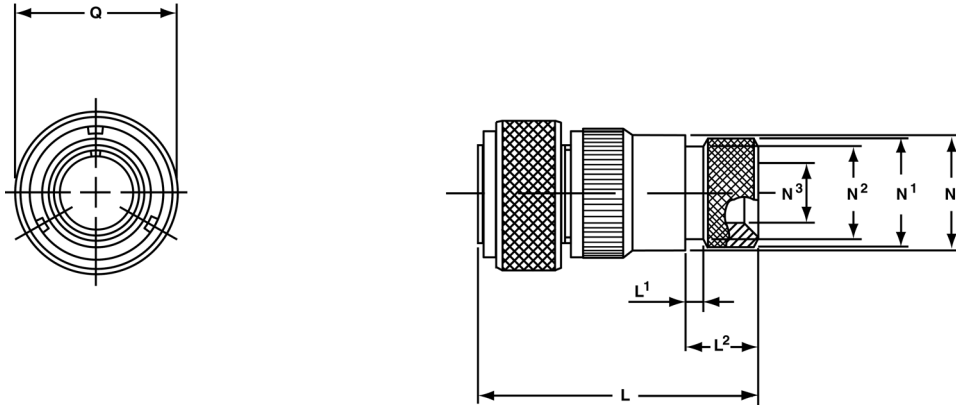
Shell Size	B Max.	L Max.	L <sup>1</sup> Max.	N Max.	Q Max.
10SL	6.5	115	55	22.7	22.8
14S	9.0	115	60	27.5	29.2
16S	11.0	115	60	30.0	32.0
16	11.0	120	70	30.0	32.0
18	14.2	120	70	32.2	36.5
20	15.8	120	75	37.5	39.9
22	15.8	120	75	37.5	43.1
24	21.4	120	90	43.3	46.6
28	21.4	120	90	43.3	53.4
32	26.7	120	90	51.7	60.1
36	31.7	130	100	58.0	66.3

All dimensions for reference only.

# ACA 3106G-B

## straight plug

- Plug with backshell for heat shrink termination
- Does not include grommet and grommet sleeve



Inches

Shell Size	L Max.	L <sup>1</sup> ± .008	L <sup>2</sup> ± .020	N ± .008	N <sup>1</sup> ± .008	N <sup>2</sup> Max.	N <sup>3</sup> Max.	Q Max.
10SL	1.969	.138	.461	.669	.610	.484	.303	.898
14S	1.969	.138	.461	.791	.752	.669	.417	1.150
16S	1.969	.138	.461	.925	.941	.862	.532	1.260
16	2.362	.138	.453	.925	.941	.862	.532	1.260
18	2.362	.138	.453	1.043	.941	.862	.575	1.437
20	2.559	.138	.500	1.189	1.165	1.031	.736	1.571
22	2.559	.138	.500	1.323	1.165	1.031	.819	1.697
24	2.559	.138	.500	1.421	1.488	1.358	.968	1.835
28	2.559	.138	.500	1.630	1.488	1.358	1.063	2.102
32	2.756	.138	.598	1.913	1.882	1.717	1.311	2.366
36	3.150	.138	.598	2.157	1.882	1.717	1.516	2.610

Millimeters

Shell Size	L Max.	L <sup>1</sup> ± 0.2	L <sup>2</sup> ± 0.5	N ± 0.2	N <sup>1</sup> ± 0.2	N <sup>2</sup> Max.	N <sup>3</sup> Max.	Q Max.
10SL	50	3.5	11.7	17.0	15.5	12.3	7.7	22.8
14S	50	3.5	11.7	20.1	19.1	17.0	10.6	29.2
16S	50	3.5	11.7	23.5	23.9	21.9	13.5	32.0
16	60	3.5	11.5	23.5	23.9	21.9	13.5	32.0
18	60	3.5	11.5	26.5	23.9	21.9	14.6	36.5
20	65	3.5	12.7	30.2	29.6	26.2	18.7	39.9
22	65	3.5	12.7	33.6	29.6	26.2	20.8	43.1
24	65	3.5	12.7	36.1	37.8	34.5	24.6	46.6
28	65	3.5	12.7	41.4	37.8	34.5	27.0	53.4
32	70	3.5	15.2	48.6	47.8	43.6	33.3	60.1
36	80	3.5	15.2	54.8	47.8	43.6	38.5	66.3

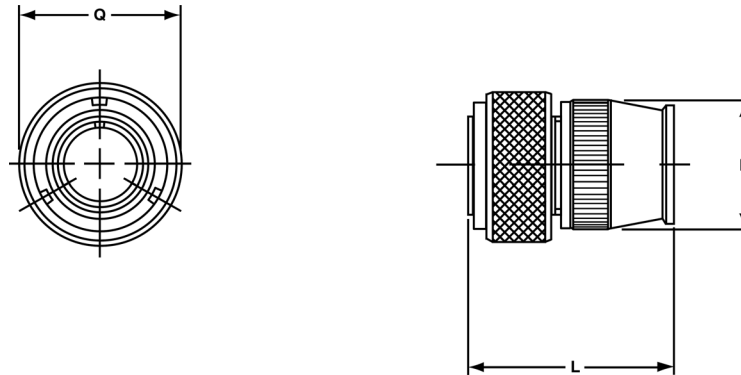
All dimensions for reference only.



# ACA 3106R-B

## straight plug

- Plug with short endbell for individual wire sealing
- Includes grommet and grommet sleeve



Inches

Shell Size	L Max.	N Max.	Q Max.
10SL	1.890	.787	.898
14S	1.890	.945	1.150
16S	1.890	1.024	1.260
16	2.205	1.024	1.260
18	2.244	1.161	1.437
20	2.244	1.299	1.571
22	2.244	1.417	1.697
24	2.244	1.575	1.835
28	2.244	1.811	2.102
32	2.362	2.028	2.366
36	2.362	2.283	2.610

Millimeters

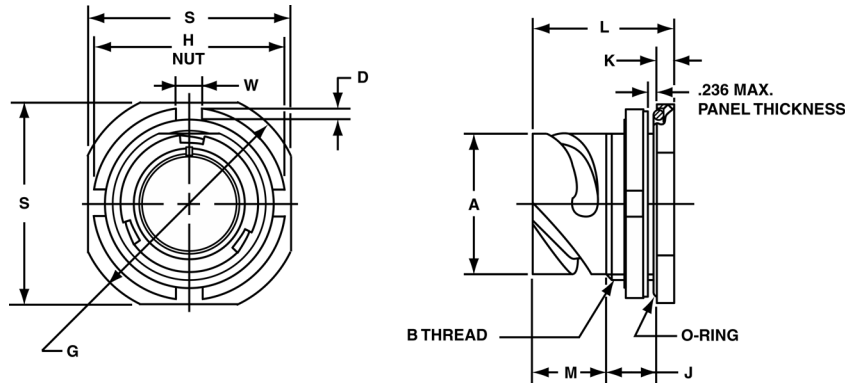
Shell Size	L Max.	N Max.	Q Max.
10SL	48	20.0	22.8
14S	48	24.0	29.2
16S	48	26.0	32.0
16	56	26.0	32.0
18	57	29.5	36.5
20	57	33.0	39.9
22	57	36.0	43.1
24	57	40.0	46.6
28	57	46.0	53.4
32	60	51.5	60.1
36	60	58.0	66.3

All dimensions for reference only.

# ACA 3107A-B

## jam nut receptacle

- For rear panel single hole mounting
- Panel seal O-ring included
- Environment proof



Inches

Shell Size	A Ref.	B Thread in Inches Class 2A	D Ref.	G Ref.	H Ref.	J Ref.	K Ref.	L Ref.	M Ref.	S ± .012	W Ref.
10SL	.715	.8750-20 UNEF	.098	1.378	1.240	.531	.126	1.150	.492	1.252	.197
14S	.967	1.1250-18 UNEF	.098	1.626	1.492	.531	.126	1.150	.492	1.500	.236
16S	1.077	1.2500-18 UNEF	.098	1.748	1.614	.531	.126	1.150	.492	1.622	.236
16	1.077	1.2500-18 UNEF	.098	1.748	1.614	.531	.126	1.484	.827	1.622	.236
18	1.211	1.3750-18 UNEF	.118	1.898	1.764	.591	.157	1.575	.827	1.772	.276
20	1.344	1.5000-18 UNEF	.118	2.063	1.929	.591	.157	1.575	.827	1.937	.276
22	1.470	1.6250-18 UNEF	.118	2.185	2.055	.591	.157	1.575	.827	2.063	.276
24	1.608	1.7500-18 UNEF	.118	2.323	2.165	.591	.157	1.575	.827	2.173	.276
28	1.837	2.0000-18 UNS	.118	2.598	2.441	.591	.157	1.575	.827	2.449	.276
32	2.100	2.2500-16 UN	.118	2.835	2.677	.591	.157	1.575	.827	2.685	.276
36	2.345	2.5000-16 UN	.118	3.150	2.953	.591	.157	1.575	.827	2.961	.315

Millimeters

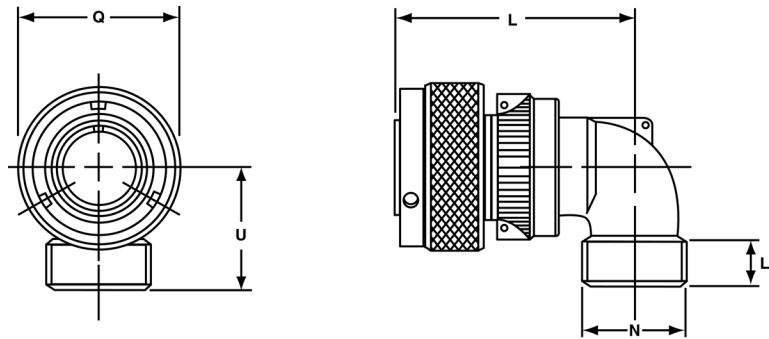
Shell Size	A Ref.	D Ref.	G Ref.	H Ref.	J Ref.	K Ref.	L Ref.	M Ref.	S ± 0.3	W Ref.
10SL	18.2	2.5	35.0	31.5	13.5	3.2	29.2	12.5	31.8	5.0
14S	24.6	2.5	41.3	37.9	13.5	3.2	29.2	12.5	38.1	6.0
16S	27.4	2.5	44.4	41.0	13.5	3.2	29.2	12.5	41.2	6.0
16	27.4	2.5	44.4	41.0	13.5	3.2	37.7	21.0	41.2	6.0
18	30.8	3.0	48.2	44.8	15.0	4.0	40.0	21.0	45.0	7.0
20	34.1	3.0	52.4	49.0	15.0	4.0	40.0	21.0	49.2	7.0
22	37.3	3.0	55.5	52.2	15.0	4.0	40.0	21.0	52.4	7.0
24	40.8	3.0	59.0	55.0	15.0	4.0	40.0	21.0	55.2	7.0
28	46.7	3.0	66.0	62.0	15.0	4.0	40.0	21.0	62.2	7.0
32	53.3	3.0	72.0	68.0	15.0	4.0	40.0	21.0	68.2	7.0
36	59.6	3.0	80.0	75.0	15.0	4.0	40.0	21.0	75.2	8.0

All dimensions for reference only.

# ACA 3108F-B

## 90° angle plug

- 90° plug for angled attachment to panels with rear accessory threads
- Includes grommet and grommet sleeve



Inches

Shell Size	L Max.	L <sup>1</sup> Min.	N Thread in Inches Class 2A	Q Max.	U Max.
10SL	1.772	.370	.6250-24 UNEF	.898	1.181
14S	1.850	.370	.7500-20 UNEF	1.150	1.181
16S	1.890	.370	.8750-20 UNEF	1.260	1.181
16	2.244	.370	.8750-20 UNEF	1.260	1.181
18	2.283	.370	1.0000-20 UNEF	1.437	1.378
20	2.402	.370	1.1875-18 UNEF	1.571	1.378
22	2.402	.370	1.1875-18 UNEF	1.697	2.087
24	2.598	.370	1.4375-18 UNEF	1.835	2.283
28	2.598	.370	1.4375-18 UNEF	2.102	2.283
32	2.835	.433	1.7500-18 UNS	2.366	2.598
36	2.953	.496	2.0000-18 UNS	2.610	2.717

Millimeters

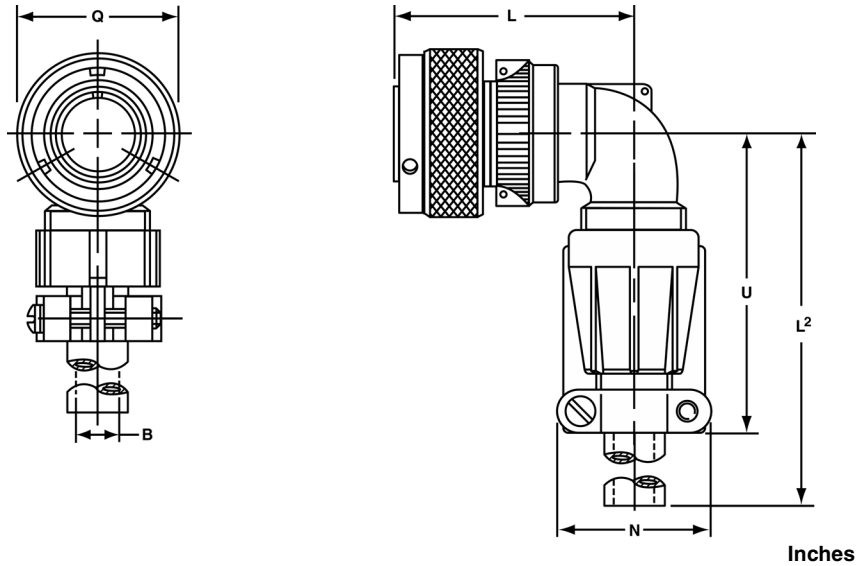
Shell Size	L Max.	L <sup>1</sup> Min.	Q Max.	U Max.
10SL	45	9.4	22.8	30
14S	47	9.4	29.2	30
16S	48	9.4	32.0	30
16	57	9.4	32.0	30
18	58	9.4	36.5	35
20	61	9.4	39.9	35
22	61	9.4	43.1	53
24	66	9.4	46.6	58
28	66	9.4	53.4	58
32	72	11.0	60.1	66
36	75	12.6	66.3	69

All dimensions for reference only.

# ACA 3108E-B

## 90° angle plug

- 90° plug for angled attachment to panels with cable clamp and telescopic bushing
- Includes grommet and grommet sleeve



Shell Size	B Max.	L Max.	L <sup>1</sup> Max.	N Max.	Q Max.
10SL	.256	1.772	3.937	.894	.898
14S	.354	1.850	3.937	1.083	1.150
16S	.433	1.890	3.937	1.181	1.260
16	.433	2.244	3.937	1.181	1.260
18	.559	2.283	3.937	1.268	1.437
20	.622	2.402	3.937	1.476	1.571
22	.622	2.402	3.937	1.476	1.697
24	.843	2.598	3.937	1.705	1.835
28	.843	2.598	3.937	1.705	2.102
32	1.051	2.835	4.331	2.035	2.366
36	1.248	2.953	4.331	2.283	2.610

Millimeters

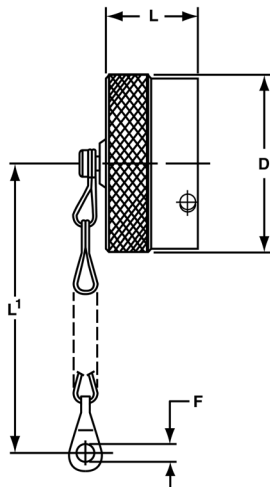
Shell Size	B Max.	L Max.	L <sup>1</sup> Max.	N Max.	Q Max.
10SL	6.5	45	100	22.7	22.8
14S	9.0	47	100	27.5	29.2
16S	11.0	48	100	30.0	32.0
16	11.0	57	100	30.0	32.0
18	14.2	58	100	32.2	36.5
20	15.8	61	100	37.5	39.9
22	15.8	61	100	37.5	43.1
24	21.4	66	100	43.3	46.6
28	21.4	66	100	43.3	53.4
32	26.7	72	110	51.7	60.1
36	31.7	75	110	58.0	66.3

All dimensions for reference only.

# ACA-B Connectors – accessories

## receptacle protection caps

- Protective metal caps which seal the front of receptacles
- Includes a chain for retention of the cap at the required location
- For all ACA( )-B receptacles



Inches

Part Number	Shell Size	D	F	L	L <sup>1</sup>
ACA-25043-10	10SL	.906	.165	.610	4.252
ACA-25043-14	14S	1.181	.165	.610	4.252
ACA-25043-16	16S	1.280	.165	.610	4.252
ACA-25043-16	16	1.280	.165	.835	4.843
ACA-25043-18	18	1.457	.165	.835	4.843
ACA-25043-20	20	1.594	.185	.835	4.843
ACA-25043-22	22	1.713	.185	.835	4.843
ACA-25043-24	24	1.850	.185	.835	4.843
ACA-25043-26	28	2.126	.221	.835	8.110
ACA-25043-32	32	2.382	.221	.835	8.110
ACA-25043-36	36	2.638	.221	.835	8.110

Millimeters

Part Number	Shell Size	D	F	L	L <sup>1</sup>
ACA-25043-10	10SL	23.0	4.2	15.5	108
ACA-25043-14	14S	30.0	4.2	15.5	108
ACA-25043-16	16S	32.5	4.2	15.5	108
ACA-25043-16	16	32.5	4.2	21.2	123
ACA-25043-18	18	37.0	4.2	21.2	123
ACA-25043-20	20	40.5	4.7	21.2	123
ACA-25043-22	22	43.5	4.7	21.2	123
ACA-25043-24	24	47.0	4.7	21.2	123
ACA-25043-26	28	54.0	5.6	21.2	206
ACA-25043-32	32	60.5	5.6	21.2	206
ACA-25043-36	36	67.0	5.6	21.2	206

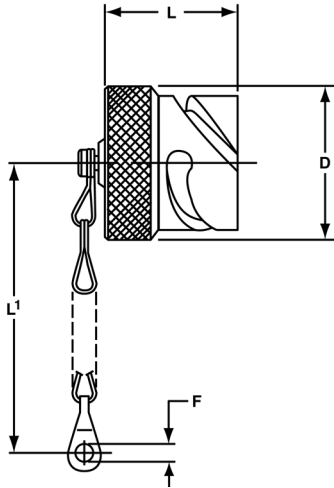
All dimensions for reference only.

For information on finishes for receptacle protection caps, consult Amphenol, Sidney NY.

# ACA-B Connectors – accessories

## plug protection caps

- Protective metal caps which seal the front of plugs
- Includes a chain for retention of the cap at the required location
- For all ACA( )-B plugs



Inches

Part Number	Shell Size	D	F	L	L <sup>1</sup>
ACA-25042-10	10SL	.906	.165	.945	4.252
ACA-25042-14	14S	1.181	.165	.945	4.252
ACA-25042-16	16S	1.280	.165	.945	4.252
ACA-25042-16	16	1.280	.165	1.299	4.843
ACA-25042-18	18	1.457	.165	1.535	4.843
ACA-25042-20	20	1.594	.185	1.299	4.843
ACA-25042-22	22	1.713	.185	1.299	4.843
ACA-25042-24	24	1.850	.185	1.732	4.843
ACA-25042-26	28	2.126	.221	1.299	8.110
ACA-25042-32	32	2.382	.221	1.811	8.110
ACA-25042-36	36	2.638	.221	1.811	8.110

Millimeters

Part Number	Shell Size	D	F	L	L <sup>1</sup>
ACA-25042-10	10SL	23.0	4.2	24	108
ACA-25042-14	14S	30.0	4.2	24	108
ACA-25042-16	16S	32.5	4.2	24	108
ACA-25042-16	16	32.5	4.2	33	123
ACA-25042-18	18	37.0	4.2	39	123
ACA-25042-20	20	40.5	4.7	33	123
ACA-25042-22	22	43.5	4.7	33	123
ACA-25042-24	24	47.0	4.7	44	123
ACA-25042-26	28	54.0	5.6	33	206
ACA-25042-32	32	60.5	5.6	46	206
ACA-25042-36	36	67.0	5.6	46	206

All dimensions for reference only.

For information on finishes for receptacle protection caps, consult Amphenol, Sidney NY.

# ACA-B Connectors – accessories

## crimp and solder contacts

Contacts for ACA-B connectors are machined from copper alloys and silver plated for maximum corrosion resistance, with a minimum millivolt drop and a maximum current carrying capacity; the size 16 and 12 socket contacts are of the closed entry design. Gold plated contacts are also available. (See how to order, pg. 39). Solder contacts for ACA-B connectors are not sold as separate items.

### CONTACTS

Part Number For Crimp Contacts only*	Pin/Socket	Mating End Size	Wire Barrel Size	Allowable Wire Size	Test Current*** Amps		
ACA-108433	Pin	16 Short†	16	16	13		
ACA-108456	Socket			18	10		
ACA-108295	Pin	16 Long	16	20	7.5		
ACA-108457	Socket			22**	5		
ACA-108388	Pin			12	12	12	23
ACA-110262	Socket					14	17
ACA-105735	Pin	8	8	8	46		
ACA-105738	Socket			10**	33		
ACA-107925	Pin	4	4	4	80		
ACA-107926	Socket			6**	60		
ACA-108848	Pin	0	0	0	150		
ACA-108849	Socket			1	125		
				2**			

\* Solder contacts are not sold as separate items. Part numbers shown here are for crimp contacts only.

† The 10SL, 14S and 16S connectors require short contacts.

\*\* When using wire adapter sleeve shown.

\*\*\* Contact ratings as stated are test ratings only. The connector may not withstand full rated current through all contacts continuously. Please note that the electrical data given is not an establishment of electrical safety factors. This is left entirely in the designer's hands as he can best determine which peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

**Table I**  
**MIL-SPEC CONTACT ARRANGEMENT SERVICE RATING**

MS Service Rating	Recommended Operating Voltage* at Sea Level		Effective Creepage Distance Nom.	Mechanical Spacing Nom.
	DC	AC (RMS)		
Inst.	250	200	1/16	
A	700	500	1/8	1/16
D	1250	900	3/16	1/8
E	1750	1250	1/4	3/16
B	2450	1750	5/16	1/4
C	4200	3000	1	5/16

\* The values listed in Table I represent operating values which include a generous safety factor. It may be necessary for some applications to exceed the operating voltages listed here. If this is necessary, designers will find Table II useful for determining the degree to which the recommended values of Table I can be exceeded.

**Table II**  
**ALTITUDE VOLTAGE DERATING\*\* CHART**

MS Service Rating	Nominal Distance		Standard Sea Level Conditions		Pressure Altitude † 50,000 Feet		Pressure Altitude † 70,000 Feet	
	Airspace	Creepage	Minimum Flashover Voltage AC (RMS)	Test Voltage AC (RMS)	Minimum Flashover Voltage AC (RMS)	Test Voltage AC (RMS)	Minimum Flashover Voltage AC (RMS)	Test Voltage AC (RMS)
Inst.	1/32	1/16	1400	1000	550	400	325	260
A	1/16	1/8	2800	2000	800	600	450	360
D	1/8	3/16	3600	2800	900	675	500	400
E	3/16	1/4	4500	3500	1000	750	550	440
B	1/4	5/16	5700	4500	1100	825	600	480
C	5/16	1	8500	7000	1300	975	700	560

† Not corrected for changes in density due to variations in temperature

\*\* No attempt has been made to recommend operating voltages. The designer must determine his own operating voltage by the application of a safety factor to the above derating chart to compensate for circuit transients, surges, etc.

# ACA-B Connectors

## application tools

When proprietary crimp contacts are employed rather than the standard MS approved solder contacts, the following application tools are recommended for use. There is a possibility of additional crimping tools other than those included being available at present or in the future for this specific application.

**TOOLING CHART**

Crimping Tool	Positioner/ Turret	Contact Size	Contact Style	Insertion Tool	Removal Tool
M22520/1-01	*	16	Pin & Socket	11-7345	11-8250 Kit
M22520/1-01	*	12	Pin & Socket	11-7082	11-8250 Kit
**	**	8	Pin & Socket	11-8220	11-8250 Kit
**	**	4	Pin & Socket	11-7365-4 †	Pin 11-7370-4 † Socket 11-7674-2 †
**	**	0	Pin & Socket	11-7365-5 †	Pin 11-7370-5 † Socket 11-7674-3 †

\* Use Daniels Turret TH29-1 or Astro Tool Co. Turret 616266

\*\* For appropriate crimp tool and positioner refer to Pico Crimping Tool Co.

† Tools used with Arbor Press 11-7364



# Amphenol® ACA-B Connectors

## how to order, connector intermateability

Part Number System (example part number shown)							
ACA	3100	E	10SL-3	P	B	W	(F80)
1	2	3	4	5	6	7	8

### 1. Connector Series

ACA designates Amphenol® ACA-B Reverse Bayonet Series

### 2. Shell Style

- 3100 - Wall mount receptacle for front panel mounting
- 3101 - Cable connecting receptacle
- 3102 - Box mount receptacle
- 3103 - Wall mount receptacle for rear panel mounting
- 3106 - Straight plug
- 3107 - Jam nut receptacle - rear panel mount
- 3108 - 90° angle plug

### 3. Connector Class

- E Environmental resisting, with grommet seal and strain relief backshell
- F Environmental resisting, with grommet seal and solid backshell with rear accessory threads
- G Backshell for heat shrink termination
- R Environmental resisting with lightweight endbell

### 4. Shell Size and Insert Arrangement

See pages 2 and 3 for insert availability charts, and pages 5-14 for insert pattern drawings.

### 5. Contact Style

P designates pin contacts  
S designates socket contacts  
Note: standard contacts are silver plated. Consult Amphenol Industrial Operations for ordering gold plated contacts.

### 6. Designation for Reverse Bayonet

B designates Reverse Bayonet coupling shells

### 7. Alternate Position

W, X, Y and Z - See page 4.  
No suffix required for normal position.

### 8. Connector Modification

Omit for standard olive drab with silver plated contacts.  
For a modification as listed below, add suffix in parenthesis to the end of the part number. Consult Amphenol Industrial Operations for further description or assistance.

- (01) with metric crimp contacts
- (F80) with AWG crimp contacts
- (A232) with black zinc cobalt plating
- (F42) less grommet and backshell
- (FO) less contacts. (contacts are to be ordered separately)
- (T00) metric threads in flange holes
- (RFI) grounded - plug only
- (A176) gold contacts
- (A23) electroless nickel plating

### MATEABILITY WITH IDENTICAL CONTACT ARRANGEMENTS

Connector Style	Mateable with Style
ACA3100	ACA 3106, 3108
ACA3101	ACA 3106, 3108
ACA3102	ACA 3106, 3108
ACA3103	ACA 3106, 3108
ACA3106	ACA 3100, 3101, 3102, 3103, 3107
ACA3107	ACA 3106, 3108
ACA3108	ACA 3100, 3101, 3102, 3103, 3107

This catalog is on the Amphenol website:  
[www.amphenol-industrial.com](http://www.amphenol-industrial.com).

See [www.amphenol-industrial.com](http://www.amphenol-industrial.com) and [www.amphenol-aerospace.com](http://www.amphenol-aerospace.com) for the broad range of interconnection products offered by Amphenol.