

Amphenol® Miniature Cylindrical insert availability

Insert Arrangement	Solder Termination					Crimp Termination			Total Contacts	Contact Size				
	MS/PT	PT	SP	PC	Hermetic PT MS-PT PC	MS/PT-SE PT-SE SP-SE PC-SE	PT-CE SP-CE PC-CE	20		16	12	Coax		Service Rating
												12	8	
6-1		X	X	X	X*			1	1					I
8-2	X	X	X	X	X		X	2	2					I
8-3	X	X	X	X	X		X	3	3					I
8-4	X	X	X	X	X		X	4	4					I
8-33		X	X	X	X	X		3	3					I
8-98		X	X	X				3	3					I
10-2		X	X	X				2		2				I
10-5		X	X	X	X*			5	5					I
10-6	X	X	X	X	X	X	X	6	6					I
10-70		X	X	X				1					1	Coax
10-98	X	X	X	X	X*		X	6	6					I
12-3	X	X	X	X	X	X	X	3		3				II
12-4		X	X	X	X*			4		4				I
12-8	X	X	X	X	X*	X	X	8	8					I
12-10	X	X	X	X	X	X	X	10	10					I
12-14		X	X	X				14	14					I
12-98		X	X	X				10	10					I
14-2		X	X	X				2				2		II
14-4		S	S	S	X			4			4			I
14-5	X	X	X	X	X	X	X	5		5				II
14-8		X	X	X				8	6		2			I
14-12	X	X	X	X	X	X	X	12	8	4				I
14-15	X	X	X	X	X	X	X	15	14	1				I
14-18	X	X	X	X	X*	X	X	18	18					I
14-19	X	X	X	X	X	X	X	19	19					I
14-22						X*		5	1		4			I
14-71		P	X	X			(02CE)	4		3			1	I
14-91 HV		S	X	X		X*		3	3					**
14-AA		X	X	X	X			4			4			I
16-8	X	X	X	X	X	X	X	8		8				II
16-23	X	X	X	X		X	X	23	22	1				I
16-26	X	X	X	X	X	X	X	26	26					I
16-70		X	X	X				15	14			1		N/A
16-76†††						X*		14	8		1	5		***
16-99	X	X	X	X		X		23	21	2				I
18-5		X	X	X		X*		5			5			II
18-8								8			8			I
18-11	X	X	X	X	X	X	X	11		11				II
18-30	X	X	X	X	X*	X	X	30	29	1				I

*Not available in MS version
 **Flashover voltage 5,000 VAC (RMS)
 ***1500 VAC (RMS)
 Sdesignates Socket insert only.

P designates Pin insert only.
 †Size 12 contacts for #10 wire
 ††Not presently tooled
 †††Contacts must be ordered separately

Amphenol[®] Miniature Cylindrical

insert availability, cont.

Insert Arrangement	Solder Termination					Crimp Termination			Total Contacts	Contact Size					Service Rating
	MS/PT	PT	SP	PC	Hermetic PT MS-PT PC	MS/PT-SE PT-SE SP-SE PC-SE	PT-CE SP-CE PC-CE	20		16	12	Coax			
												12	8		
18-32	X	X	X	X	X	X	X	32	32					I	
18-71						X*		9		8			1	Coax, II	
18-72		X	X	X				14	10			4		N/A	
18-75		X	X	X				4					4	Coax	
18-76								4				3	1	II	
18-80		X	X	X			X	8	6				2	Coax, I	
18-91 HV						X*	X	6	6					**	
20-16	X	X	X	X	X	X	X	16		16				II	
20-24	X	X	X	X			X	24	24					I	
20-25		X	X	X				25	25					I	
20-26		X	X	X				26	20		6			I	
20-27	X	X	X	X			X	27	27					I	
20-39	X	X	X	X	X	X	X	39	37	2				I	
20-41	X	X	X	X	X	X	X	41	41					I	
20-70								14	10				4	Coax	
20-90 HV		X	X	X				7	7					Hi-Voltage	
22-7		X	X	X		X*		7					7	Coax	
22-21	X	X	X	X	X	X	X	21		21				II	
22-25						X*		25		25				I	
22-32	X	X	X	X		X	P	32	32					I	
22-34		X	X	X			X	34	34					I	
22-36		X	X	X			X	36	36					I	
22-41	X	X	X	X	X	X	X	41	27	14				I	
22-55	X	X	X	X	X	X	X	55	55					I	
22-70		X	X	X				19	13				6	I, Coax	
22-71								9	2				7	I, Coax	
22-72		X	X	X				19	12	4			3	N/A	
22-78†††						X*		7					7	Coax	
22-96						X*		7			7†			II	
24-31		X	X	X			X	31		31				I	
24-51						X*		51	47			4		I	
24-61	X	X	X	X	X	X	X	61	61					I	
24-71		X	X	X				49	45	2			2	N/A	
24-79								6	1				5	Coax	

*Not available in MS version

**Flashover voltage 5,000 VAC (RMS)

***1500 VAC (RMS)

†Size 12 contacts for #10 wire

††Not presently tooled

†††Contacts must be ordered separately

Amphenol[®] Miniature Breakaway Twist Pull insert availability

Insert Availability - Breakway Twist Pull

Insert Arrangement	Crimp Termination		Solder Termination	Total Contacts	Contact Size			
	PT-CE	PT-SE	PT		20	16	12	Service Rating
8-2	X		X	2	2			I
8-3	X		X	3	3			I
8-4	X		X	4	4			I
10-2			X	2		2		I
10-6	X	X	X	6	6			I
10-98	X		X	6	6			I
10-99	X	X		7	7			I
12-3	X	X	X	3		3		II
12-4			X	4		4		I
12-8	X	X	X	8	8			I
12-10	X	X	X	10	10			I
12-98			X	10	10			I
14-2			X	2			2	II
14-5	X	X	X	5		5		II
14-8			X	8	6		2	I
14-12	X	X	X	12	8	4		I
14-15	X	X	X	15	14	1		I
14-16			X	4		2	2	II
14-18	X	X	X	18	18			I
14-19	X	X	X	19	19			I
14-91		X	X	3	3*			H.V.
16-6			X	6			6	I
16-8	X	X	X	8		8		II
16-23	X	X	X	23	22	1		I
16-26	X	X	X	26	26			I
16-99		X	X	23	21	2		I
18-5		X	X	5			5	II
18-11	X	X	X	11		11		II
18-28		X	X	28	26	2		I
18-30	X	X	X	30	29	1		I
18-32	X	X	X	32	32			I
18-91		X	X	6	6*			H.V.
20-8			X	8		8		I
20-16	X	X	X	16		16		II
20-24	X		X	24	24			I
20-25			X	25	25			I
20-27	X		X	27	27			I
20-39	X	X	X	39	37	2		I
20-41	X	X	X	41	41			I
22-8			X	8		8		II
22-21	X	X	X	21		21		II
22-25		X		25		25		I
22-32	X	X	X	32	32			I
22-34	X		X	34	34			I
22-36	X		X	36	36			I
22-41		X	X	41	27	14		I
22-55	X	X	X	55	55			I
22-96		X		7			7†	II
22-97			X	16		16		II
22-99			X	11		11		II
24-31	X			31		31		I
24-61	X	X	X	61	61			I

For further information regarding any additional insert patterns available in Breakaway Miniature connectors, please contact Amphenol Aerospace. For availability of shielded coax contacts within Breakaway Miniature connectors contact Amphenol. The Breakaway style pages are: PT (solder) breakaway plug is on page 26, the PT-SE (crimp) breakaway plug is on page 38, and the PT-CE (crimp) breakaway plug is on page 48.

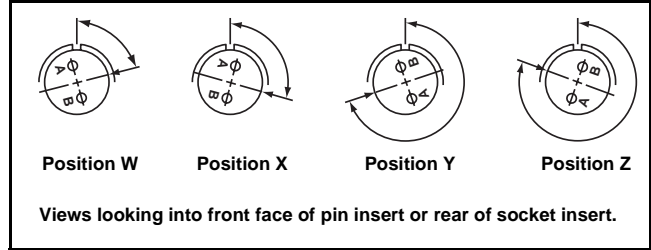
* 5KV Voltage Rating
† Size 12 contact for #10 wire.

Amphenol® Miniature Cylindrical alternate positioning

Alternate Positioning

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

As shown in the diagram at right, 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.














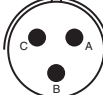
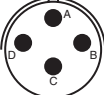
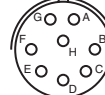
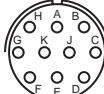

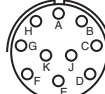


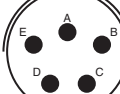
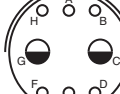
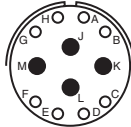

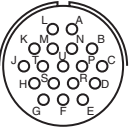
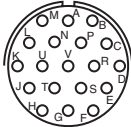
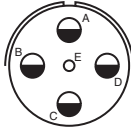
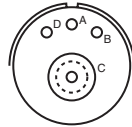
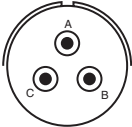
Shell Size	Insert Arrangement	Insert Rotation			
		Degrees			
		W	X	Y	Z
6	6-1	—	—	—	—
8	8-2*	58	122	—	—
8	8-3	60	210	—	—
8	8-4*	45	97	184	—
8	8-33*	90	—	—	—
8	8-98	—	—	—	—
10	10-2	45	90	315	—
10	10-5*	45	151	180	270
10	10-6*	90	—	—	—
10	10-70	—	—	—	—
10	10-98*	90	180	240	270
12	12-3*	—	—	180	—
12	12-4*	38	—	—	—
12	12-8	90	112	203	292
12	12-10*	60	155	270	295
12	12-14	—	—	—	—
12	12-98*	61	135	189	340
14	14-2	58	122	—	—
14	14-4*	45	—	—	—
14	14-5*	40	92	184	273
14	14-8	48	162	189	312
14	14-12*	43	90	—	—
14	14-15*	17	110	155	234
14	14-18*	15	90	180	270
14	14-19*	30	165	315	—
14	14-22	45	—	—	—
14	14-71	—	—	—	—
14	14-91HV	—	60	—	—
14	14-AA*	45	—	—	—
16	16-8*	54	152	180	331
16	16-23	158	270	—	—
16	16-26*	60	—	275	338
16	16-70	41	122	216	286
16	16-76	—	—	—	—
16	16-99*	66	156	223	340
18	18-5	55	97	263	315
18	18-8	180	—	—	—

Shell Size	Insert Arrangement	Insert Rotation			
		Degrees			
		W	X	Y	Z
18	18-11*	62	119	241	340
18	18-30*	180	193	285	350
18	18-32*	85	138	222	265
18	18-71	18	108	127	215
18	18-72	53	102	213	293
18	18-75	45	—	—	—
18	18-76	—	—	—	—
18	18-80	45	90	135	160
18	18-91HV	90	180	240	270
20	20-16*	238	318	333	347
20	20-24	70	145	215	290
20	20-25	72	144	216	288
20	20-26	13	107	210	322
20	20-27	72	144	216	288
20	20-39*	63	144	252	333
20	20-41*	45	126	225	—
20	20-70	63	135	222	335
20	20-90	45	135	225	315
22	22-7	19	41	—	—
22	22-21*	16	135	175	349
22	22-25	60	125	211	336
22	22-32	72	145	215	288
22	22-34	62	142	218	298
22	22-36	72	144	216	288
22	22-41	39	135	264	—
22	22-55*	30	142	226	314
22	22-70	30	82	218	312
22	22-71	33	191	236	270
22	22-72	42	200	277	339
22	22-78	19	41	—	—
22	22-96*	19	41	—	—
24	24-31	90	225	255	—
24	24-51	22	171	313	—
24	24-61*	90	180	270	324
24	24-71	39	131	205	281
24	24-79	—	—	—	—

* Available in Hermetic Class

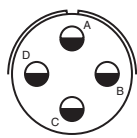
Amphenol® Miniature Cylindrical insert arrangements

front face of pin inserts illustrated

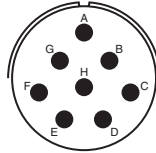
							
Insert Arrangement	6-1	8-2	8-3	8-4	8-33	8-98	10-2
Service Rating	I	I	I	I	I	I	I
Number of Contacts	1	2	3	4	3	3	2
Contact Size	20	20	20	20	20	20	16
							
Insert Arrangement	10-5	10-6	10-70	10-98	12-3	12-4	12-8
Service Rating	I	I	Coax	I	II	I	I
Number of Contacts	5	6	1	6	3	4	8
Contact Size	20	20	8 Coax	20	16	16	20
							
Insert Arrangement	12-10	12-14	12-98	14-2	14-4	14-5	14-8
Service Rating	I	I	I	II	I	II	I
Number of Contacts	10	14	10	2	4	5	6 2
Contact Size	20	20	20	12	12	16	20 12
							
Insert Arrangement	14-12	14-15	14-18	14-19	14-22	14-71	14-91HV
Service Rating	I	I	I	I	I	I	Flashover
Number of Contacts	8 4	14 1	18	19	1 4	3 1	5,000 VAC (RMS)
Contact Size	20 16	20 16	20	20	20 12	16 8 Coax	3 20

Amphenol[®] Miniature Cylindrical insert arrangements

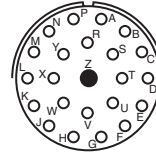
front face of pin inserts illustrated



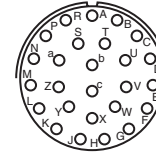
14-AA
I
4
12



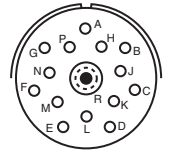
16-8
II
8
16



16-23
I
22 1
20 16

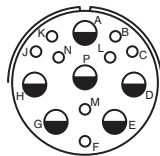


16-26
I
26
20

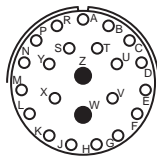


16-70
N/A
14 1
20 12 Coax

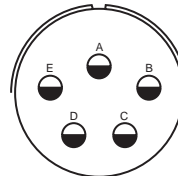
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



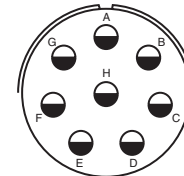
16-76
Flashover
1,500 VAC (RMS)
8 1 5
20 12* 2 Coax*



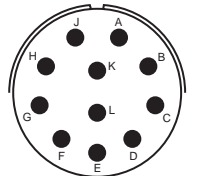
16-99
I
21 2
20 16



18-5
II
5
12



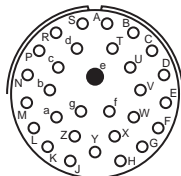
18-8
I
8
12



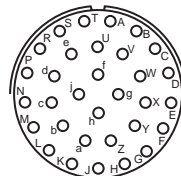
18-11
II
11
16

Insert Arrangement
Service Rating
Number of Contacts
Contact Size

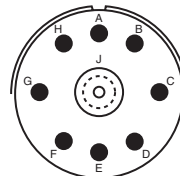
*Contact Positions Optional



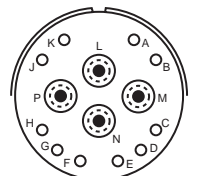
18-30
I
29 1
20 16



18-32
I
32
20

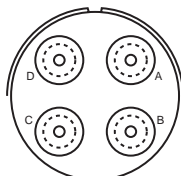


18-71
II, Coax
8 1
16 8 Coax

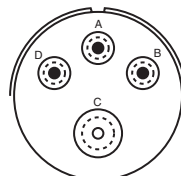


18-72
N/A
10 4
20 12 Coax

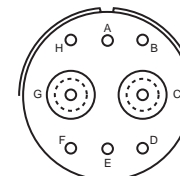
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



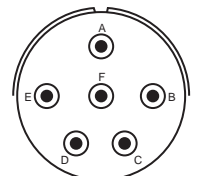
18-75
Coax
4
8 Coax



18-76
II
3 1
12 Coax 8 Coax



18-80
I, Coax
6 2
20 8 Coax

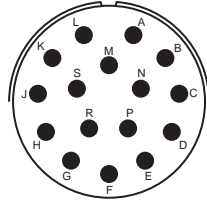


18-91 HV
Flashover
5,000 VAC (RMS)
6
20

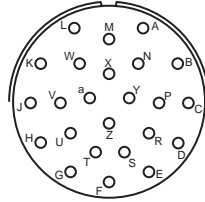
Insert Arrangement
Service Rating
Number of Contacts
Contact Size

Amphenol® Miniature Cylindrical insert arrangements

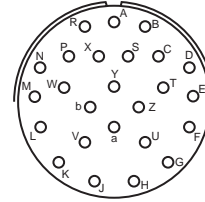
front face of pin inserts illustrated



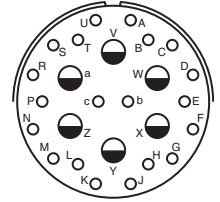
20-16
II
16
16



20-24
I
24
20

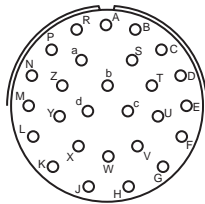


20-25
I
25
20

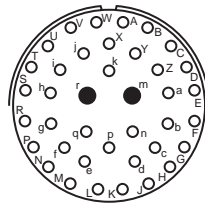


20-26
I
20 6
20 12

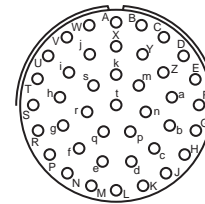
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



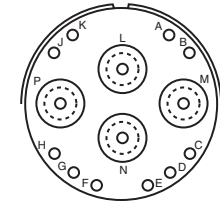
20-27
I
27
20



20-39
I
37 2
20 16

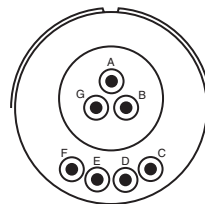


20-41
I
41
20

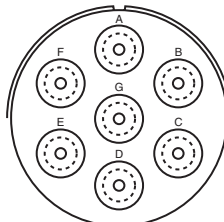


20-70
Coax
10 4
20 8 Coax

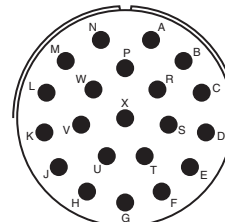
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



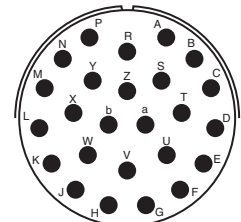
20-90
Hi-Voltage
7
20



22-7
Coax
7
8 Coax

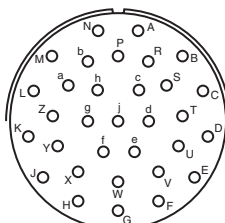


22-21
II
21
16

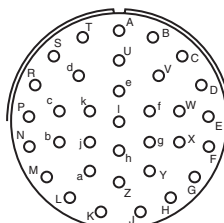


22-25
I
25
16

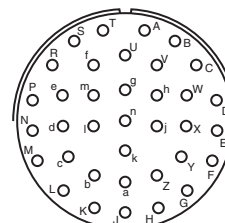
Insert Arrangement
Service Rating
Number of Contacts
Contact Size



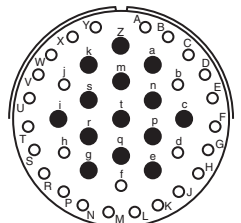
22-32
I
32
20



22-34
I
34
20



22-36
I
36
20

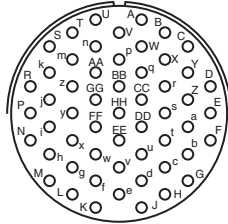


22-41
I
27 14
20 16

Insert Arrangement
Service Rating
Number of Contacts
Contact Size

Amphenol[®] Miniature Cylindrical insert arrangements

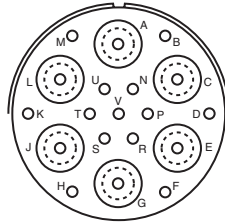
front face of pin inserts illustrated



22-55

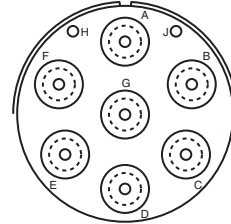
Insert Arrangement
Service Rating
Number of Contacts
Contact Size

I
55
20



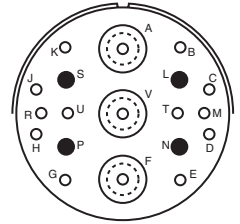
22-70

I, Coax
13 6
20 8 Coax



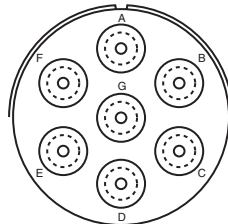
22-71

I, Coax
2 7
20 8 Coax



22-72

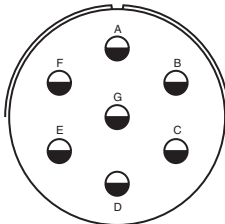
N/A
12 4 3
20 16 8 Coax



22-78

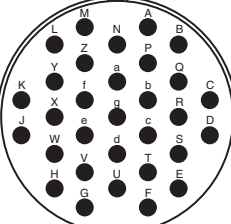
Insert Arrangement
Service Rating
Number of Contacts
Contact Size

Coax
7
8 Coax



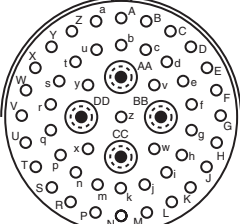
22-96

II
7
12 for
10 wire



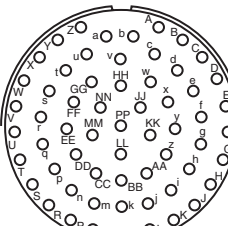
24-31

I
31
16



24-51

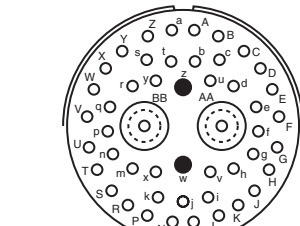
I
47 4
20 12 Coax



24-61

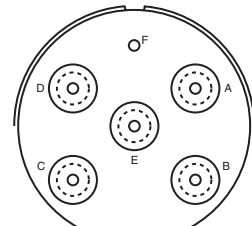
Insert Arrangement
Service Rating
Number of Contacts
Contact Size

I
61
20



24-71

N/A
45 2 2
20 16 8 Coax



24-79

Coax
1 5
20 8 Coax

Contact Legend

Symbol	Contact Size
○	20
●	16
◐	12
⊙	HV
⊗	12 Coax
⊘	8 Coax