Amphenol® 97 Series Connectors with solder contacts

MS3100A

MS3106A

MS3101A

MS3107A

MS3102A

MS3108B

DESIGN CHARACTERISTICS

- **Medium to heavy weight cylindrical**
- **Durable, field-proven design**
- **Single key/keyway polarization**
- **Threaded coupling, hard dielectric inserts**
- **Non-rotating contacts**
- **Operating temperatures from –55°C to +125°C**
- **Cost effective**
- **Intermateable and intermountable with existing 97 Series and SAE AS50151 connectors**
- **Underwriters Laboratories approved recognition File E115497**
- **Canadian Standards Association Certification File LR69183**
- **CE Certification Registration No.: AT1312862E**

CUSTOMER OPTIONS

- **Six shell styles**
- **128 contact arrangements, from 1 to 52 circuits**
- **Alternate insert positioning**
- **High temperature and potting constructions**
- **Special plating finishes including gray zinc nickel**
- **Optional gold plating**
- **Thermocouple arrangements available**

Connector components are fabricated from high grade aluminum alloy, with a conductive cadmium plate finish and an olive drab chromate after-treatment.

See how to order page 18.

Contacts are silver plated with pre-tinned solder cups. Optional gold over silver plating is also available. Inserts for solder style contacts are diallyl-phthalate.

Users should be aware that classes “A” and “B” of SAE AS50151 have been canceled.

97 series solder type
insert availability

Insert Number	Total Contacts	Mechanical Spacing		Service Rating	Contact Size				
		Inches	mm		0	4	8	12	16
8S-1✦	1	1/16	1.57	INST.					1
10SL-3	3	1/16	1.57	A					3
10SL-4	2	1/16	1.57	A					2
12SL-844✦	4	1/16	1.57	A					4
12S-3	2	1/16	1.57	A					2
12-5✦	1	1/8	3.18	D				1	
12S-6✦	2	1/16	1.57						2 Thermo-couple
14S-1	3	1/16	1.57	A					3
14S-2	4			INST.					4
14S-4✦	1	1/8	3.18	D					1
14S-5	5			INST					5
14S-6	6			INST.					6
14S-7	3	1/16	1.57	A					3
14S-9	2	1/16	1.57	A					2
16S-1	7	1/16	1.57	A					7
16S-4✦	2	1/8	3.18	D					2
16S-5	3	1/16	1.57	A					3
16S-6✦	3	1/16	1.57	A					3
16-7	3	1/16	1.57	A			1		2
16S-8	5	1/16	1.57	A					5
16-9	4	1/16	1.57	A				2	2
16-10	3	1/16	1.57	A				3	
16-11✦	2	1/16	1.57	A				2	
16-12	1	1/16	1.57	A		1			
16-13	2	1/16	1.57	A				2 Thermo-couple	
18-1	10	1/16	1.57	A					4
				INST.					6
18-3	2	1/8	3.18	D				2	
18-4	4	1/8	3.18	D					4
18-5✦	3	1/8	3.18	D				2	1
18-8	8	1/16	1.57	A				1	7
18-9✦	7			INST.				2	5
18-10	4	1/16	1.57	A				4	
18-11	5	1/16	1.57	A				5	
18-12	6	1.16	1.57	A					6
18-13	4	1/16	1.57	A			1	3	
18-16	1	5/16	7.92	C				1	
18-19	10	1/16	1.57	A					10
18-20	5	1/16	1.57	A					5
18-22	3	1/8	3.18	D					3
18-29✦	5	1/16	1.57	A					5
18-420	1							1 Hi-Volt-age**	
20-3	3	1/8	3.18	D				3	

Insert Number	Total Contacts	Mechanical Spacing		Service Rating	Contact Size				
		Inches	mm		0	4	8	12	16
20-4	4	1/8	3.18	D				4	
20-6	3	1/8	3.18	D					3
20-7	8	1/8	3.18	D					4
		1/16	1.57	A					4
20-8	6			INST.			2		4
20-11	13			INST.					13
20-14	5	1/16	1.57	A			2	3	
20-15	7	1/16	1.57	A				7	
20-16	9	1/16	1.57	A				2	7
20-17	6	1/16	1.57	A				5	1
20-18	9	1/16	1.57	A				3	6
20-19	3	1/16	1.57	A			3		
20-21	9	1/16	1.57	A				1	8
20-23	2	1/16	1.57	A			2		
20-24	4	1/16	1.57	A			2		2
20-27	14	1/16	1.57	A					14
20-29	17	1/16	1.57	A					17
20-33	11	1/16	1.57	A					11
22-1	2	1/8	3.18	D			2		
22-2	3	1/8	3.18	D			3		
22-4	4	1/16	1.57	A			2	2	
22-5	6	1/8	3.18	D				2	4
22-8	2	3/16	4.75	E				2	
22-9	3	3/16	4.75	E				3	
22-10	4	3/16	4.75	E					4
22-11	2	1/4	6.35	B					2
22-12	5	1/8	3.18	D			2		3
22-13	5	1/8	3.18	D					1
		1/16	1.57	A				4	
22-14	19	1/16	1.57	A					19
22-15	6	3/16	4.75	E					1
		1/16	1.57	A				5	
22-16	9	1/16	1.57	A				3	6
22-18	8	1/8	3.18	D					5
		1/16	1.57	A					3
22-19	14	1/16	1.57	A					14
22-20	9	1/16	1.57	A					9
22-22	4	1/16	1.57	A			4		
22-23	8	1/8	3.18	D				1	
		1/16	1.57	A				7	

** Hi-Voltage = 17KVAC/24KVDC

✦ Molded-in pin (MIP) insert requires (910) deviation. See how to order, pg. 18.

97 series solder type
insert availability, cont.

Insert Number	Total Contacts	Mechanical Spacing		Service Rating	Contact Size				
		Inches	mm		0	4	8	12	16
22-27	9	1/8	3.18	D			1		
		1/16	1.57	A					8
22-28	7	1/16	1.57	A				7	
22-34	5	1/8	3.18	D				3	2
24-2	7	1/8	3.18	D				7	
24-5	16	1/16	1.57	A					16
24-6	8	1/8	3.18	D				3	
		1/16	1.57	A				5	
24-7	16	1/16	1.57	A				2	14
24-9	2	1/16	1.57	A		2			
24-10	7	1/16	1.57	A			7		
24-11	9	1/16	1.57	A			3	6	
24-12	5	1/16	1.57	A		2		3	
24-16	7	1/8	3.18	D			1		3
		1/16	1.57	A				3	
24-19	12	1/16	1.57						12
24-20✦	11	1/8	3.18	D				2	9
24-21	10	1/8	3.18	D			1		9
24-22■	4	1/8	3.18	D			4		
24-27	7	3/16	4.75	E					7
24-28	24	1/16	1.57	INST.					24
28-1	9	1/8	3.18	D			1	2	
		1/16	1.57	A			2	4	
28-2	14	1/8	3.18	D				2	12
28-3	3	3/16	4.75	E			3		
28-6	3	1/8	3.18	D		3			
28-8	12	1/16	1.57	A					9
		1/8	3.18	D					1
		3/16	4.75	E				2	
28-9	12	1/8	3.18	D				6	6
28-10	7	1/8	3.18	D				1	
		1/16	1.57	A		2	2	2	
28-11	22	1/16	1.57	A				4	18
28-12	26	1/16	1.57	A					26
28-15	35	1/16	1.57	A					35
28-16	20	1/16	1.57	A					20
28-17	15	1/4	6.35	B					1
		1/8	3.18	D					3
		1/16	1.57	A					11
28-18	12	5/16	7.92	C					1
		1/8	3.18	D					5
		1/16	1.57	A					2
				INST.					4
28-19	10	1/4	6.35	B					2
		1/8	3.18	D					2
		1/16	1.57	A				4	2

Insert Number	Total Contacts	Mechanical Spacing		Service Rating	Contact Size				
		Inches	mm		0	4	8	12	16
28-21	37	1/16	1.57	A					37
32-5	2	1/8	3.18	D	2				
32-6	23	1/16	1.57	A		2	3	2	16
32-7	35	1/16	1.57	A				7	24
				INST.					4
32-8	30	1/16	1.57	A				6	24
32-13	23	1/8	3.18	D				5	18
32-17	4	1/8	3.18	D		4			
32-414	52	1/16	1.57	A					52
36-1	22	1/8	3.18	D				4	18
36-5	4	1/16	1.57	A	4				
36-6	6	1/16	1.57	A	2	4			
36-7	47	1/16	1.57	A				7	40
36-8	47	1/16	1.57	A				1	46
36-9	31	1/16	1.57	A		1	2	14	14
36-10	48	1/16	1.57	A					48
36-15	35	1/16	1.57	A					34
		1/8	3.18	D					1
36-403*	52	1/16	1.57	A					52

** Hi-Voltage = 17KVAC/24KVDC

✦ Molded-in pin (MIP) insert requires (910) deviation. See how to order, pg. 18.