

LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND $\oplus$ =16 $\bullet$ =12 $\bullet$ =8 $\circ$ =4 $\otimes$ =0
Mating face view of pin inserts

SERIES KEY: AIB ($\bullet$ =GT) AIT ($\oplus$ =MS; $\diamond$ =non QPL) 97 ($\diamond$ =97)
VG95234 ($\blacksquare$) MS3450 (∇ =MS; ∇ =non QPL) Thermocouple (⌚)

1 CONTACT

								
LAYOUT	8S-1	10S-2	12S-4	12-5	14S-4	14-3	16S-3	16-2
# OF CONTACTS	1-#16	1-#16	1-#16	1-#12	1-#16	1-#8	1-#16	1-#12
SERIES	⬆ ⬆ ⬇	⬆ ⬇	⬆ ⬇	⬆ ⬆ ⬇	● ⬆ ⬆	⬆ ⬇	⬇ ⬆	● ⬆ ⬇
SERVICE RATING	A	A	D	D	D	A	B	E

								
LAYOUT	16-12	18-6	18-7	18-16	18-420	20-2	22-7	24-52
# OF CONTACTS	1-#4	1-#4	1-#8	1-#12	1-#12	1-#0	1-#0	1-#12
SERIES	● ⬆ ⬆ ■ ⬇	● ⬆ ⬇	⬆ ● ⬇	● ⬆ ⬆ ⬇	⬆	● ⬆ ■ ⬇	● ⬆ ⬇	● ⬆
SERVICE RATING	A	D	B	C	17 KV _{ac} 24 KV _{dc}	D	E	21 KV _{ac} 30 KV _{dc}

2 CONTACTS

LAYOUT	10SL-4* ★	12S-3* ★	12S-6	14S-9* ★	16S-4	16A11	16-11	16-13	18-3
# OF CONTACTS	2-#16	2-#16	2-#16	2-#16	2-#16	2-#12	2-#12	2-#12	2-#12
SERIES	● ⊕ ◊ ▣ ▽ ⚡	⊕ ▽ ⚡	⊕	● ⊕ ▽ ⚡	● ⊕ ▣ ▽ ⚡	▣	● ⊕ ▽ ⚡	⊕ ▽ ⚡	● ⊕ ▽
SERVICE RATING	A	A	Thermocouple	A	D	A	A	Thermocouple	D

LAYOUT	18-14	20-12	20-23	22-1	22-8	22-11	24-1
# OF CONTACTS	1-#16; 1-#4	1-#16; 1-#4	2-#8	2-#8	2-#12	2-#16	1-#12; 1-#0
SERIES	⊕ ▽	⊕	● ⊕	● ⊕	● ⊕	● ⊕ ▽	▽
SERVICE RATING	A	A	A	D	E	B	D

3 CONTACTS

LAYOUT	24-9	28-7	32-5	10SL-3*	14S-1	14S-7	16S-5
# OF CONTACTS	2-#4	2-#4	2-#0	3-#16	3-#16	3-#16	3-#16
SERIES	$\bullet$ $\oplus$ $\diamond$ $\blacksquare$	$\bullet$ $\diamond$	$\bullet$ $\oplus$ $\diamond$	$\bullet$ $\oplus$ $\blacksquare$ ∇	$\oplus$ ∇ $\bullet$	$\bullet$ $\oplus$ ∇ ⌚	$\bullet$ $\oplus$ ∇
SERVICE RATING	A	D	D	A	A	A	A

* most popular * Pins in receptacle, sockets in plug only for 97/AIT/MS series

LAYOUTS BY NUMBER OF CONTACTS

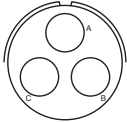
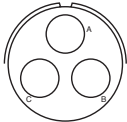
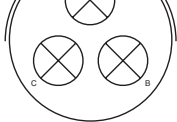
CONTACT LEGEND ⊕ =16 ● =12 ⊙ =8 ○ =4 ⊗ =0 ◐ =2/0 SERIES KEY: AIB (●=GT) AIT (⊕=MS; ⊙=non QPL) 97 (⬢=97)
Mating face view of pin inserts VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊕)

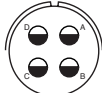
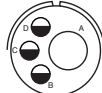
3 CONTACTS (CONT.)

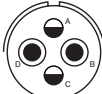
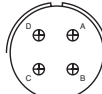
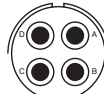
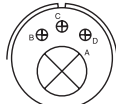
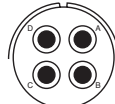
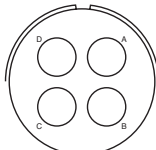
LAYOUT	16S-6	16-7	16-10	18-5	18-22	20-3	20-6	20-19
# OF CONTACTS	3-#16	2-#16; 1-#8	3-#12	1-#16; 2-#12	3-#16	3-#12	3-#16	3-#8
SERVICE RATING	A	A	A	D	D	D	D	A

LAYOUT	20-51	20-59	22-2	22-6	22-9	22-21	22-80	28-3
# OF CONTACTS	3-#8	3-#8 for #10 or #12 wire	3-#8	1-#16; 2-#8	3-#12	2-#16; 1-#0	3-#8 for #10 or 12 wire	3-#8
SERVICE RATING	A	A	D	D	E	A	A	E

4 CONTACTS

							
LAYOUT	28-6	28-72	36-4	40-AV	12SL-844	14S-2*	14S-10
# OF CONTACTS	3-#4	3-#4 (coax) RG-59A/U or RG-62A/U	3-#0	3-#2/0	4-#16	4-#16	4-#16
SERVICE RATING	D	(coax)	D(A); A(B,C)	D	I	I	I

									
LAYOUT	16-9	16-59	18-4*	18-10*	18-13	18-15	20-4*	20-20	20-24
# OF CONTACTS	2-#16; 2-#12	4-#12	4-#16	4-#12	3-#12; 1-#8	4-#12	4-#12	3-#12; 1-#4	2-#16; 2-#8
SERVICE RATING	A	A	D	A	A	Thermocouple	D	A	A

							
LAYOUT	22B22	22-4	22-10	22-22*	24-4	24-22*	32-17
# OF CONTACTS	4-#8	2-#12; 2-#8	4-#16	4-#8	3-#16; 1-#0	4-#8	4-#4
SERVICE RATING	A	A	E	A	D	D	D

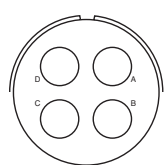
* most popular

LAYOUTS BY NUMBER OF CONTACTS

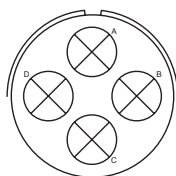
CONTACT LEGEND ⊕=16 ●=12 ⊙=8 ○=4 ⊗=0
Mating face view of pin inserts

SERIES KEY: AIB (●=GT) AIT (⊕=MS; ⊙=non QPL) 97 (⧫=97)
VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⧫°)

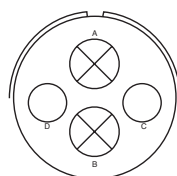
4 CONTACTS (CONT.)



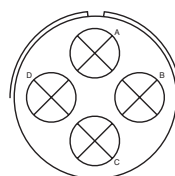
LAYOUT
OF CONTACTS 4-#4 (coax) RG-161/U
or RG-179/U
SERIES ● ⊙
SERVICE RATING (coax)



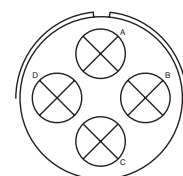
36-5
4-#0
● ⊕ ⊙ ▼
A



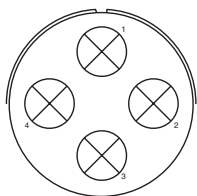
36-51
2-#4; 2-#0
● ⊙
D



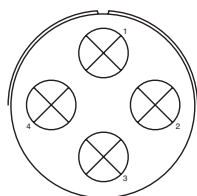
36-64
4-#0 (coax) RG-11/U;
RG-12/U or RG-13/U
● ⊙
(coax)



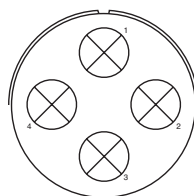
36-65
4-#0 (coax) RG-59/U;
RG-62/U or RG-71/U
● ⊙
(coax)



LAYOUT
OF CONTACTS 4-#0
SERIES ● ⊙
SERVICE RATING E



40-66
4-#0 (coax) RG-63B/U
● ⊙
(coax)



40-86
4-#0 (coax) RG-115A/U
● ⊙
E/ (coax)

5 CONTACTS



14S-5*
5-#16
● ⊕ ⊙ ▼
I



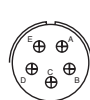
16S-8*
5-#16
● ⊕ ⊙ ▼
A



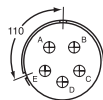
18-11*
5-#12
● ⊕ ⊙ ▼ ⧫°
A



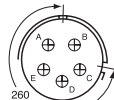
18-20
5-#16
● ⊕ ⊙
A



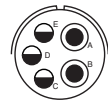
LAYOUT
OF CONTACTS 5-#16
SERIES ● ⊕ ⊙
SERVICE RATING A



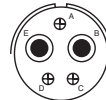
18-30
5-#16
● ⊙ ⊕
A



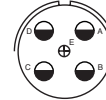
18-31
5-#16
● ⊙ ⊕
A



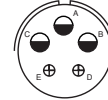
20-14
3-#12; 2-#8
● ⊕ ⊙ ▼
A



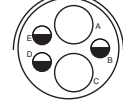
22-12
3-#16; 2-#8
● ⊕ ⊙ ■
D



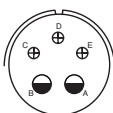
22-13
1-#16; 4-#12
● ⊕ ⊙
D(E) A(A,B,C,D)



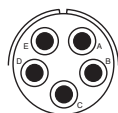
22-34
2-#16; 3-#12
⊕ ⊙
D



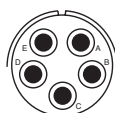
24-12
3-#12; 2-#4
● ⊕ ⊙ ■ ▼
A



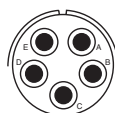
LAYOUT
OF CONTACTS 3-#16; 2-#12
SERIES ● ⧫°
SERVICE RATING D



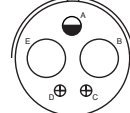
24-51
5-#8
● ⊙
A



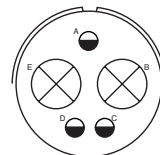
24-53
5-#8
● ⊙
A



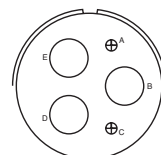
24-79
5-#8
● ⊙
A



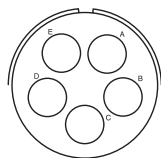
28-5
2-#16; 1-#12; 2-#4
● ⊕ ⊙ ▼
D



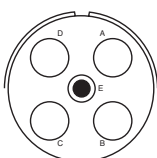
32-1
3-#12; 2-#0
⊕ ⊙ ▼
E(A); D(All others)



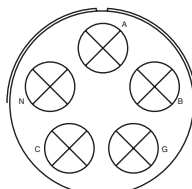
32-2
2-#16; 3-#4
● ⊕ ▼
E



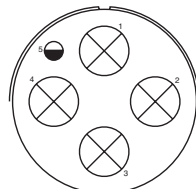
LAYOUT
OF CONTACTS 5-#4
SERIES ▼
SERVICE RATING D



32-79
1-#8; 4-#4
● ⊙
D



40-5
5-#0
● ⊙
A



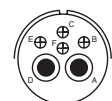
40-75
4-#0; 1-#12
● ⊙
E



14S-6*
6-#16
● ⊕ ⊙ ▼ ⧫°
I



18-12
6-#16
⊕ ⊙ ▼ ⧫°
A



20-8
4-#16; 2-#8
● ⊕ ⊙ ■ ▼
I

6 CONTACTS

* most popular

LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND $\oplus$ =16 $\bullet$ =12 $\bullet$ =8 $\circ$ =4 $\otimes$ =0
Mating face view of pin inserts

SERIES KEY: AIB ($\bullet$ =GT) AIT ($\oplus$ =MS; $\diamond$ =non QPL) 97 ($\diamond$ =97)
VG95234 ($\blacksquare$) MS3450 (∇ =MS; ∇ =non QPL) Thermocouple (⌚)

6 CONTACTS (CONT.)

LAYOUT	20-17	20-22	20-66	22-5	22-15	22-24	28-22
# OF CONTACTS	1-#16; 5-#12	3-#16; 3-#8	1-#16; 5-#12 for #10 wire	4-#16; 2-#12	1-#16; 5-#12	4-#16; 2-#12	3-#16; 3-#4
SERIES	$\bullet \oplus \diamond \nabla$	$\bullet \oplus \nabla$	$\bullet \diamond$	$\bullet \oplus \diamond \nabla \text{⌚}$	$\bullet \oplus \blacksquare \nabla$	$\bullet \oplus$	$\bullet \oplus \blacksquare \nabla$
SERVICE RATING	A	A	A	D	A(A, B, C, E, F); E(D)	D(C, D, E)A(A, B, F)	D

7 CONTACTS

LAYOUT	36-3	36-6	40-74	14SA7	16S-1*	18-9
# OF CONTACTS	3-#12; 3-#0	4-#4; 2-#0	1-#12; 1-#4 (coax) RG-62/U; 4-#0 (coax) RG-9B/U or RG-214/U	7-#16	7-#16	5-#16; 2-#12
SERIES	$\bullet \oplus \diamond \nabla$	$\bullet \oplus \diamond \blacksquare \nabla$	$\bullet \diamond$	$\bullet \diamond$	$\bullet \oplus \diamond \blacksquare \nabla \text{⌚}$	$\bullet \oplus \diamond \blacksquare \nabla \text{⌚}$
SERVICE RATING	D	A	A / coax	A	A	I

LAYOUT	20-15*	20-57	22-26	22-28	22-33	24-2
# OF CONTACTS	7-#12	7-#12 for #14 or 16 wire	5-#16; 2-#12	7-#12	7-#16	7-#12
SERIES	$\bullet \oplus \diamond \nabla \text{⌚}$	$\bullet \diamond$	$\oplus$	$\bullet \oplus$	$\bullet \oplus$	$\bullet \oplus$
SERVICE RATING	A	A	1/8" spacing	D/A	D(A, B, C, D); A(E, F, G)	D

LAYOUT	24-10	24-16	24-27	24-60	24-66	24-71
# OF CONTACTS	7-#8	3-#16; 3-#12; 1-#8	7-#16	7-#8 or 12 wire	7-#12	5-#8 for #10 or 12 wire, 2-#8
SERIES	$\bullet \oplus \diamond \blacksquare \nabla$	$\bullet \oplus \diamond \nabla$	$\bullet \oplus \diamond \nabla$	$\bullet \diamond$	$\bullet \oplus$	$\bullet \diamond$
SERVICE RATING	A	D(A, B, F, G) A(C, D, E)	E	A	D	A

LAYOUT	28-10	32-10	36-73	36-77	36-83
# OF CONTACTS	3-#12; 2-#8; 2-#4	3-#16; 2-#8; 2-#4	7-#4 (coax) RG-62B/U	7-#4	7-#4 (coax) RG-58/U
SERIES	$\bullet \oplus \diamond \nabla$	$\bullet \oplus$	$\bullet \diamond$	$\bullet \diamond$	$\bullet \diamond$
SERVICE RATING	D(G); A(All others)	E(A, F); B(G); D(B, E); A(C, D)	(coax)	D	(coax)

* most popular

LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND ⊕=16 ●=12 ⊙=8 ○=4 ⊗=0
Mating face view of pin inserts

SERIES KEY: AIB (●=GT) AIT (⊕=MS; ⊙=non QPL) 97 (⬢=97)
VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊖)

8 CONTACTS

LAYOUT	18-8*	20-7*	20-9	20-79	22-18	22-23	22-36	22-65
# OF CONTACTS	7-#16; 1-#12	8-#16	7-#16; 1-#12	7-#16; 1-#12 for #16 wire	8-#16	8-#12	8-#12	8-#12 for #14 or 16 wire
SERIES	● ⊕ ⊕ ▼	● ⊕ ⊕ ▼ ⊖	⊕ ⊕ ▼	⊕ ⊕	● ⊕ ⊕ ▼	● ⊕ ⊕ ▼	▼	● ⊕
SERVICE RATING	A	A (B,C,F,G) I(all others)	DCH; A(all others)	DCH; A(all others)	D(A, B, F, G, H); A(C, D, E)	D(H); A(all others)	D(H) A(all others)	D(H); A(all others)

9 CONTACTS

LAYOUT	24-6	32-15	32-52	32-57	40-AD	20A9	20-16
# OF CONTACTS	8-#12	6-#12; 2-#0	6-#12; 2-#0	6-#12; 2-#0 (coax) RG-7/U	4-#8; 4-#0	9-#12	7-#16; 2-#12
SERIES	● ⊕ ⊕ ▼	● ⊕ ▼	● ⊕	● ⊕	● ⊕	■	● ⊕ ⊕ ▼
SERVICE RATING	D(A, G, H); A(all others)	D	D	(coax)	A	D(J), I(all others)	A

LAYOUT	20-18*	20-21	22-16	22-17	22-20	22-27	24-11
# OF CONTACTS	6-#16; 3-#12	8-#16; 1-#12	6-#16; 3-#12	8-#16; 1-#12	9-#16	8-#16; 1-#8	6-#12; 3-#8
SERIES	● ⊕ ⊕ ▼	● ⊕ ⊕ ▼	● ⊕ ⊕ ▼	● ⊕ ▼	● ⊕ ⊕	● ⊕ ⊕ ▼	● ⊕ ⊕ ▼
SERVICE RATING	A	A	A	D(A); A(all others)	A	D(J); A(all others)	A

LAYOUT	28-1	28-4	28-84	28AY	32-3	32-75
# OF CONTACTS	6-#12; 3-#8	7-#16; 2-#12	9-#8	5-#16; 4-#4	4-#16; 2-#12; 2-#4; 1-#0	2-#12; 7-#8 (coax) RG-180B/U
SERIES	● ⊕ ⊕ ▼	● ⊕ ▼	● ⊕	● ⊕	● ⊕ ▼	● ⊕
SERVICE RATING	D(A, J, E); A(all others)	E(G, P, S); D(all others)	A	A	D	(coax)

10 CONTACTS

LAYOUT	18-1*	18-19	18-24	20-58	24-21	28-19
# OF CONTACTS	10-#16	10-#16	10-#16	5-#16; 5-#12	9-#16; 1-#8	6-#16; 4-#12
SERIES	● ⊕ ⊕ ▼ ⊖	● ⊕ ⊕ ▼	● ⊕ ⊕ ▼	● ⊕	● ⊕ ⊕ ▼	● ⊕ ⊕ ▼
SERVICE RATING	A (B, C, F, G) I(all others)	A	A(B, C, F, G); I(balance)	A	D	B(H, M); D(A, B) A(C, E, G, J, K, L)

* most popular

LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND ⊕ =16 ● =12 ⊙ =8 ○ =4 ⊗ =0
Mating face view of pin inserts

SERIES KEY: AIB (●=GT) AIT (⊕=MS; ⊙=non QPL) 97 (◆=97)
VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊞°)

11 CONTACTS

LAYOUT	20-33	24-20	36-14	40-67	40-72	40-80
# OF CONTACTS	11-#16	9-#16; 2-#12	6-#16; 5-#12; 5-#8	1-#16; 10-#4 (coax) RG-59/U	1-#16; 10-#4 (coax) RG-9B/U	10-#4; 1-#16
SERIES	● ⊕ ◆ ▼	● ⊕ ◆ ▼ ⊞°	● ⊕	● ⊙	● ⊙	● ⊙
SERVICE RATING	A	D	D	A (coax)	A (coax)	A

12 CONTACTS

						
LAYOUT	22-63	24-19	28-8	28-9	28-18	28-51
# OF CONTACTS	8-#16; 4-#12	12-#16	10-#16; 2-#12	6-#16; 6-#12	12-#16	12-#12
SERIES	● ⊕	● ⊕	● ⊕ ⊕ ▽	● ⊕ ⊕ ▽	● ⊕ ⊕ ▽	● ⊕
SERVICE RATING	A	A	E(L,M,); D(B) A(balance)	D	C(M); D(G, H, J, K, L) A(A, B); I(C,D,E,F)	A

13 CONTACTS

LAYOUT	20-11	20-25	20-30	22-70	24-58	32-14●	20-27*
# OF CONTACTS	13-#16	13-#16	13-#16	5-#16; 8-#12	7-#16; 3-#12; 3-#8	13-#12	14-#16
SERIES	● ⊕ ◆	● ⊙ ◆	● ⊙ ◆	● ⊕	● ⊕	⊕	● ⊕ ◆ ▼ ⊞°
SERVICE RATING	I	I	I	A	A	D	A

14 CONTACTS

LAYOUT	22-19*	24-59	28-2	28-20	32-4	32-9	36-78
# OF CONTACTS	14-#16	7-#16; 7-#12	12-#16; 2-#12	4-#16; 10-#12	12-#16; 2-#12	12-#16; 2-#4	12-#8; 2-#16
SERIES	● ⊕ ◆ ▼ ⊞°	● ⊕	● ⊕ ◆ ▼	● ⊕ ◆ ▼ ⊞°	● ⊕	● ⊕ ▼	● ⊕
SERVICE RATING	A	A	D	A	A(F, J, K, N); D(all others)	D	A

• different per 1651 STD: 5-#12; 2-#4

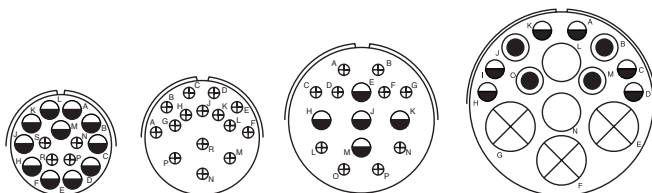
* most popular

LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND ⊕=16 ●=12 ⊙=8 ○=4 ⊗=0
Mating face view of pin inserts

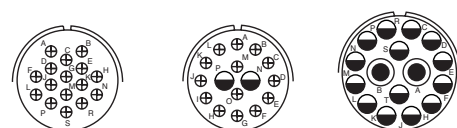
SERIES KEY: AIB (●=GT) AIT (⊕=MS; ⊙=non QPL) 97 (⬢=97)
VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊖)

15 CONTACTS

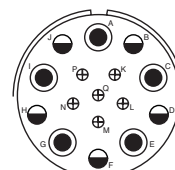
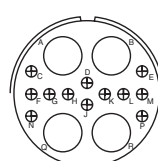
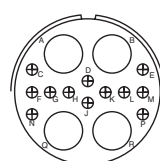
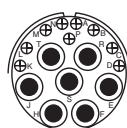
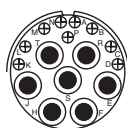
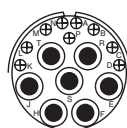


LAYOUT	24-65	28-17*	32-12	40-5□
# OF CONTACTS	4-#16; 11-#12	15-#16	10-#16; 5-#12	6-#12; 4-#8; 2-#4; 3-#0
SERIES	● ⊙	● ⊕ ⊙ ▼	● ⊕	▽
SERVICE RATING	A	B(R); D(M-P); A(A-L)	A(C, D, E, F, G); D(all others)	A

16 CONTACTS

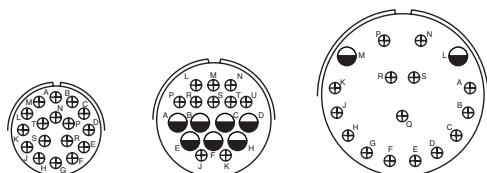


LAYOUT	24-5	24-7*	28-66
# OF CONTACTS	16-#16	14-#16; 2-#12	14-#12; 2-#8
SERIES	● ⊕ ⊙ ▼ ⊖	● ⊕ ⊙ ▼ ⊖	● ⊙
SERVICE RATING	A	A	A



LAYOUT	28-74	28-75	28-79	32-68	32-82	36-14
# OF CONTACTS	9-#16; 4-#8; 3-#8 for #10 wire	9-#16; 7-#8 for #10 wire	7-#8; 9-#16	12-#12; 4-#4 (coax) RG-58C/U	12-#16; 4-#4	6-#16; 5-#12; 5-#8
SERIES	● ⊙	● ⊙	● ⊙	● ⊙	● ⊙	● ⊕
SERVICE RATING	A	A	A	A (coax)	A	D

17 CONTACTS



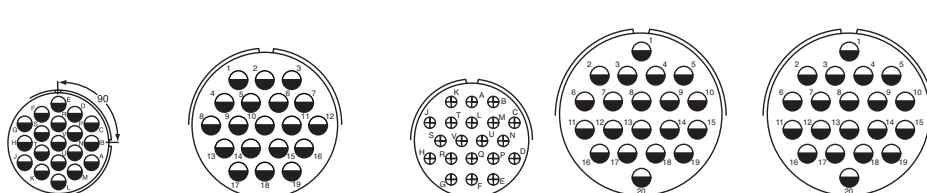
LAYOUT	20-29*	28-59	36-13
# OF CONTACTS	17-#16	10-#16; 7-#12	15-#16; 2-#12
SERIES	● ⊕ ⊙ ▼ ⊖	● ⊙	● ⊙
SERVICE RATING	A	A	E(N, P, Q); A(all others)

19 CONTACTS



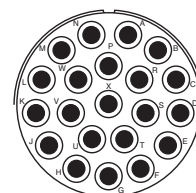
LAYOUT	20A48	20-26	22-14*	24-67
# OF CONTACTS	19-#16	19-#16	19-#16	19-#12
SERIES	■	⊙ ●	● ⊕ ⊙ ▼ ⊖	● ⊙
SERVICE RATING	I	A	A	I

20 CONTACTS



LAYOUT	24-84	32-76	28-16	36-79	36-80	40-68
# OF CONTACTS	1-#12; 18-#12 (coax) RG-188/U or RG-174/U	19-#12,	20-#16	20-#12	20-#12 for #10 wire	21-#8
SERIES	● ⊙	● ⊙	● ⊕ ⊙ ▼ ⊖	● ⊙	● ⊙	● ⊙
SERVICE RATING	A (coax)	A	A	A	A	A

21 CONTACTS



* most popular

□ Special arrangement for MS3450 Series

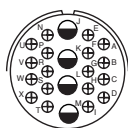
LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND ⊕ =16 ● =12 ⊙ =8 ○ =4 ⊗ =0
Mating face view of pin inserts

SERIES KEY: AIB (●=GT) AIT (⊕=MS; ⊙=non QPL) 97 (◆=97)
VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊞°)

22 CONTACTS

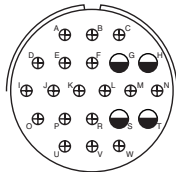
23 CONTACTS

**LAYOUT**

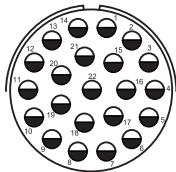
OF CONTACTS
SERIES
SERVICE RATING

28-11*

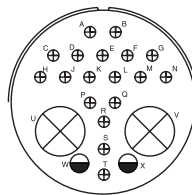
18-#16; 4-#12
● ⊕ ◆ ▼ ⊞°
A

**36-1**

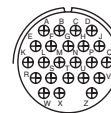
18-#16; 4-#12
● ⊕ ◆
D

**36-22**

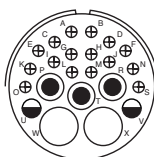
22-#12
● ◆
D

**40-7**

18-#16; 2-#12; 2-#0
▽
P, Q, U, V, W, X=A;
D(balance)

**24-80**

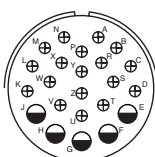
23-#16
● ◆ ▽
I

**LAYOUT**

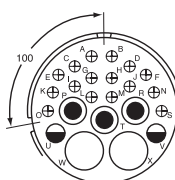
OF CONTACTS
SERIES
SERVICE RATING

32-6

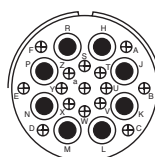
16-#16; 2-#12;
3-#8; 2-#4
● ⊕ ◆ ▼
A

**32-13**

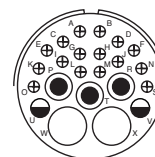
18-#16; 5-#12
● ⊕ ◆ ▼
D

**32-16**

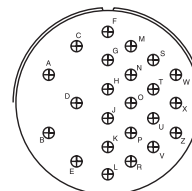
16-#16; 2-#12;
3-#8; 2-#4
● ◆ ▽
A

**32-60**

15-#16; 8-#8 (coax)
RG-124/U
● ◆
A (coax)

**32-62**

16-#16; 2-#12; 1-#8;
2-#8 (coax) RG-124/U; 2-#4
● ◆
A (coax)

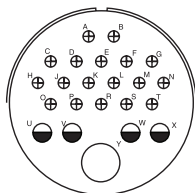
**40-2**

23-#16
▽
D

23 CONTACTS (CONT.)

24 CONTACTS

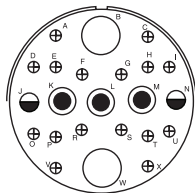
25 CONTACTS

**LAYOUT**

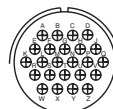
OF CONTACTS
SERIES
SERVICE RATING

40-3

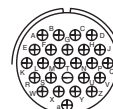
18-#16; 4-#12; 1-#4
▽
D

**40-4**

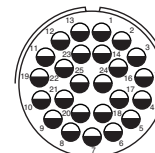
16-#16; 2-#12; 3-#8; 2-#4
▽
D

**24-28***

24-#16
● ⊕ ◆ ▼ ⊞°
I

**24-AJ**

25-#16
● ◆
A

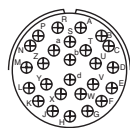
**32-25**

25-#12
● ◆
A

26 CONTACTS

28 CONTACTS

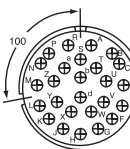
29 CONTACTS

**LAYOUT**

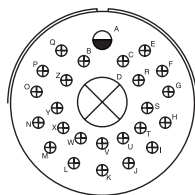
OF CONTACTS
SERIES
SERVICE RATING

28-12*

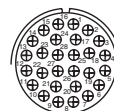
26-#16
● ⊕ ◆ ▼ ⊞°
A

**28-13**

26-#16
● ◆ ⊕ ▽
A

**40-6**

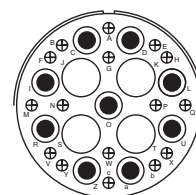
24-#16; 1-#12; 1-#0
▽
D

**24-96**

28-#16
● ◆
I

**28A63**

19-#16; 9-#12
■
A

**40-10**

16-#16; 9-#8; 4-#4
● ⊕
A

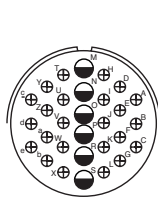
* most popular

LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND ⊕=16 ●=12 ⊙=8 ○=4 ⊗=0
Mating face view of pin inserts

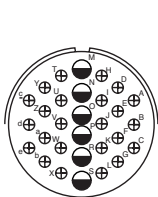
SERIES KEY: AIB (●=GT) AIT (⊕=MS; ⊙=non QPL) 97 (⬢=97)
VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊖)

30 CONTACTS

**32-8**

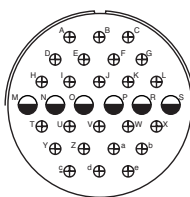
24-#16; 6-#12

● ⊕ ⊖
A

**32-56**

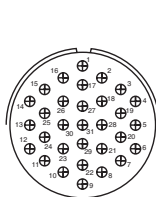
24-#16; 6-#12 for #10 wire

● ⊕
A

**40-1**

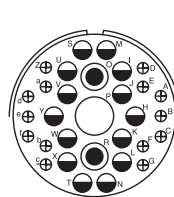
24-#16; 6-#12

● ⊕ ▼
D

**32-31**

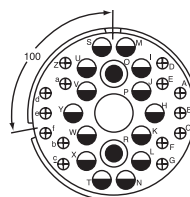
31-#16

● ⊕
A

**36-9**

14-#16; 14-#12; 2-#8; 1-#4

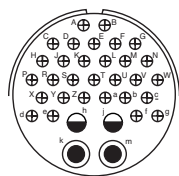
● ⊕ ⊖ ▼
A

**36-18**

14-#16; 14-#12; 2-#8; 1-#4

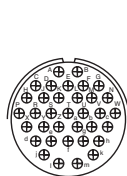
● ⊕ ▽
A

34 CONTACTS

**36-20**

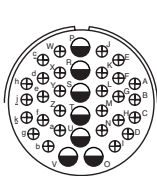
30-#16; 2-#12; 2-#8

● ⊕
A

**28-15***

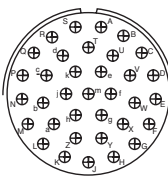
35-#16

● ⊕ ⊖ ⊖
A

**32-7***

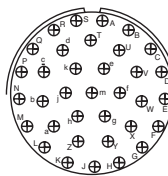
28-#16; 7-#12

● ⊕ ⊕ ■ ▼
I(A, B, H, J); A(all others)

**36-15**

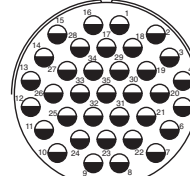
35-#16

● ⊕ ⊖ ⊖
D(M); A(balance)

**36-85**

35-#16 for #12 wire

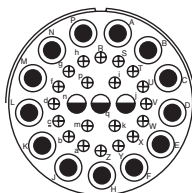
● ⊕
A/D

**40-35**

35-#12

● ⊕
D

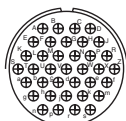
36 CONTACTS

**40-64**

20-#16; 3-#12; 13-#8 (coax) RG-124/U

● ⊕
(coax)

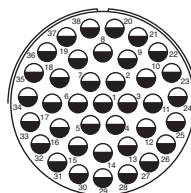
37 CONTACTS

**28-21***

37-#16

● ⊕ ⊕ ■ ▼ ⊖
A

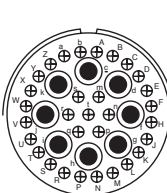
38 CONTACTS

**40-AG**

38-#12

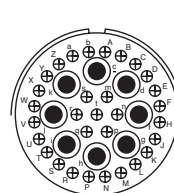
● ⊕
A

39 CONTACTS

**36-54**

31-#16; 8-#8

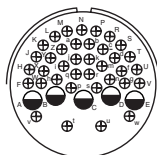
● ⊕
A

**36-55**

31-#16; 8-#8 for #6 wire

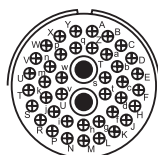
● ⊕
A

42 CONTACTS

**32-53**

37-#16; 5-#12

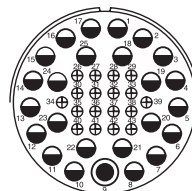
● ⊕
I/E

**32-59**

40-#16; 2-#8 (coax) RG-161/U

● ⊕
A (coax)

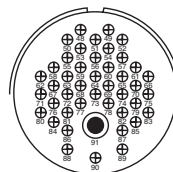
43 CONTACTS

**40-AT**

18-#16; 24-#12; 1-#8

● ⊕
A

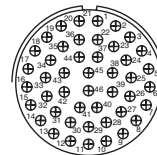
44 CONTACTS

**36-74**

43-#16; 1-#8 (coax); RG-187B/U

● ⊕
A (coax)

46 CONTACTS

**32-73**

46-#16

● ⊕ ▼
A

LAYOUT
OF CONTACTS
SERIES
SERVICE RATING

LAYOUT
OF CONTACTS
SERIES
SERVICE RATING

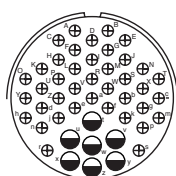
* most popular

LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND ⊕ =16 ● =12 ⊙ =8 ○ =4 ⊗ =0
Mating face view of pin inserts

SERIES KEY: AIB (●=GT) AIT (⊕=MS; ⊙=non QPL) 97 (⬠=97)
VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊖)

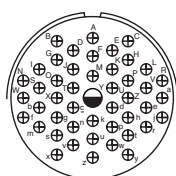
47 CONTACTS



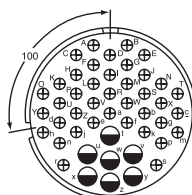
LAYOUT

OF CONTACTS
SERIES
SERVICE RATING

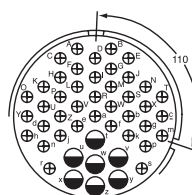
36-7*
40-#16; 7-#12
● ⊕ ▼ ▽ ⊖
A



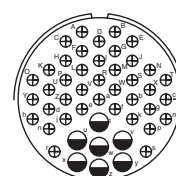
36-8
46-#16; 1-#12
● ⊕ ▼ ▽ ⊖
A



36-16
40-#16; 7-#12
● ⊕ ▽
A

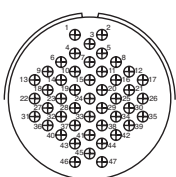


36-17
40-#16; 7-#12
● ⊕ ▽
A



36-60
40-#16; 7-#12 for #10 wire
● ⊕
A

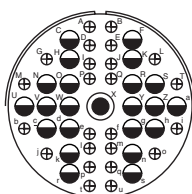
48 CONTACTS



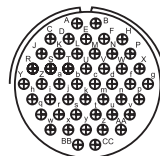
LAYOUT

OF CONTACTS
SERIES
SERVICE RATING

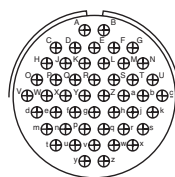
36-76
47-#16
● ⊕
A



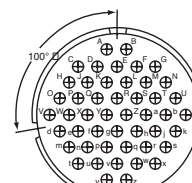
40-9
24-#16; 22-#12; 1-#8
● ⊕ ▼
A



32-48
48-#16
● ⊕
I

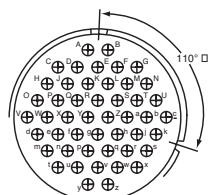


36-10*
48-#16
● ⊕ ⊕ ■ ▽ ⊖
A



36-11
48-#16
● ⊕ ⊕ ▽
A

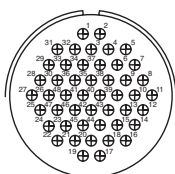
52 CONTACTS



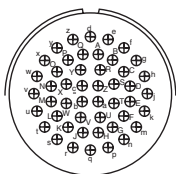
LAYOUT

OF CONTACTS
SERIES
SERVICE RATING

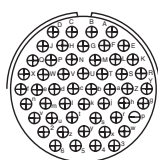
36-12
48-#16
● ⊕ ⊕ ▽
A



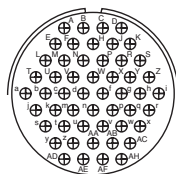
36-75
48-#16 for #14 wire
● ⊕
A



36-AF
48-#16
● ⊕
A

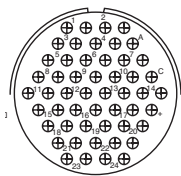


32-414
52-#16
⬠
A



36-52
52-#16
● ⊕ ▼ ▽ ⊖
A

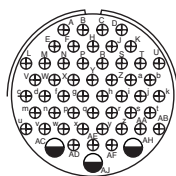
53 CONTACTS



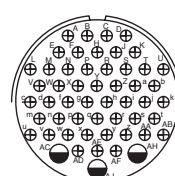
LAYOUT

OF CONTACTS
SERIES
SERVICE RATING

36-403
52-#16
⬠
A



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



36-71
50-#16; 3-#12
● ⊕
A

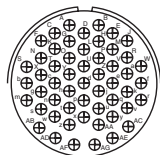
* most popular

LAYOUTS BY NUMBER OF CONTACTS

CONTACT LEGEND $\odot$ =20 $\oplus$ =16 $\bullet$ =12 $\bullet$ =8 $\bigcirc$ =4 $\bigotimes$ =0
Mating face view of pin inserts

SERIES KEY: AIB ($\bullet$ =GT) AIT ($\oplus$ =MS; $\diamond$ =non QPL) 97 ($\diamond$ =97)
VG95234 ($\blacksquare$) MS3450 (∇ =MS; ∇ =non QPL) Thermocouple (⌚)

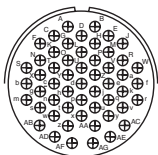
54 CONTACTS

**LAYOUT**

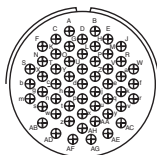
OF CONTACTS
SERIES
SERVICE RATING

32-22
54-#16
 $\bullet$ $\diamond$ ∇
A

55 CONTACTS

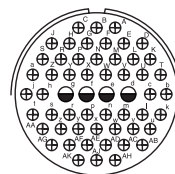


32-64
54-#16
 $\bullet$ $\diamond$
I



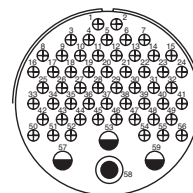
32-AF
55-#16
 $\bullet$ $\diamond$
A

56 CONTACTS



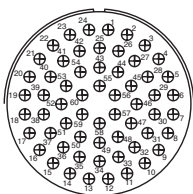
36-66
52-#16; 4-#12
 ∇
A

59 CONTACTS



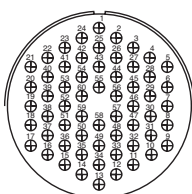
40-61
55-#16; 3-#12; 1-8
 $\bullet$ $\diamond$
A

60 CONTACTS

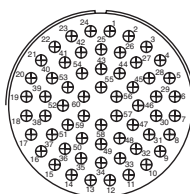
**LAYOUT**

OF CONTACTS
SERIES
SERVICE RATING

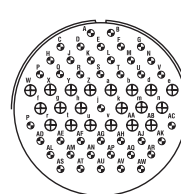
40-53
60-#16
 $\bullet$ $\diamond$ ⌚
A



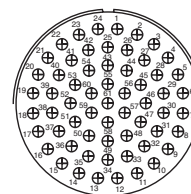
40-62
60-#16
 $\bullet$ $\oplus$ ∇
A



40-85
60-#16 for #14 wire
 $\bullet$ $\diamond$
A

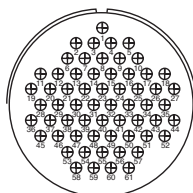


32A69
41-#20; 20-#16
 $\blacksquare$
I



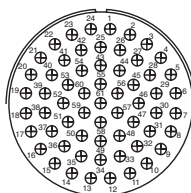
40-63
61-#16 for #14 wire
 $\bullet$ $\diamond$
A

62 CONTACTS

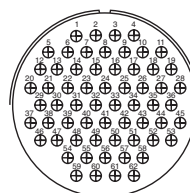
**LAYOUT**

OF CONTACTS
SERIES
SERVICE RATING

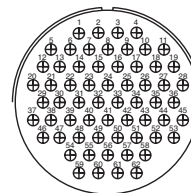
40-70
61-#16
 $\bullet$ $\diamond$
A



40-73
61-#16
 $\bullet$ $\diamond$
A

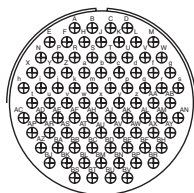


40-81
62-#16 for #14 wire
 $\bullet$ $\diamond$
A



40-82
62-#16
 $\bullet$ $\diamond$
A

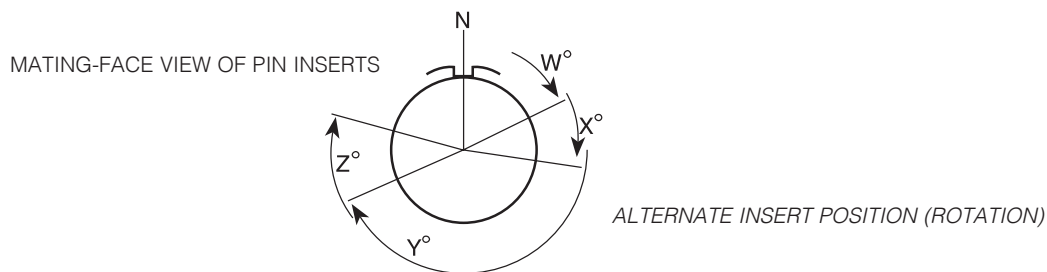
85 CONTACTS

**LAYOUT**

OF CONTACTS
SERIES
SERVICE RATING

40-56
85-#16
 $\bullet$ $\oplus$ ∇ ⌚
A

* most popular



SERIES KEY: 97 (◆=97) AIT (⊕=MS; ◆=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊖)
 CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						°	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
8S-1	◆	⊕			▼	1		1						-	-	-	-	A
10S-2		⊕^			▼	1		1						-	-	-	-	A
10SL-3	◆	⊕	●	■	▼	3		3						-	-	-	-	A
10SL-4	◆	⊕	●	■	▼	2		2						63#	-	-	-	A
10SL-51		◆	●		▽	2		2					⊖	10SL-4 45° A=Ir.; B=Con.				
10SL-52		◆	●		▽	2		2					⊖	10SL-4 45° A=Cu; B=Con.				
10SL-53		◆	●		▽	2		2					⊖	10SL-4 45° A=Al.; B=Ch.				
10SL-54		◆	●		▽	3		3					⊖	10SL-3 A=Ir.; B=Con.; C=Cu				
10SL-55		◆	●		▽	3		3					⊖	10SL-3 A=Al.; B=Ch.; C=Cu				
10SL-56		◆	●		▽	2		2					⊖	10SL-4 A=Al.; B=Ch.				
10SL-57		◆	●		▽	2		2					⊖	10SL-4 A=Ch.; B=Con.				
10SL-58		◆	●		▽	3		3					⊖	10SL-3 A=Ch.; B=Al.; C=Cu				
10SL-59		◆	●		▽	2		2					⊖	10SL-4 A=Ch.; B=Al.				
10SL-60		◆	●		▽	2		2					⊖	10SL-4 A=Ir.; B=Con.				
10SL-61		◆	●		▽	2		2					⊖	10SL-4 A=Cu; B=Con.				
10SL-62		◆	●		▽	3		3					⊖	10SL-3 A=Cu; B=Al.; C=Ir.				
10SL-63		◆	●		▽	3		3					⊖	10SL-3 A, C=Con.; B=Ch.				
10SL-64		◆	●		▽	3		3					⊖	10SL-3 A, C=Ch.; B=Al.				
12S-1		◆			▽	2		2						12S-3 100°				A
12S-2	◆	◆			▽	2		2						12S-3 250°				A
12S-3	◆	⊕			▼	2		2						70	145	215	290	A
12S-4		⊕			▼	1		1						-	-	-	-	D
12S-6	◆					2		2					⊖	12S-3 A=Con.; B=Ir.				
12S-51		◆			▽	2		2					⊖	12S-3 315° A=Ch.; B=Al.				
12S-54		◆			▽	2		2					⊖	12S-3 315° A = Ir.; B=Con.				
12S-55		◆			▽	2		2					⊖	12S-3 45° A=Cu; B=Con.				
12S-56		◆			▽	2		2					⊖	12S-3 A=Al.; B=Ch.				
12S-57		◆			▽	2		2					⊖	12S-3 60° A=Ch.; B=Al.				
12S-58		◆			▽	2		2					⊖	12S-3 120° A=Ir.; B=Con.				
12S-59		◆			▽	2		2					⊖	12S-3 A=Ir.; B=Con.				
12S-60		◆			▽	2		2					⊖	12S-3 A=Cu; B=Con.				
12S-61		◆			▽	2		2					⊖	12S-3 A=Ch.; B=Con.				
12S-62		◆			▽	2		2					⊖	12S-3 A=Ch.; B=Al.				
12SL844	◆					4		4						-	-	-	-	I
12-5	◆	⊕			▼	1			1					-	-	-	-	D
14S-1	◆	⊕	●		▼	3		3						-	-	-	-	A
14S-2	◆	⊕	●		▼	4		4						-	120	240	-	I
14S-4	◆	⊕^	●			1		1						-	-	-		D
14S-5	◆	⊕	●		▼	5		5						-	110	-	-	I

*Pins in receptacle, sockets in plug only ^ 5015 QPL not all configurations #Rotation commercial only, not MS-approved

NOTE: 16S contacts are used in shell sizes 8S, 10S, 10SL, 12S, 14S, & 16S

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (✦=MS; ✧=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊞°)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						⊞°	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
14S-6	◆	✦	●	■	▼	6		6						90#	-	-	-	I
14S-7	◆	✦	●		▼	3		3						90	180	270	-	A
14S-9	◆	✦	●		▼	2		2						70	145	215	290	A
14S-10	◆	✧	●		▽	4		4						14S-2	100°			I
14S-11	◆	✧	●		▽	4		4						14S-2	250°			I
14S-12	◆	✧	●		▽	3		3						14S-1	100°			A
14S-13	◆	✧	●		▽	3		3						14S-1	260°			A
14S-14	◆	✧	●			4		4						14S-2	100°			I
14S-51		✧	●		▽	2		2					⊞°	14S-9	90° A=Al.; B=Ch.			
14S-52		✧	●		▽	4		4					⊞°	14S-2	45° A, B=Cu; C=Al.; D=Ch.			
14S-53		✧	●		▽	2		2					⊞°	14S-9	90° A=Ir.; B=Con.			
14S-54		✧	●		▽	6		6					⊞°	14S-6	45° A, C, E=Ir.; B, D, F=Con.			
14S-55		✧	●		▽	4		4					⊞°	14S-2	45° A, C=Ir.; B, D=Con.			
14S-56		✧	●		▽	4		4					⊞°	14S-2	45° A=Ir.; B=Con.; C, D=Cu			
14S-57		✧	●		▽	4		4					⊞°	14S-2	45° A, C=Al.; B, D=Ch.			
14S-58		✧	●		▽	3		3					⊞°	14S-7	45° A=Al.; B=Ch.; C=Cu			
14S-59		✧	●		▽	2		2					⊞°	14S-9	90° A=Cu; B=Con.			
14S-60		✧	●		▽	2		2					⊞°	14S-9	A=Al.; B=Ch.			
14S-61		✧	●		▽	6		6					⊞°	14S-6	45° A=Al.; B=Ch.; C=Ir.; D=Con.; E, F=Cu			
14S-63		✧	●		▽	6		6					⊞°	14S-6	A, C= Al.; B, D=Ch.; E=Ir.; F=Con.			
14S-64		✧	●		▽	4		4					⊞°	14S-2	A, C=Con.; B, D=Cu			
14S-65		✧	●		▽	6		6					⊞°	14S-6	A, C, E= Cu; B, D, F=Con.			
14S-67		✧	●		▽	6		6					⊞°	14S-6	A=Al.; B=Ch.; Balance=Cu			
14S-68		✧	●		▽	4		4					⊞°	14S-2	45° A=Ch.; B=Con.; C, D=Cu			
14S-69		✧	●		▽	3		3					⊞°	14S-7	A=Con.; B=Ch.; C=Cu			
14S-70		✧	●		▽	4		4					⊞°	14S-2	A, D=Ch.; B, C=Al.			
14S-71		✧	●		▽	4		4					⊞°	14S-2	A, B, D=Cu; C=Con.			
14S-72		✧	●		▽	2		2					⊞°	14S-9	A=Con.; B=Cu			
14S-73		✧	●		▽	4		4					⊞°	14S-2	A, B=Cu; C=Al.; D=Ch.			
14S-74		✧	●		▽	4		4					⊞°	14S-2	A, B=Ch.; C, D=Al.			
14S-75		✧	●		▽	4		4					⊞°	14S-2	A, B=Cu; C, D=Con.			
14S-76		✧	●		▽	4		4					⊞°	14S-2	A, C=Al.; B, D=Ch.			
14S-77		✧	●		▽	4		4					⊞°	14S-2	A, D=Al.; B, C=Ch.			
14S-78		✧	●		▽	2		2					⊞°	14S-9	A=Ch.; B=Al.			
14SA7		✧	●			7		7						-	-	-	-	A
14-3		✦			▼	1				1				-	-	-	-	A
16S-1	◆	✦	●	■	▼	7		7						80	-	-	280	A
16S-3		✦			▽	1		1						-	-	-	-	B
16S-4	◆	✦	●	■	▽	2		2						35	110	250	325	D
16S-5	◆	✦	●			3		3						70	145	215	290	A
16S-6	◆	✦	●			3		3						90	180	270	-	A
16S-8	◆	✦	●		▼	5		5						-	170	265	-	A
16S-14	◆	✧	●			3		3						16S-5	110°			A
16S-15	◆	✧	●			2		2						16S-4	100°			D
16S-16	◆	✧	●			2		2						16S-4	250°			D
16S-17	◆	✧	●			3		3						16S-5	250°			A
16S-52		✧	●		▽	2		2					⊞°	16S-4	A=Ch.; B= Al.			
16S-54		✧	●		▽	7		7					⊞°	16S-1	A=Al.; B=C; Balance=Cu			

NOTE: 16S contacts are used in shell sizes 8S, 10S, 10SL, 12S, 14S, & 16S. #Rotation commercial only. Not MS-approved. Not used for 97 series.

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (◆=MS; ◆=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▼=non QPL) Thermocouple (⌚)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						⌚	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
16S-55		◆	●		▼	7		7					⌚	16S-1	A=Con.; Balance=Cu			
16A11				■		2			2					35	110	250	125	A
16SA18	◆	◆	●			7		7						16S-1	100°			A
16SA19	◆	◆	●			7		7						16S-1	260°			A
16SA20	◆	◆	●			7		7						16S-1	110°			A
16SA21	◆	◆	●			7		7						16S-1	250°			A
16-2		◆	●		▼	1			1					-	-	-	-	E
16-7	◆	◆	●	■	▼	3		2		1				80	110	250	280	A
16-9	◆	◆	●		▼	4		2	2					35	110	250	325	A
16-10	◆	◆	●	■	▼	3			3					90	180	270	-	A
16-11	◆	◆	●		▼	2			2					35	110	250	325	A
16-12	◆	◆	●	■	▼	1					1			-	--	-		A
16-13	◆	◆	●		▼	2			2				⌚	35	110	250	325	A = Ir.; B = Con.
16-52		◆	●		▼	2			2				⌚	16-11	90° A=Al.; B=Ch.			
16-53		◆	●		▼	4		2	2				⌚	16-9	70° A=Al.; C=Ch.; B, D=Cu			
16-55		◆	●		▼	3			3				⌚	16-10	45° A=Al.; B=Ch.; C=Cu			
16-56		◆	●		▼	2			2				⌚	16-13	90° A=Con.; B=Cu			
16-57		◆	●		▼	3			3				⌚	16-10	A=Al.; B=Cu; C=Ch.			
16-58		◆	●		▼	3			3				⌚	16-10	A=Con.; B, C=Cu			
16-59		◆	●			4			4					80	-	-	280	A
16-60		◆	●		▼	2			2				⌚	16-13	A=Al.; B=Ch.			
16-62		◆	●		▼	2			2				⌚	16-11	A=Con.; B=Cu			
18A31	◆	◆	●			10		10						18-1	110°			A (B,C,F,G) I (all others)
18-1	◆	◆	●	■	▼	10		10						70	145	215	290	A (B,C,F,G) I (all others)
18-3	◆	◆	●			2			2					35	110	250	325	D
18-4	◆	◆	●		▼	4		4						35	110	250	325	D
18-5	◆	◆	●		▼***	3		1	2					80	110	250	280	D
18-6		◆	●		▼***	1					1			-	-	-	-	D
18-7		◆^	●		▼	1				1				-	-	-	-	B
18-8	◆	◆	●		▼	8		7	1					70	-	-	290	A
18-9	◆	◆	●	■	▼	7		5	2					80	110	250	280	I
18-10	◆	◆	●		▼	4			4					-	120	240	-	A
18-11	◆	◆	●	■	▼	5			5					-	170	265	-	A
18-12	◆	◆	●		▼	6		6						80	-	-	280	A
18-13	◆	◆	●	■	▼	4			3	1				80	110	250	280	A
18-14		◆^			▼	2		1			1			80	110	250	280	A
18-15	◆†	◆	●		▼***	4			4				⌚	-	120	240	-	A, C=Ir. B, D=Con.
18-16	◆	◆^	●		▼	1			1					-	-	-	-	C
18-17	◆	◆	●		▼	7		5	2					18-9	100°			I
18-18	◆	◆	●		▼	7		5	2					18-9	250°			I
18-19	◆	◆	●		▼	10		10						80	120	240	-	A
18-20	◆	◆^	●			5		5						90	180	270	-	A
18-22	◆	◆^	●		▼	3		3						70	145	215	290	D
18-23	◆	◆	●		▼	10		10						18-1	100°			A (B,C,F,G) I (all others)
18-24	◆	◆	●		▼	10		10						18-1	250°			A (B,C,F,G) I (all others)
18-25	◆	◆	●			2			2					18-3	100°			D
18-26	◆	◆	●			2			2					18-3	250°			D

† Socket only for 97 Series

^ 5015 QPL not all configurations

***Socket only for MS3450 series

***Pin only for MS3450

NOTE: 16S contacts are used in shell sizes 8S, 10S, 10SL, 12S, 14S, & 16S

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (◆=MS; ◆=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▼=non QPL) Thermocouple (⊞)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						⊞	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
18-27	◆	◆	●		▼**	3		1	2					18-5	100°			D
18-28	◆	◆	●		▼**	3		1	2					18-5	250°			D
18-29	◆	◆^	●			5		5						90	180	270	-	A
18-30	◆	◆	●			5		5						18-20	110°			A
18-31	◆	◆	●			5		5						18-20	260°			A
18-420	◆					1 HV			1 HV					24 KVdc, 17 KVac				
18-51		◆	●	▼		6		6					⊞	18-12	A=Ir.; B, E=Con.; D=Cu; C, F=Dummy			
18-52		◆	●	▼		5			5				⊞	18-11	A=Ir.; B=Con.; C=Ch.; D=Al.; E=Dummy			
18-53		◆	●	▼		6		6					⊞	18-12	A, D=Ir.; B, E=Con.; C, F=Dummy			
18-54		◆	●	▼		4			4				⊞	18-15	A, C=Al.; B, D=Ch.			
18-56		◆	●	▼		10		10					⊞	18-1	45° A, C, E, G, I=Ir.; B, D, F, H, J=Con.			
18-57		◆	●	▼		6		6					⊞	18-12	45° A, C, E=Al.; B, D, F=Ch.			
18-59		◆	●	▼		6		6					⊞	18-12	45° A, C=Ir.; B, E, F=Con.; D=Cu			
18-60		◆	●	▼		5			5				⊞	18-11	45° A, D=Al.; B, C=Ch.; E=Cu			
18-61		◆	●	▼		6		6					⊞	18-12	A, C=Ir.; B, D=Con.; E=Ch.; F=Al.			
18-62		◆	●	▼		6		6					⊞	18-12	A, B, C=Ir.; D, E, F=Con.			
18-63		◆	●	▼		4			4				⊞	18-15	A, C=Con.; B, D=Cu			
18-65		◆	●	▼		6		6					⊞	18-12	A=Ir.; B=Con.; Balance=Cu			
18-66		◆	●	▼		10		10					⊞	18-1	A, C, E, G, I=Cu; B, D, F, H, J=Con.			
18-67		◆	●	▼		6		6					⊞	18-12	A, C, E=Cu; B, D, F=Con.			
18-68		◆	●	▼		5			5				⊞	18-11	A, D=Al.; B, C=Ch.; E=Cu			
18-69		◆	●	▼		10		10					⊞	18-1	A=Al.; B=Ch.; Balance=Cu			
18-70		◆	●	▼		5			5				⊞	18-11	A=Ir.; B=Con.; C=Ch.; D=Al.; E=Cu			
18-71		◆	●	▼		4			4				⊞	18-15	A=Con.; Balance=Cu			
18-72		◆	●	▼		4			4				⊞	18-15	D=Con.; Balance=Cu			
18-73		◆	●	▼		7		5	2				⊞	18-9	A=Al.; D=Ch.; Balance=Cu			
18-74		◆	●	▼		6		6					⊞	18-12	A=Ch.; B=Al.; D=Ir.; E=Cu; C, F=Con.			
20A9				■		9			9					-	110	250	-	D(J), I(all others)
20A16	◆	◆	●			13		13						20-11	182°			I
20A37	◆	◆	●			4			4					20-4	250°			D
20A48				■		19		19						80	280	-	-	I
20-2		◆	●	■	▼	1						1		-	-	-	-	D
20-3	◆	◆^	●			3			3					70	145	215	290	D
20-4	◆	◆	●		▼	4			4					45	110	250	-	D
20-6	◆	◆^	●			3		3						70	145	215	290	D
20-7	◆	◆	●		▼	8		8						80	110	250	280	A(B,C,F,G) I(all others)
20-8	◆	◆	●	■	▼	6		4		2				80	110	250	280	I
20-9		◆			▼	8		7	1					80	110	250	280	D(H), A(all others)
20-11	◆	◆	●			13		13						-	-	-	-	I
20-12		◆^				2		1			1			80	110	250	280	A
20-14	◆	◆	●		▼	5			3	2				80	110	250	280	A
20-15	◆	◆	●		▼	7			7					80	-	-	280	A
20-16	◆	◆	●		▼	9		7	2					80	110	250	280	A
20-17	◆	◆^	●		▼	6		1	5					90	180	270	-	A
20-18	◆	◆	●		▼	9		6	3					35	110	250	325	A
20-19	◆	◆	●		▼	3				3				90	180	270	-	A
20-20		◆^	●			4			3		1			80	110	250	280	A
20-21	◆	◆	●		▼	9		8	1					35	110	250	325	A

** Socket only for MS3450 series ^ 5015 QPL not all configurations

NOTE: 16S contacts are used in shell sizes 8S, 10S, 10SL, 12S, 14S, & 16S

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (⬢=MS; ⬢=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊞)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						⊞	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
20-22		+	●		▼	6		3		3				80	110	250	280	A
20-23	◆	+	●			2				2				35	110	250	325	A
20-24	◆	+	●		▼	4		2		2				35	110	250	325	A
20-25	◆	⬢	●			13		13						20-11 100°				I
20-26		⬢	●			19		19						-	90	280	-	A
20-27	◆	+	●		▼	14		14						35	110	250	325	A
20-29	◆	+	●		▼	17		17						80	-	-	280	A
20-30	◆	⬢	●			13		13						20-11 250°				I
20-32	◆	⬢	●		▽	8		8						20-7 260°				A(B,C,F,G) I (all others)
20-33	◆	+	●		▼	11		11						-	-	-	280#	A
20-51		⬢	●			3				3				-	-	-	-	A
20-52		⬢	●		▽	4			4				⊞	20-4 315° A=Ir.; B=Con.; C=Ch.; D=Al.				
20-56		⬢	●		▽	8		8					⊞	20-7 45° A, B, G, H=Ir.; C, D, E, F=Con.				
20-57		⬢	●			7‡			7‡					-	-	-	-	A
20-58		⬢	●			10		5	5					-	-	-	-	A
20-59		⬢	●			3‡				3‡				-	-	-	-	A
20-60		⬢	●		▽	8		8					⊞	20-7 45° D=Ch.; E=Al.; Balance=Cu				
20-61		⬢	●		▽	17		17					⊞	20-29 45° A, B, M=Cu; Balance=Con.				
20-62		⬢	●		▽	7			7				⊞	20-15 80° A, C, E=Al.; B, D, F=Ch.; G=Cu				
20-64		⬢	●		▽	14		14					⊞	20-27 A=Al.; C=Ch.; Balance=Cu				
20-65		⬢	●		▽	14		14					⊞	20-27 A, B, C, D, E, F, G=Ir.; H, I, J, K, L, M, N=Con.				
20-66		⬢	●			6‡		1	5‡					-	-	-	-	A
20-67		⬢	●		▽	9		7	2				⊞	20-16 H=Al.; I=Ch.; Balance=Cu				
20-68		⬢	●		▽	8		8					⊞	20-7 A, B, G, H=Con.; C, D, E, F=Cu				
20-69		⬢	●		▽	14		14					⊞	20-27 A, B, C, D, E, F, G=Cu; H, I, J, K, L, M, N=Con.				
20-70		⬢	●		▽	17		17					⊞	20-29 A, C, E, G, J, L, N, R, T=Ir.; B, D, F, H, K, M, P, S=Con.				
20-71		⬢	●		▽	17		17					⊞	20-29 S=Al.; R=Ch.; Balance=Cu				
20-74		⬢	●		▽	17		17					⊞	20-29 A, C, E, G, J, L, N, R=Ir.; B, D, F, H, K, M, P, S=Con.; T=Cu				
20-75		⬢	●		▽	7			7				⊞	20-15 G=Al.; Balance=Ch.				
20-77		⬢	●		▽	9		7	2				⊞	20-16 A=Con.; Balance=Cu				
20-79		⬢	●			8‡		7	1‡					-	-	-	-	D(H); A (all others)
20-80		⬢	●		▽	14		14					⊞	20-27 A, C, E, G, I, K, M=Cu; B, D, F, H, J, L, N=Con.				
20-81		⬢	●		▽	14		14					⊞	20-27 A, C, E, G, I, K, M=Ch.; B, D, F, H, J, L, N=Al.				
20-82		⬢	●		▽	17		17					⊞	20-29 A, C, E, G, J, L, N, R=Al.; B, D, F, H, K, M, P, S=Ch.; T=Cu				
22B22				■		4				4				-	110	250	-	A
22-1	◆	+	●			2				2				35	110	250	325	D
22-2	◆	+	●	■	▼	3				3				70	145	215	290	D
22-4	◆	+	●		▼***	4			2	2				35	110	250	325	A
22-5	◆	+	●		▼***	6		4	2					35	110	250	325	D
22-6		+	●		▼***	3		1		2				80	110	250	280	D
22-7		+	●		▼***	1						1		-	-	-	-	E
22-8	◆	⬢^	●			2			2					35	110	250	325	E
22-9	◆	+	●		▽	3			3					70	145	215	290	E
22-10	◆	+	●		▽	4		4						35	110	250	325	E
22-11	◆	+	●		▽	2		2						35	110	250	325	B
22-12	◆	⬢^	●	■		5		3		2				80	110	250	280	D
22-13	◆	⬢^	●			5		1	4					35	110	250	325	A(A-D) D(E)

#Rotation commercial only, not MS-approved ‡ Reduced contact crimp pot ^ 5015 QPL not all configurations

*** Socket only for MS3450 series *** Pin only for MS3450 series

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (⬢=MS; ⬢=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊞)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES							DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
22-14	◆	⬢	●	■	▼	19		19						80	110	250	280	A
22-15	◆	⬢	●		▽	6		1	5					80	110	250	280	A(A-C, E, F) E(D)
22-16	◆	⬢	●			9		6	3					80	110	250	280	A
22-17		⬢^	●		▽	9		8	1					80	110	250	280	D(A) A(all others)
22-18	◆	⬢	●		▽	8		8						80	110	250	280	A(C-E) D(all others)
22-19	◆	⬢	●		▼	14		14						80	110	250	280	A
22-20	◆	⬢^	●			9		9						35	110	250	325	A
22-21		⬢^	●		▼	3		2			1			80	110	250	280	A
22-22	◆	⬢	●	■	▼	4				4				-	110	250	-	A
22-23	◆	⬢	●		▼	8			8					35	-	250	-	D(A-D): A(E-G)
22-24		⬢	●			6		4	2					80	110	250	280	D(C, D, E) A(A, B, F)
22-26	◆					7		5	2					-	-	-	-	1/8" spacing
22-27	◆	⬢	●	■	▽	9		8		1				80	-	250	280	D(J) A(all others)
22-28	◆	⬢^	●			7			7					80	-	-	280	A
22-30	◆	❖	●		▽	19		19						22-14	100°			A
22-31	◆	❖	●			2		2						22-11	100°			B
22-32	◆	❖	●		▽	6		4	2					22-5	260°			D
22-33		⬢^	●			7		7						80	110	250	280	D(A-D) A(E-G)
22-34	◆	⬢				5		2	3					80	110	250	280	D
22-36				▽		8			8					90	-	270	-	D(H); A(all others)
22-57		❖	●		▽	19		19					22-14	45° A, C, E, G, J, L, N, R=Ir.; B, D, F, H, K, M, P, S=Con.; T, U, V=Cu				
22-60		❖	●	▽	19	19							22-14	45° U=Al.; N=Ch.; Balance=Cu				
22-62		❖	●	▽	8			8					22-23	60° A, B, F, G=Al.; C, D, E, H=Ch.				
22-63		❖	●		12			8	4					20	-	-	-	A
22-65		❖	●		8†			8†						-	-	-	-	D(H); A(all others)
22-68		❖	●	▽	14	14							22-19	45° A, C, E, G, J, L, M=Ir.; B, D, F, H, K, P, N=Con.				
22-69		❖	●	▽	14	14							22-19	45° A, C, E, G, J, L, M=Cu; B, D, F, H, K, P, N=Con.				
22-70		❖	●		13			5	8					-	-	-	-	A
22-71		❖	●	▽	19	19							22-14	V=Al.; U=Ch.; Balance=Cu				
22-72		❖	●	▽	6			4	2				22-5	B=Al.; E=Ch.; Balance=Cu				
22-73		❖	●	▽	6			4	2				22-5	E=Al.; B=Ch.; Balance=Cu				
22-74		❖	●	▽	8				8				22-23	A, C, E, G=Ir.; B, D, F, H=Con.				
22-75		❖	●	▽	8				8				22-23	A=Al.; B, D, G, H=Cu; C=Ch.; E=Ir.; F=Con.				
22-76		❖	●		21	21								W=Con.; Balance=Cu				
22-77		❖	●	▽	14	14							22-19	B, D, F, H, J, K, M, P=Cu; A, E, L=Ir.; C, G, N=Con.				
22-78		❖	●	▽	19	19							22-14	A, C, E, G, H, K, M, P, R, T=Con.; Balance=Cu				
22-79		❖	●	▽	4	4							22-10	A, C=Con.; B, D=Cu				
22-80		❖	●		3†				3†					-	-	-	-	A
24A35		❖	●		16			14	2					24-7	100°			A
24-2	◆	⬢	●	▼	7				7					80	-	-	280	D
24-3		⬢^	●		7			5	2					80	110	250	280	D
24-4				▽	4			3			1			80	110	250	280	D
24-5	◆	⬢	●	▼	16	16								80	110	250	280	A
24-6	◆	⬢^	●	▽	8				8					80	110	250	280	D(A,G,H) A(all others)
24-7	◆	⬢	●	▼	16			14	2					80	110	250	280	A

^ 5015 QPL not all configurations

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (◆=MS; ◆=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▼=non QPL) Thermocouple (⊞°)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						⊞°	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
24-9	◆	◆	●	■		2					2			35	110	250	325	A
24-10	◆	◆	●	■	▼	7				7				80	-	-	280	A
24-11	◆	◆	●	■	▼	9			6	3				35	110	250	325	A
24-12	◆	◆	●	■	▼	5			3		2			80	110	250	280	A
24-15		◆	●		▼	16		16						24-5 100°				A
24-16	◆	◆ ⁺	●		▼	7		3	3	1				80	110	250	280	D(A, B, F, G) A(C, D, E)
24-17		◆ ⁺	●			5		3	2					80	110	250	280	D
24-19	◆	◆	●			12		12						-	-	-	-	A
24-20	◆	◆	●		▼	11		9	2					80	110	250	280	D
24-21	◆	◆	●		▼	10		9		1				80	110	250	280	D
24-22	◆	◆	●		▼	4				4				45	110	250	-	D
24-24					▼	16		16						24-5 250°				A
24-25	◆	◆	●			8			8					24-6 100°				D(A, G, H) A(all others)
24-26	◆	◆	●			8			8					24-6 250°				D(A, G, H) A(all others)
24-27	◆	◆	●		▼	7		7						80	-	-	280	E
24-28	◆	◆	●	■	▼	24		24						80	110	250	280	I
24-51		◆	●			5				5				-	108	-	-	A
24-52		◆	●			1 HV			1HV					30 KVdc, 21 KVac				
24-53		◆	●			5 [‡]				5 [‡]				-	108	-	-	A
24-56		◆	●		▼	11		9	2				⊞°	24-20 45° E=Al.; F=Ch.; Balance=Cu				
24-57		◆	●		▼	24		24					⊞°	24-28 45° A, C, J, V, Y, W, K, E, H, U, S, M=Ch.; Balance=Al.				
24-58		◆	●			13		7	3	3				-	-	-	-	A
24-59		◆	●			14		7	7					-	-	-	-	A
24-60		◆	●			7 [‡]				7 [‡]				-	-	-	-	A
24-62		◆	●		▼	24		24					⊞°	24-28 A, C, E, G=Ir.; B, D, F, H=Con.; R, T=Ch.; S, U=Al.; Balance=Cu				
24-63		◆	●		▼	24		24					⊞°	24-28 A, C, E, G, J, L, K, N, S, U, W, Y=Cu; B, D, F, H, Q, R, M, P, T, V, X, Z=Con.				
24-64		◆	●		▼	16		16					⊞°	24-5 A, B, C, D, E, F, G, H=Ir.; J, K, L, M, N, P, R, S=Con.				
24-65		◆	●			15		4	11					-	-	-	-	A
24-66		◆	●			7			7					-	-	-	-	D
24-67		◆	●			19			19					16	-	-	-	I
24-68		◆	●		▼	24		24					⊞°	24-28 D=Con.; Balance=Cu				
24-71		◆	●			7 [‡]				7 [‡]				-	-	-	-	A
24-75		◆	●			7 [‡]				7 [‡]				-	-	-	-	A
24-79		◆	●			5				5				-	108	-	-	A
24-80		◆	●		▼	23		23						35	145	240	300	I
24-81		◆	●			16		14	2				⊞°	24-7 A, C, E, G, I, K, M, N, P=Cu; B, D, F, H, J, L, O=Con.				
24-84		◆	●			19			19(18)					-	-	-	-	A/Coax
24-96		◆	●			28		28						65	-	-	-	I
24-AJ		◆	●			25		25						80	110	250	280	A
28A63				■		28		19	9					-	110	260	-	A
28-1	◆	◆	●		▼	9			6	3				80	110	250	280	D(A, E, J) A(all others)
28-2	◆	◆	●		▼	14		12	2					35	110	250	325	D
28-3	◆	◆	●		▼	3				3				70	145	215	290	E
28-4		◆ ⁺	●		▼	9		7	2					80	110	250	280	E(G, P, S) D(all others)
28-5		◆ ⁺	●		▼	5		2	1		2			35	110	250	325	D
28-6	◆	◆ ⁺	●			3					3			70	145	215	290	D
28-7		◆	●			2					2			35	110	250	325	D

‡ Reduced contact crimp pot ^ 5015 QPL not all configurations () Number of contacts that are coax

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (◆=MS; ◆=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▼=non QPL) Thermocouple (⊞)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						⊞	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
28-8	◆	◆ ⁺	●		▼	12		10	2					80	110	250	280	E (L, M) D(B) A(all others)
28-9	◆	◆	●		▼	12		6	6					80	110	250	280	D
28-10	◆	◆	●		▼	7			3	2	2			80	110	250	280	D(G) A(all others)
28-11	◆	◆	●	■	▼	22		18	4					80	110	250	280	A
28-12	◆	◆	●		▼	26		26						90	180	270	-	A
28-13	◆	◆	●		▼	26		26						28-12 100°				A
28-15	◆	◆	●		▼	35		35						80	110	250	280	A
28-16	◆	◆	●		▼	20		20						80	110	250	280	A
28-17	◆	◆	●		▼	15		15						80	110	250	280	A(A-L) B(R) D(M-P)
28-18	◆	◆	●		▼	12		12						70	145	215	290	C(M) D(G, H, J, K, L) A(A, B) I(C, D, E, F)
28-19	◆	◆	●		▼	10		6	4					80	110	250	280	A(C, E, G, J, K, L) B(H, M) D(A, B)
28-20	◆	◆ ⁺	●	■	▼	14		4	10					80	110	250	280	A
28-21	◆	◆	●	■	▼	37		37						80	110	250	280	A
28-22		◆ ⁺	●	■	▼	6		3			3			70	145	215	290	D
28-51		◆	●			12			12					80	135	195	-	A
28-53		◆	●		▼	22		18	4				⊞	28-11 45° J, L=Al.; K, M=Ch.; Balance=Cu				
28-58		◆	●		▼	14		4	10				⊞	28-20 45° A, C, E, G, K, M=Al.; B, D, F, H, L, N=Ch.; J, P=Cu				
28-59		◆	●			17		10	7					-	-	-	-	A
28-61		◆	●		▼	37		37					⊞	28-21 45° A, C, J, Z, m, r, n, a, K, F, H, X, k, h, T, M, N, d=Ir.; Balance=Con.				
28-63		◆	●		▼	14		4	10				⊞	28-20 45° A, C, E, G, J=Al.; B, D, F, H, P=Ch.; Balance=Cu				
28-64		◆	●		▼	35		35					⊞	28-15 A, d=Al.; B, j=Ch.; C, D, E, F, G, N, P, R, S, H, J, K, L, M, W, X, Y, Z=Con.; Balance=Cu				
28-65		◆	●		▼	26		26					⊞	28-12 A, C, E, G, J, L, N, R, T, V=Ir.; X, Z=Al.; B, D, F, H, K, M, P, S, U, W=Con.; Y, a=Ch.; b, d=Cu				
28-66		◆	●			16			14	2				50	100	165	-	A
28-67		◆	●		▼	20		20					⊞	28-16 U=Con.; Balance=Cu				
28-68		◆	●		▼	35		35					⊞	28-15 45° T=Al.; U=Ch.; Balance=Cu				
28-69		◆	●		▼	22		18	4				⊞	28-11 G=Al.; R=Ch.; Balance=Cu				
28-70		◆	●		▼	22		18	4				⊞	28-11 A=Al.; B=Ch.; Balance=Cu				
28-72		◆	●			3					3(3)			-	-	-	-	Coax
28-74		◆	●			16 [‡]		9		7 [‡]				70	133	227	290	A
28-75		◆	●			16 [‡]		9		7 [‡]				70	133	227	290	A
28-79		◆	●			16		9		7				70	133	227	290	A
28-82		◆	●			6			4	2				-	-	-	-	D
28-84		◆	●			9				9				45	157	90	135	A
28-77		◆	●		▼	22		18	4				⊞	28-11 J=Con.; Balance=Cu				
28-81		◆	●		▼	37		37					⊞	28-21 A, D, S, Z, n, s=Ir.; B, J, K, f, g, r=Con.; G, L, P, b, e, j=Al.; F, H, T, X, h, k=Ch.; Balance=Cu				
28-AY		◆	●			9		5			4			80	110	250	280	A
32A29		◆	●			23		16	2	3	2			32-6 250°				A
32A30		◆	●			5			3			2		32-1 100°				E(A) D(all others)
32A69				■		61	41	20						-	110	250	-	I
32-1		◆		■	▼	5			3			2		80	110	250	280	E(A) D(all others)
32-2		◆	●		▼	5		2			3			70	145	215	290	E

‡ Reduced contact crimp pot ^ 5015 QPL not all configurations () Number of contacts that are coax

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (⬢=MS; ⬢=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊞)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						°	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
32-3		⬢	●	■	▼	9		4	2		2	1		80	110	250	280	D
32-4		⬢^	●			14		12	2					80	110	250	280	A (F, J, K, N) D (all others)
32-5	◆	⬢	●			2						2		35	110	250	325	D
32-6	◆	⬢	●	■	▼	23		16	2	3	2			80	110	250	280	A
32-7	◆	⬢	●	■	▼	35		28	7					80	125	235	280	I (A, B, H, J) A (all others)
32-8	◆	⬢	●			30		24	6					80	125	235	280	A
32-9		⬢^	●		▼	14		12			2			80	110	250	280	D
32-10		⬢^	●			7		3		2	2			80	110	250	280	E (A, F) B (G) D (E) A (D)
32-12		⬢^	●			15		10	5					80	110	250	280	A (C, D, E, F, G) D (all others)
32-13	◆	⬢	●		▼	23		18	5					80	110	250	280	D
32-14		⬢				13			13					65	130	230	295	D
32-15		⬢^	●		▼	8			6			2		35	110	250	280	D
32-16		⬢	●		▽	23		16	2	3	2			32-6	100°			A
32-17	◆	⬢	●		▼	4					4			45	110	250	-	D
32-19		⬢	●		▽	5			3			2		32-1	260°			E (A) D (all others)
32-20		⬢	●		▽	23		16	2	3	2			32-6	260°			A
32-22		⬢	●		▽	54		54						80	110	250	280	A
32-25		⬢	●			25			25					60	125	-	-	A
32-31		⬢	●			31		31						80	125	215	280	A
32-48		⬢	●			48		48						80	-	-	-	I
32-51		⬢	●			30		24	6				⊞	32-8	90°M=Ch.; N=Al.; Balance=Cu			
32-52		⬢	●			8			6			2		32-15	90°			D
32-53		⬢	●			42		37	5					-	-	-	-	I/E
32-55		⬢	●			30		24	6				⊞	32-8	125°M, N=Ch.; O, P=Al.; Balance=Cu			
32-56		⬢	●			30†		24	6†					-	-	-	-	A
32-57		⬢	●			8			6			2(2)		-	-	-	-	Coax
32-58		⬢	●			.4					4(4)			-	-	-	-	Coax
32-59		⬢	●			42		40		2(2)				-	-	-	-	Coax
32-60		⬢	●			23			15	8(8)				72	145	215	200	A/Coax
32-62		⬢	●			23		16	2	3(2)	2			-	-	-	-	A/Coax
32-63				▼		5					5			-	-	-	-	D
32-64		⬢	●			54		54						80	100	110	250	I
32-68		⬢	●			16		12			4(4)			30	-	-	-	A/Coax
32-73		⬢	●		▼	46		46						36	-	-	-	A
32-75		⬢	●			9			2	7(7)				-	-	-	-	Coax
32-76		⬢	●			19			19					44	147	254	-	A
32-79		⬢	●			5				1	4			-	-	-	-	D
32-82		⬢	●			16		12			4			30	-	-	-	A
32-414	◆					52		52						-	-	-	-	A
32-AF		⬢	●			55		55						80	110	250	280	A
36-1	◆	⬢^	●			22		18	4					80	110	250	280	D
36-3		⬢^	●	■	▼	6			3			3		70	145	215	290	D
36-4		⬢^	●			3						3		70	145	215	290	A (B, C) D (A)
36-5	◆	⬢	●	■	▼	4						4		-	120	240	-	A
36-6	◆	⬢	●	■	▼	6					4	2		35	110	250	325	A
36-7	◆	⬢	●		▼	47		40	7					80	110	250	280	A
36-8	◆	⬢	●		▼	47		46	1					80	110	250	280	A

† Reduced contact crimp pot ^ 5015 QPL not all configurations () Number of contacts that are coax

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (⬢=MS; ⬢=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▽=non QPL) Thermocouple (⊞)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						⊞	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
36-9	◆	⬢	●		▼	31		14	14	2	1			80	125	235	280	A
36-10	◆	⬢	●	■	▼	48		48						80	125	235	280	A
36-11	◆	⬢	●		▽	48		48						36-10 100°				A
36-12	◆	⬢	●		▽	48		48						36-10 250°				A
36-13		⬢^	●			17		15	2					80	110	250	280	E(N,P,Q) A(all others)
36-14		⬢^	●			16		6	5	5				90	180	270	-	D
36-15	◆	⬢	●		▼	35		35						60	125	245	305	D(M) A(all others)
36-16		⬢	●		▽	47		40	7					36-7 100°				A
36-17		⬢	●		▽	47		40	7					36-7 250°				A
36-18		⬢	●		▽	31		14	14	2	1			36-9 100°				A
36-20		⬢	●			34		30	2	2				-	-	-	-	A
36-21		⬢	●		▽	31		14	14	2	1			36-9 260°				A
36-22		⬢	●			22			22					-	-	-	-	D
36-51		⬢	●			4					2	2		-	127	-	-	D
36-52		⬢^	●		▼	52		52						72	144	216	288	A
36-53		⬢	●		▽	47		40	7				⊞	36-7 45° u, v, w=Al.; x, y, z=Ch.; Balance=Cu				
36-54		⬢	●			39		31		8				-	-	-	-	A
36-55		⬢	●			39‡		31		8‡				-	-	-	-	A
36-56		⬢	●		▽	48		48					⊞	36-10 A, C, E, G, L, J, H, P, R, T, V, X, Z, b, d, f, h, k, q, n, m, u, w, y=Con.; Balance=Cu				
36-59		⬢	●			53‡		50	3‡					-	-	-	-	A
36-60		⬢	●			47‡		40	7‡					-	-	-	-	A
36-61		⬢	●		▽	35		35					⊞	36-15 A, C, E, J, K, L, M, N, P, R, T, V, f, X, Y, h, j, c=Con.; Balance=Cu				
36-62		⬢	●		▽	48		48					⊞	36-10 A, C, E=Al.; B, D, F=Ch.; Balance=Cu				
36-64		⬢	●			4						4(4)		-	-	-	-	Coax
36-65		⬢	●			4						4(4)		-	-	-	-	Coax
36-66					▽	56		52	4					110	250	260	280	A
36-71		⬢	●			53		50	3					-	-	-	-	A
36-73		⬢	●			7					7(7)			81	279	-	-	Coax
36-74		⬢	●			44		43	1(1)					-	-	-	-	A
36-75		⬢	●			48‡		48‡						-	-	-	-	A
36-76		⬢	●			47		47						-	-	-	-	A
36-77		⬢	●			7					7			81	279	-	-	D
36-78		⬢	●			14		2		12				35	106	254	325	A
36-79		⬢	●			20			20					30	110	250	330	A
36-80		⬢	●			20‡			20‡					30	110	250	330	A
36-82		⬢	●		▽	52		52					⊞	36-52 v, g=Ir.; p, y, c=Con. x=Ch.; Balance=Cu				
36-83		⬢	●			7					7(7)			81	279	-	-	Coax
36-85		⬢	●			35‡		35‡						-	-	-	-	A/D
36-403	◆					52		52						-	-	-	-	A
36-57		⬢	●		▽	47		46	1				⊞	36-8 W=Al.; f=Ch.; Balance=Cu				
36-58		⬢	●		▽	35		35					⊞	36-15 H=Al.; G=Ch.; Balance=Cu				
36-AF		⬢	●			48		48						65	-	-	-	A
40-1		⬢	●		▼	30		24	6					65	130	235	300	D
40-2					▽	23		23						80	110	250	280	D
40-3					▽	23		18	4		1			80	110	250	280	D

‡ Reduced contact crimp pot ^ 5015 QPL not all configurations () Number of contacts that are coax

LAYOUTS BY SHELL SIZE

SERIES KEY: 97 (◆=97) AIT (◆=MS; ◆=non QPL) AIB (●=GT) VG95234 (■) MS3450 (▼=MS; ▼=non QPL) Thermocouple (°)

CONTACT METALLURGY KEY: Alumel (Al.) Chromel (Ch.) Constantan (Con.) Copper (Cu) Iron (Ir.)

LAYOUT	97 Series	AIT Series	AIB/GT	VG95234	MS3450	TOTAL	CONTACTS SIZES						°	DEGREES OF ROTATION				SERVICE RATING
							20	16	12	8	4	0		W	X	Y	Z	
40-4				▼	23		16	2	3	2				80	110	250	280	D
40-5##				▼	15			6	4	2	3			80	110	250	280	A
40-5	◆	●			5							5		33	-	-	270	A
40-6				▼	26		24	1				1		80	110	250	280	D
40-7				▼	22		18	2				2		80	110	250	280	P,Q,U,V,W,X=A; Bal=D
40-9	◆	●		▼	47		24	22	1					65	125	225	310	A
40-10	◆^	●			29		16		9	4				65	125	225	310	A
40-35	◆	●			35				35					70	130	230	290	D
40-53	◆	●			60		60							80	110	250	280	A
40-56	◆	●		▼	85		85							72	144	216	288	A
40-57	◆	●			4							4		30	150	-	-	E
40-58	◆	●		▼	85		85						°	40-56 A, C, E, H, K, M, P, S, U, W, Y, a, c, f, h, j, m, p, r, t, v, x, z, AB, AD, AF, AJ, AL, AN, AP, AS, AU, AW, AY, BA, BC, BE, BH, BK, BM, BP, BS, BU=Ir.; Balance=Con.				
40-59	◆	●		▼	85		85						°	40-56 B=Ch.; C=Con.; Balance=Cu				
40-61	◆	●			59		55	3	1					-	-	-	-	A
40-62	◆	●		▼	60		60							30	130	220	290	A
40-63	◆	●			61‡		61‡							-	-	-	-	A
40-64	◆	●			36		20	3	13(13)					-	-	-	-	Coax
40-66	◆	●			4						4(4)			-	-	-	-	Coax
40-67	◆	●			11		1			10(10)				-	-	-	-	A/Coax
40-68	◆	●			21				21					-	-	-	-	A
40-70	◆	●			61		61							-	-	-	-	A
40-72	◆	●			11		1			10(10)				-	-	-	-	A/Coax
40-73	◆	●			61		61							-	-	-	-	A
40-74	◆	●			6			1		1(1)	4(4)			-	-	-	-	A/Coax
40-75	◆	●			5			1			4			-	-	-	-	E
40-77	◆	●			60		60						°	40-56 55, 60=Ir.; 57, 58, 59=Con.; 56=Ch.; Balance=Cu				
40-78	◆	●			60			60					°	40-53 50 51=Ir.; 27, 28, 29, 31, 32, 34, 36, 37=Con.; 25, 39, 40, 41=Al 43,44,45, 46, 47, 48, 49, 52, 53, 54=Ch.; Balance=Cu				
40-80	◆	●			11		1				10			72	144	210	288	A
40-81	◆	●			62‡		62‡							-	-	-	-	A
40-82	◆	●			62		62							-	-	-	-	A
40-85	◆	●			60‡		60‡							-	-	-	-	A
40-86	◆	●			4						4(4)			-	-	-	-	E/Coax
40-87	◆	●			7					7				37	74	285	322	D
40-AD	◆	●			8				4		4			45	-	-	-	A
40-AG	◆	●			38			38						37	74	285	322	A
40-AT	◆	●			43		18	24	1					80	110	250	280	A
40-AV	◆	●			3						3#2/0			90	180	270	-	D

‡ Reduced contact crimp pot ^ 5015 QPL not all configurations () Number of contacts that are coax ## Different per 1651 STD; 5-#12,2-#4