

MS/Standard how to order

MIL-DTL-5015 and MIL-5015 Type (Solder Contacts)

MS 3102 A 18-3 P W (SR)
1 2 3 4 5 6 7 8

- Connector Type
 - MS designates Military Standard
 - CS* designates service class A and C with proprietary special contact arrangements
 - SG* designates service class E with proprietary special contact arrangements
 - SM* designates service class F and R with proprietary special contact arrangements
- Connector Style
 - 3100 wall mounting receptacle
 - 3101 cable connecting plug
 - 3102 box mounting receptacle
 - 3106 straight plug
 - 3108 90° plug
- Service Class
 - A solid shell for general, non-environmental applications
 - C solid shell for pressurized applications
 - E environmental resisting
 - F environmental resisting with strain relief (MS part number only)
 - R lightweight environmental resisting
5. Shell size and insert arrangement - see tables, pages 22-24.
- Contact Types
 - P designates pin contact
 - S designates socket contact
- Insert Rotation
 - "W", "X", "Y", or "Z" designate that insert is rotated in its shell from normal position. No letter required for normal (no rotation) position.
- (SR) strain relief for non-military connectors (For MS use "F" class)

* For insert arrangements over 50 and shell size 40 and above. Exceptions: 36-52, 40-1, 40-9 and 40-56 are MS approved.

Consult Amphenol, Sidney, NY for availability of alternate finishes, including black and olive drab zinc alloys.

Proprietary (Crimp Contacts)

75 - 68 0 12-3 H
1 2 3 4 5 6

- Connector Type
 - 75 - connector utilizing silver plated contacts
 - 80 - less contacts
 - 85 - contacts utilizing 50 micro-inches gold over silver plating
- Service Class
 - 68 service class A, general duty
 - 474 service class F, environmental resisting
 - 190 service class R, lightweight environmental resisting
- Connector Style
 - 0 wall mounting receptacle
 - 1 cable connecting plug
 - 2 box mounting receptacle
 - 6 straight plug
 - 8 90° plug
- Shell Size Designator

Shell Size	8S	10S	10SL	12S	12	14S	14	16S	16	18
Shell Designator	8	10	11	12	13	14	15	16	17	18

Shell Size	20	22	24	28	32	36	40	44	48
Shell Designator	20	22	24	28	32	36	40	44	48

- Insert Arrangements
 - See page 22-24.
- Contact Type/Alternate Insert Rotation
 - P designates pin, S designates socket for normal positioning of inserts. When an alternate position of the connector insert is required to prevent cross-mating, a different letter (other than P or S) is used. See page 25 for description of alternate positions, then convert to Amphenol® proprietary coding by the following charts:

Pin Contacts		Socket Contacts	
MS Letter	Amphenol Letter	MS Letter	Amphenol Letter
PW	G	SW	H
PX	I	SX	J
PY	K	SY	L
PZ	M	SZ	N

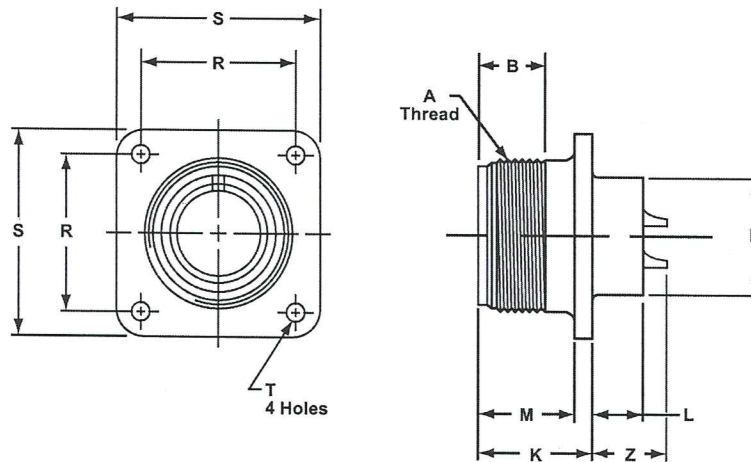
MS/Standard insert arrangements

Insert Arrangement	Service Rating	Total Contacts	Contact Size				
			0	4	8	12	16
8S-1	A	1					1
10S-2	A	1					1
10SL-3	A	3					3
10SL-4†	A	2					2
12S-3	A	2					2
12S-4	D	1					1
12-5	D	1				1	
14S-1	A	3					3
14S-2	Inst.	4					4
14S-4	D	1					1
14S-5	Inst.	5					5
14S-6	Inst.	6					6
14S-7	A	3					3
14S-9	A	2					2
14S-10	Inst.	4					4
14S-12	A	3					3
14-3	A	1			1		
16S-1	A	7					7
16S-3	B	1					1
16S-4	D	2					2
16S-5	A	3					3
16S-6	A	3					3
16S-8	A	5					5
16-2	E	1				1	
16-7	A	3			1		2
16-9	A	4				2	2
16-10	A	3				3	
16-11	A	2				2	
16-12	A	1		1			
16-13	A	2				2	
18-1	A/Inst.	10					10
18-3	D	2				2	
18-4	D	4					4
18-5	D	3				2	1
18-6	D	1		1			
18-7	B	1			1		
18-8	A	8				1	7
18-9	Inst.	7				2	5
18-10	A	4				4	
18-11	A	5				5	
18-12	A	6					6
18-13	A	4			1	3	
18-14	A	2		1			1
18-15	A	4				4	
18-16	C	1				1	
18-17	Inst.	7				2	5
18-19	A	10					10
18-20	A	5					5
18-22	D	3					3
18-24	A/Inst.	10					10
18-29	A	5					5
18-30	A	5					5

Insert Arrangement	Service Rating	Total Contacts	Contact Size				
			0	4	8	12	16
18-31	A	5					5
20-2	D	1	1				
20-3	D	3				3	
20-4	D	4				4	
20-6	D	3					3
20-7	D/A	8					8
20-8	Inst.	6			2		4
20-9	D/A	8				1	7
20-11	Inst.	13					13
20-12	A	2		1			1
20-14	A	5			2	3	
20-15	A	7				7	
20-16	A	9				2	7
20-17	A	6				5	1
20-18	A	9				3	6
20-19	A	3			3		
20-20	A	4		1		3	
20-21	A	9				1	8
20-22	A	6			3		3
20-23	A	2			2		
20-24	A	4			2		2
20-25	Inst.	13					13
20-27	A	14					14
20-29	A	17					17
20-30	Inst.	13					13
20-33	A	11					11
22-1	D	2			2		
22-2	D	3			3		
22-4	A	4			2	2	
22-5	D	6				2	4
22-6	D	3			2		1
22-7	E	1	1				
22-8	E	2				2	
22-9	E	3				3	
22-10	E	4					4
22-11	B	2					2
22-12	D	5			2		3
22-13	D/A	5				4	1
22-14	A	19					19
22-15	E/A	6				5	1
22-16	A	9				3	6
22-17	D/A	9				1	8
22-18	D/A	8					8
22-19	A	14					14
22-20	A	9					9
22-21	A	3	1				2
22-22	A	4			4		
22-23	D/A	8				8	
22-24	D/A	6				2	4
22-27	D/A	9			1		8
22-28	A	7				7	

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

MS/Standard MS3102A or C box mounting receptacle



To complete order number, see "how to order" pg. 70.
For solder well data, see page 67.

Shell Size	A Thread Class 2A	B Min Full Thread	K +.020 - .010	L +.000 - .010	M +.010 - .000	N Dia. +.010 - .000	R ±.005	S ±.031	T Dia. +.004 - .002	Z +.050 - .060
8S	.5000-28UNEF	.391	.672	.297	.562	.375	.594	.875	.120	.422
10S	.6250-24NEF	.391	.672	.297	.562	.500	.719	1.000	.120	.422
10SL	.6250-24NEF	.391	.672	.297	.562	.625	.719	1.000	.120	.422
12S	.7500-20UNEF	.450	.672	.297	.562	.625	.812	1.094	.120	.422
12	.7500-20UNEF	.625	.860	.484	.750	.625	.812	1.094	.120	.672
14S	.8750-20UNEF	.450	.672	.297	.562	.750	.906	1.188	.120	.422
14	.8750-20UNEF	.625	.860	.484	.750	.750	.906	1.188	.120	.672
16S	1.0000-20UNEF	.450	.672	.297	.562	.875	.969	1.281	.120	.422
16	1.0000-20UNEF	.625	.860	.484	.750	.875	.969	1.281	.120	.672
18	1.1250-18NEF	.625	.891	.453	.750	1.000	1.062	1.375	.120	.641*
20	1.2500-18NEF	.625	.891	.453	.750	1.125	1.156	1.500	.120	.641*
22	1.3750-18NEF	.625	.891	.453	.750	1.250	1.250	1.625	.120	.641*
24	1.5000-18NEF	.625	.953	.453	.812	1.375	1.375	1.750	.147	.578
28	1.7500-18NS	.625	.953	.453	.812	1.625	1.562	2.000	.147	.578*
32	2.0000-18NS	.625	1.031	.438	.875	1.875	1.750	2.250	.173	.500*
36	2.2500-16UN	.625	1.031	.438	.875	2.062	1.938	2.500	.173	.500*
40	2.5000-16UN	.625	1.031	.438	.875	2.312	2.188	2.750	.173	.500*
44***	2.7500-16UN	.625	1.063	.543†	.875	2.594	2.375	3.000††	.173	.768**
48***	3.0000-16UN	.625	1.063	.543†	.875	2.812	2.625	3.250††	.209	.769**

* Increase Z dimension by .312 for size "0" contact only.

** Increase Z dimension by .062 for size "0" contact only.

*** Available in proprietary version only.

† +.020 - .030

†† ±.020