Rear Release Circular Connectors (AERO AE55 Series)
Threaded Coupling Configurations
Environmental Sealing • Crimp Contact Terminations

These MIL-C-5015 Series III circular connectors provide aerospace performance and reliability for general purpose power interconnection requirements. The original solder type 5015 connector of World War II has been revised over the years, resulting in this series that enjoys widespread usage in applications requiring wire gauges 0 to 16.

There are 19 shell sizes, from size 8 to 40, with over 159 approved insert arrangements per MIL-STD-1651, incorporating 1 to 854 contacts. The connectors are available with a choice of wall mount, box mount, cable connecting and jam nut receptacles, and standard or self-locking plugs. The hard plastic socket interface features the chamfered conical entry that aids in the proper mating of contacts. The fluorosilicone interfacial seal has conical risers around each pin contact, that compress into the socket interface, assuring the seal of the mating surface. Various shell materials and finishes are available. Please refer to the Military Part Number System listed below.

GENERAL SPECIFICATIONS

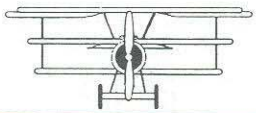
Operating temperature range:	-55°C (-67°F) to 200°C (392°F)
Voltage Service Rating:	Sea level 1500 VAC 450 VAC @ 50,000 ft. 200 VAC @ 110,000 ft.
Test voltage:	1500 v. RMS, 60 Hz,mated or unmated 1000 v. (altitudes up to 50,000 ft.) mated 250 v. (altitudes up to 110,000 ft.) unmated
Polarization:	Insert rotation (See MIL-STD-1651)
Contacts:	Sizes 16, 12, 8, 4 and 0 gauge. per MIL-C-39029
Contact current rating:	(See page 3)
Shell sizes:	19 (8 to 40) 159 insert arrangements, incorporating 1 to 85 contacts
Environmental	fluorosilicone Elastomers

MILITARY PART NUMBERING SYSTEM

MS345 6 W 16S - 8 P W

Insert Clocking: (Blank for normal, Alternate Positions W, X, Y, Z)
Contact Style: (P = Pin, S = Socket, A = Less Pins, B = Less Sockets)*
Insert arrangements: Per MIL-STD-1651 (1 thru 85 contacts)
Shell Size: 8 thru 40
Environmental Class
L=Aluminum shell, electroless nickel finish, fluid resistant insert
LS=Stainless shell, passivated finish, fluid resistant insert
K=Superseded by Class KT
KT=Ferrous alloy shell, olive drab cadmium finish, firewall fluid resistant insert
KS=Stainless shell, passivated finish, firewall fluid resistant insert
U=Superseded by Class L
W=Aluminum shell, 500 hour corrosion resistant olive drab cadmium finish, fluid resistant insert
Shell Configuration
0=Receptacle, wall mount (square flange)
1=Receptacle, cable connecting
2=Receptacle, box mount (square flange)
4=Receptacle, single hole mount (jam nut)
6=Plug, standard coupling ring
9D=Plug, self locking (ratchet) coupling ring
MS Number

* P for Pin and S for Socket only shall be marked on connector.



PART NUMBER CROSS REFERENCE: AERO 55 SERIES TO MIL-C-5015

AERO ELECTRIC	MIL-C-5015 III	SOLDER 5015	FRONT RELEASE 5015
AE550**-*P/S*	MS3450**-*P/S*	MS3100**-*P/S*	MS3400**-*P/S*
AE551**-*P/S*	MS3451**-*P/S*	MS3101**-*P/S*	MS3401**-*P/S*
AE552**-*P/S*	MS3452**-*P/S*	MS3102**-*P/S*	MS3402**-*P/S*
AE554**-*P/S*	MS3454**-*P/S*	MS3104**-*P/S*	MS3404**-*P/S*
AE556**-*P/S*	MS3456**-*P/S*	MS3106**-*P/S*	MS3406**-*P/S*
AE559**-*P/S*	MS3459**-*P/S*	NO EQUIVALENT	NO EQUIVALENT

CONTACTS

CONTACT SIZE	CURRENT RATING DC Test Amperes	CONTACT RETENTION Axial Load	APPLICABLE WIRE SIZES Wire Gauge	Insulation Sealing Range
16	13	25 lbs.	20-16	.053- .103
12	23	30 lbs.	14-12	.085-.158
8	46	50 lbs	10-8*	.132-.255
4	80	60 lbs	6-4*	.237-.370
0	150	75 lbs	2-0*	.360-.550

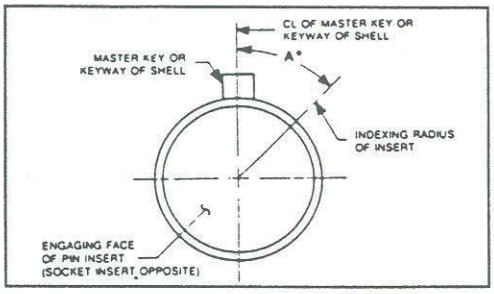
*MS3348 bushings will permit use of small wire

SOCKET CONTACTS		PIN CONTACTS		SEALING PLUGS	
Size	Aero Part Number	Military Part Number	Aero Part Number	Military Part Number	Aero Part Number	Military Part Number
16S	5005-76-16S16	M39029/30-217	N/A	N/A	7206-001-1601	MS27488-16
16	5005-78-1616	M39029/30-218	5205-50-1616	M39029/29-212	7206-001-1601	MS27488-16
12	5005-79-1212	M39029/30-219	5205-51-1212	M39029/29-213	7206-001-1201	MS27488-12
8	5005-80-0808	M39029/30-220	5205-52-0808	M39029/29-214	7206-001-0801	MS27488-8
4	5005-81-0404	M39029/30-221	5205-53-0404	M39029/29-215	7206-001-0401	MS27488-4
0	5005-83-0000	M39029/30-222	5205-54-0000	M39029/29-216	7206-001-0001	MS27488-0

MIL-C-5015 and MIL-C-83723 Series II Insert Arrangements and Alternate Clocking Positions

NORMAL POSITION - The centerline of the face view of the insert pattern (see INSERT PATTERN LAYOUT CHART) is aligned with the shell key on the plug and keyway on the receptacle. Therefore, angle A on the opposite drawing would be at zero degrees.

ALTERNATE POSITIONS - The centerline of the face view of the insert pattern (see INSERT PATTERN LAYOUT CHART) is rotated in relationship to the shell key on the plug and keyway on the receptacle. Pin key inserts are rotated clockwise. Therefore, a 12S-3 (1303) pin insert layout in the W position would have an angle A (on the opposite drawing) of 70 degrees.



MIL-C-5015 INSERT CONTACTS, SERVICE RATING AND CLOCKING POSITIONS

SHELL SIZE		INSERT ARRANGEMENTS		CONTACTS		SERVICE RATING	ALTERNATE INSERT POSITIONS (DEGREES)				REMARKS
M83723 II	5015 III	5015 III	M83723 II	QTY.	SIZE		W	X	Y	Z	
08	8S	8S-1	0801	1	16	A	---	---	---	---	
10	10S	10S-2	1002	1	16	A	---	---	---	---	
11	10SL	10SL-3	1103	3	16	A	---	---	---	---	SERVICE RATING INST. CLASS K
	10SL	10SL-4	1104	2	16	A	---	---	---	---	
13	12S	12S-1	1301	2	16	A	Insert rotated 100°C/W in shell				Made from 12S-3
	12S	12S-2	1302	2	16	A	Insert rotated 250°C/W in shell				Made from 12S-3
	12S	12S-3	1303	2	16	A	70	145	215	290	
	12S	12S-4	1304	1	16	D	---	---	---	---	
12	12	12-5	1205	1	12	D	---	---	---	---	
15	14S	14S-1	1501	3	16	A	---	---	---	---	
	14S	14S-2	1502	4	16	Inst.	---	120	140	---	
14	14	14-3	1403	1	8	A	---	---	---	---	
15	14S	14S-5	1505	5	16	Inst.	---	110	---	---	
	14S	14S-6	1506	6	16	Inst.	---	---	---	---	
	14S	14S-7	1507	3	16	A	90	180	270	---	