

INCH-POUND

MS33678A

9 July 2004

SUPERSEDING

MS33678

17 December 1958

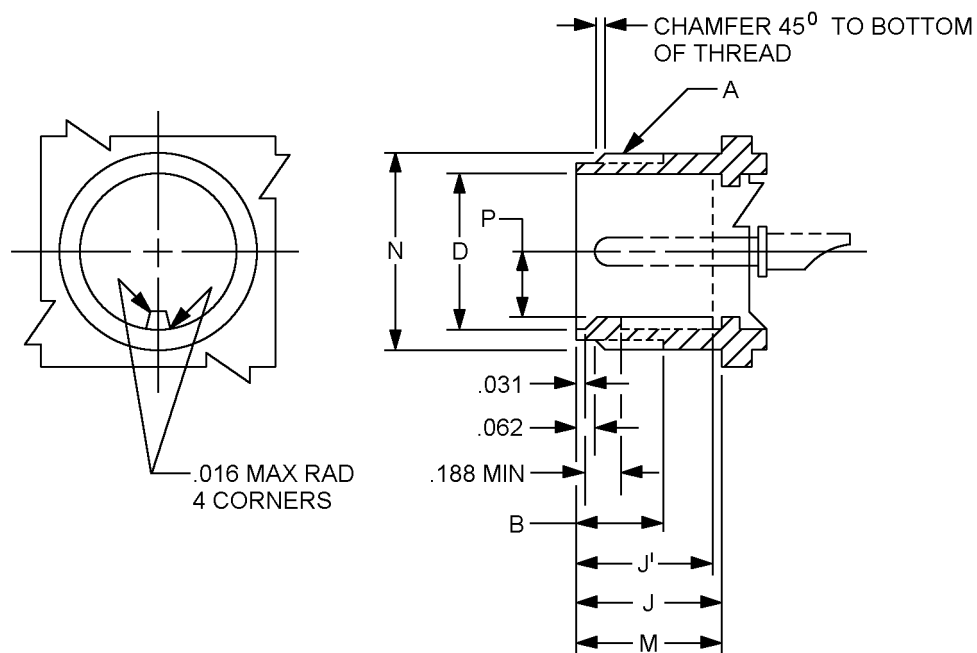
## DETAIL SPECIFICATION SHEET

## CONNECTOR, RECEPTACLE, ELECTRICAL, INTEGRAL MOUNTING

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein  
shall consist of this specification sheet.

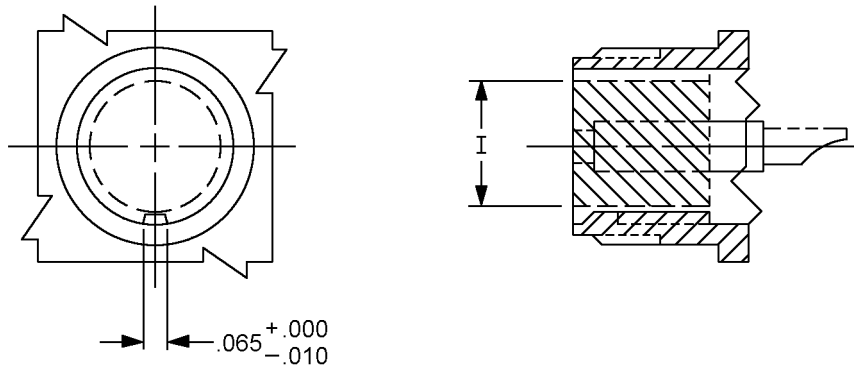
This is a design standard not to be used as an MS part number.



STYLE "P" (PIN INSERT)

FIGURE 1. Dimensions and configurations.

MS33678A



STYLE "S" (SOCKET INSERT)

Inches	mm
.010	.254
.016	.406
.031	.787
.062	1.575
.065	1.651
.188	4.775

FIGURE 1. Dimensions and configurations - Continued.

## MS33678A

Shell size	A Coupling thread	B Min usable thread	D + .015 (.381) - .000 ID	I Max insert dia	J + .031 (.787) - .000	J' + .031 (.787) - .000 Mounting flange location
8S	1/2-28	.375 (9.534)	.370 (9.398)	.250 (6.350)	.562 (14.275)	.562 (14.275)
10S	5/8-24		.448 (11.379)	.320 (8.128)		
10SL	5/8-24		.448 (11.379)	.448 (11.379)		
12S	3/4-20		.557 (14.148)	.448 (11.379)		
14S	7/8-20		.682 (17.323)	.525 (13.335)		
16S	1.00-20		.807 (20.498)	.650 (16.510)		
12	3/4-20	.625 (15.875)	.557 (14.148)	.448 (11.379)	.750 (19.05)	.750 (19.05)
14	7/8-20		.682 (17.323)	.525 (13.335)		
16	1.00-20		.807 (20.498)	.650 (16.510)		
18	1-1/8-18		.932 (23.673)	.770 (19.558)		
20	1-1/4-18		1.058 (26.873)	.925 (23.495)		
22	1-3/8-18		1.182 (30.023)	1.020 (25.908)		
24	1-3/4-18		1.307 (33.198)	1.145 (29.083)		
28	1-1/8-18		1.526 (38.760)	1.365 (34.671)		
32	2.00-18		1.776 (45.110)	1.615 (41.021)		
36	2-1/4-16		1.995 (50.673)	1.830 (46.482)		

FIGURE 1. Dimensions and configurations - Continued.

## MS33678A

Shell size	M +.031 (.787) -.000 Mounting flange location	N Max outer dia	P +.015 (.381) -.000 Key height
8S	.562 (14.275)	.532 (13.513)	.130 (3.302)
10S		.656 (16.662)	.165 (4.191)
10SL		.656 (16.662)	.165 (4.191)
12S		.782 (19.863)	.224 (5.689)
14S		.906 (23.012)	.263 (6.680)
16S		1.032 (26.213)	.325 (8.255)
12	.750 (19.050)	.782 (19.863)	.224 (5.689)
14		.906 (23.012)	.263 (6.680)
16		1.032 (26.213)	.325 (8.255)
18		1.156 (29.352)	.385 (9.779)
20		1.282 (32.563)	.463 (11.760)
22		1.406 (35.712)	.510 (12.954)
24	.812 (20.625)	1.532 (38.913)	.573 (14.554)
28		1.782 (45.263)	.683 (17.348)
32	.875 (22.225)	2.032 (51.613)	.808 (20.523)
36		2.282 (57.963)	.915 (23.241)

FIGURE 1. Dimensions and configurations - Continued.

## MS33678A

### Requirements:

Design and construction: See figure 1.

Where resilient inserts are used, J' may be .109 (2.768 mm) less than indicated.

### Example of design designation:

MS33678R18-5S = Environment resisting, receptacle size 18, insert arrangement -5  
(see MIL-STD-1651), style S (socket contacts, see MIL-DTL-5015).

MS3102R or modification thereof, may be used in lieu of this design.

For design details, see MIL-DTL-5015.

Dimensions are in inches.

Unless otherwise specified, tolerances are  $\pm .016$  (.406 mm).

Insert arrangement shall be in accordance with MIL-STD-1651.

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

### Reference documents. This document references the following:

MIL-DTL-5015  
MS3102  
MIL-STD-1651

## CONCLUDING MATERIAL

### Custodians:

Army - CR  
Navy - AS  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5935-4419-030)

### Review activities:

Army - MI  
Air Force - 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://www.dodssp.daps.mil>.