

REV.
B

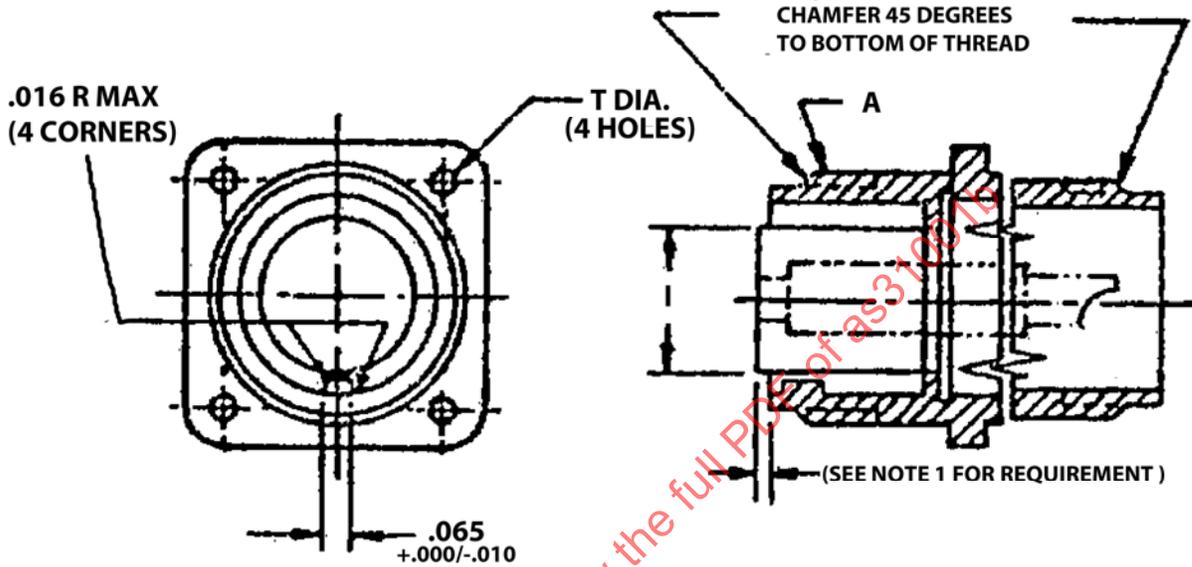
RATIONALE

- REVISION IS REQUIRED TO CORRECT THE DIMENSIONAL TOLERANCE VALUE FOR DIMENSION S.
- REVISION IS REQUIRED TO CORRECT THE APPLICATION NOTE 3 APPLICABLE SHELL SIZES.

AS31001

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS50151.



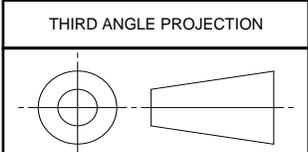
STYLES (SOCKET INSERT)

- CLASS A - SOLID SHELL
- CLASS C - PRESSURIZED

FIGURE 1 - STYLE S (SOCKET INSERT)

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS50151



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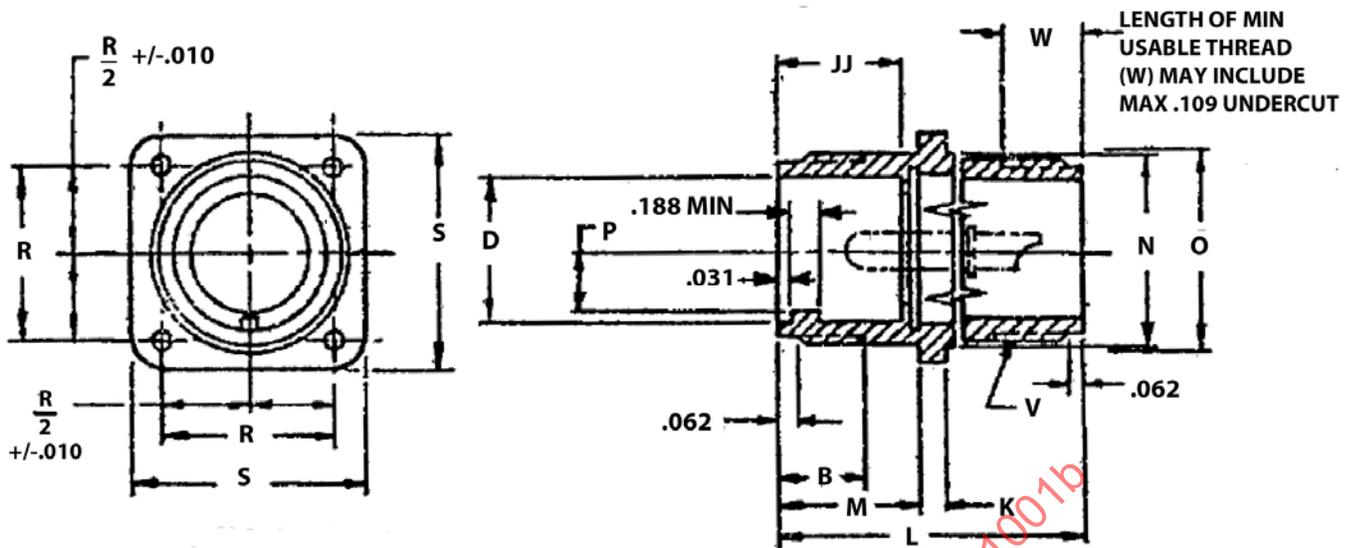
CONNECTOR, RECEPTACLE, ELECTRIC,
WALL MOUNTING, SOLDER CONTACTS,
AN TYPE

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ISSUED 2004-06 REVISED 2014-06

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STYLE P (PIN INSERT)

**CLASS A - SOLID SHELL
CLASS C - PRESSURIZED**

FIGURE 2 - STYLE P (PIN INSERT)

TABLE 1 - FIGURE 1 AND 2 DIMENSIONS

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D +.015 -.000 ID	I MAX INSERT DIA	JJ 1/ +.031 -.000 INSERT LOCATION	K THICKNESS MOUNTING FLANGE		L MAX OVERALL LENGTH	M +.031 -.000 MOUNTING FLANGE LOCATION	
						MAX	MIN			
8S	1/2 - 28	.375	.370	.250	.562	.156	.062	1.469	.562	
10S	5/8 - 24		.448	.320						
10SL			.448	.320						
12S	3/4 - 20	.625	.557	.448	.750			1.688		
14S	7/8 - 20	.375	.682	.525	.562			2.062		.750
14		.625	.525	.750	1.688			.562		
16S		.375	.807	.650	.562	2.062	.562			
16	1 - 20	.625	.932	.770	.750	.203	.094	2.062	.750	
18	1-1/8 - 18		1.058	.925						
20	1-1/4 - 18		1.182	1.020						
22	1-3/8 - 18		1.307	1.145						
24	1-1/2 - 18		1.526	1.365						
28	1-3/4 - 18		1.776	1.615						
32	2 - 18		1.995	1.830		.359	.125	2.312	.812	
36	2-1/4 - 16		2.245	2.045						
40	2-1/2 - 16		2.495	2.300						
44	2-3/4 - 16		2.745	2.550				2.438		.875
48	3 - 16			2.562						

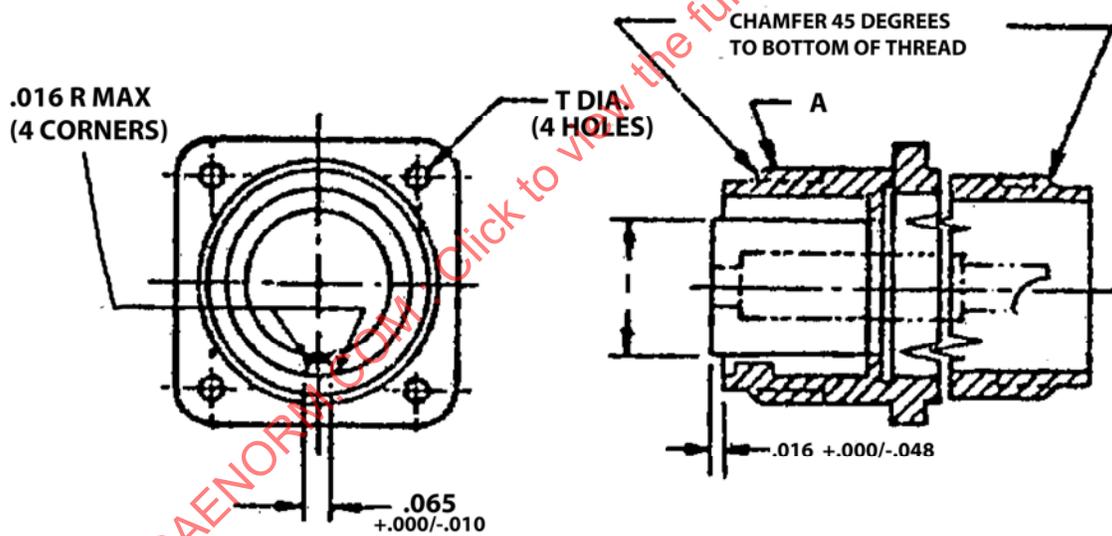
1/ WHERE RESILIENT INSERTS ARE USED, "JJ" MAY BE .109 LESS THAN THAT INDICATED.

TABLE 1 - FIGURE 1 AND 2 DIMENSIONS (CONTINUED)

SIZE	N MAX O.D.	O (REF) MOUNTING HOLE DIA	P +.015 -.000 KEY HEIGHT	R ±.005 ¢ - ¢ MOUNTING HOLES	S ±.031 INCHES LENGTH SIDE	T +.010 -.005 MOUNTING BOLT HOLE DIA	V THREAD	W MIN USABLE THREAD	FOR INSERT ARRANGEMENT SEE DRAWING
8S	.532	.562	.130	.594	.875	.120	1/2 - 28	.375	MIL-STD 1651
10S	.656	.688	.165	.719	1.000		5/8 - 24		
10SL									
12S	.782	.812	.224	.812	1.094		3/4 - 20		
12									
14S	.906	.938	.263	.906	1.188		7/8 - 20		
14									
16S	1.032	1.062	.325	.969	1.281		1 - 20		
16									
18	1.156	1.188	.385	1.062	1.375		1-3/16 - 18		
20	1.282	1.312							
22	1.406	1.438	.510	1.250	1.625	1-7/16 - 18			
24	1.532	1.562							
28	1.782	1.812	.683	1.562	2.000	1-3/4 - 18			
32	2.032	2.062							
36	2.282	2.312	.915	1.938	2.500	2 - 18			
40	2.532	2.562							
44	2.782	2.812	1.150	2.375	3.000	2-1/4 - 16			
48	3.032	3.062							
						.173	2-1/2 - 16	.500	
							3 - 16	.625	

NOTES FOR CLASS A AND C:

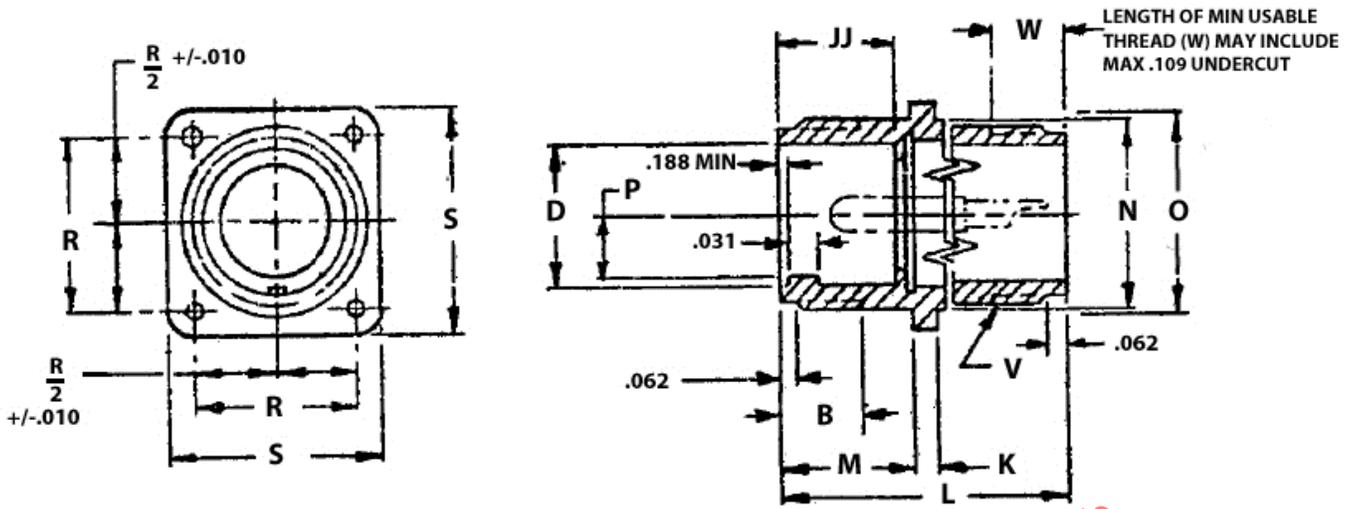
1. SOCKET INSERTS OF HARD MATERIAL SHALL EXTEND .016 MAXIMUM BEYOND OR .032 MAXIMUM BELOW SHELL. SOCKET INSERT OF RESILIENT MATERIAL SHALL EXTEND .047 +.000/-.047 BEYOND SHELL.



STYLE S (SOCKET INSERT)

CLASS K - FIREWALL

FIGURE 3 - STYLE S (SOCKET INSERT)



CLASS K - FIREWALL

FIGURE 4 - STYLE P (PIN INSERT)

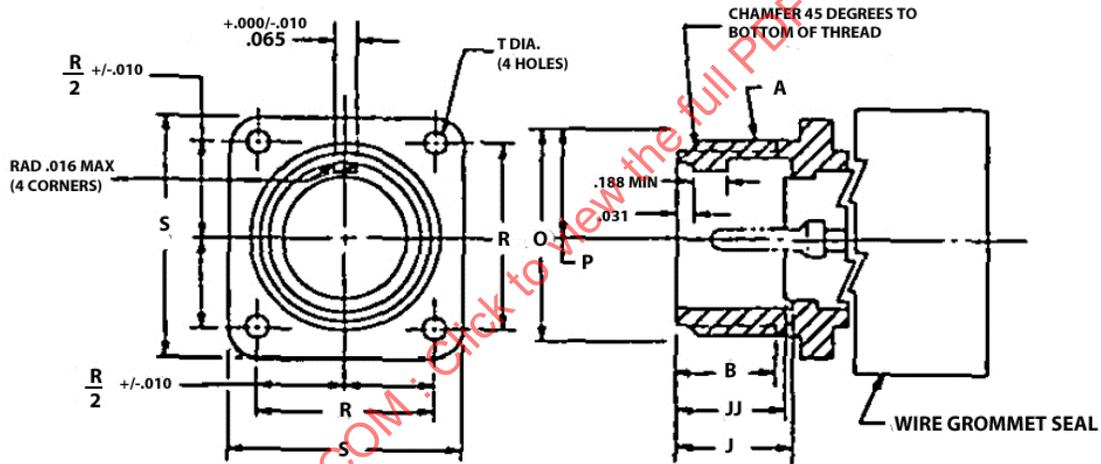
TABLE 2 - FIGURE 3 AND 4 DIMENSIONS

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D +.015 -.000 ID	I MAX INSERT DIA	JJ +.031 -.000 INSERT LOCATION	K MIN THICKNESS MOUNTING FLANGE	L MAX OVERALL LENGTH	M +.031 -.000 MOUNTING FLANGE LOCATION	
8S	1/2 - 28	.375	.370	.250	.562	.062	2.188	.562	
10S	5/8 - 24		.448	.320					
10SL			.448	.448					
12S	3/4 - 20	.625	.557	.448	.750	.062	2.875	.750	
14S	7/8 - 20	.375	.682	.525	.562	.062	2.188	.562	
14		.625			.750		2.875	.750	
16S	1 - 20	.375	.807	.650	.562	.062	2.188	.562	
16									
18	1-1/8 - 18	.625	.932	.770	.750	.078	2.875	.750	
20	1-1/4 - 18		1.058	.925					
22	1-3/8 - 18		1.182	1.020					
24	1-1/2 - 18		1.307	1.145			.125	3.125	.812
28	1-3/4 - 18		1.526	1.365					
32	2 - 18		1.776	1.615					
36	2-1/4 - 16	1.995	1.830			.875			
40	2-1/2 - 16	2.245	2.045						

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TABLE 2 - FIGURE 3 AND 4 DIMENSIONS (CONTINUED)

SIZE	N MAX O.D.	O (REF) MOUNTING HOLE DIA	P +.015 -.000 KEY HEIGHT	R ±.005 ϕ - ϕ MOUNTING HOLES	S ±.031 INCHES LENGTH SIDE	T +.010 -.005 MOUNTING BOLT HOLE DIA	V THREAD	W MIN USABLE THREAD	FOR INSERT ARRANGEMENT SEE DRAWING
8S	.532	.562	.130	.594	.875	.150	1/2 - 28	.375	MIL-STD 1651
10S	.656	.688	.165	.719	1.000		5/8 - 24		
10SL	.782	.812	.224	.812	1.094				
12S							3/4 - 20		
12									
14S	.906	.938	.263	.906	1.188		7/8 - 20		
14									
16S	1.032	1.062	.325	.969	1.281		1 - 20		
16									
18	1.156	1.188	.385	1.062	1.375		1-3/16 - 18		
20	1.344	1.375	.463	1.156	1.500	1-7/16 - 18			
22	1.406	1.438	.510	1.250	1.625				
24	1.625	1.688	.573	1.375	1.750	.177	.438		
28	1.782	1.812	.683	1.562	2.000				
32	2.032	2.062	.808	1.750	2.250	.209	.500		
36	2.282	2.312	.915	1.938	2.500				
40	2.532	2.562	1.023	2.188	2.750	2-1/4 - 16			



STYLE P (PIN INSERT)

CLASS E - ENVIRONMENT RESISTANT

FIGURE 5 - STYLE P (PIN INSERT)

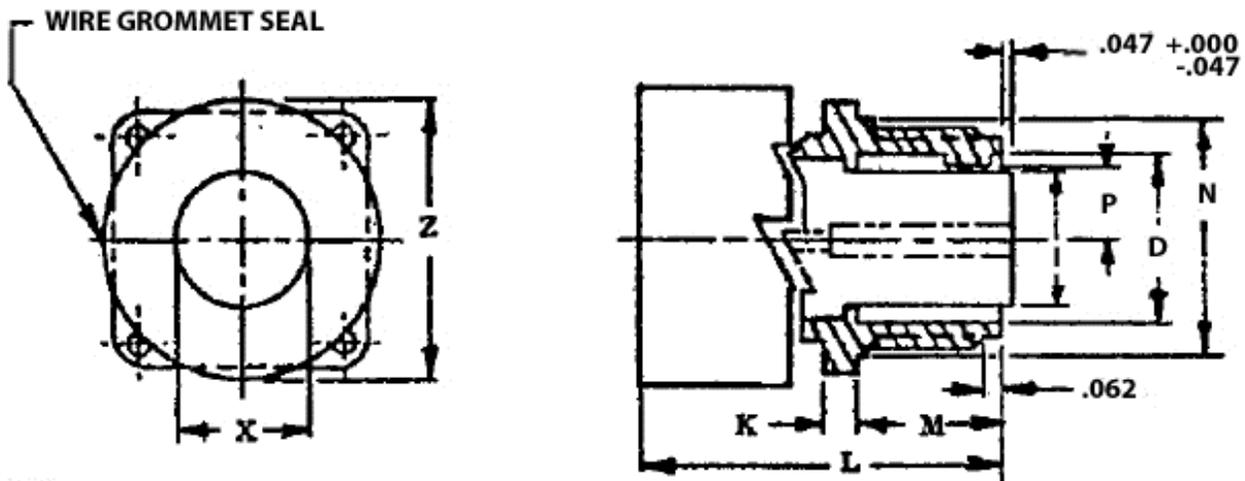


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REV. B



STYLE S (SOCKET INSERT)

CLASS E - ENVIRONMENT RESISTANT

FIGURE 6 - STYLE S (SOCKET INSERT)

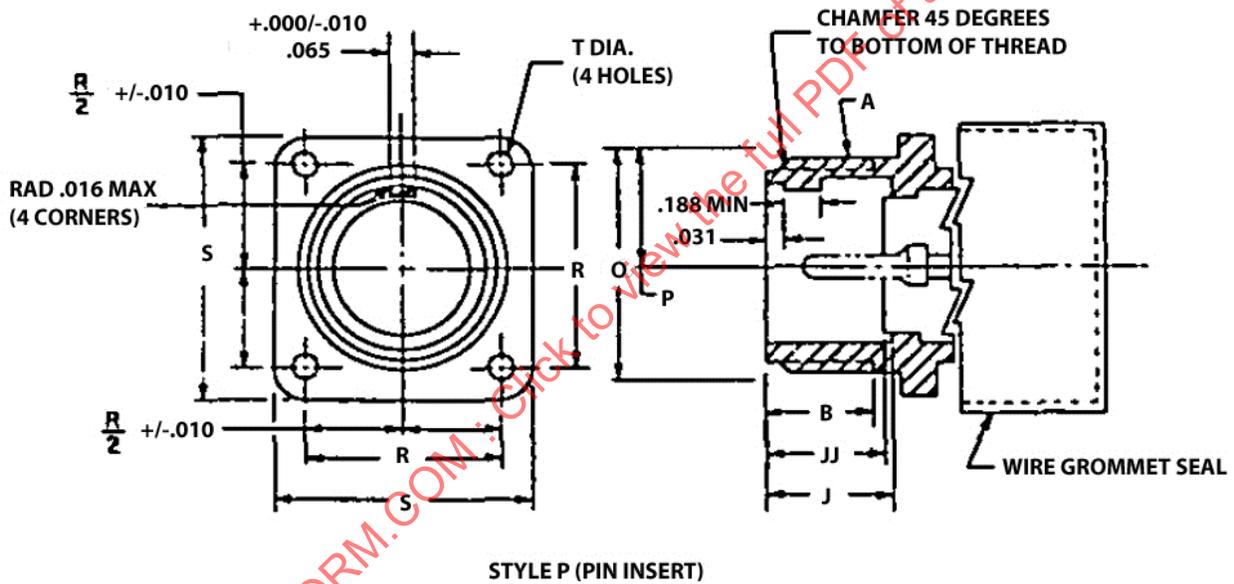
TABLE 3 - FIGURE 5 AND 6 DIMENSIONS

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D +.015 -.000 ID	I MAX INSERT DIA	J +.031 -.000 INT SHELL SHLDR	JJ ±.031 INSERT LOCATION	K THICKNESS MOUNTING FLANGE		L MAX 1/ OVERALL LENGTH	M +.031 -.000 MOUNTING FLANGE LOCATION		
							MAX	MIN				
8S	1/2 - 28	.375	.370	.250	.562	.484	.156	.078	2.250	.562		
10S	5/8 - 24		.448	.320								
10SL			.448	.448								
12S	3/4 - 20	.625	.557	.750	.672							
12		.375	.682	.525	.562	.484						
14S	7/8 - 20	.625	.682	.525	.750	.672						
14		.375	.807	.650	.562	.484						
16S	1 - 20	.375	.807	.650	.750	.672			.203	.094	2.250	.562
16		.625	.932	.770								
18	1-1/8 - 18	.625	.932	.770					.750	.672	.203	.094
20	1-1/4 - 18		1.058	.925								
22	1-3/8 - 18		1.182	1.020								
24	1-1/2 - 18		1.307	1.145								
28	1-3/4 - 18		1.526	1.365								
32	2 - 18		1.776	1.615								
36	2-1/4 - 16		1.995	1.830								
40	2-1/2 - 16		2.245	2.045								

1/ ADD .375 FOR SIZE "0" CONTACTS.

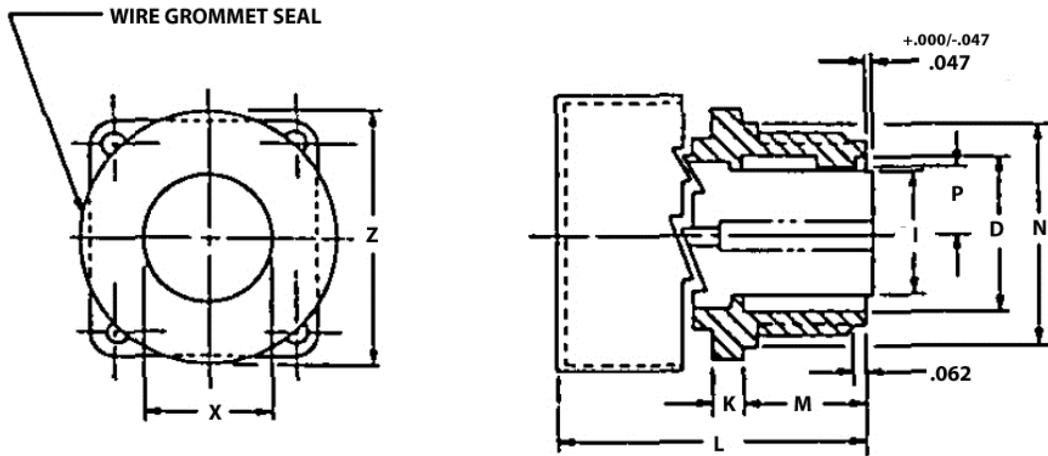
TABLE 3 - FIGURE 5 AND 6 DIMENSIONS (CONTINUED)

SIZE	N MAX O.D.	O (REF) MOUNTING HOLE DIA	P +.015 -.000 KEY HEIGHT	R ±.005 ϕ - ϕ MOUNTING HOLES	S ±.031 INCHES LENGTH SIDE	T +.010 -.005 MOUNTING BOLT HOLE DIA	X MIN CABLE CLEARANCE	Z MAX ACROSS SEAL ASSEMBLY	FOR INSERT ARRANGEMENT SEE DRAWING	
8S	.532	.562	.130	.594	.875	.120	.172	1.046	MIL-STD 1651	
10S	.656	.688	.165	.719	1.000					
10SL	.782	.812								
12S			.224	.812	1.094					
12	.906	.938	.263	.906	1.188		.406	1.343		
14S										
16S	1.032	1.062	.325	.969	1.281		.500	1.484		
16										
18	1.156	1.188	.385	1.062	1.375		.531	1.609		
20	1.282	1.312	.463	1.156	1.500		.656	1.890		
22	1.406	1.438	.510	1.250	1.625		.750			
24	1.532	1.562	.573	1.375	1.750		.147	.781		2.170
28	1.782	1.812	.683	1.562	2.000					
32	2.032	2.062	.808	1.750	2.250		.173	1.156		2.656
36	2.282	2.312	.915	1.838	2.500	1.250		2.922		
40	2.532	2.562	1.023	2.188	2.750	1.562	3.531			



CLASS R - ENVIRONMENT RESISTANT

FIGURE 7 - STYLE P (PIN INSERT)



STYLE S (SOCKET INSERT)

CLASS R - ENVIRONMENT RESISTANT

FIGURE 8 - STYLE S (SOCKET INSERT)

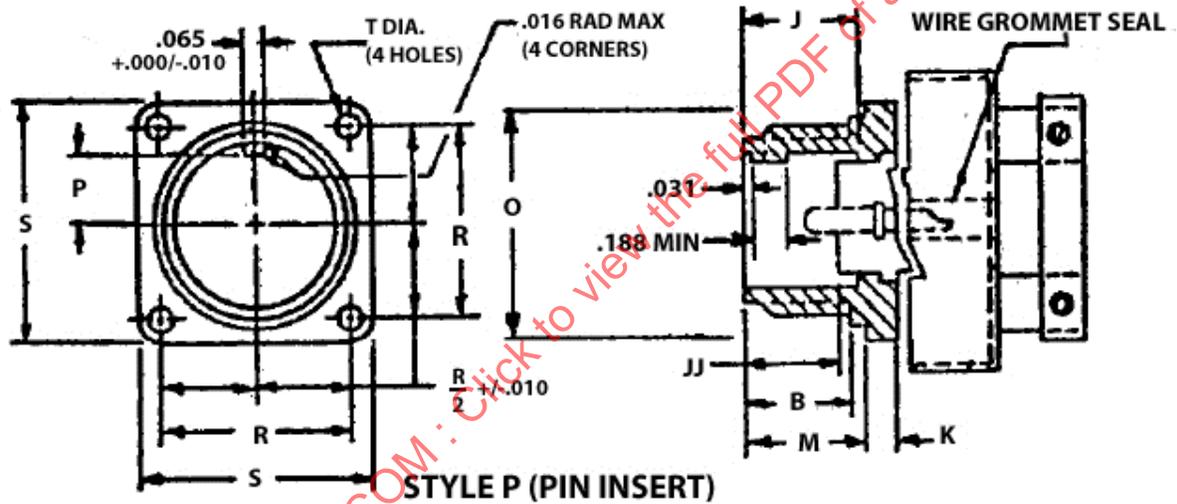
TABLE 4 - FIGURE 7 AND 8 DIMENSIONS

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D +.015 -.000 ID	I MAX INSERT DIA	J +.031 -.000 INT SHELL SHLDR	JJ ±.031 INSERT LOCATION	K THICKNESS MOUNTING FLANGE		L MAX 1/ OVERALL LENGTH	M +.031 -.000 MOUNTING FLANGE LOCATION
							MAX	MIN		
8S	1/2 - 28	.375	.370	.250	.562	.484	.156	.076	1.838	.562
10S	5/8 - 24		.448	.320						
10SL										
12S	3/4 - 20	.625	.557	.448	.750	.672				
12										
14S	7/8 - 20	.375	.682	.525	.562	.484			.203	.094
14				.625	.750	.672				
16S	1 - 20	.375	.807	.650	.562	.484				
16										
18	1-1/8 - 18	.625	.932	.770	.750	.672	.203	.094	2.281	.812
20	1-1/4 - 18		1.058	.925						
22	1-3/8 - 18		1.182	1.020						
24	1-1/2 - 18		1.307	1.145						
28	1-3/4 - 18		1.526	1.365						
32	2 - 18		1.776	1.615						
36	2-1/4 - 16	1.995	1.930	.359	.125	2.322	.875			
40	2-1/2 - 16	2.245	2.045							

1/ ADD .375 FOR SIZE "0" CONTACTS.

TABLE 4 - FIGURE 7 AND 8 DIMENSIONS (CONTINUED)

SIZE	N MAX O.D.	O (REF) MOUNTING HOLE DIA	P +.015 -.000 KEY HEIGHT	R ±.005 ϕ - ϕ MOUNTING HOLES	S ±.031 INCHES LENGTH SIDE	T +.010 -.005 MOUNTING BOLT HOLE DIA	X MIN CABLE CLEARANCE	Z MAX ACROSS SEAL ASSEMBLY	FOR INSERT ARRANGEMENT SEE DRAWING
8S	.532	.562	.130	.594	.875	.120	.172	1.046	MIL-STD 1651
10S	.656	.688	.165	.719	1.000		.281	1.125	
10SL									
12S	.782	.812	.224	.812	1.094				
12									
14S	.906	.938	.263	.906	1.188				
14									
16S	1.032	1.062	.325	.969	1.281		.500	1.484	
16									
18	1.156	1.188	.385	1.062	1.375		.531	1.609	
20	1.282	1.312	.463	1.156	1.500		.656	1.890	
22	1.406	1.438	.510	1.250	1.625		.750		
24	1.532	1.562	.573	1.375	1.750		.781	2.170	
28	1.782	1.812	.683	1.562	2.000		.922		
32	2.032	2.062	.808	1.750	2.250	1.156	2.656		
36	2.282	2.312	.915	1.938	2.500	.173	1.250	2.922	
40	2.532	2.562	1.023	2.188	2.750	1.562	3.328		



CLASS F - ENVIRONMENT RESISTANT

FIGURE 9 - STYLE P (PIN INSERT)