NOTE: The cover page of this standard has been changed for administrative reasons. There are no changes to this document.

NOTICE OF CHANGE

MIL-STD-348A <u>20 April 1988</u> SUPERSEDING MIL-STD-348 25 MAR 1986

# DEPARTMENT OF DEFENSE INTERFACE STANDARD

#### RADIO FREQUENCY CONNECTOR INTERFACES FOR

MIL-C-3643, MIL-C-3650, MIL-C-3655, MIL-C-25516, MIL-C-26637, MIL-C-39012, MIL-C-49142, MIL-A-55339, MIL-C-83517



AMSC N/A FSC 5935

## DEPARTMENT OF DEFENSE WASHINGTON, DC 20402

#### Radio Frequency Connector Interfaces

- 1. This military standard is approved for use by all Departments and Agencies of the Department of Defense.
- 2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: US Army Communications-Electronics Command, ATTN: AMSEL-ED-TO, Fort Monmouth, NJ 07703-5016, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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#### 1. SCOPE

- 1.1 Purpose. The purpose of this standard is to standardize radio frequency connector interfaces and to ensure the inclusion of essential design requirements.
- 1.2 <u>Scope</u>. This standard specifies the dimensional requirements for radio frequency connector interfaces referenced in MIL-C-3643, MIL-C-3650, MIL-C-3655, MIL-C-25516, MIL-C-26637, MIL-C-39012, MIL-C-49142, MIL-A-55339, and MIL-C-83517.

#### 2. REFERENCED DOCUMENTS

#### 2.1 Government documents.

2.1.1 Specifications and standard. The following specifications and standard form a part of this standard to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

#### **SPECIFICATIONS**

#### MILITARY

MIL-C-3643	<ul> <li>Connectors, Coaxial, Radio Frequency, Series HN, and Associated Fittings, General Specification For.</li> </ul>
MIL-C-3650	- Connectors, Coaxial, Radio Frequency, Series LC.
MIL-C-3655	<ul> <li>Connectors, Plug and Receptacle, Electrical (Coaxial, Series Twin), and Associated Fittings, General Specification For.</li> </ul>
MIL-C-25516	<ul> <li>Connectors, Electrical, Miniature, Coaxial, Environment Resistant Type, General Specification For.</li> </ul>
MIL-C-26637	<ul> <li>Connectors, Coaxial, Radio Frequency Series LT, General Specification For.</li> </ul>
MIL-C-39012	<ul> <li>Connectors, Coaxial, Radio Frequency; General Specification For.</li> </ul>
MIL-C-49142	<ul> <li>Connector, Triaxial, Radio Frequency, General Specification For.</li> </ul>
MIL-A-55339	<ul> <li>Adapters, Connector, Coaxial, Radio Frequency, (Between Series and Within Series), General Specification For.</li> </ul>
MIL-C-83517	<ul> <li>Connector, Coaxial, Radio Frequency For Coaxial, Strip or Microstrip Transmission Line.</li> </ul>

#### STANDARD

#### MILITARY

MIL-STD-1373 - Screw-Thread, Modified, 60 Degree Stub, Double.

(Copies of the specifications and standard, required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

2.2 Order of precedence. In the event of a conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.

#### 3. DEFINITIONS

3.1 Terms. The terms used in this standard are generally accepted by the electrical and electronics industries and commonly used in electrical connector engineering practice.

4. GENERAL REQUIREMENTS Not applicable

#### 5. DETAILED REQUIREMENTS

- 5.1 Gauge tests. Applicable gauge tests shall be as specified in the associated connector specification sheet.
  - 5.2 Marking. Not applicable.
- 5.3 Drawing notes. Unless otherwise specified, the following information is applicable to all figures of this military standard.
  - a. Dimensions are in inches.
  - b. Metric equivalents are given for general information only.
  - c. All undimensioned, pictorial configurations are for reference purposes only.
  - d. Applicable to section 400 only. The construction, material, and finish of the standard socket connector shall result in satisfactory electrical and mechanical performance and provide the following minimum life cycles when mated with the same series pin standard test connector.

Series	Life cycles
C, N, SC, TNC	10,000
BNC	5,000
SMA, SMB, SMC	2.000

e. Applicable to section 400 only. Dimensions shown are for the standard test connector only.

#### 6. NOTES

#### 6.1 Subject term (key word) listing.

Connector interfaces Connector, radio frequency Interfaces, radio frequency connector

6.2 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:
Army - CR
Navy - EC
Air Force - 85

Review activities:
Army - AT, AY, MI
Navy - AS, SH
Air Force - 10, 11, 17, 99
DLA - ES

User activities:
Navy - CG, MC
Air Force - 11

Preparing activity: Army - CR

Agent: DLA - ES

(Project 5935-3555)

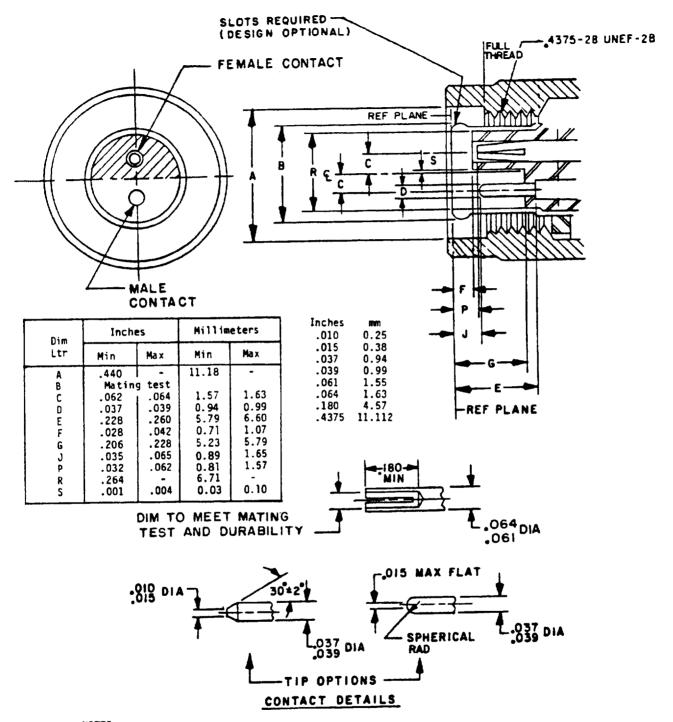
Downloaded from http://www.everyspec.com

#### MIL-STD-348A

#### SECTION 100

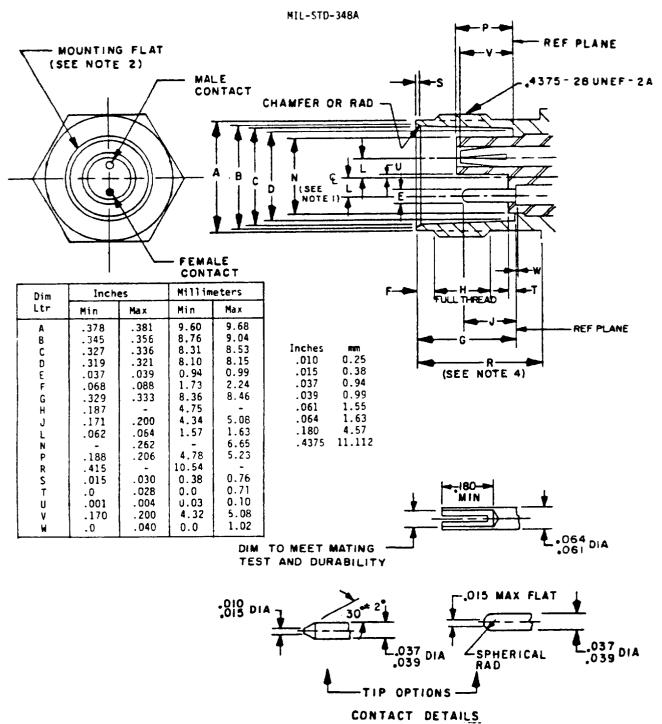
## Interface Dimensions for MIL-C-3655

Section	101	Series	THINC
Section	102	Series	TWBNC
Section	103	Series	TWSMC
Section	104	Series	TWSMB



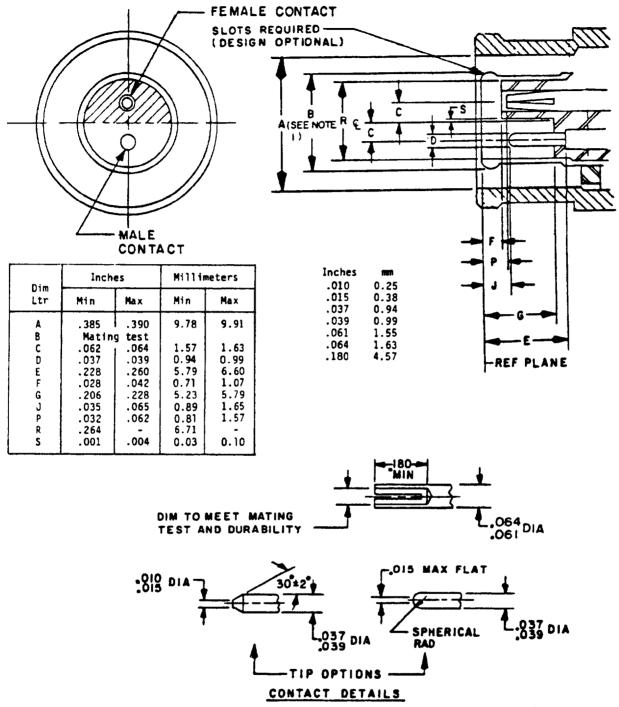
- Three holes equally spaced, .027 (0.69 mm) minimum diameter for safety wiring. Location on coupling nut optional.
- 2. This interface shall meet the gauge requirements as specified in MIL-C-3655/14.

FIGURE 101-1. Interface, series TWTNC, coupling nut.



- N dimension applies to portion of dielectric protruding beyond reference plane. Contacts, insulator, and mounting flat shall be oriented within  $\pm 3^\circ$  of orientation shown.
- This interface shall meet the guage requirements as specified in MIL-C-3655/13.
- Clearance for mating connector coupling nut.

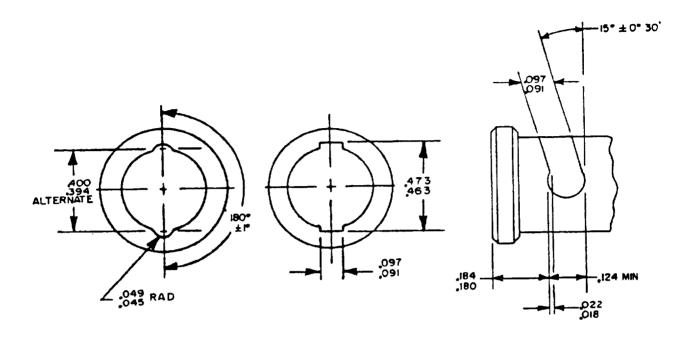
FIGURE 101-2. Interface, series TWTNC, no coupling nut.



- Flare to meet gauge test.
   This interface shall meet the gauge requirements as specified in MIL-C-3655/15.

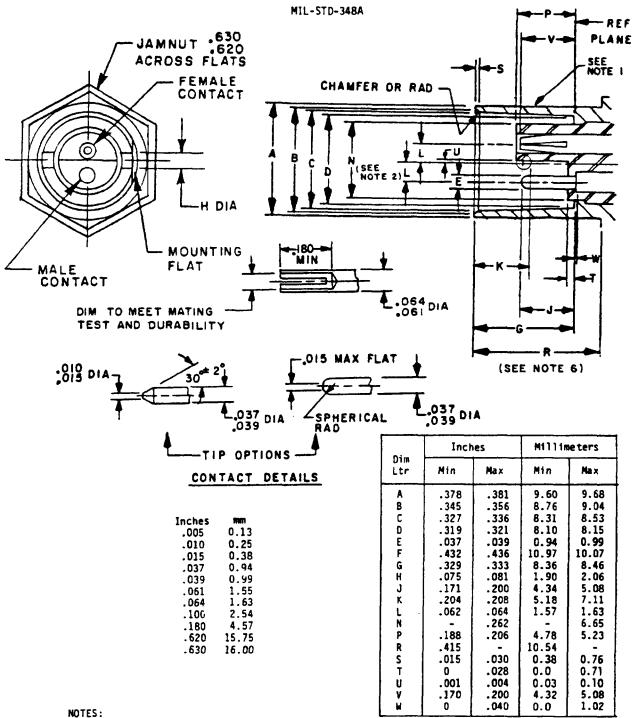
FIGURE 102-1. Interface, series TWBNC, with coupling nut.

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Inches	-	Inches	STATE
.018	0.46	11 .180	4.57
.022	0.56	1.184	4.67
.045	1.14	.394	10.01
.049	1.24	.400	10.16
.091	2.31	.463	11.76
.097	2.46	.473	12.01
124	2 15	• • • • • •	

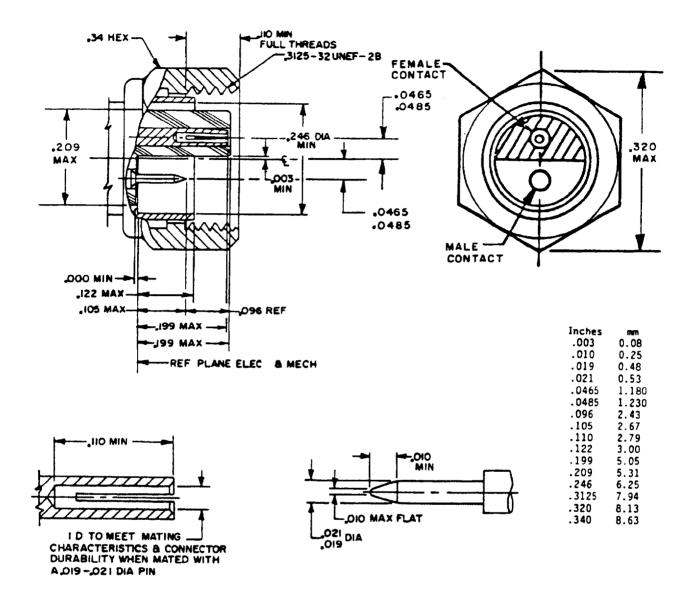
FIGURE 102-2. Interface, series TWBNC, coupling nut.



- Concave depression .100 x .005 deep between study permitted.

- N dimension applies to portion of dielectric protruding beyond reference plane. Bayonet study and plane of contacts shall be within ±3° of orientation shown. Contacts, insulator and mounting flat shall be oriented within ±3° of orientation shown.
- This interface shall meet the guage requirements as specified in MIL-C-3655/16.
- 6. Clearance for mating connector coupling nut.

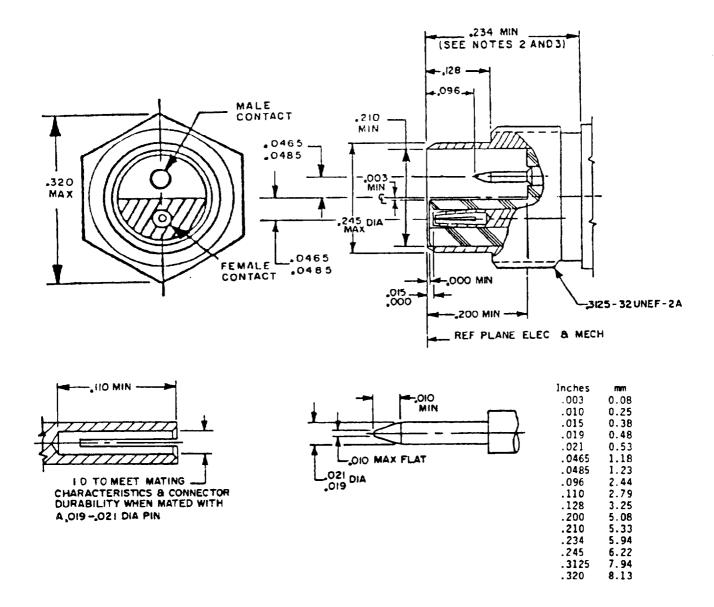
FIGURE 102-3. Interface, series TWBNC, without coupling nut.



- 1. This interface shall meet the gauge requirements as specified in MIL-C-3655/18.
- 2. Thread gauge must go .234 (5.94 mm) minimum from reference plane.

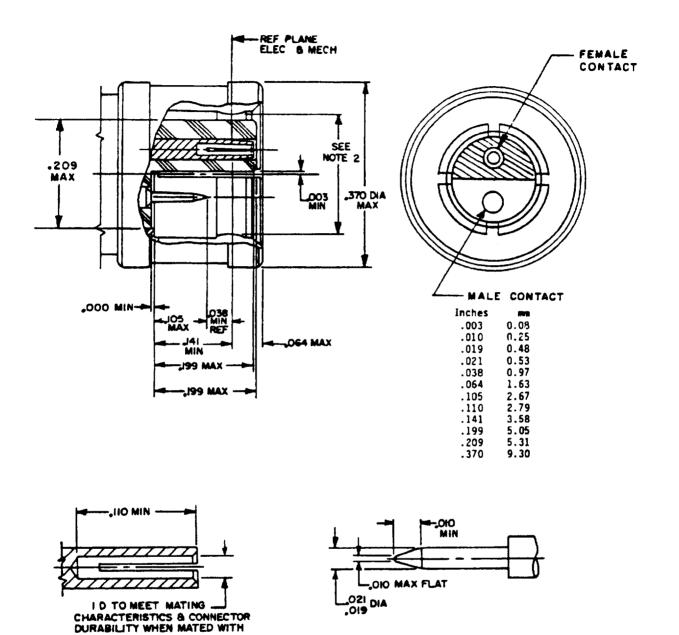
FIGURE 103-1. Interface, series TMSMC, with coupling nut.

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- 1. This interface shall meet mating requirements as specified in MIL-C-3655/19. 
  2. Thread guage must go .234 (5.94 mm) minimum from reference plane.
- 3. Clearance for mating connector coupling nut.

FIGURE 103-2. Interface, series TWSMC, without coupling nut.

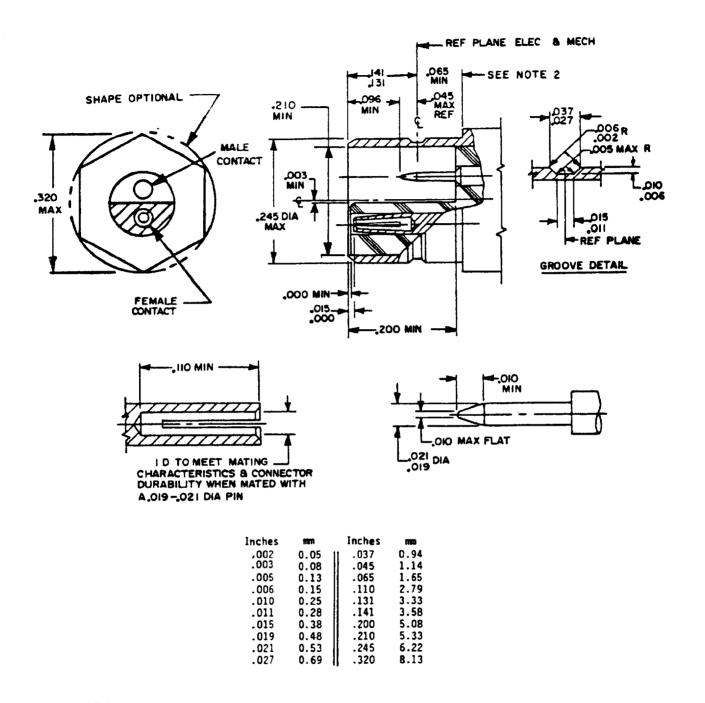


#### NOTES:

A-019 -- 021 DIA PIN

- This interface shall meet the gauge requirements as specified in MIL-C-3655/20.
   This interface shall meet the force to engage/disengage as specified in MIL-C-39012/20.

FIGURE 104-1. Interface, series TWSMC, with coupling mechanism.



- 1. This interface shall meet the mating requirements as specified in MIL-C-3655/21.
- 2. Clearance for mating connector coupling nut.

FIGURE 104-2. Interface, series TWSMB, without coupling mechanism.

#### SECTION 200

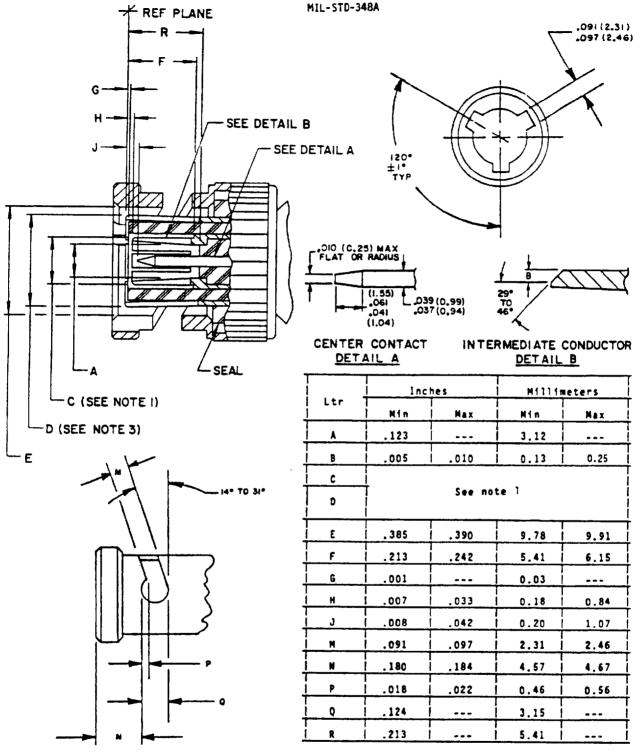
Interface Dimensions for MIL-C-49142

Section 201

Series TRB

Section 202

Series TRT



- Flared to meet mating characteristic test.
   Metric equivalents are in parentheses or tabulated.
   This interface shall meet the gauge requirements of MIL-C-49142.

FIGURE 201-1. Interface, series, TRB, pin contact.

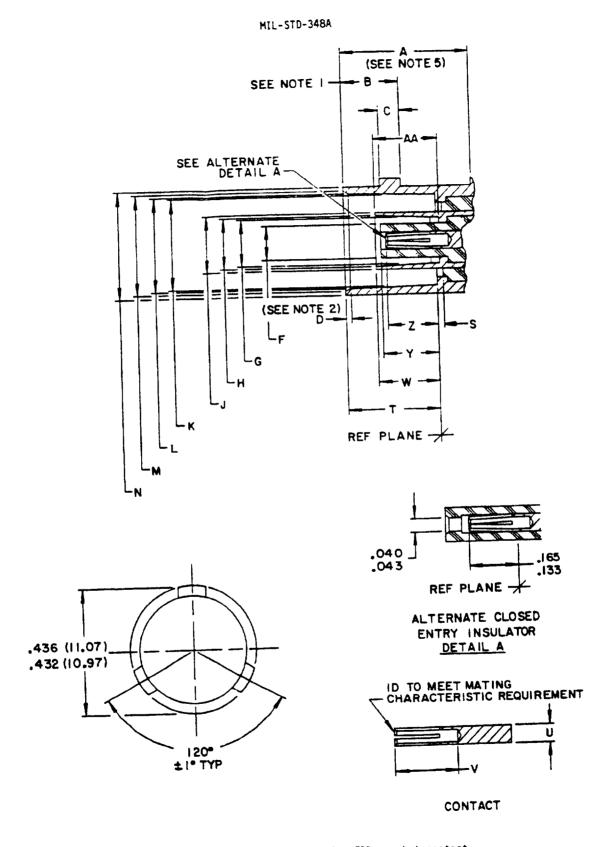


FIGURE 201-2. Interface, series TRB, socket contact.

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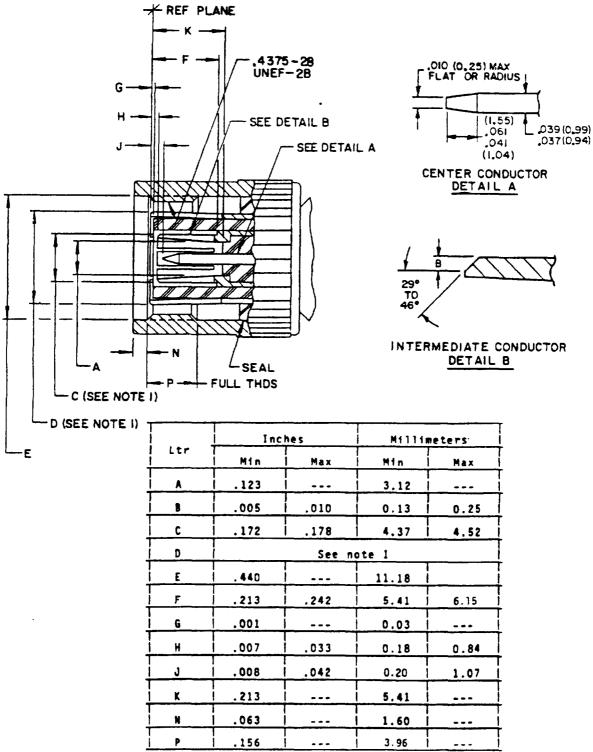
1	Inches		Millim	eters
Ltr	Min	Max	Min	Max
l A	.414		10.52	
AA	. 206	.213	5.23	5,41
В	.204	.208	5.18	5.28
С	.075	.081_	1.90	2.06
ם	.015	.030	0.38	0.76
F	.117	.122	2.97	3.10
G	.169	.171	4.29	4.34
H	.178	. 182	4.52	4.62
J	1 .195	.199	4.95	5.05
K	.319	.321	8.10	8.15
L	.327	. 333	8.31	8.46
М	, 346	. 356	8.79	9.04
i N	.378	.382	9.60	9.70
! ! S	.001		0.03	
T	.327	.335	8.31	8.51
U	.062	.064	1.57	1,63
V	.213		5.41	
l w	.187	.213	4.75	5,41
Y		.213		5,41
Z	.165	. 203	4.19	5.16

- MOTES: 1. .005 (0.13 mm) flat permissible to meet dimension B. 2. Chamfer or radius.

- Metric equivalents are in parentheses or tabulated.
   This interface shall meet the gauge requirements of MIL-C-49142.
   Clearance for mating connector coupling nut.

FIGURE 201-2. Interface, series TRB, socket contact - Continued.

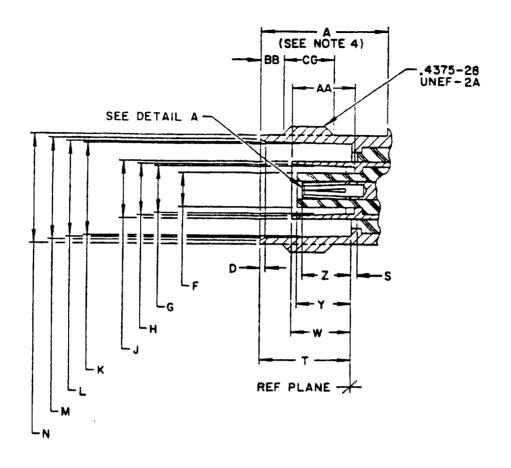
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- 1. Flared to meet mating characteristic test.
- 2. Metric equivalents are in parentheses or tabulated.
- 3. This interface shall meet the gauge requirements of MIL-C-49142.

FIGURE 202-1. Interface, series TRT, pin contact.

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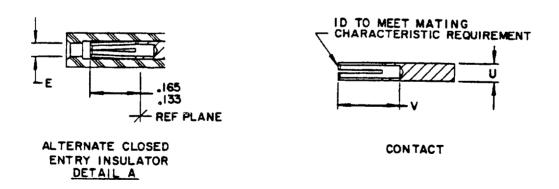


FIGURE 202-2. Interface, series TRT, socket contact.

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	Inct	ies	Millim	eters
Ltr   	Min	Max	Min	Max
A	. 414		10.52	
D	.015	.030	0.38	0.76
I E I	.040	.043	1.02	1.09
F	,117	.122	2.97	3.10
G	.169	,171	4.29	4.34
Н	.178	. 182	4.52	4,62
J	.195	.199	4.95	5.05
K	.319	, 321	8.10	8.15
L	.327	. 333	8.31	8.46
<u> </u>	.346	.356	8.79	9.04
N N	.378	. 382	9.60	9.70
<u></u>	.001		0.03	
T	.327	.335	8.31	8.51
U	.062	.064	1.57	1.63
	.213		5.41	
<u> </u>	. 187	.213	4.75	5,41
Y		.213		5.41
7 2	.165	.263	4.19	5,16
AA_	.201	. 213	5.23	5.41
ВВ	.06B	. 088	1.73	2.24
cc	.187		4.75	

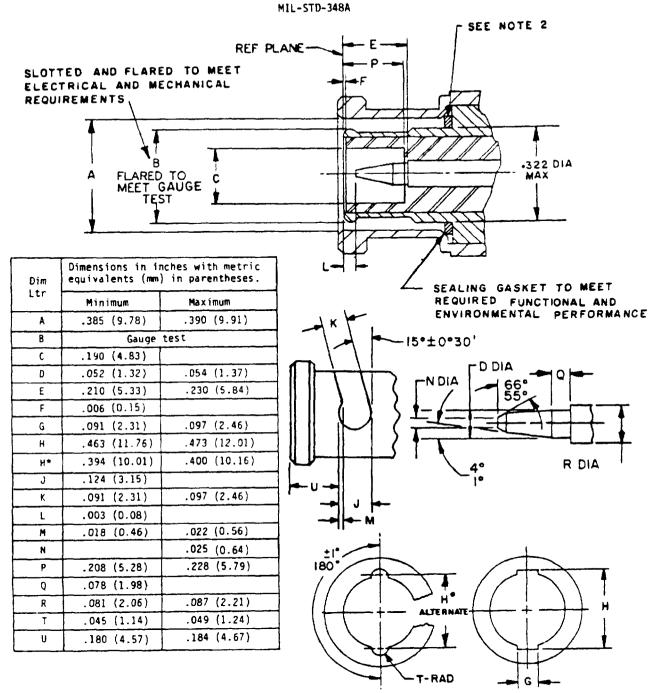
- 1. Metric equivalents are tabulated.
  2. Chamfer or radius.
  3. This interface shall meet the gauge requirements of MIL-C-49142.
  4. Clearance for mating connector coupling nut.

FIGURE 202-2. Interface, series TRT, socket contact - Continued.

### SECTION 300

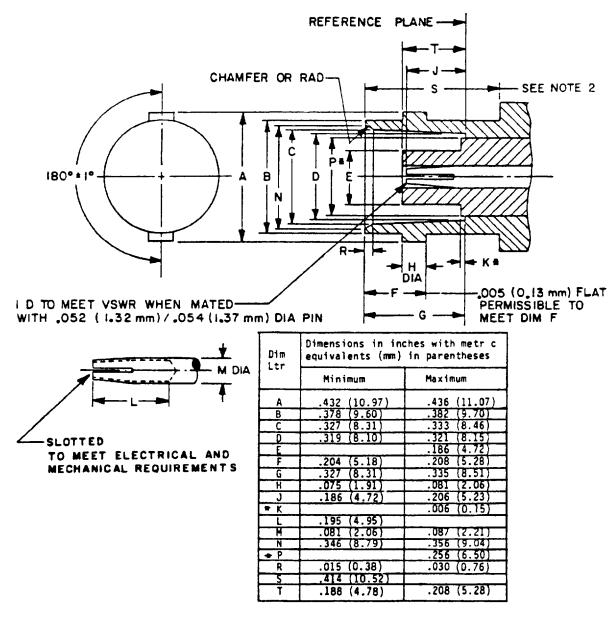
Interface Dimensions for MIL-C-3643, MIL-C-3650, MIL-C-26637, MIL-C-39012, MIL-A-55339, and MIL-C-83517

Section	301	Series BNC
Section	302	Series C
Section	303	Series MHV
Section	304	Series N
Section	305	Series QL
Section	306	Series QM
Section	307	Series QNC
Section	308	Series QSC
Section	309	Series SC
Section	310	Series SMA
Section	311	Series SMB
Section	312	Series SMC
Section	313	Series TNC
Section	314	Series SHY
Section	315	Series LC
Section	316	Environment resistant
Section	317	Series HN
Section	318	Series LT
Section	319	Series SSMA



- 1. In the mated condition, the longitudinal force of the spring of the coupling mechanism shall exceed the pressure exerted by the sealing gasket by an amount necessary to insure butting of the outer contacts at the reference plane.
- 2. This interface shall meet the gauge requirements as specified in MIL-C-39012/16.

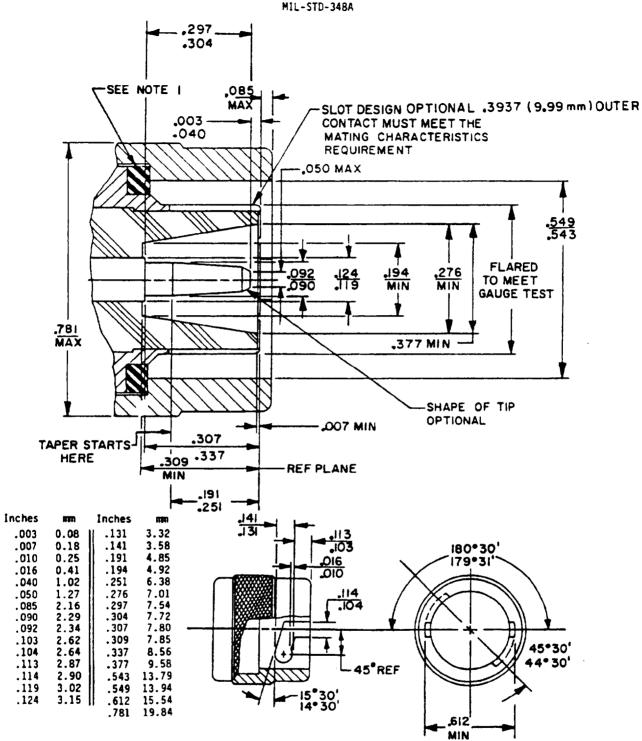
FIGURE 301-1. Interface, series BNC, pin contact.



\*P dimension applies to that portion (if applicable) of dielectric which extends beyond reference plane by dimension K+.

- This interface shall meet the gauge requirements as specified is MIL-C-39012/17.
   Clearance for mating connector coupling nut.

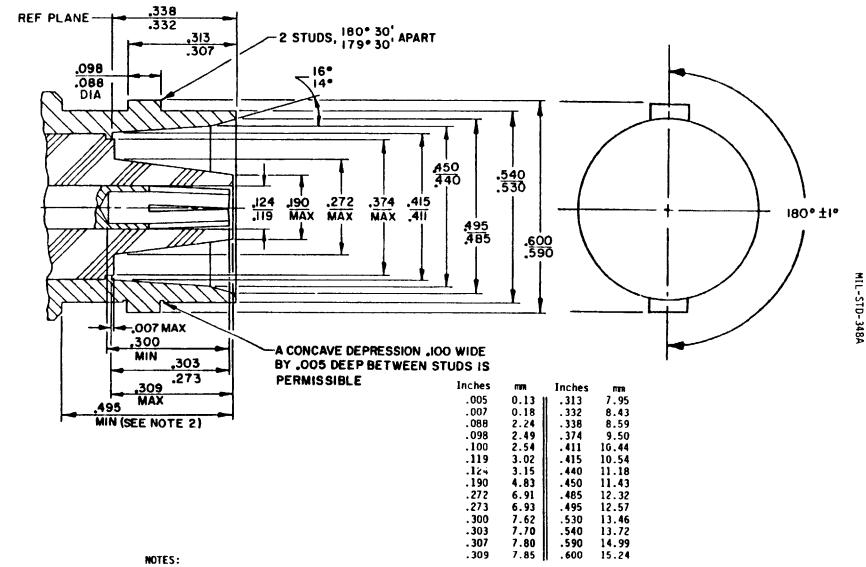
FIGURE 301-2. Interface, series BNC, socket contact.



- In the mated condition, the longitudinal force of the spring of the coupling mechanism shall exceed the pressure exerted by the sealing gasket by an amount necessary to insure butting of the outer contacts at the reference plane.
- This interface shall meet the gauge requirements as specified in MIL-C-39012/6.
   The I.D. of outer contact when inserted into a .411 (10.44 mm) maximum ring gauge shall be .377 (9.58 mm) minimum.

FIGURE 302-1. Interface, series C, pin contact.



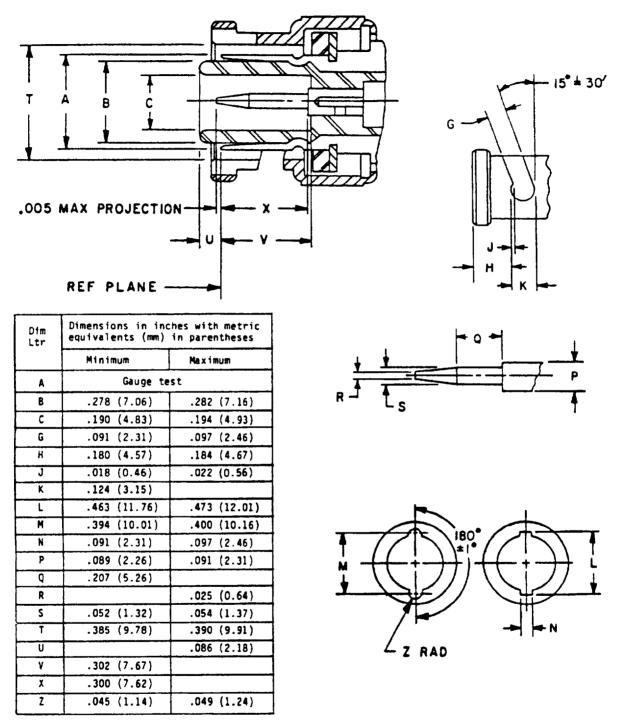


This interface shall meet the gauge requirements as specified in MIL-C-39012/7.

2. Clearance for mating connector coupling nut.

FIGURE 302-2. Interface, series C, socket contact.

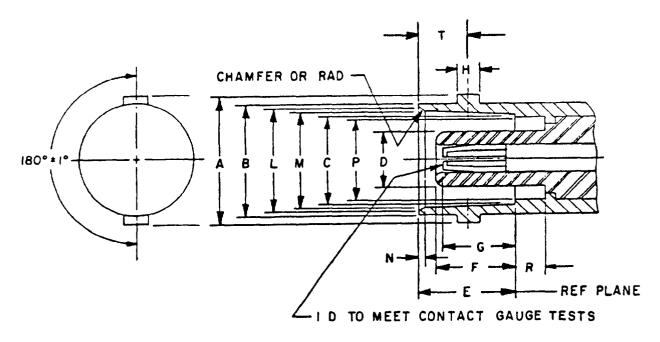
MIL-STD-348A



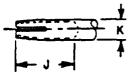
NOTE: This interface shall meet the gauge requirements as specified in MIL-C-39012/100.

FIGURE 303-1. Interface, series MHV, pin contact.

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Dim Ltr	Dimensions in inches with metric equivalents (mm) in parentheses.		
ננו	Minimum	Maximum	
A	.432 (10.97)	.436 (11.07)	
В	.378 (9.60)	.382 (9.70)	
С	.319 (8.10)	.321 (8.15)	
D		.186 (4.72)	
E	.327 (8.31)	.335 (8.51)	
F	.289 (7.34)	.311 (7.90)	
G	.253 (6.43)	.280 (7.11)	
Н	.075 (1.91)	.081 (2.06)	
J	.270 (6.86)		
K	.081 (2.06)	.091 (2.31)	
L	.346 (8.79)	.356 (9.04)	
М	.327 (8.31)	.333 (8.46)	
N	.015 (0.38)	.030 (0.76)	
Р	.284 (7.21)	.290 (7.37)	
R	.086 (2.18)		
T	.165 (4.19)	.169 (4.29)	

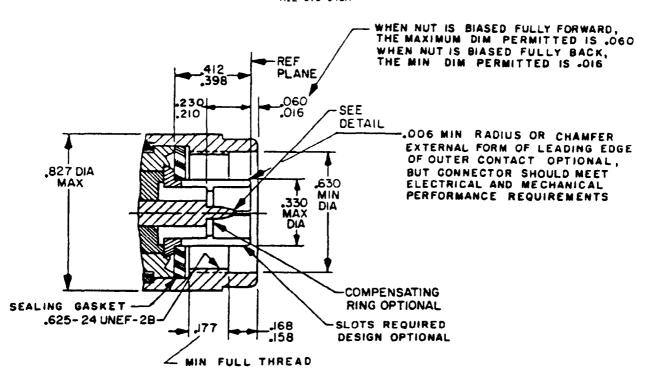


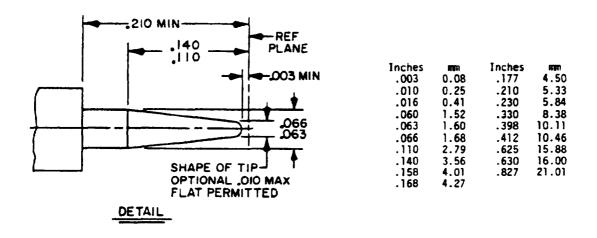
NOTE: This interface shall meet the gauge requirements as specified in MIL-C-39012/101.

FIGURE 303-2. Interface, series MHV, socket contact.

1

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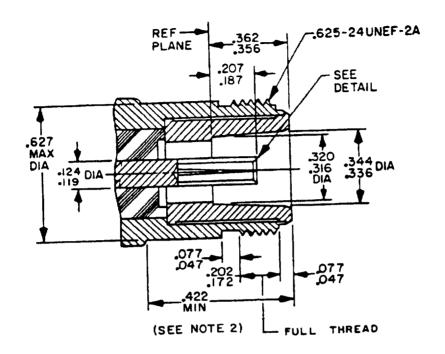


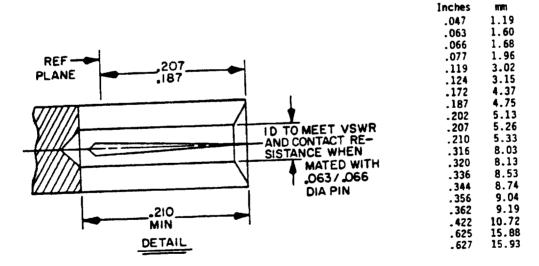


NOTE: This interface shall meet the gauge requirements as specified in MIL-C-39012/1.

FIGURE 304-1. Interface, series N. pin contact.

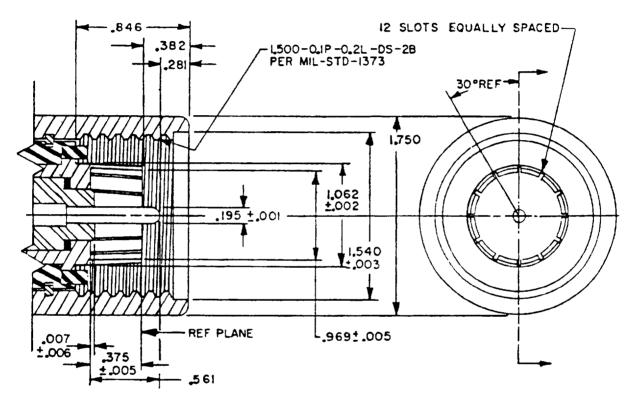
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- This interface shall meet the gauge requirements as specified in MIL-C-39012/2.
   Clearence for mating connector coupling nut.

FIGURE 304-2. Interface, series N, socket contact.

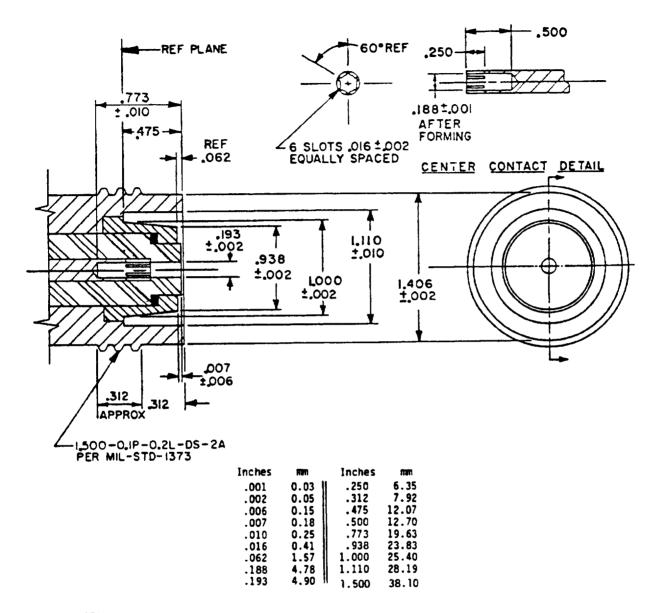


Inches	ग्रहरा	Inches	RYN
.001	0.03	.375	9.53
.002	0.05	.382	9.70
.003	0.08	.561	14.25
. 005	0.13	.846	21.49
.006	0.15	. 969	24.61
.007	0.18	1.062	27.03
. 195	4.95	1.500	38.10
. 281	7.14	1.540	39.12
		1.750	44.45

- This interface shall meet the gauge requirements as specified in MIL-C-39012/44.
   Unless otherwise specified, tolerances are ±.010 (0.25 mm).

FIGURE 305-1. Interface, series QL, pin contact.

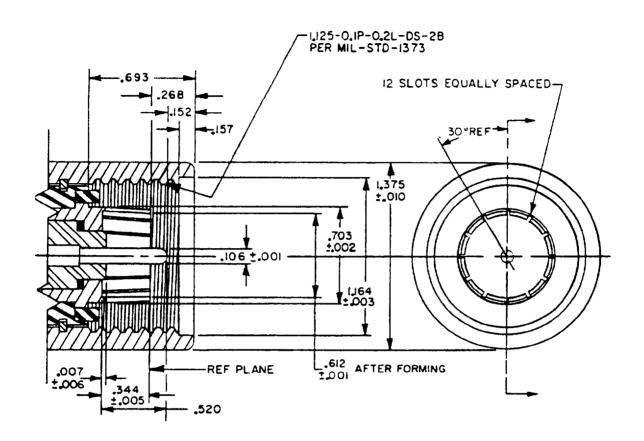
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- 1. This interface shall meet the gauge requirements as specified in MIL-C-39012/45. 2. Unless otherwise specified, tolerances are  $\pm$ .010 (0.25 mm).

FIGURE 305-2. Interface, series QL, socket contact.

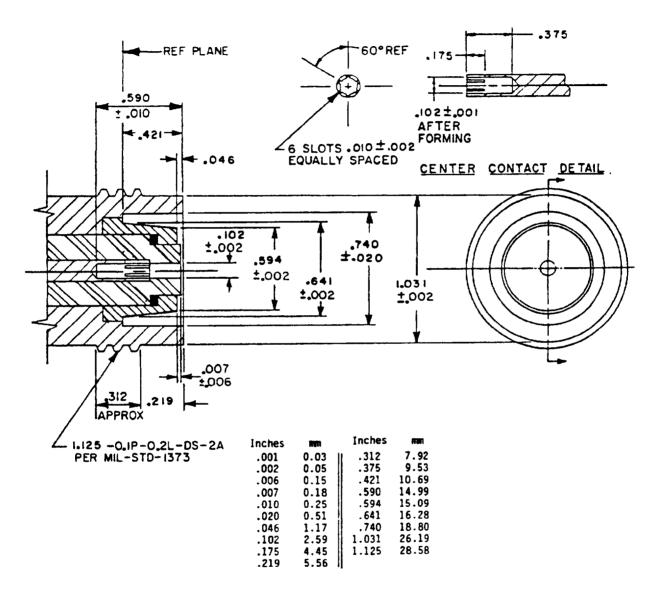
MIL-STD-348A



Inches	TEN.	Inches	TET.
.001 .002 .003 .005	0.03 0.05 0.08 0.13 0.15	.157 .268 .344 .520	3.99 6.81 8.74 13.21 15.54
.007 .010 .106 .152	0.18 0.25 2.69 3.86	.693 .703 1.125 1.164 1.375	17.60 17.86 28.58 29.57 34.93

- 1. This interface shall meet the gauge requirements as specified in MIL-C-39012/48. 
  2. Unless otherwise specified, tolerances are  $\pm$ .010 (0.25 mm).

FIGURE 306-1. Interface, series QM, pin contact.



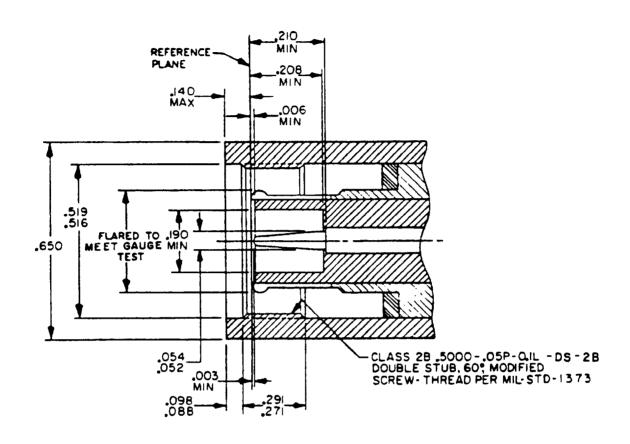
#### NOTES:

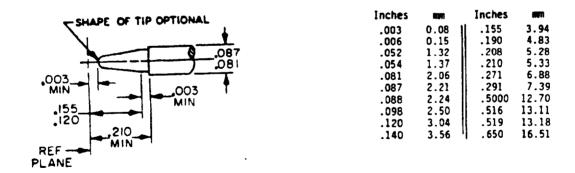
at a second

- This interface shall meet the gauge requirements as specified in MIL-C-39012/49.
   Unless otherwise specified, tolerances are +.010 (0.25 mm).

FIGURE 306-2. Interface, series OM, socket contact.

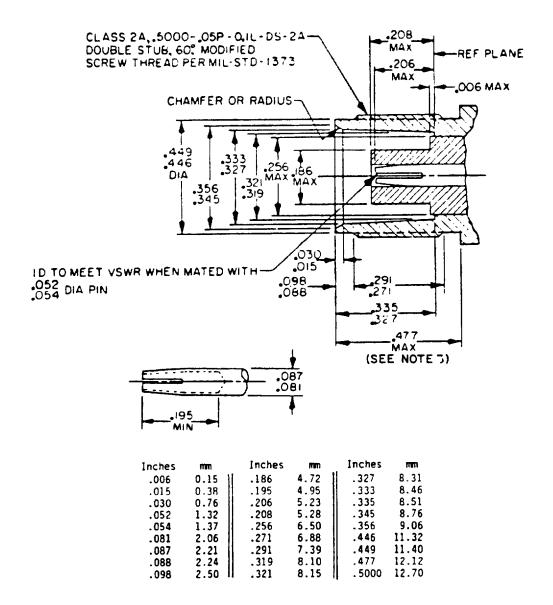
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NOTE: This connector shall meet the gauge requirements as specified in MIL-C-39012/65.

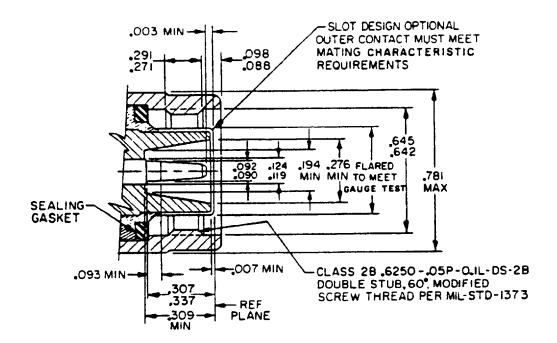
FIGURE 307-1. Interface, series ONC, pin contact.



- 1. This interface shall meet the gauge requirements as specified in MIL-C-39012/89.
- The .256 dimension applies to that portion (if applicable) of the dielectric which protrudes beyond the metal shoulder (or reference plane) by dimension .006.
- 3. Clearance for mating connector coupling nut.

FIGURE 307-2. Interface, series QNC, socket contact.

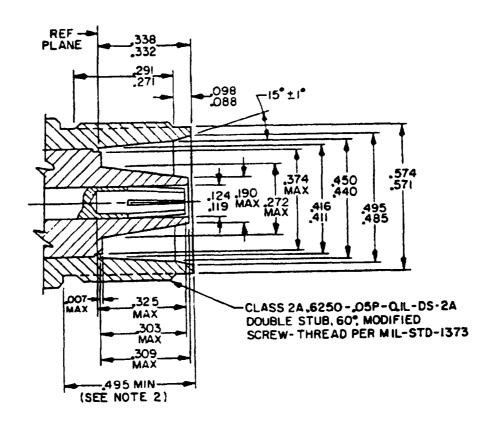
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Inches	III	Inches	MMA
.003	0.08	.271	6.88
.007	0.18	.276	7.01
.088	2.24	.291	7.39
.090	2.29	.307	7.80
.092	2.34	.309	7.85
.093	2.36	.337	8.56
.098	2.50	. 6250	15.88
.119	3.02	.642	16.31
.124	3.15	.645	16.38
.194	4.93	li .781	19.84

NOTE: This interface shall meet the gauge requirements as specified in MIL-C-39012/84.

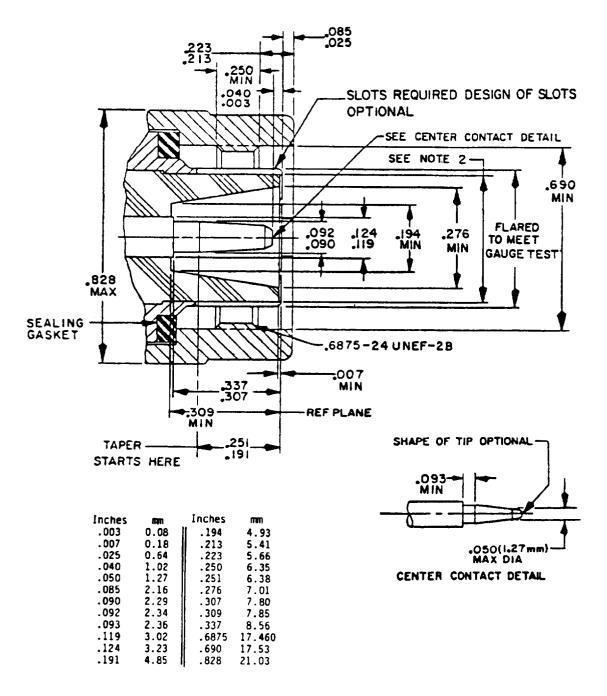
FIGURE 308-1. Interface, series QSC, pin contact.



Inches	eren:	Inches		Inches	EEE!
•	0.18 1	291	7.39 l	.416	10.56
.007	1	.303	7.70	.440	11.18
.088	2.24	.303	7.85	.450	11.43
.098	3.02	.325	8.26	.485	12.32
.119 .124	3.15	.332	8.43	. 495	12.57
.124	4.83	.338	8.59	.571	14.50
.271	6.88	.374	9.50	.574	14.58
272	6.91	.411	10.44	.6250	15.88

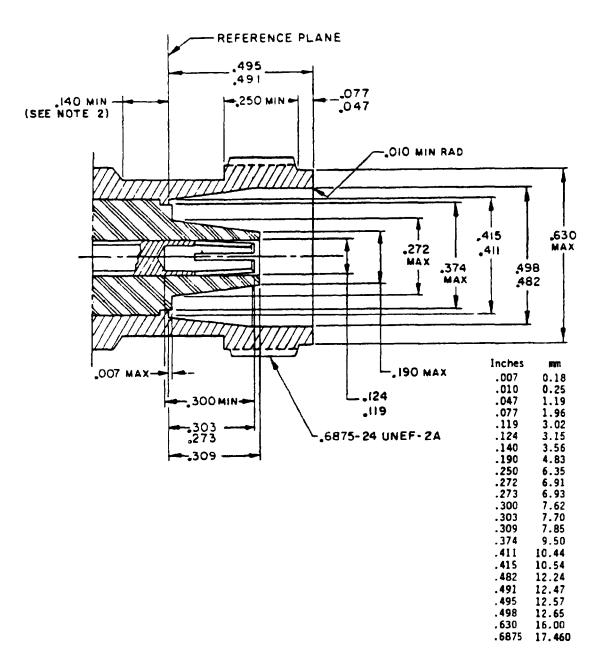
- This interface shall meet the gauge requirements as specified in MIL-C-39012/85.
   Clearance for mating connector coupling nut.

FIGURE 308-2. Interface, series QSC, socket contact.



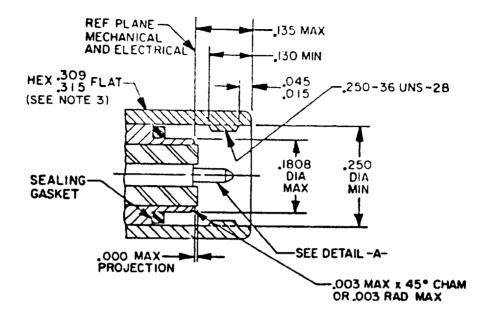
- 1. This interface shall meet the gauge requirements as specified in MIL-C-39012/35.
- The I.D. of outer contact when inserted into a .411 (10.44 mm) maximum ring gauge shall be .377 (9.58 mm) minimum.

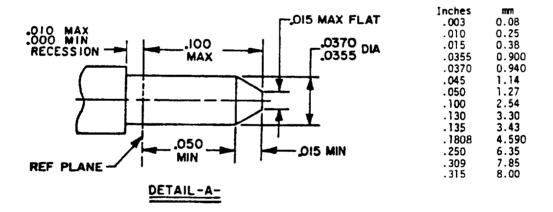
FIGURE 309-1. Interface, series SC, pin contact.



- 1. This interface shall meet the gauge requirements as specified in MIL-C-39012/40.
- 2. Clearance for mating connector coupling nut.

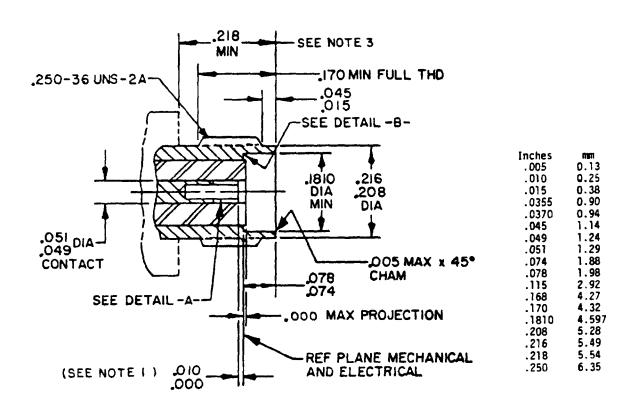
FIGURE 309-2. Interface, series SC, socket contact.

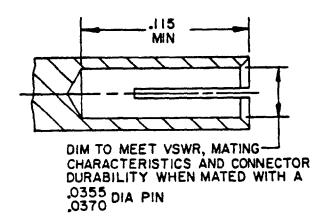


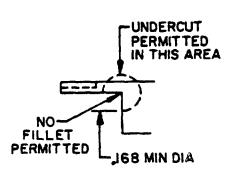


- This interface shall meet the guage requirements as specified in MIL-C-39012/79.
   Connector interfaces (after connector mating) shall be kept free from dust and moisture.
- 3. May extend throughout the full length of the coupling nut.

FIGURE 310-1. Interface, series SMA, pin contact.





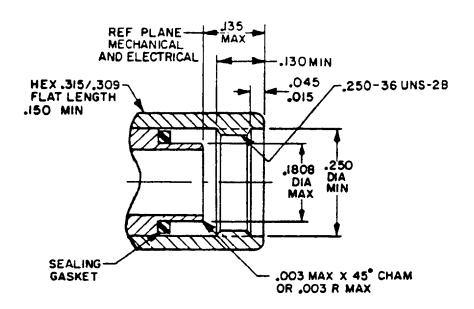


# DETAIL -A-

DETAIL -B-

- A .030 inch (0.76 mm) maximum contact recession is permissible for thick wall designs only.
- 2. This interface shall meet the guage requirements as specified in MIL-C-39012/83.
- 3. Clearance for mating connector coupling nut.

FIGURE 310-2. Interface, series SMA, socket contact.

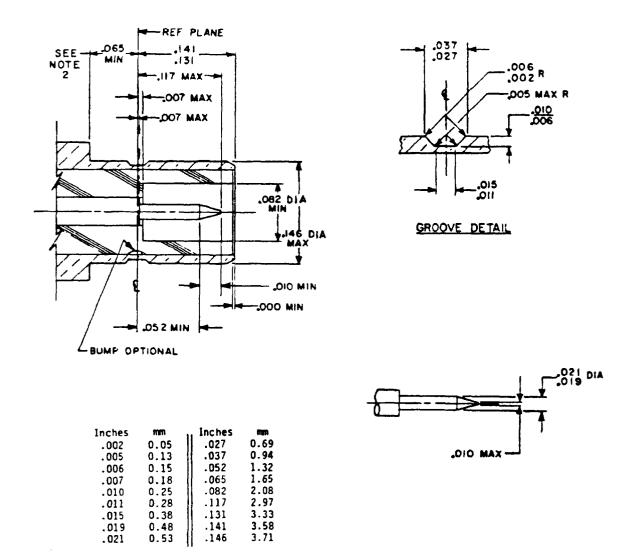


Inches	MATT
.003	0.08
.015	0.38
.045	1.14
.130	3.30
.135	3.43
.150	3.81
-1808	4.59
. 250	6.35
.309	7.85
.315	8.00

### NOTES:

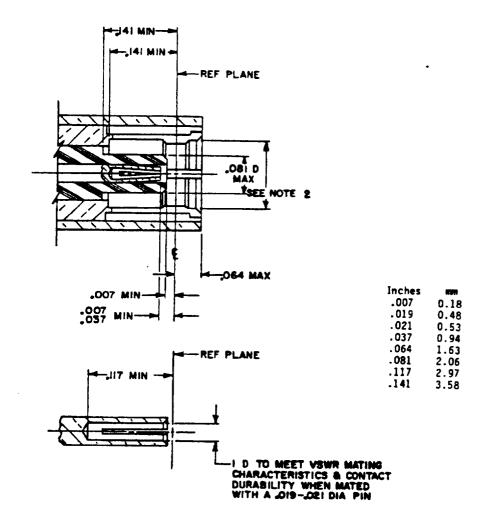
This interface shall meet the gauge requirements as specified in MIL-C-39012/92.
 Reference MIL-C-39012/92 for cable stripping dimensions.

FIGURE 310-3. Interface, series SMA, no contact.



- This interface shall meet the guage requirements as specified in MIL-C-39012/68.
   Clearance for mating connector coupling nut.

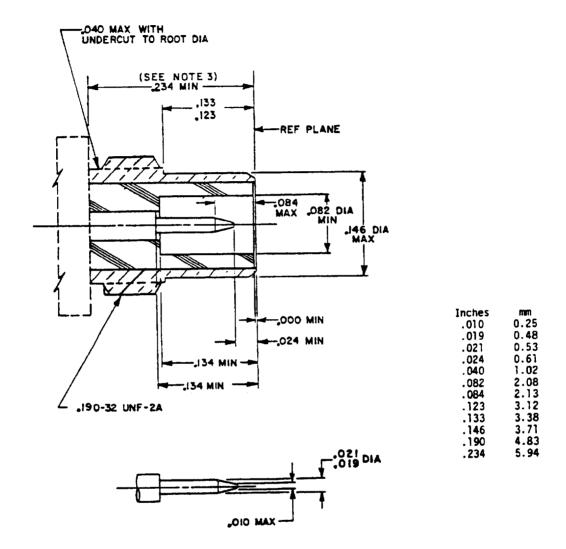
FIGURE 311-1. Interface, series SMB, pin contact.



- 1. Method of slotting of inner contact optional.
- Must meet the longitudinal force requirements of force to engage and disengage when mated with its mating gauge.

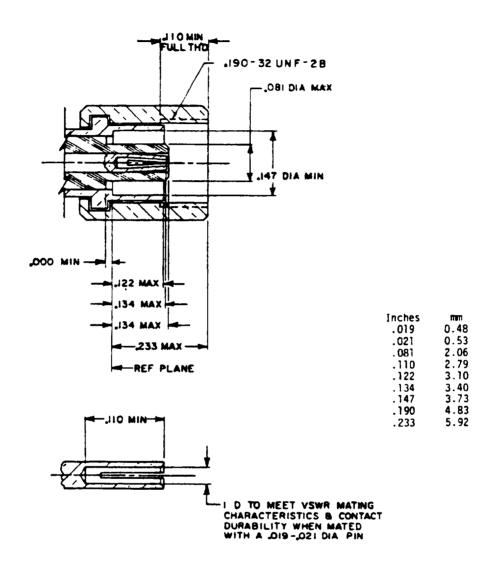
  3. This interface shall meet the gauge requirements as specified in MIL-C-39012/67.

FIGURE 311-2. Interface, series SMB, socket contact.



- This interface shall meet the guage requirements as specified in MIL-C-39012/74.
   Thread guage must go .234 (5.94 mm) minimum from reference plane.
   Clearance for mating connector coupling nut.

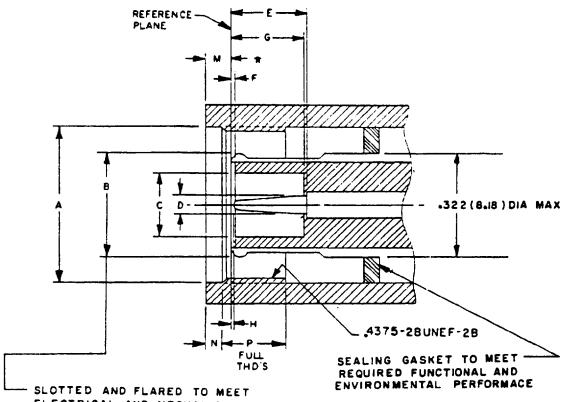
FIGURE 312-1. Interface, series SMC, pin contact.



- Method of slotting of inner contact optional.
   This interface shall meet the gauge requirements as specified in MIL-C-39012/73.

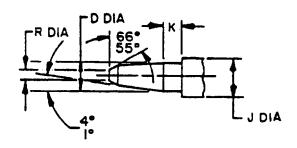
FIGURE 312-2. Interface, series SMC, socket contact.

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SLOTTED AND FLARED TO MEET ELECTRICAL AND MECHANICAL REQUIREMENTS

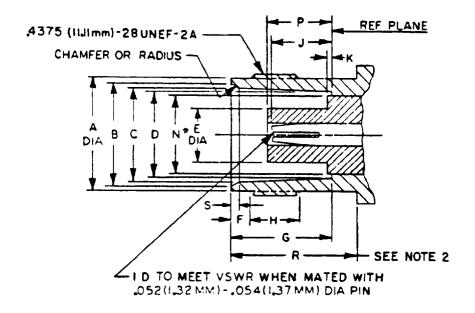
Dim Ltr	Dimensions in inches with metric equivalents (mm) in parentheses.				
	Minimum	Maximum			
Α	.440 (11.18)				
В	Gauge	test			
С	.190 (4.83)				
D	.052 (1.32)	.054 (1.37)			
Ε	.210 (5.33)	.230 (5.84)			
F	.006 (0.15)				
G	.208 (5.28)	.228 (5.79)			
н	.003 (0.08)	.040 (1.02)			
J	.081 (2.06)	.087 (2.21)			
К	.078 (1.98)				
М		.078 (1.98)			
N	.063 (1.60)				
P	.156 (3.96)				
R		.025 (0.64)			



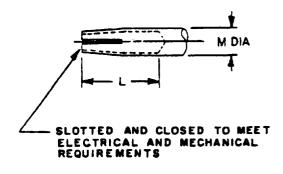
\* THIS DIMENSION SHOWS THE POSITION WITH NUT BIASED FULLY FORWARD

NOTE: This interface shall meet the gauge requirements as specified in MIL-C-39012/26.

FIGURE 313-1. Interface, series TNC, pin contact.



Dim Ltr	Dimensions in inches with metric equivalents (mm) in parentheses (see note)					
	Minimum	Maximum				
Α	.378 (9.60)	.381 (9.68)				
В	.346 (8.79)	.356 (9.04)				
С	.327 (8.31)	.333 (8.46)				
D	.319 (8.10)	.321 (8.15)				
E		.186 (4.72)				
F	.068 (1.73)	.088 (2.24)				
G	.327 (8.31)	.335 (8.51)				
н	.187 (4.75)					
J	.186 (4.72)	.206 (5.23)				
К		.006 (0.15)				
L	.195 (4.95)					
м	.081 (2.06)	.087 (2.21)				
N		.256 (6.50)				
P	.188 (4.78)	.208 (5.28)				
R	.414 (10.52)					
S	.015 (0.38)	.030 (0.76)				

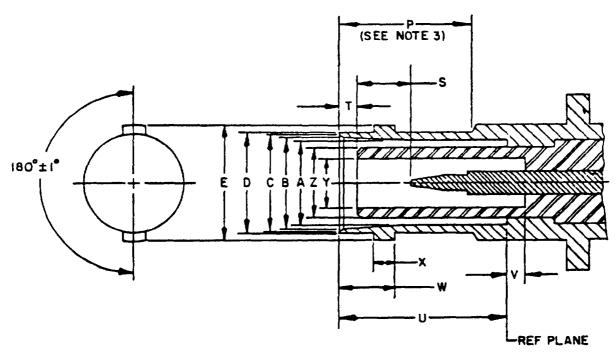


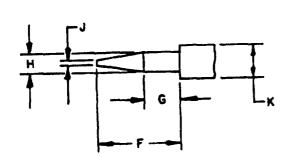
\*N dimension applies to that portion (if applicable) of the dielectric which protrudes beyond the metal shoulder (or reference plane) by dimension K.

- This interface shall meet the guage requirements as specified in MIL-C-39012/28.
   Clearance for mating connector coupling nut.

FIGURE 313-2. Interface, series TNC, socket contact.

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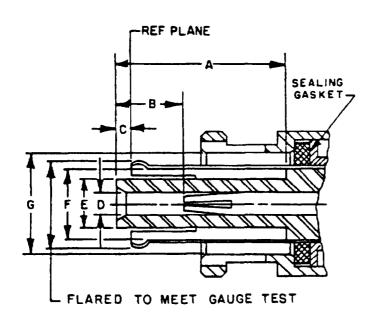


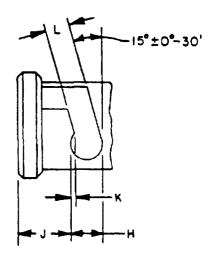
Dim	Inches		Millimeters	
Ltr	Min	Max	Min	Max
Α	.319	.321	8.10	8.15
В	.328	. 333	8.33	8.46
С	.347	.357	8.81	9.07
D	.378	.382	9.60	9.70
E	.432	.436	10.97	11.07
F	.207	.214	5.26	5.44
G	.130		3.30	
Н	.052	. 054	1.32	1.37
J	.015	.025	0.38	0.64
K	.081	.083	2.06	2.11
Р	.427		10.85	
S	.188	.208	4.78	5.28
Ť	.061	.078	1 .55	1.98
U	.626	.630	15.90	16.00
V	.064	.086	1.63	2.18
W	.204	.208	5.18	5.28
X	.075	.081	1.90	2.06
Y	.190	.196	4.83	4.98
2		.260		6.60

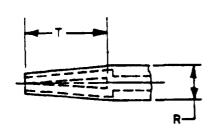
- 1. This interface shall meet the guage requirements as specified in MIL-C-39012/107.
  2. .005 (0.13 mm) flat permissible to meet dimension W.
  3. Clearance for mating connector coupling nut.

FIGURE 314-1. Interface, series SHV, pin contact.

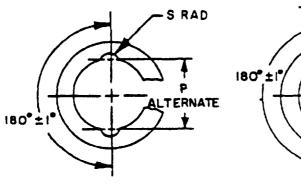
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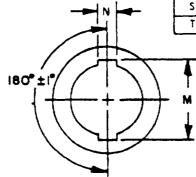






Dim	Inches		Millimeters	
Ltr	Min	Max	Min	Max
A	.628	.632	15.95	16.05
В	.238	.262	6.05	6.65
С	.046	.064	1.17	1.63
0	.002		2.08	
E	.180	.186	4.57	4.72
F	. 264		6.71	
G	. 385	. 390	9.78	9.91
Н	.124		3.15	
J	.180	.184	4.57	4.67
K	.018	.022	0.46	0.56
L	.091	.097	2.31	2.46
M	. 463	.473	11.76	12.01
N	.091	.094	2.31	2.46
P	.394	.400	10.01	10.16
R	.081	.083	2.06	2.11
S	.045	.049	1.14	1.24
Ť	.214		5.44	





NOTE: This interface shall meet the gauge requirements as specified in MIL-C-39012/106.

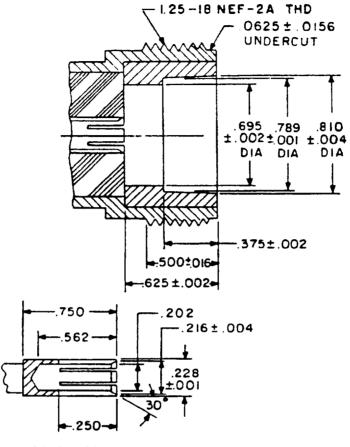
FIGURE 314-2. Interface, series SHV, socket contact.

SECTION 300

INTERFACE DIMENSIONS FOR MIL-C-3650

FIGURE 315-1. Interface, series LC, pin contact.

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SOCKET DETAIL

Inches	10 M	Inches	18 M	Inches	
.001	0.03	.216	5.49	.625	15.88
.002	0.05	.228	5.79	.695	17.65
.004	0.10	.250	6.35	.750	19.05
.0156	0.40	.375	9.52	.789	20.04
.016	0.41	.500	12.70	.810	20.57
. 0625	1.59	.562	14.28	1.25	31.75
.202	5.13	,,,,		-,	

- Dimensions are in inches.
   Metric equivalents are given for general information only.
- 3. This interface shall meet the gauge requirements as specified in MIL-C-3050.

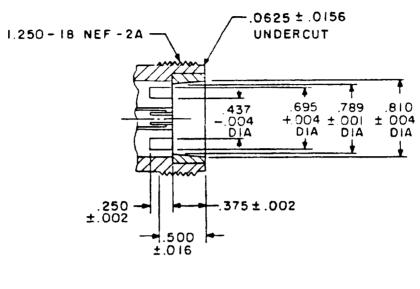
FIGURE 315-2. Interface, series LC, socket contact.

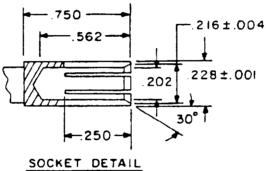
SECTION 300

INTERFACE DIMENSIONS FOR MIL-C-3650

FIGURE 315-3. Interface, series LC, pin contact.

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Inches	OR OR	Inches	有用	Inches	mm
.001	0.03	.216	5.49	. 625	15.88
.002	0.05	.228	5.79	.695	17,65
.004	0.10	.250	6.35	. 750	19.05
.0156	0.40	.375	9.52	.789	20.04
.016	0.41	.437	11.10	.810	20.57
.0625	1.59	. 50 0	12.70	1.25	31.75
202	5.13	.562	14.28		

- Dimensions are in inches.
   Metric equivalents are given for general information only.
- 3. This interface shall meet the gauge requirements as specified in MIL-C-3650.

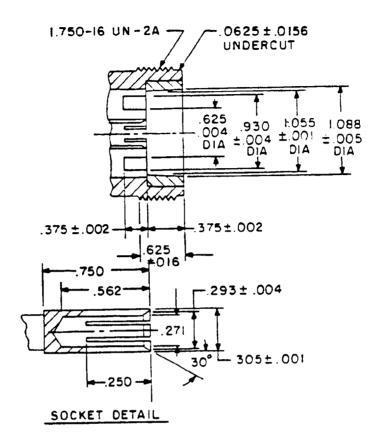
FIGURE 315-4. Interface, series LC, socket contact.

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INTERFACE DIMENSIONS FOR MIL-C-3650

FIGURE 315-5. Interface, series LC, pin contact.

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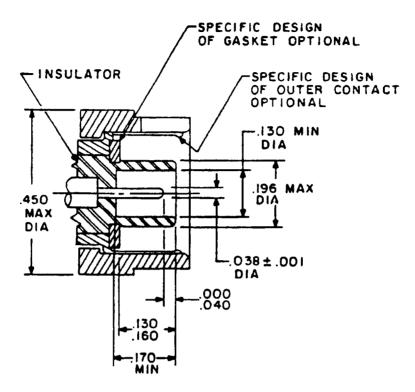


Inches	***	Inches	mm	Inches	糖性
.001 .002 .004 .0156	0.03 0.05 0.10 0.40 0.41	.250 .271 .293 .305 .375	6.35 6.88 7.44 7.45 9.52 14.28	.625 .750 .930 1.055 1.088 1.750	15.88 19.05 23.62 26.84 27.64 44.45

:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. This interface shall meet the gauge requirements as specified in MIL-C-3650.

FIGURE 315-6. Interface, series LC, socket contact.

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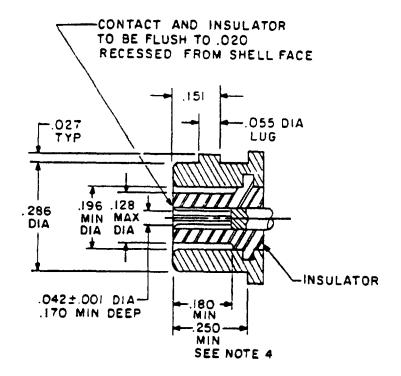
PLUG WITH PIN CONTACT

Inches		Inches		Inches	**
.001	0.03	. 04 2	1.07	.170	4.32
.020	0.51	.055	1.40	.180	4.57
.027	0.69	.128	3.25	.250	6.35
.030	0.76	.130	3.30	.286	7.26
.038	0.97	.151	3.84	.450	11,43
.040	1.02	.160	4.06		

- 1. Dimensions are in inches.
- 2. Metric equivalents are given for general information only.
- 3. This interface shall meet the gauge requirements as specified in MIL-C-25516

FIGURE 316-1. Interface, coaxial, environment resistant.

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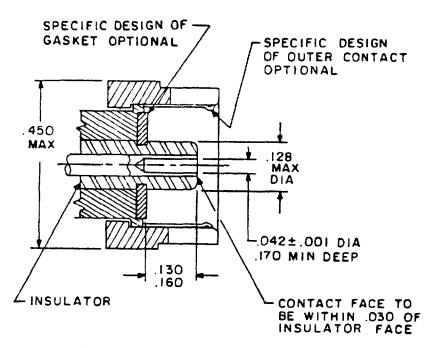
RECEPTACLE WITH SOCKET CONTACT

Inches		Inches	94	Inches	**
.001	0.03	.055	1.40	.180	4.57
.020	0.51	.100	2.54	.196	4.98
.027	0.69	.128	3.25	.250	6.35
.038	0.97	.130	3.30	. 286	7.26
.040	1.02	.151	3.84	.450	11.43
.042	1.07	.170	4.32	•	

- 1. Dimensions are in inches.
- Metric equivalents are given for general information only.
   This interface shall meet the gauge requirements as specified in MIL-C-25516
- 4. Clearance for mating connector coupling nut.

FIGURE 316-2. Interface, coaxial, environment resistant.

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PLUG WITH SOCKET CONTACT

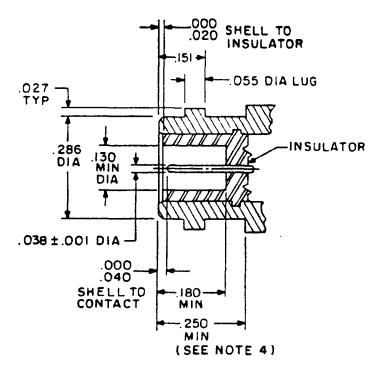
Inches		Inches	**	Inches	***
.001	0.03	. 055	1.40	.180	4.57
.020	0.51	.100	2.54	.196	4.98
.027	0.69	.128	3.25	.250	6.35
.038	0.97	.130	3.30	,286	7.26
.040	1.02	.151	3.84	.450	11.43
.042	1.07	.170	4.32		

1. Dimensions are in inches.

Metric equivalents are given for general information only.
 This interface shall meet the gauge requirements as specified in MIL-C-25516

FIGURE 316-3. Interface, coaxial, environment resistant.

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RECEPTACLE WITH PIN CONTACT

Inches	<b>m m</b>	Inches	**	Inches	MR
.001	0.03	. 042	1.07	.170	4.32
.020	0.51	. 055	1.40	.180	4.57
.027	0.69	.128	3.25	. 250	6.35
.030	0.76	.130	3.30	.286	7.26
.038	0.97	.151	3.84	.450	11.43
040	1.02	160	4.06	• • • • • • • • • • • • • • • • • • • •	

- Dimensions are in inches.
   Hetric equivalents are given for general information only.
   This interface shall meet the gauge requirements as specified in MIL-C-25516
- 4. Clearance for mating connector coupling nut.

FIGURE 316-4. Interface, coaxial, environment resistant.

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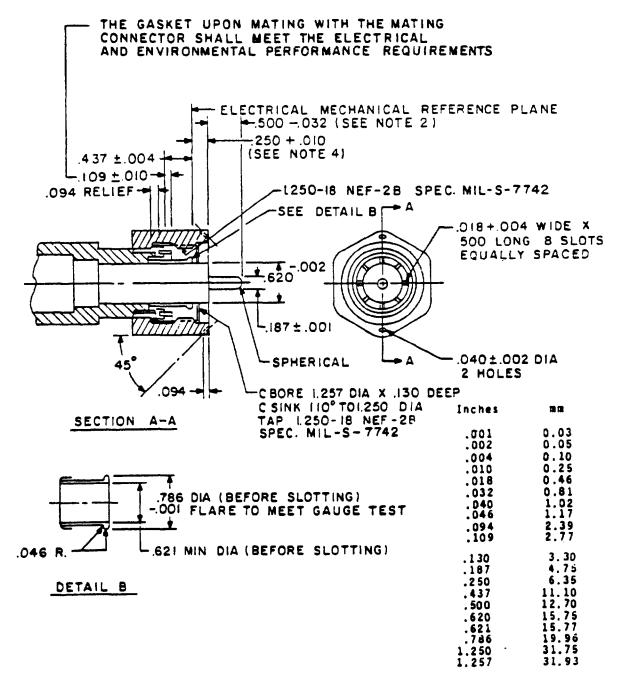
INTERFACE DIMENSIONS FOR MIL-C-3643

FIGURE 315-3. Interface, series HN, pin contact.

SECTION 300

INTERFACE DIMENSIONS FOR MIL-C-3643

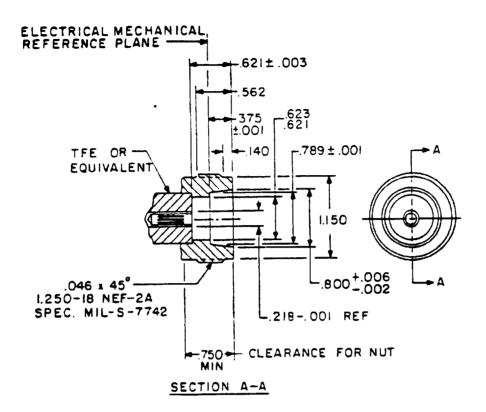
FIGURE 317-2. Interface, series MN, socket contact.



- 1. Dimensions are in inches.
- 2. This dimension is from the tip of the center contact to the end of the dielectric.
- 3. Unless otherwise specified, all tolerances shall be ±.005 inch.
- 4. This dimension is from the end of the outer contact to the end of the dielectric.
- 5. This connector shall meet the gauge requirements as specified in MIL-C-26637.

FIGURE 318-1. Interface, series LT, no contact.

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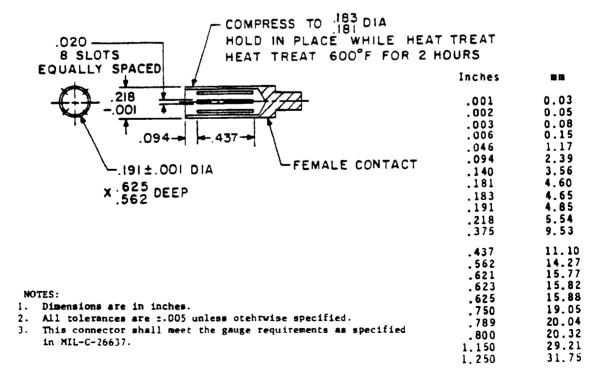
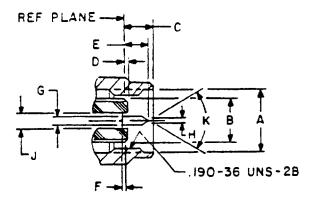


FIGURE 318-2. Interface, series LT, socket contact.

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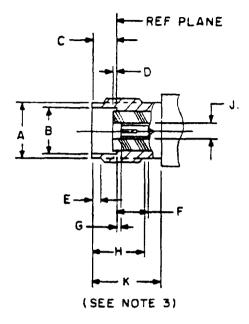


Ltr	Minimum		Maxi	mum i
	Inches	766FI*	Inches	rame*
A dia	1 .196	4.98	.202	5.13
B dia	.124	3.15	.1258	3.221
С	.100	2.54	.133	3.38
D	l005	   -0.13	.002	0.05
E	.060	1.27	.065	1.65
F	i ,000	0.00	.010	0.25
G dia	.0195	0.495	.0208	0.523
H dia	.000	0.00	.010	0.25
J d1a	.0335	0.851	.0348	0.884
K	70°		95°	

- Dimensions are in inches.
   Metric equivalents are given for general information only.

FIGURE 319-1. Interface, series SSMA, pin contact.

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	Inc	he s	Millimeters	
Ltr	l ! Min	Max	Min	Nax .
A	.153	3.89	.160	4.06
l B	1 .127	3.23	.130	3.30
С	. 07 5	1.90	.077	1.96
l D	005	-0.13	.002	0.05
Ε	.020	0.51	. 040	1.02
F	.115	2.92		
G	.000	0.00	.010	0.25
н	1 .190	4.83	.210	5.33
J	.0335	0.851	.0348	0.884
1 K	.230	5.84	•••	

- Dimensions are in inches.
   Metric equivalents are given for general information only.
   Clearance for mating connector coupling nut.

FIGURE 319-2. Interface, series SSMA, socket contact.

# SECTION 400 TEST CONNECTOR

# Interface Dimensions for MIL-C-39012, MIL-A-55339, and MIL-C-83517

Section	401	Series	С
Section	402	Series	N
Section	403	Series	\$C
Section	404	Series	BNC
Section	405	Series	SMA
Section	406	Series	TNC
Section	407	Series	SMB
Section	408	Series	SMC
Section	409	Series	QNC
Section	410	Series	QSC

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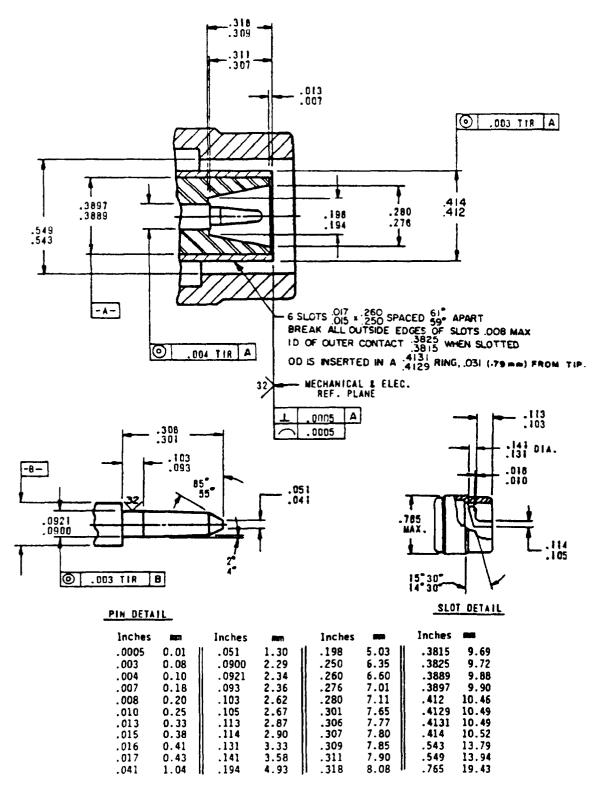
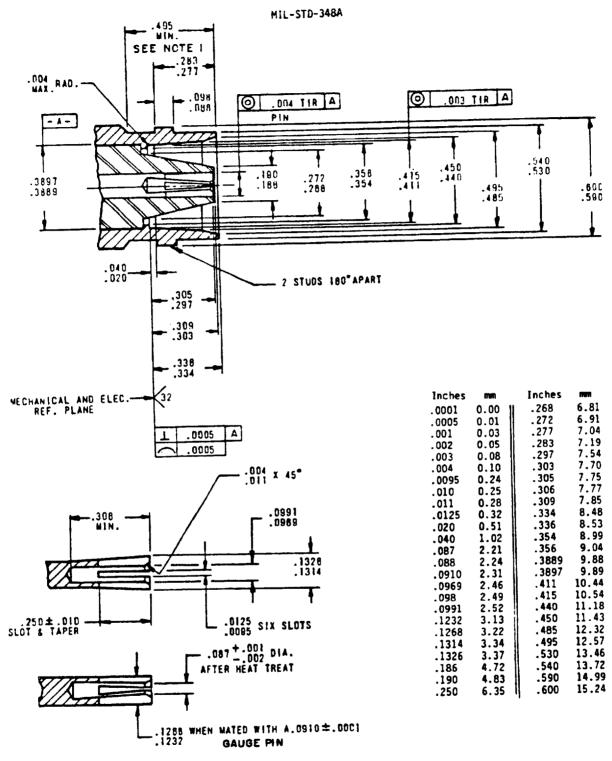


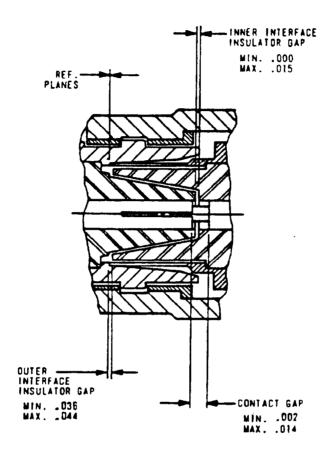
FIGURE 401-1. Interface test connector, series C, pin contact.



DETAIL OF INNER CONTACT

MOTE: Clearance for mating connector coupling nut.

FIGURE 401-2. Interface test connector, series C, socket contact.



Inches	
. 002	0.05
.014	0.36
.015	0.38
.036	0.91
.044	1.12

FIGURE 401-3. Interface, mated test connector, series C.

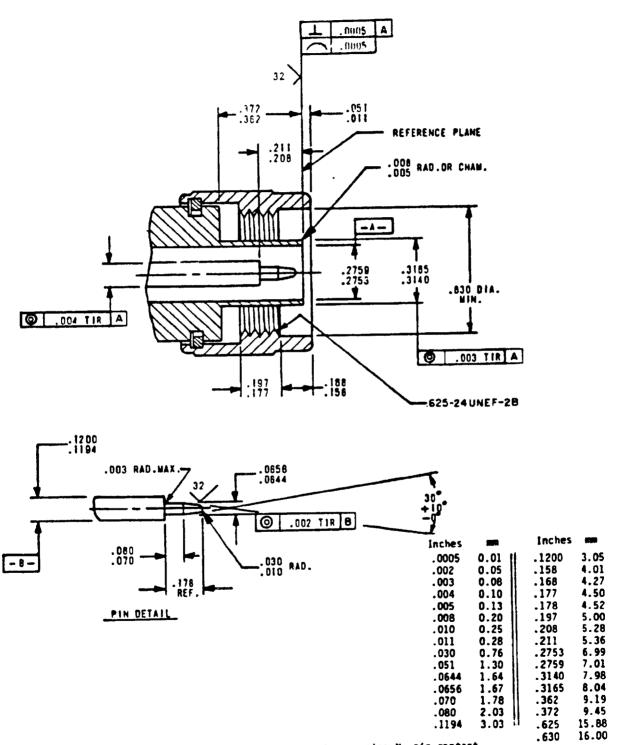
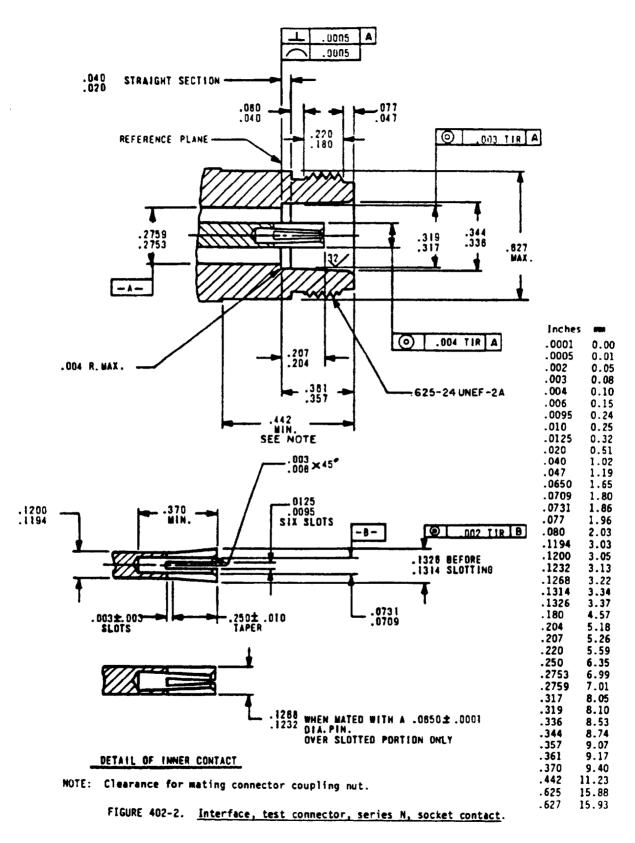
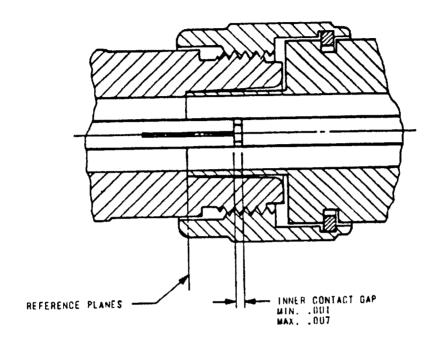


FIGURE 402-1. Interface, test connector, series N. pin contact.



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.001 0.03 .007 0.18

FIGURE 402-3. Interface, mated test connector, series N.

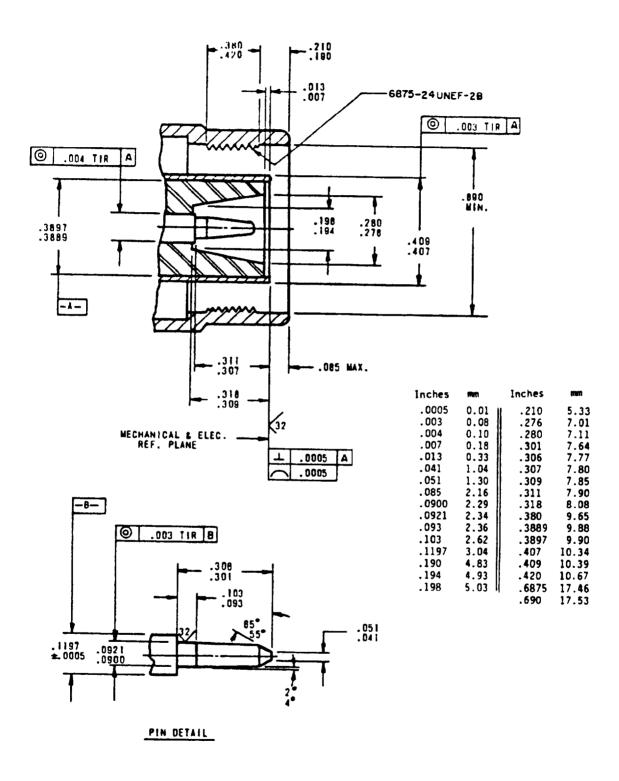


FIGURE 403-1. Interface, test connector, series SC, pin contact.

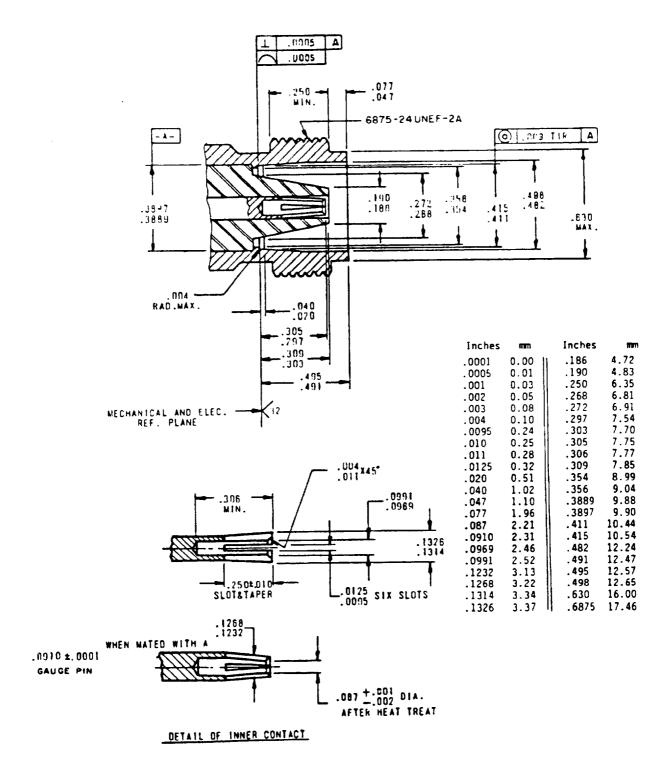
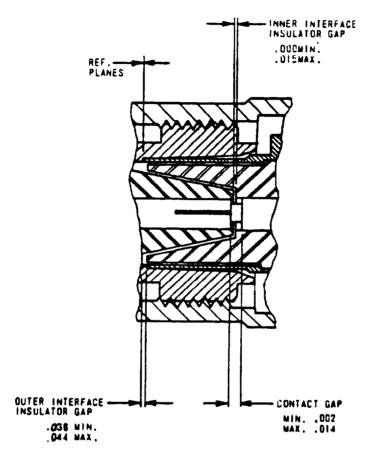


FIGURE 403-2. Interface, test connector, series SC, socket contact.



Inches	aun
.002	0.05
. 014	0.36
.015	0.38
.036	0.91
. 044	1.12

FIGURE 403-3. Interface, mated test connector, series SC.

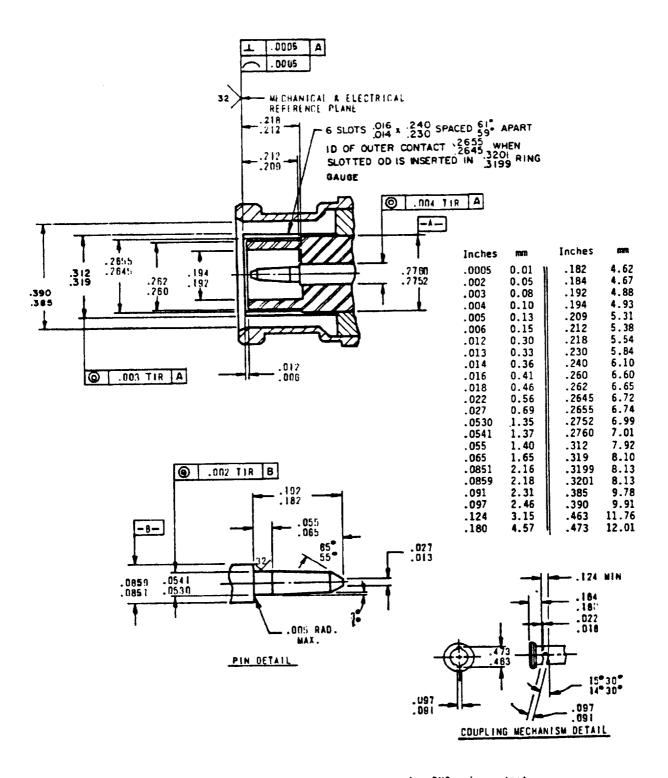


FIGURE 404-1. Interface, test connector, series BNC, pin contact.

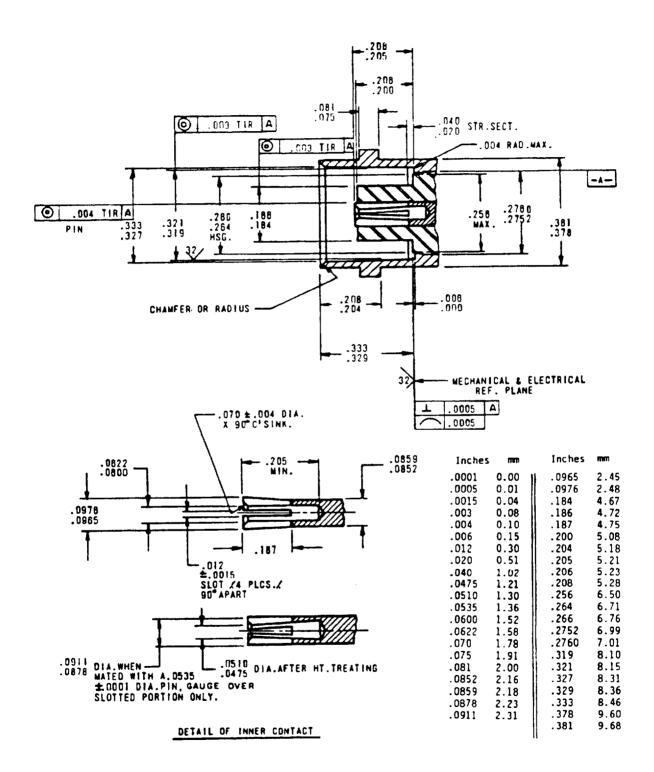
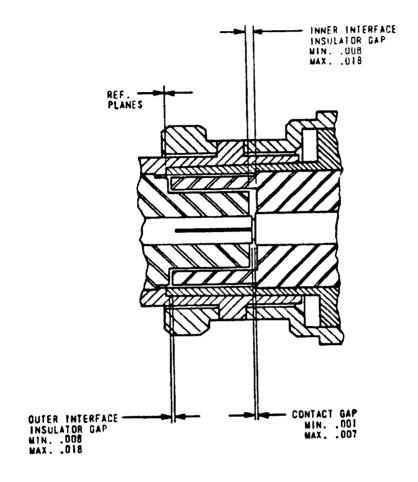


FIGURE 404-2. Interface, test connector, series BNC, socket contact.

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Inches	mm
.001	0.03
.006	0.15
.007	0.18
.018	0.40

FIGURE 404-3. Interface, mated test connector, series BNC.

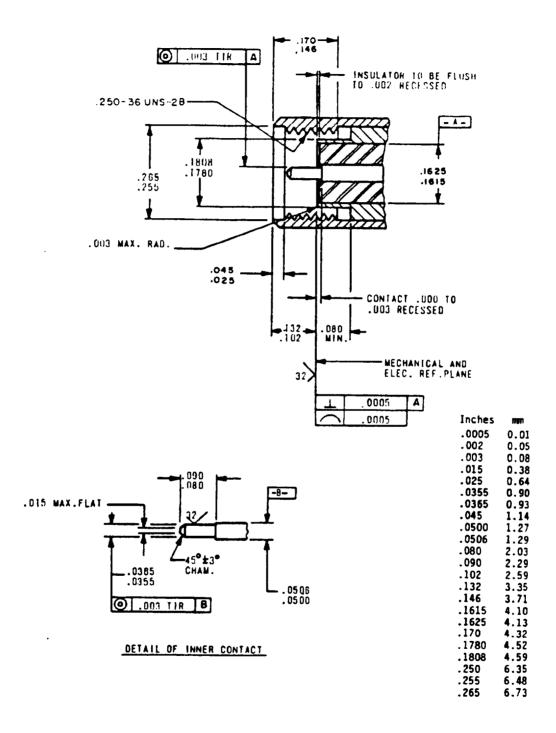


FIGURE 405-1. Interface, series SMA, pin contact.

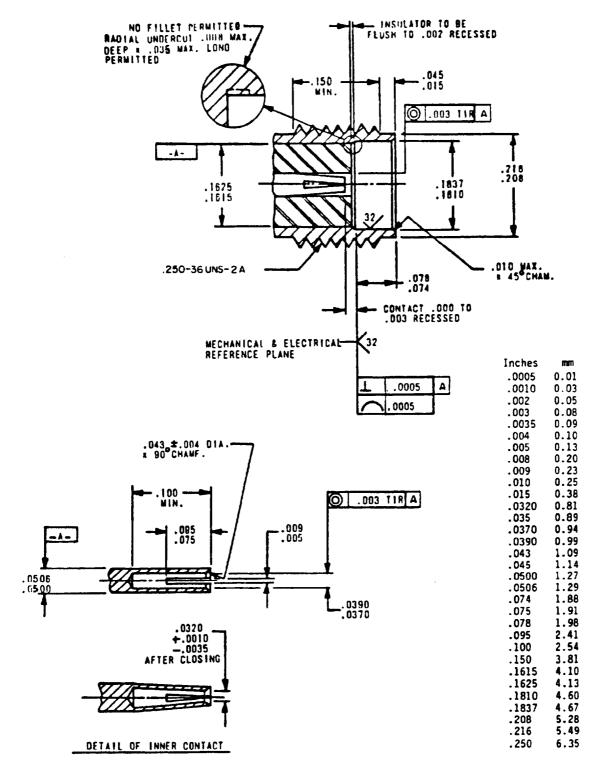
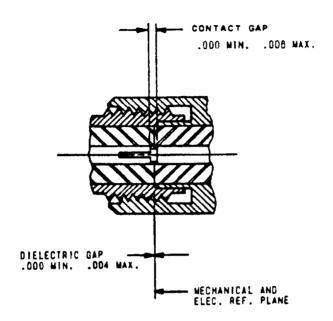


FIGURE 405-2. Interface, test connector, series SMA, socket contact.



Inches mm .004 0.10 .006 0.15

FIGURE 405-3. Interface, mated test connector, series SMA.

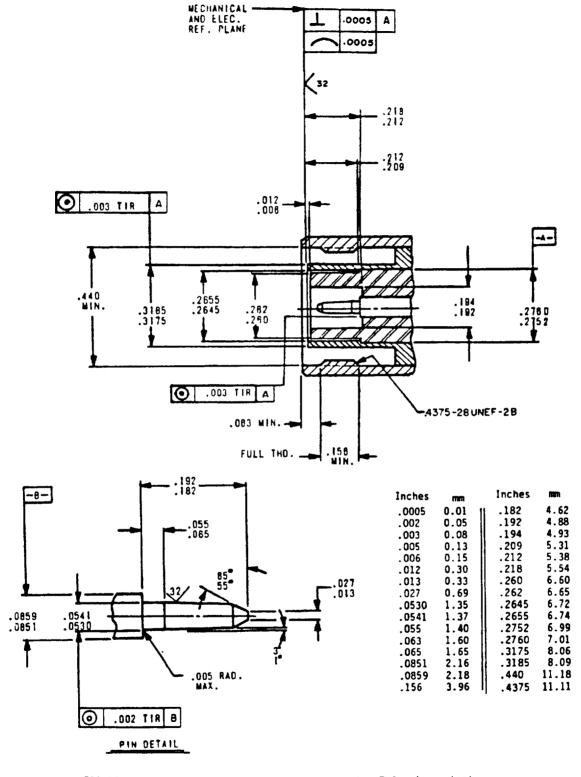


FIGURE 406-1. Interface, test connector, series TNC, pin contact.

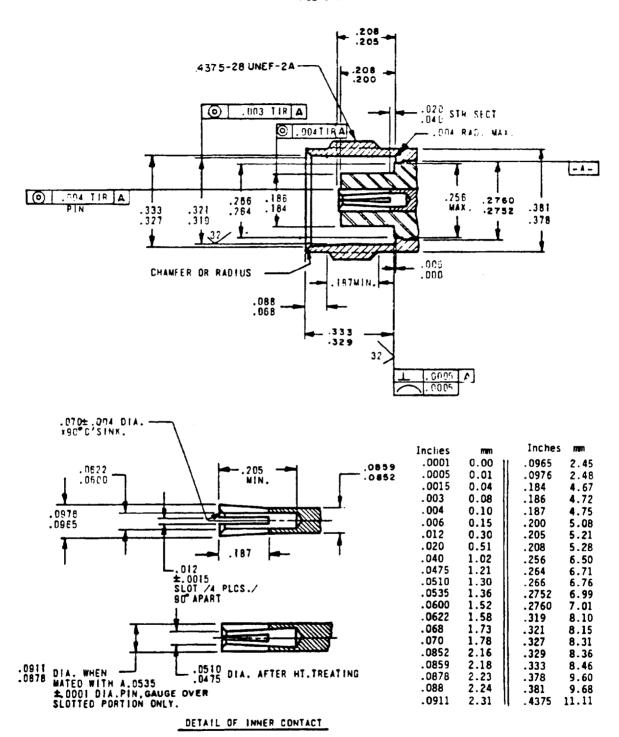
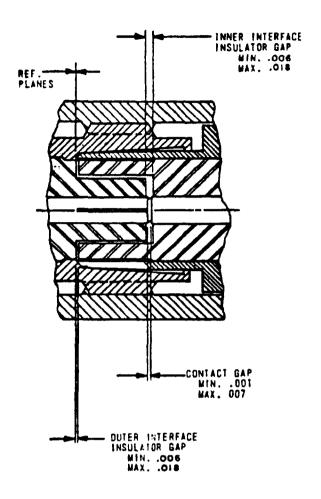


FIGURE 406-2. Interface, test connector, series TNC, socket contact.

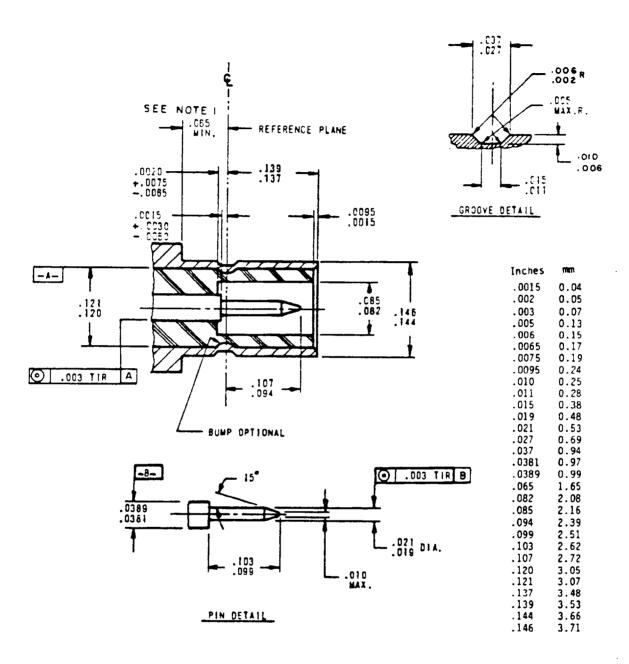
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Inches	FIE
.001	0.03
.006	0.15
.007	0.18
.018	0.46

FIGURE 406-3. Interface, mated test connector, series TNC.

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NOTE: Clearance for mating connector coupling nut.

FIGURE 407-1. Interface, test connector, series SMB, pin contact.

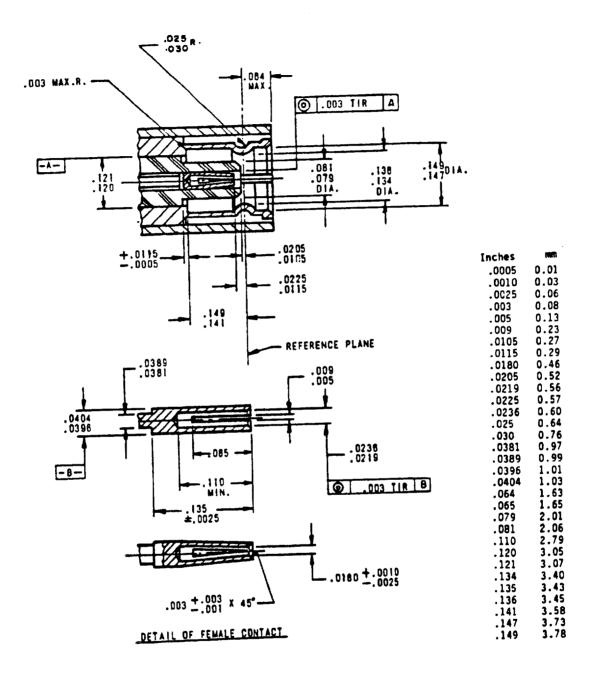
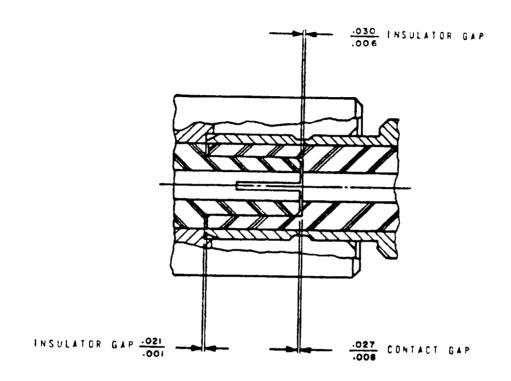


FIGURE 407-2. Interface, test connector, series SMB, socket contact.



Inches	MIN
.001	0.03
.006	0.15
.008	0.20
.021	0.53
.027	0.69
.030	0.76

FIGURE 407-3. Interface, mated test connector, series SMB.

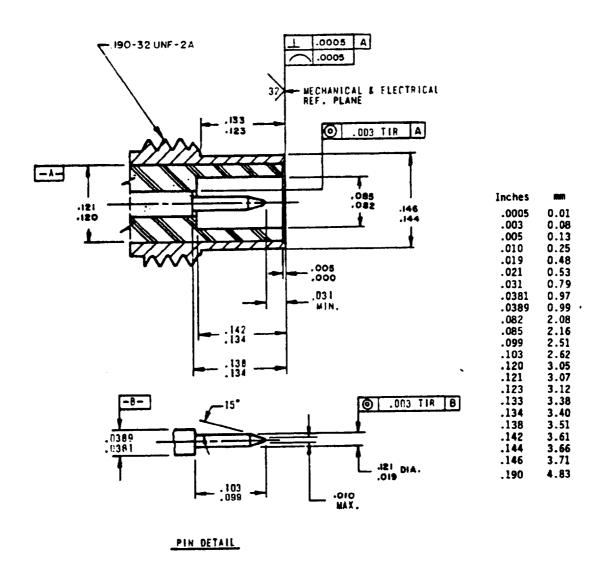
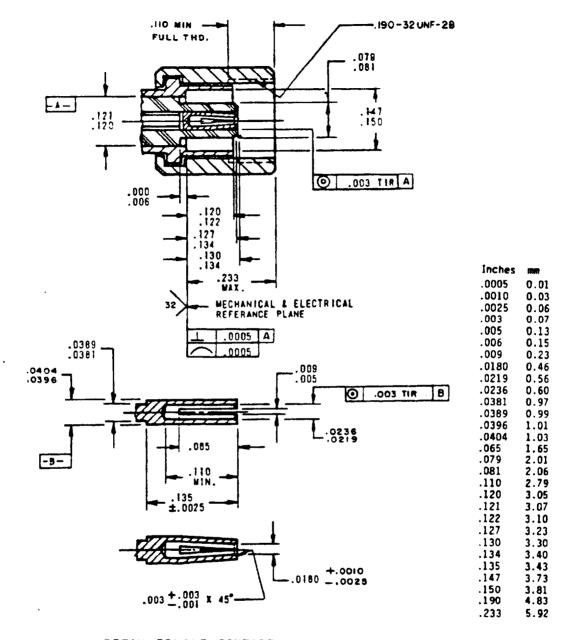


FIGURE 408-1. Interface, test connector, series SMC, pin contact.

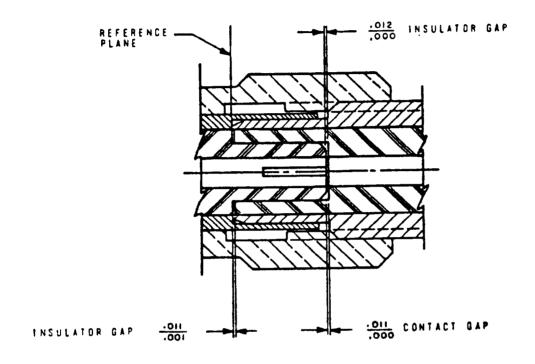
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DETAIL FEMALE CONTACT

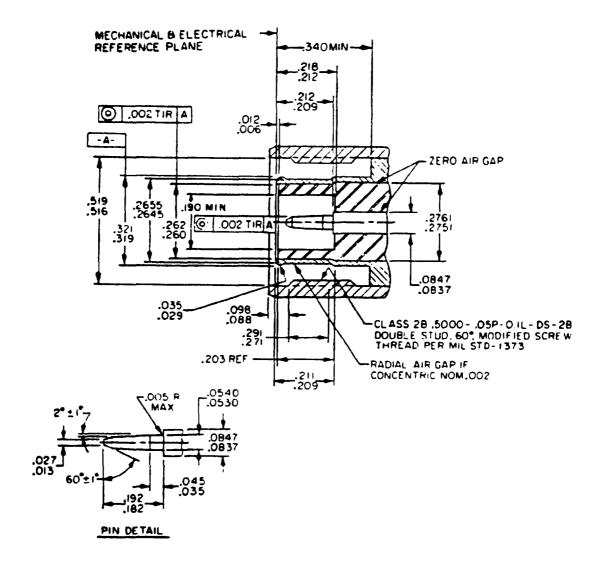
FIGURE 408-2. Interface, test connector, series SMC, socket contact.

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Inches	m
.001	0.03
.011	0.28
.012	0.30

FIGURE 408-3. Interface, mated test connector, series SMC.



Inches	(IIII)	Inches	SET .	Inches	<b>ITET</b>	Inches	mm
.002	0.05	.0530	1.346	11 . 209	5.31	] .2751	<b>6.98</b> 7
.005	0.13	1 .0540	1.371	.211	5.36	.2761	7.012
.006	0.15	.0837	2.125	.212	5.38	.291	7.39
.012	0.30	.0847	2.151	.218	5.54	319	8.10
.013	0.33	.088	2.24	. 260	6.60	.321	8.15
.027	0.69	.098	2.49	. 262	6.65	.340	8.64
.029	0.74	.182	4.62	. 2645	6.718	.5000	12.700
.035	0.89	.192	4.88	.2655	6.743	.516	13.11
.045	1.14	.203	5.16	.271	6.88	.519	13.18

FIGURE 409-1. Interface test connector, series QNC, pin contact.

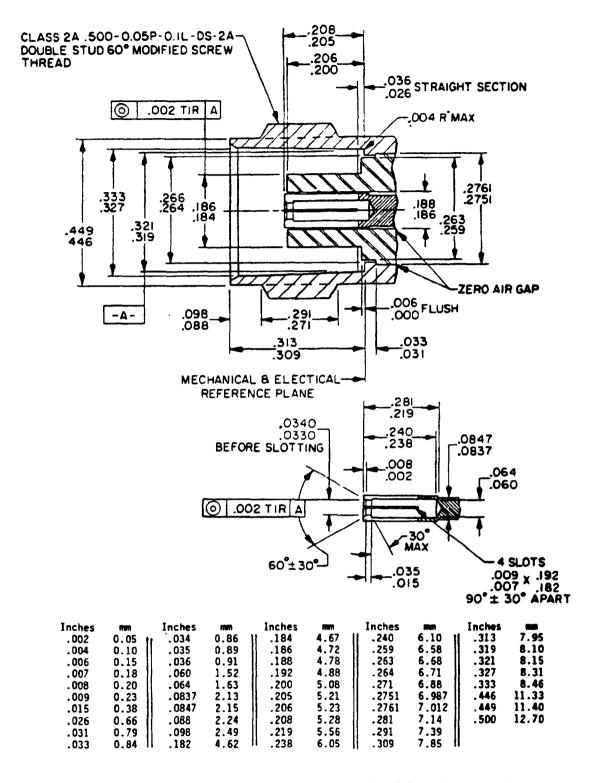
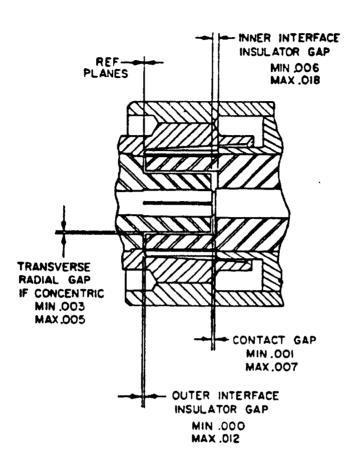


FIGURE 409-2. Interface test connector, series QNC, socket contact.

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Inches	Mile
. 001	0.03
.003	0.08
.005	0.13
. 006	0.15
. 007	0.18
.012	0.30
.018	0.46

FIGURE 409-3. Gap of mated standard test connector, series QNC.

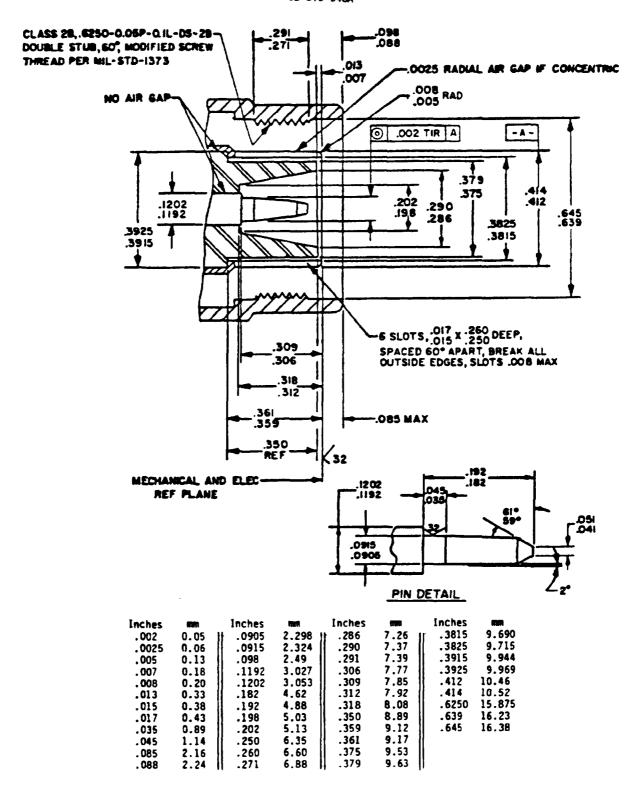
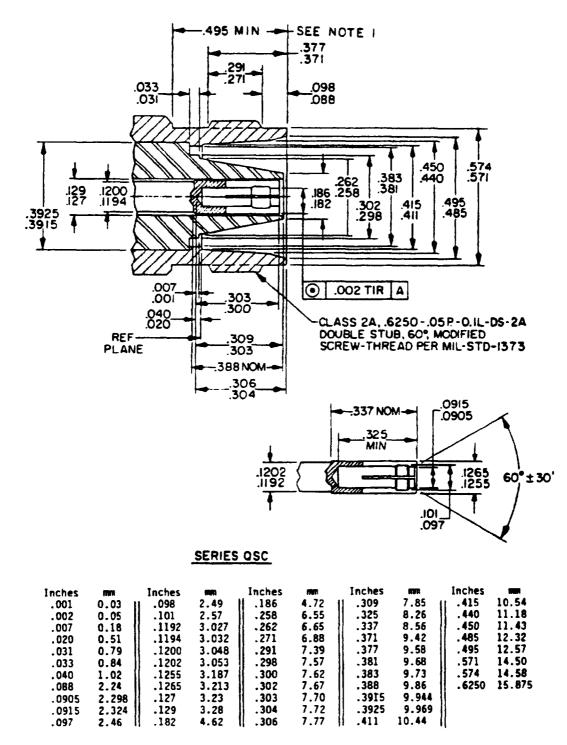


FIGURE 410-1. Interface test connector, series QSC, pin contact.

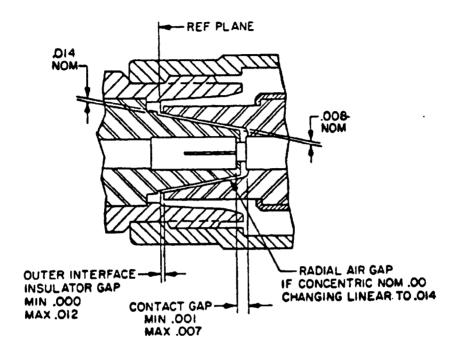
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NOTE: Clearance for mating connector coupling nut.

FIGURE 410-2. Interface test connector, series QSC, socket contact.

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# SERIES QSC

Inches	III P
.001	0.03
.007	0.18
.008	0.20
.012	0.30
. 014	0.36

FIGURE 410-3. Gap of mated standard test connector, series OSC.