

NOTICE OF
CHANGE

INCH-POUND

MIL-STD-348A
NOTICE 5
18 November 2002

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-PRF-39012, MIL-PRF-49142,
MIL-PRF-55339, MIL-C-83517

TO ALL HOLDERS OF MIL-STD-348A:

1. THE FOLLOWING PAGES OF MIL-STD-348A ARE NEW OR HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
iii	21 July 1992	iii	Reprinted without change
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326.3		326.3	16 July 1999
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327.1		New page	
327.2		New page	
328.1		New page	
328.2		New page	
328.3		New page	
329.1		New page	
329.2		New page	

2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.

3. Holders of MIL-STD-348A will verify that page changes and additions indicated above have been entered. This notice page will be retained as check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the standard is completely revised or canceled.

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-4323-000)

Review activities:

Army - AT, AV, MI
Navy - AS, CG, MC, SH
Air Force - 99

AMSC N/A

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FSC 5935

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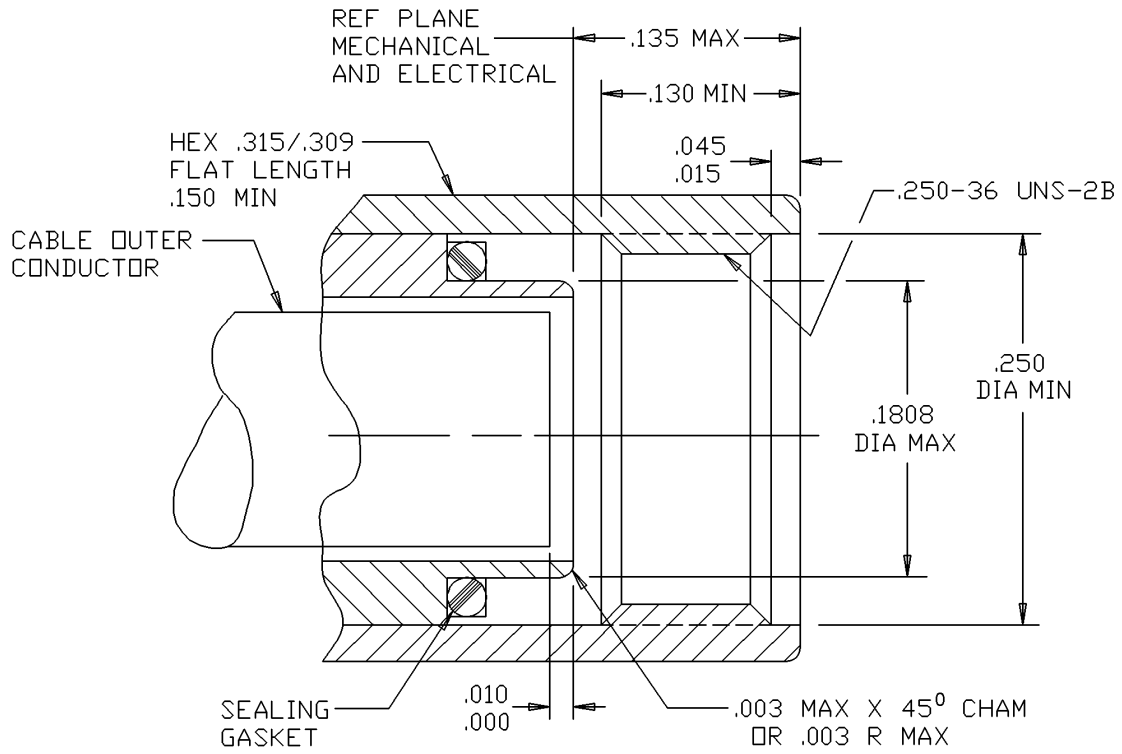
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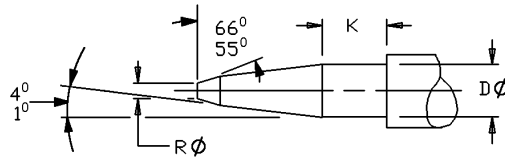
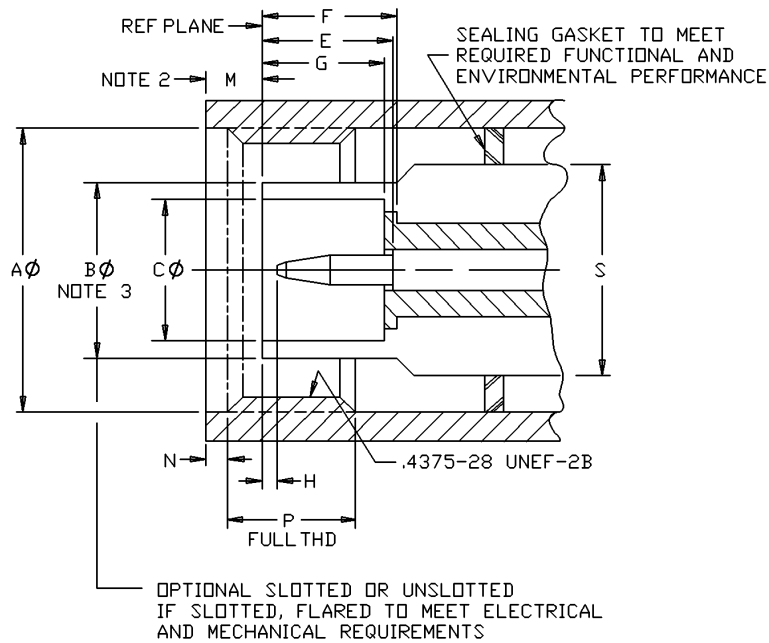
Inches	mm	Inches	mm
.000	0.00	.135	3.43
.003	0.08	.150	3.81
.015	0.38	.1808	4.59
.045	1.14	.250	6.35
.101	2.57	.309	7.85
.130	3.30	.315	8.00

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Reference MIL-PRF-39012/92 for cable stripping dimensions.

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

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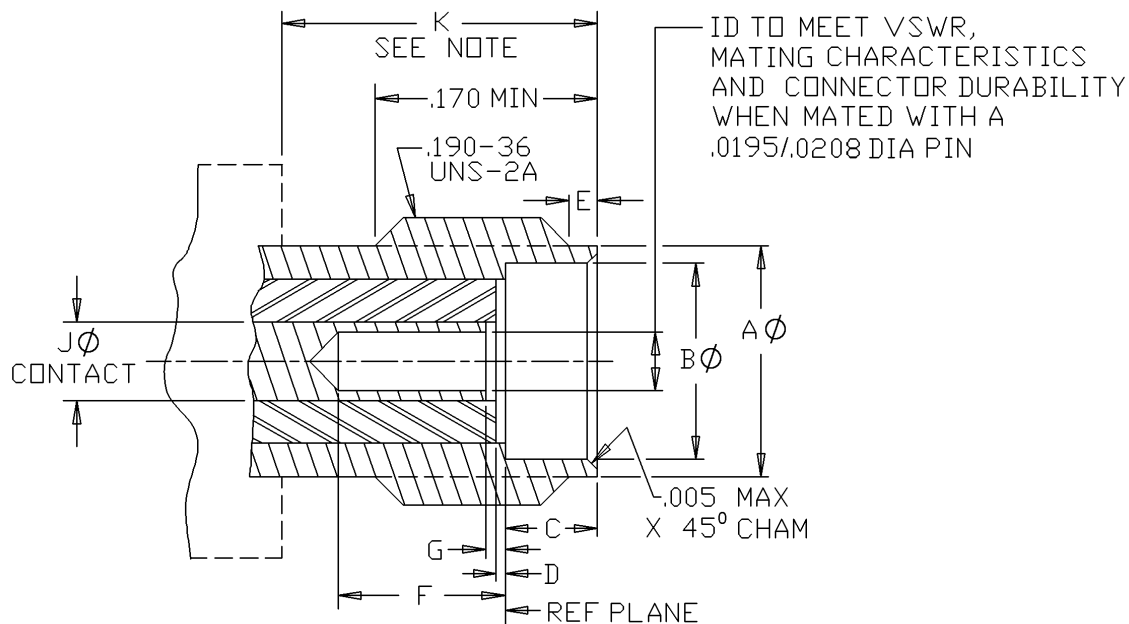
LTR	Inches		Millimeter	
	Min	Max	Min	Max
A	.440		11.18	---
B	.314	.318	7.98	8.08
C	.238	.242	6.05	6.15
D	.052	.054	1.32	1.37
E	.208	---	5.28	
F	.212	---	5.38	
G	.208	---	5.28	
H	.003	.040	0.08	1.02
K	.078	---	1.98	
M		.078		1.98
N	.063		1.60	
P	.156		3.96	
R		.025		0.64
S		.322		8.18

NOTES:

1. Three holes .027 inch minimum diameter equally spaced for safety wiring when required. Location on coupling nut is optional.
2. Dimension with nut bias fully forward.
3. For unslotted version. Slotted designs must meet gauge test, B dimension will not apply.

FIGURE 313-3. Interface, series TNCA, pin contact, air interface.

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Inches	mm
.005	0.13
.0195	0.50
.0210	0.533
.170	4.32
.190	4.83

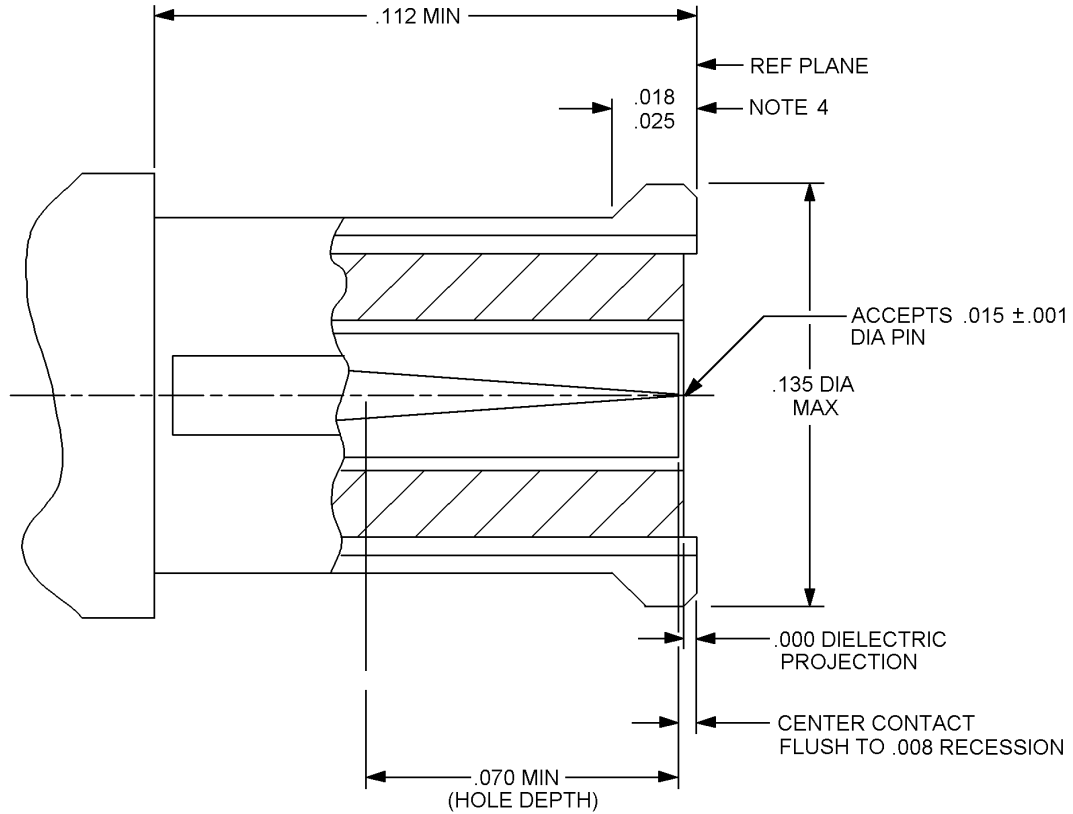
LTR	Inches		Millimeters	
	Min	Max	Min	Max
A Ø	.147	.160	3.89	4.06
B Ø	.127	.130	3.23	3.30
C	.075	.077	1.90	1.96
D	.000	.010	0.00	0.25
E	.020	.040	0.51	1.02
F	.075	---	1.90	---
G	.000	.010	0.00	0.25
J Ø	.0335	.0348	0.851	0.884
K	.230	---	5.84	---

NOTE: Clearance for coupling nut.

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

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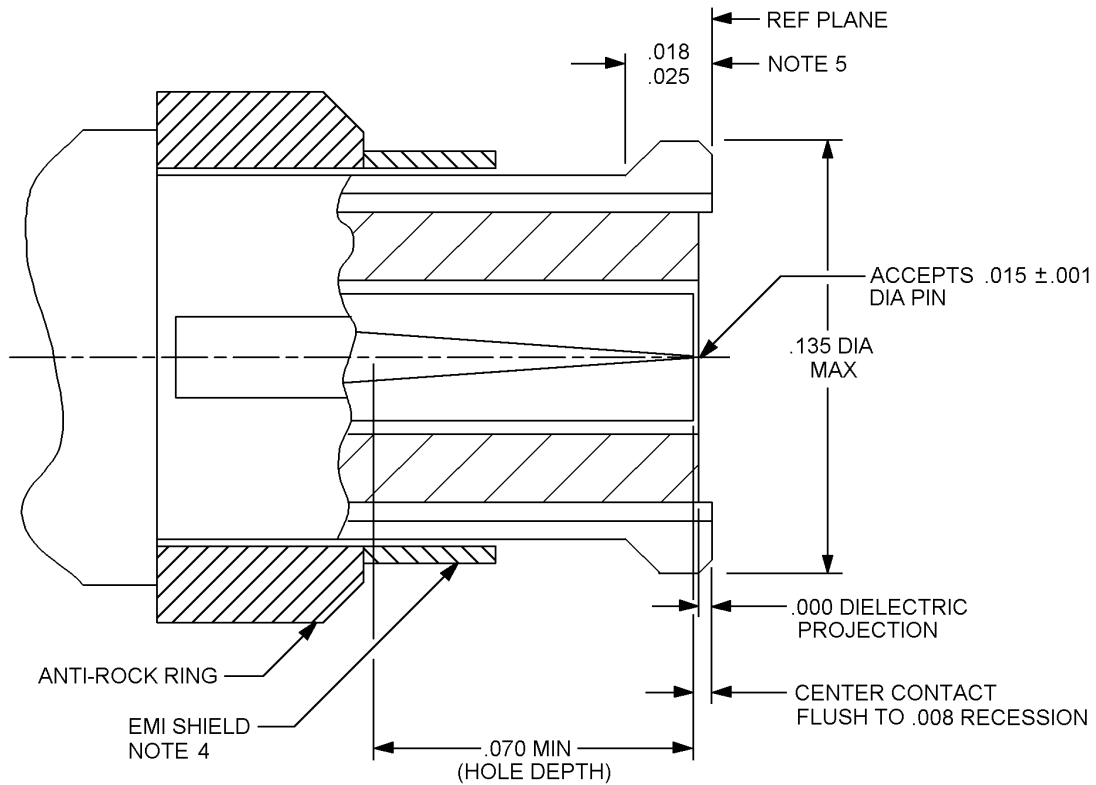
Inches	mm	Inches	mm
.001	0.03	.025	0.64
.008	0.20	.070	1.78
.015	0.38	.112	2.84
.018	0.46	.135	3.43

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Interface shall meet the force to engage and disengage requirements in accordance with DSCC drawing 94008.
4. Form and dimension of outer conductor to meet electrical and mechanical requirements.

FIGURE 326-1. Interface, series SMP, socket contact (uncabled connector).

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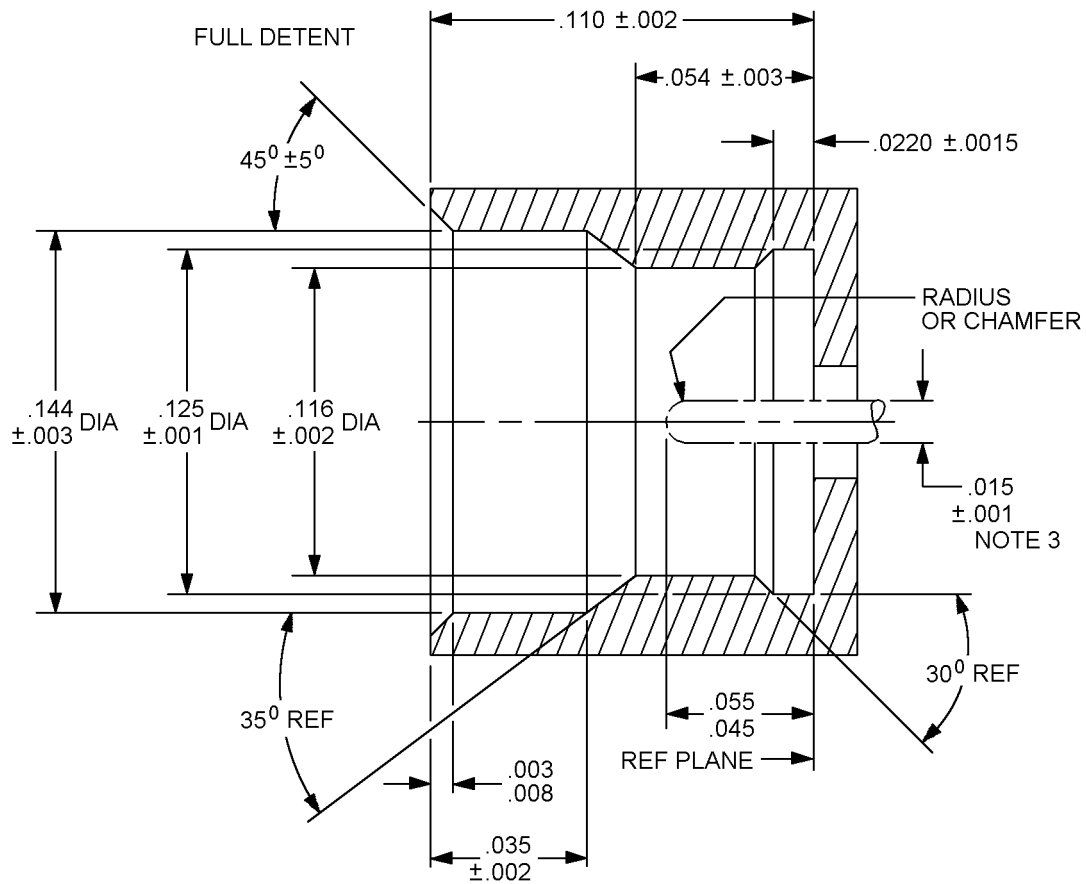
Inches	mm	Inches	mm
.001	0.03	.025	0.64
.008	0.20	.070	1.78
.015	0.38	.135	3.43
.018	0.46		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Interface shall meet the force to engage and disengage requirements in accordance with DSCC drawing 94008.
4. EMI shield configuration optional: Shall not prevent proper engagement of detent required. To meet mechanical and electrical requirements of DSCC drawing 94008.
5. Form and dimension of outer conductor to meet electrical and mechanical requirements.

FIGURE 326-1a. Interface, series SMP, socket contact (cabled connector).

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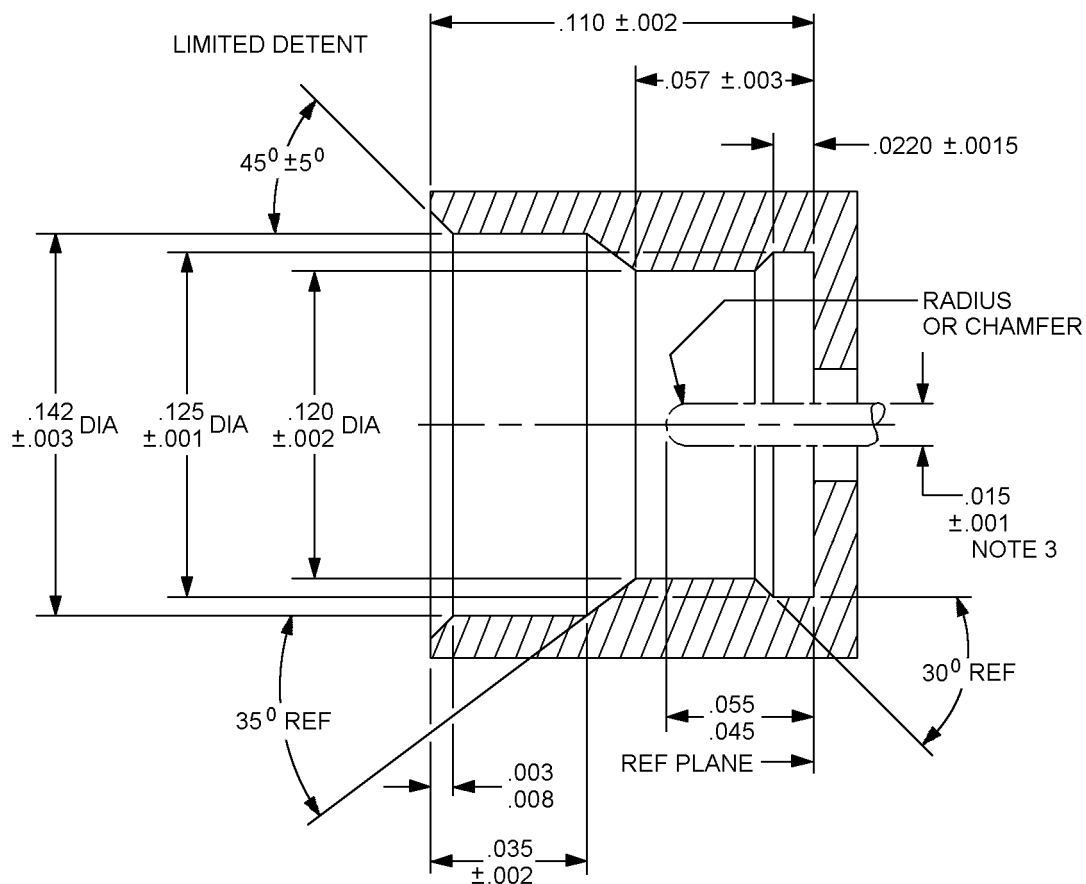
Inches	mm	Inches	mm
.001	0.03	.045	1.14
.0015	0.038	.054	1.37
.002	0.05	.055	1.40
.003	0.08	.110	2.79
.008	0.20	.116	2.95
.015	0.38	.125	3.18
.0220	0.056	.144	3.66
.035	0.89		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Pin may not be supplied with shroud, refer to the applicable specification.

FIGURE 326-2. Interface, series SMP, pin contact, full detent.

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Inches	mm	Inches	mm
.001	0.03	.055	1.40
.0015	0.038	.057	1.45
.002	0.05	.110	2.79
.003	0.08	.120	3.05
.008	0.20	.125	3.18
.015	0.38	.142	3.61
.0220	0.056		
.035	0.89		
.045	1.14		

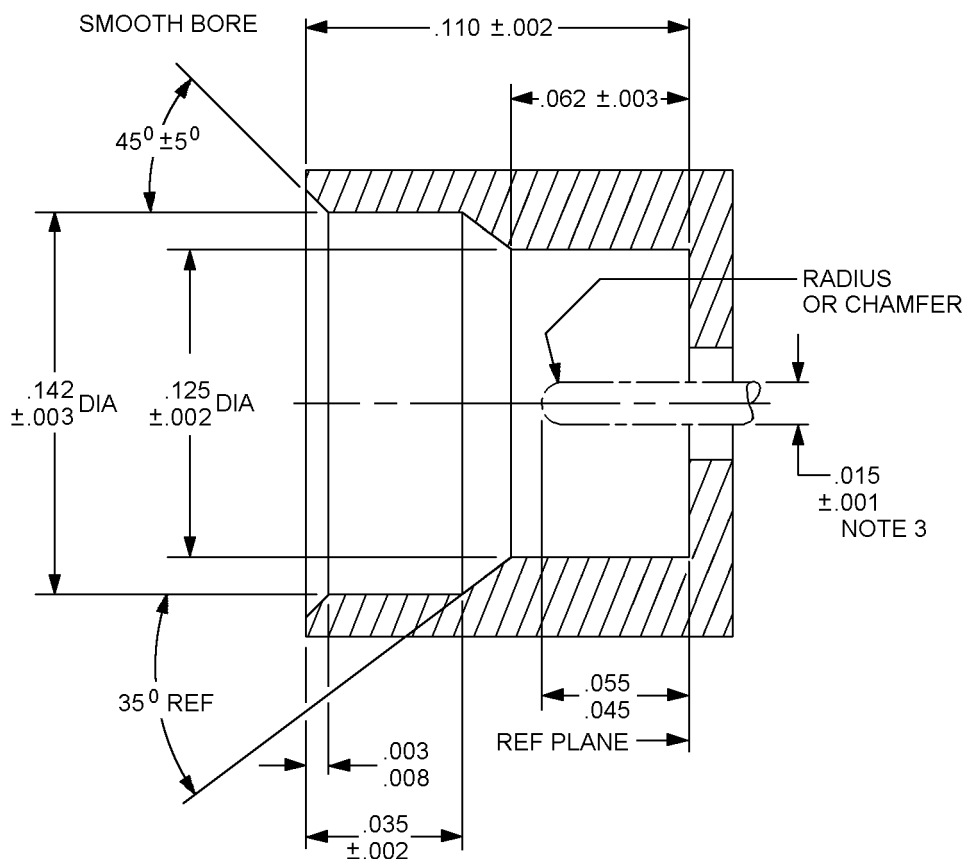
NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Pin may not be supplied with shroud, refer to applicable specification.

FIGURE 326-3. Interface, series SMP, pin contact, limited detent.

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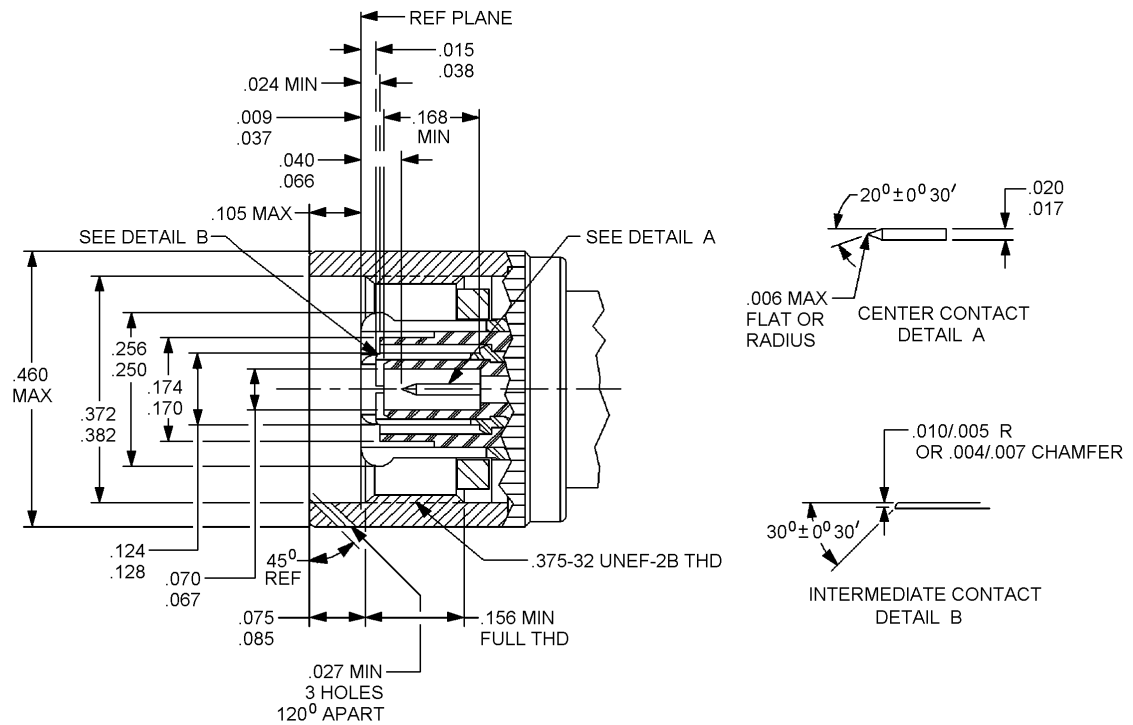
Inches	mm	Inches	mm
.001	0.03	.054	1.37
.002	0.05	.055	1.40
.003	0.08	.110	2.79
.008	0.20	.125	3.18
.015	0.38	.142	3.61
.035	0.89	.144	3.66
.045	1.14		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Pin may not be supplied with shroud, refer to applicable specification.

FIGURE 326-4. Interface, series SMP, pin contact, smooth bore.

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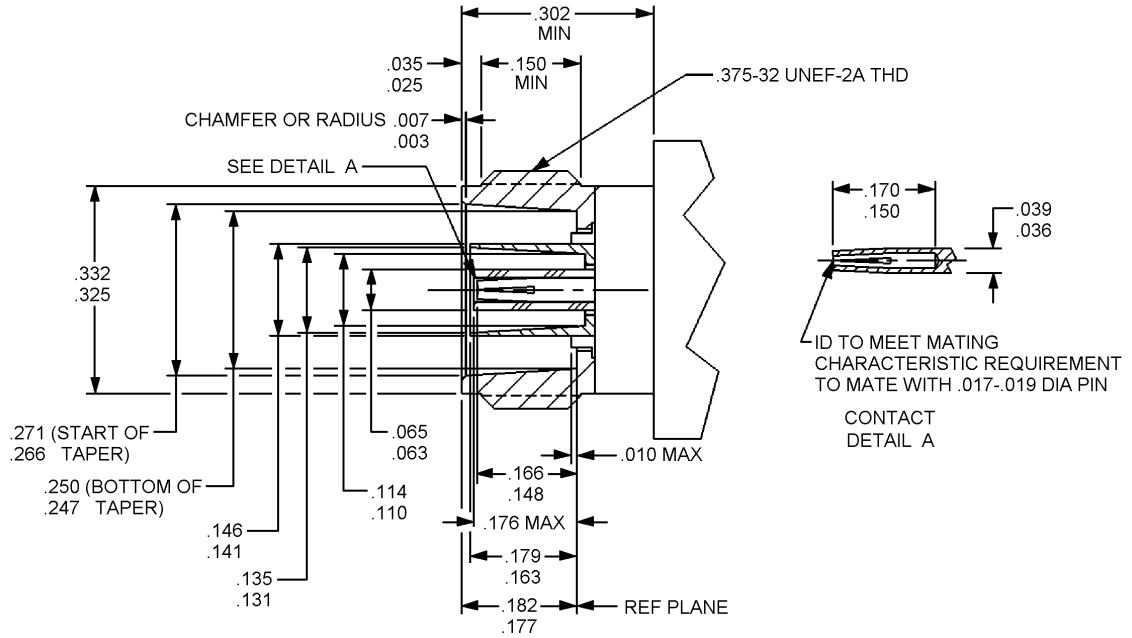
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Inches	mm	Inches	mm
.004	0.10	.070	1.78
.005	0.13	.075	1.91
.006	.015	.085	2.16
.007	0.18	.105	2.66
.009	0.23	.124	3.15
.010	0.25	.128	3.25
.015	0.38	.156	3.96
.017	0.43	.168	4.27
.020	0.51	.170	4.32
.024	0.61	.174	4.42
.037	0.94	.250	6.35
.038	0.97	.256	6.50
.040	1.02	.372	9.45
.066	1.68	.382	9.70
.067	1.70	.460	11.68

FIGURE 327-1. Threaded plug – pin center contact (DBA).

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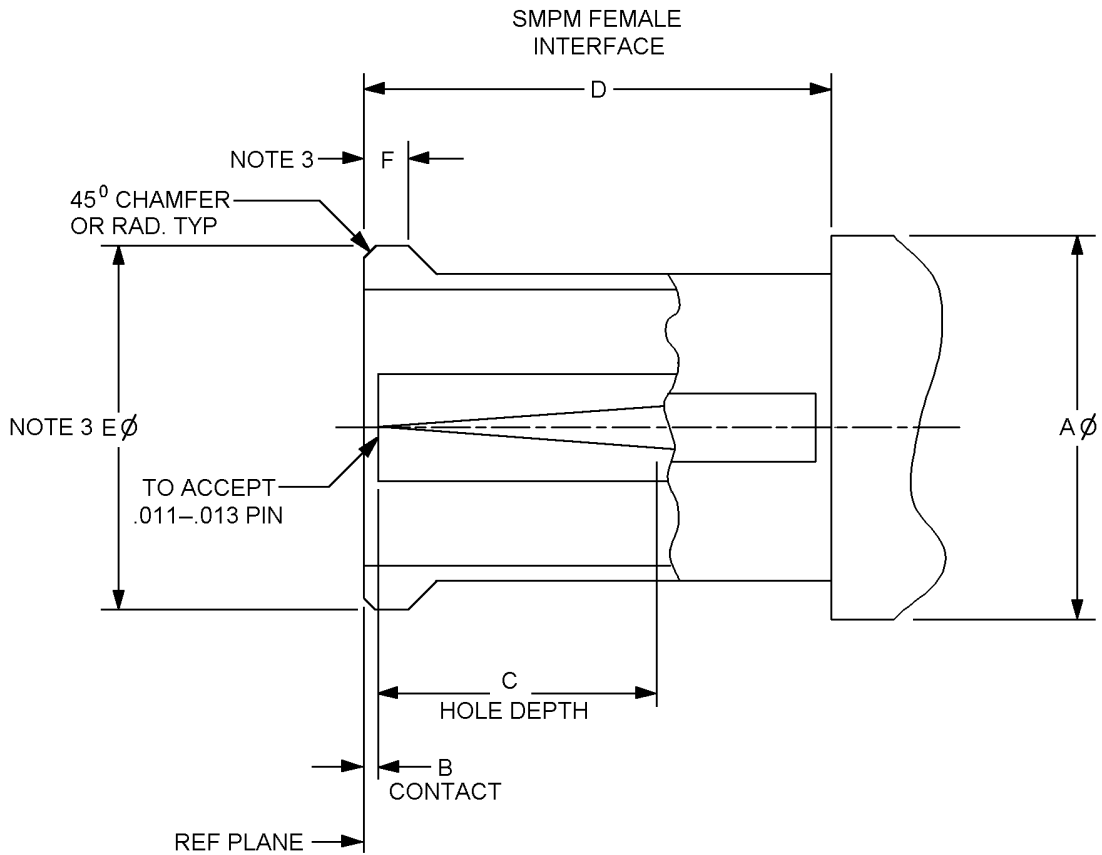
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Inches	mm	Inches	mm
.003	0.07	.148	3.76
.007	0.18	.150	3.81
.010	0.25	.163	4.14
.017	0.43	.166	4.22
.019	0.49	.170	4.32
.025	0.64	.176	4.47
.035	0.89	.177	4.50
.036	0.91	.179	4.55
.039	0.99	.182	4.62
.063	1.60	.247	6.27
.065	1.65	.250	6.35
.110	2.79	.266	6.76
.114	2.90	.271	6.88
.131	3.33	.302	7.67
.135	3.43	.325	8.26
.141	3.58	.332	8.43
.146	3.71		

FIGURE 327-2. Threaded plug – socket center contact (DBA).

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FEMALE

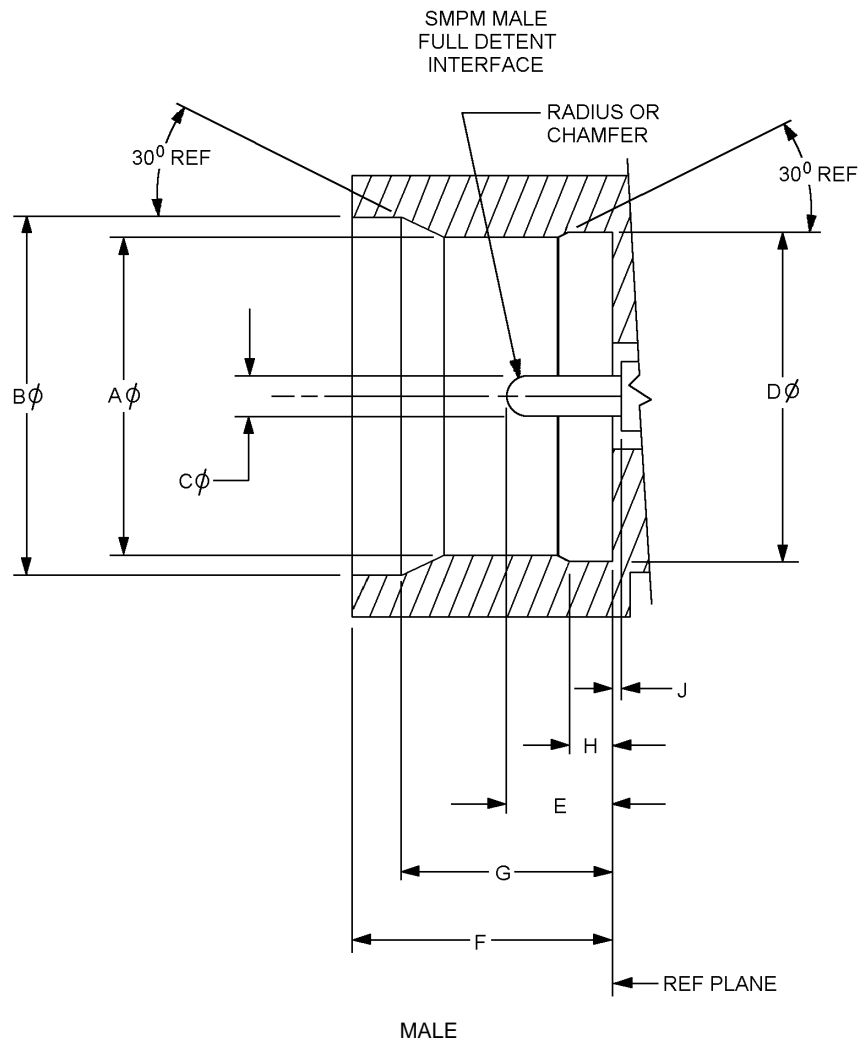
LTR	Minimum		Maximum	
	Inches	mm	Inches	mm
A∅	---	---	.110	2.79
B	.000	0.00	.008	0.20
C	.050	1.27	---	---
D	.068	1.73	---	---
E∅	---	---	.095	2.41
F	---	---	.023	0.58

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Features to meet mechanical/electrical requirements when mated with SMPM male interface.

FIGURE 328-1. SMPM female interface.

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LTR	Minimum		Maximum	
	Inches	mm	Inches	mm
A ϕ	.083	2.11	.085	2.16
B ϕ	.111	2.82	.115	2.92
C ϕ	.011	0.28	.013	0.33
D ϕ	.086	2.18	.088	2.24
E	.030	0.76	.045	1.14
F	.082	2.08	.084	2.13
G	.062	1.57	.072	1.83
H	.021	0.53	.023	0.58
J	.000	0.00	---	---

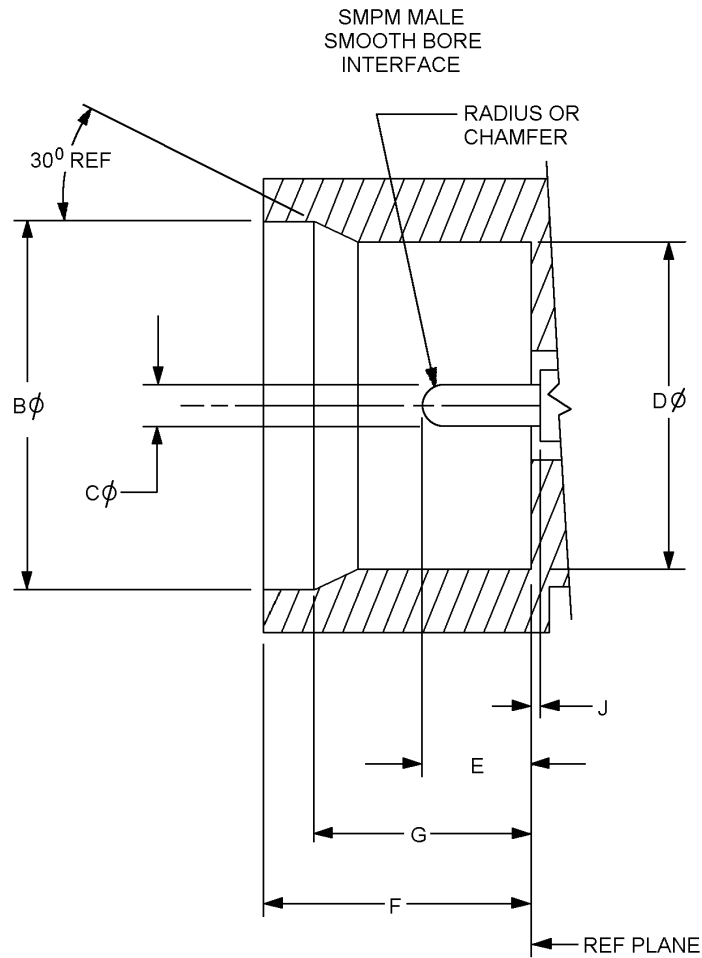
NOTES:

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

FIGURE 328.2. SMPM male full detent interface.

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MALE

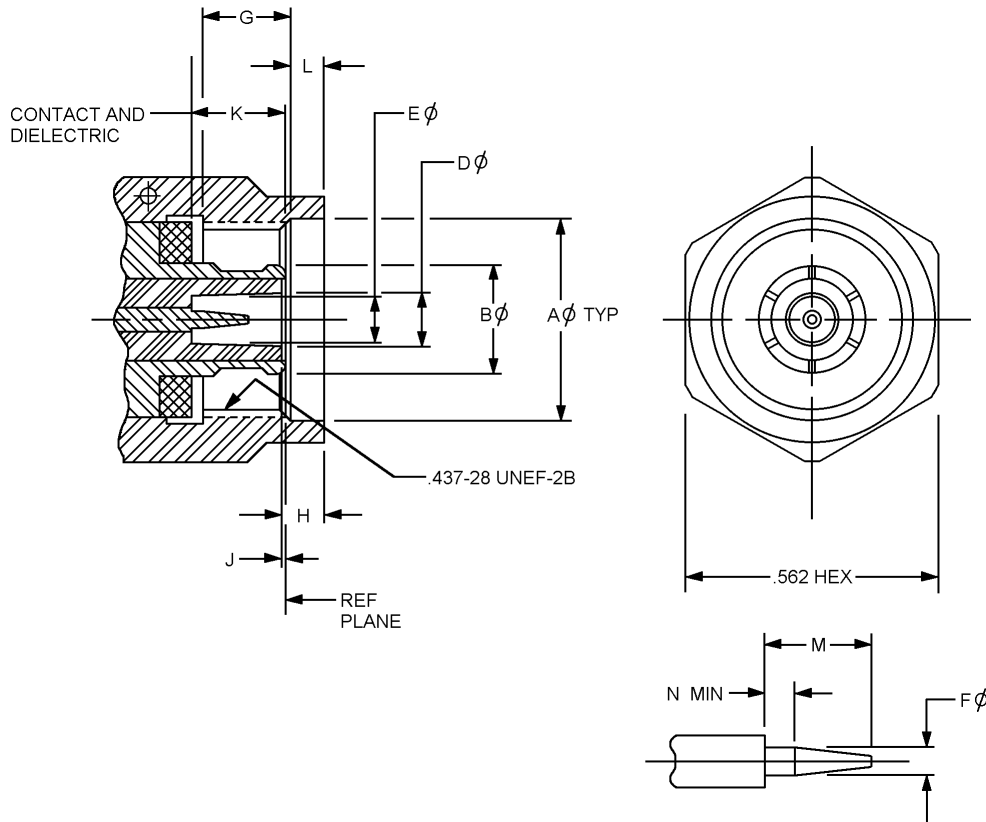
LTR	Minimum		Maximum	
	Inches	mm	Inches	mm
BØ	.111	2.82	.115	2.92
CØ	.011	0.28	.013	0.33
DØ	.086	2.18	.088	2.24
E	.030	0.76	.045	1.14
F	.082	2.08	.084	2.13
G	.062	1.57	.072	1.83
J	.000	0.00	----	---

NOTES:

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

FIGURE 328-3. SMPM male smooth bore interface.

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LTR	MALE	
	Minimum Inches (mm)	Maximum Inches (mm)
ϕA	.440 (11.18)	
ϕB	.242 (6.15)	.246 (6.25)
ϕD	.124 (3.15)	.126 (3.20)
ϕE	.114 (2.90)	.116 (2.95)
ϕF	.0335 (0.850)	.0345 (0.876)
G	.175 (4.45)	.215 (5.46)
H	.074 (1.88)	.096 (2.44)
J	.000	.004 (0.10)
K	.209 (5.31)	.212 (5.38)
L	.065 (1.65)	.085 (2.16)
M	.120 (3.05)	.130 (3.30)
N	.030 (0.76)	.040 (1.02)

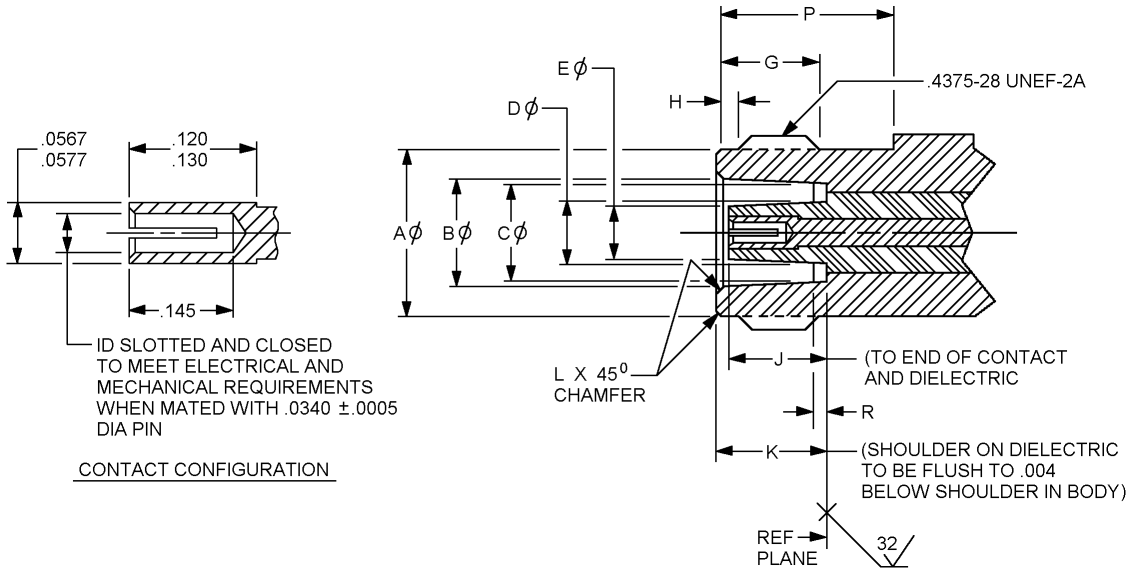
NOTES:

1. When fully engaged, the two reference planes must coincide with metals contacts.
2. Metric equivalents are given for general information only.

FIGURE 329-1. Interface series TK, pin contact.

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LTR	FEMALE	
	Minimum	Maximum
	Inches (mm)	Inches (mm)
∅A	.365 (9.27)	.375 (9.53)
∅B	.250 (6.35)	.255 (6.48)
∅C	.239 (6.07)	.241 (6.12)
∅D	.122 (3.10)	.124 (3.15)
∅E	.122 (2.84)	.114 (2.90)
G	.235 (5.97)	.245 (6.22)
H	.055 (1.40)	.065 (1.65)
J	.205 (5.21)	.208 (5.28)
K	.227 (5.77)	.233 (5.92)
L	.010 (0.25)	.020 (0.51)
P	.340 (8.64)	-----
R	.025 (0.64)	.035 (0.89)

NOTES:

1. When fully engaged, the two reference planes must coincide with metals contacts.
2. Metric equivalents are given for general information only.

FIGURE 329-2. Interface series TK, socket contact.

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