

# CONTROL DRAWING

29976H1-X-NNNX

E

**NOTES:**

- DESCRIPTION**  
HERMETIC CONNECTOR, SOLDER TYPE, H+S Astrolab SMPM-T MALE, THREADED, TO BE USED WITH H+S Astrolab SMPM-T UNITS. (FEMALE-THREAD, H+S Astrolab 29971TCR SERIES, FIG 3). SEE CHART FOR DETENT AND PIN OPTIONS.
- MATERIALS AND FINISHES**  
BODY AND CENTER CONDUCTOR,  
IRON NICKEL ALLOY (KOVAR) IAW ASTM F-15 AND F-1466 (MIL-I-23011 CLASS1) UNS K94610  
GOLD PLATED .000050 IN MIN. THK. (1.27 MICRO METERS) PER ASTM B-488, CODE A, TYPE III, OVER NICKEL PLATE, .000050 IN MIN. THK. PER SAE-AMS-QQ-N-290, OR ASTM B-689 TYPE 1.  
DIELECTRIC  
CORNING No. 7070 GLASS  
OUTGASSING,  
ASSEMBLY MEETS OR EXCEEDS NASA LOW OUTGASSING REQUIREMENTS.
- ELECTRICAL CHARACTERISTICS:**  
IMPEDANCE  
50.0 Ohms NOMINAL.  
FREQUENCY  
40.0 GHz MAX.  
VSWR  
1.25 : 1 MAX. AT 26.5 GHz MAX.  
1.35 : 1 MAX. AT 40.0 GHz MAX.
- SMPM-T INTERFACE MEETS MIL-STD-348.
- OPERATING TEMPERATURE RANGE**  
-55° C TO +125° C.
- HERMETIC SEAL:**  
100% OF CONNECTORS ARE TESTED AND QUALIFIED FOR LEAKAGE RATES LESS THAN 1 X 10<sup>-8</sup> CCM/SEC OF HELIUM UNDER PRESSURE DIFFERENTIAL OF 15.00 PSIG, IAW ASTM E-498 AND MIL-STD-202.

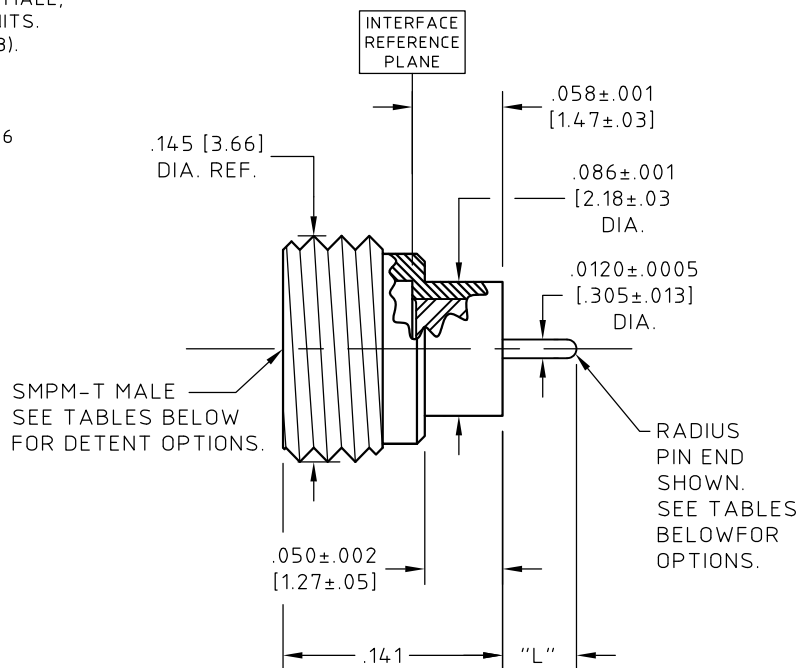


FIGURE 1, OUTLINE 29976H1-X-NNNX

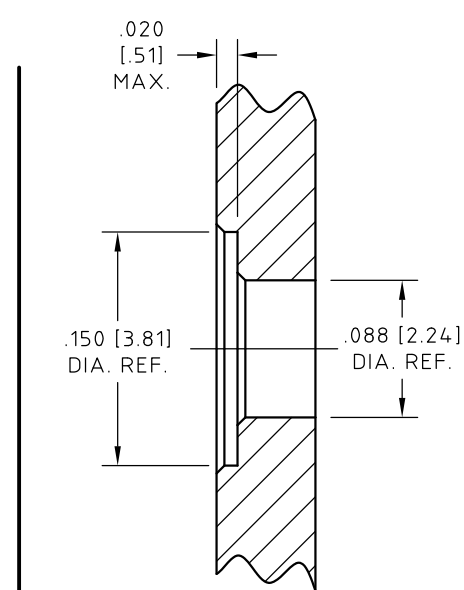


FIGURE 2, REFERENCE ONLY, TYPICAL SOLDER CUT OUT.

DETAIL OF CUT OUT IS DEFINED BY APPLICATION REQUIREMENTS.

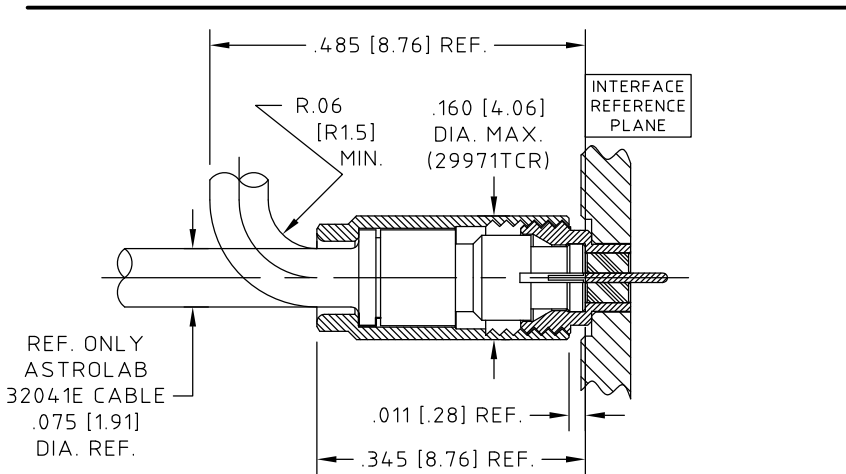


FIGURE 3 SCALE 4 : 1 SHOWN ABOVE IS TYPICAL APPLICATION UTILIZING AN H+S Astrolab SMPM-T FEMALE CONNECTOR (29971TCR SERIES) MATED AND LOCKED.

			SQUARE PIN END		
PART NUMBER	DETENT	" L "	PART NUMBER	DETENT	" L "
29976H1-2-030R	FULL	.030	29976H1-2-030S	FULL	.030
29976H1-2-050R	FULL	.050	29976H1-2-050S	FULL	.050
29976H1-2-060R	FULL	.060	29976H1-2-060S	FULL	.060
29976H1-2-070R	FULL	.070	29976H1-2-070S	FULL	.070
29976H1-2-090R	FULL	.090	29976H1-2-090S	FULL	.090
29976H1-4-030R	S.B.	.030	29976H1-4-030S	S.B.	.030
29976H1-4-050R	S.B.	.050	29976H1-4-050S	S.B.	.050
29976H1-4-060R	S.B.	.060	29976H1-4-060S	S.B.	.060
29976H1-4-070R	S.B.	.070	29976H1-4-070S	S.B.	.070
29976H1-4-090R	S.B.	.090	29976H1-4-090S	S.B.	.090

UNLESS OTHERWISE SPECIFIED CONCENTRICITY .004 T.I.R. CORNERS AND FILLETS .005 MAX. RADIUS OR CHAMFER. SURFACE FINISH 63 RMS MICROINCHES OR BETTER.

FRACTIONS	± 1/16
X	± .030
XX	± .015
XXX	± .005
ANGLES	± 1°
DO NOT SCALE DRAWING	

NAME	DATE
PREP. GSG	03/03/08
ELEC.	
MECH. AW	03/05/08
Q.C.	

THIS DRAWING CONTAINS PATENTABLE AND PROPRIETARY INFORMATION. THE DESIGN CANNOT BE USED WITHOUT WRITTEN PERMISSION OF HUBER + SUHNER ASTROLAB.

TITLE <b>CONNECTOR, HERMETIC, SMPM-T MALE (SHROUD)</b>					
THDS. TO BE IN ACCORD WITH U.S. DEPT. OF COMM. SCREW THD. STDS. FOR FEDERAL SERVICES 1950 SUPL. TO HANDBOOK H 28.	SCALE 8:1	CODE IDENT. 16301	DWG NO. 29976H1-X-NNNX	REV E	

E	COMPANY LOGO UPDATED	03/05/13	EF	
REV.	DESCRIPTION	DATE	BY	APPROVED