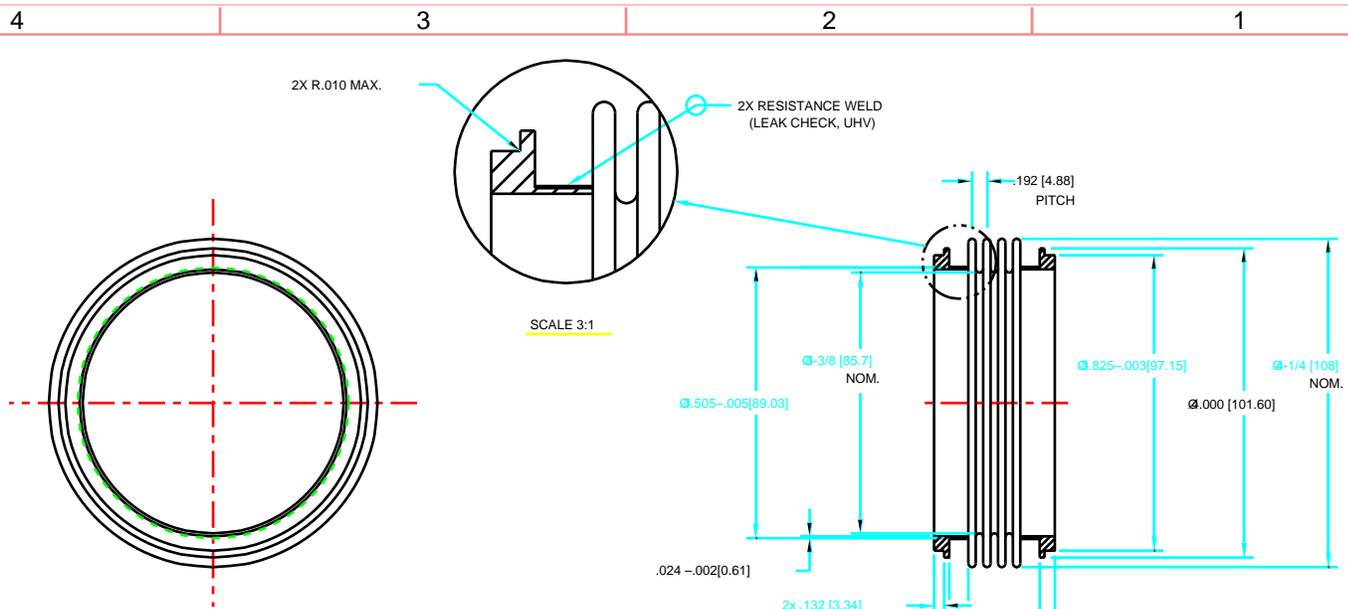


(C)	PLOT SCALE: 1=1	DWG. SCALE: 1	A11616
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- NOTES:
- WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
 - CIMCOOL 5 STAR 49
 - TRIM SOL
 - THIS IS A UHV PART. ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING, THE PART NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN.

FINAL TEST WILL CONSIST OF SURROUNDING THE ASSEMBLY (BAGGING) WITH HELIUM. THE ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.

- KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
- DIMENSIONS IN [] ARE MILLIMETERS

REFERENCE SOURCE:
 FLEXONICS, INC.
 300 EAST DEVON AVENUE
 BARTLETT, IL. 60103
 TEL.: 708-837-1811

3. WELDMENT ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2X 10⁻¹⁰ STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS:

- ALCATEL ASM-110TCL
- VARIAN NCR 925 OR 936
- VEECO MS-9, MS-90 OR MS-18
- Du PONT CEC 24-120B

CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
REVISIONS				

2	4" FLANGE FITTING	304 SST	2	
1	J324 MECHANICALLY FORMED BELLOWS	316 SST	1	
ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES				
TOLERANCES:				
DECIMALS		ANGULAR		
.X - .03 [.7620]	= .25			
.XX - .01 [0.25]				
.XXX - .005 [0.127]				
SURFACE ROUGHNESS		125 /		
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.				
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1				
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5				
DO NOT SCALE DRAWING				
LOG NUMBER A11616		THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY		
DRAWN BY MUSCIA	DATE 6/9/93	CHIEF DESIGN ENGINEER D.SHU	DATE 8/31/93	TITLE ADVANCED PHOTON SOURCE
CHECKED BY J.CHANG	DATE 8/31/93	GP LEADER T.M.KUZAY	DATE 8/31/93	V3 APS I.D. FRONT END
DESIGNER MUSCIA	DATE 8/31/93	PROJECT MGR.		SLOW VALVE & FAST VALVE
RESPONSIBLE ENGINEER J.CHANG	DATE 8/31/93	APPROVED/RELEASED		VACUUM CHAMBER
MATERIAL SEE PARTS LIST		SCALE 1:1		
		SHEET 1 of 1		DRAWING NUMBER P4105090703-830001-00