



- NOTES:
1. THIS IS A UHV ASSEMBLY. KEEP THE UHV PARTS CLEAN DURING ASSEMBLY AND WRAP UP FOR PACKING WITH ALUMINUM FOIL.
 2. DEVICE SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2 x 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
DuPONT CEC 24-120B
CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.
FINAL TEST WILL CONSIST OF SURROUNDING THE CHAMBER (BAGGING) WITH HELIUM. THE CHAMBER WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.
 3. BEFORE ASSEMBLY OF SWAGELOK MALE CONNECTORS, USE SILVER COOP THREAD LUBRICANT (FROM SWAGELOK CO.) TO ALLOW CONNECTION TO BE DISASSEMBLED WITHOUT SPECIAL TOOLS.
 4. ALL DIMENSIONS WITH [] ARE MILLIMETERS.
 5. WATER PRESSURE TEST AT 500 PSI AFTER ASSEMBLING.

- INSTRUCTIONS FOR INSTALLATION OF TUBING
1. INSTALL THE TUBE INTO THE FITTING UNTIL IT IS BOTTOM AGAINST THE SHOULDER OF THE BODY.
 2. TIGHTEN NUT TO APPR. 1/8 TURN PAST FINGER TIGHT
 3. SCRIBE A LINE ON NUT AT 6 O'CLOCK
 4. HOLDING THE FITTING WITH A WRENCH, TIGHTEN NUT PAST ONE COMPLETE TURN AND STOP TURNING WHEN SCRIBE MARK IS AT 9 O'CLOCK. (1-1/4 TURN)
 5. SUFFICIENT PULL-UP IS REACHED WHEN SWAGELOK GAP INSPECTION GAGE (MS-IG-468) DOES NOT FIT INTO GAP BETWEEN NUT AND BODY

SOURCE

(SWAGELOK)
DEARBORN VALVE & FITTING CO.
1540 N. OLD RAND ROAD
P.O. BOX 847
WAUCONDA, IL. 60084-0847
708-526-6900
FAX: 708-526-1221

3	SS-600-1-4	CONNECTOR MALE TUBE FITTING	SST	4
2	P4102010109-940100	W1-94 BERYLLIUM WINDOW WELDMENT ASSEMBLY		1
1	P4102020109-200001	4" I.D. BE WINDOW TUBING	SST	1

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
3	SS-600-1-4	CONNECTOR MALE TUBE FITTING	SST	4
2	P4102010109-940100	W1-94 BERYLLIUM WINDOW WELDMENT ASSEMBLY		1
1	P4102020109-200001	4" I.D. BE WINDOW TUBING	SST	1

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		LOG NUMBER	THIS DRAWING IS THE PROPERTY OF	
DECIMALS	FRACTIONS	A2058200	ARGONNE NATIONAL LABORATORY	
1/16	1/32	DRAWN BY	DATE	CHIEF DESIGN ENGINEER
1/32	1/64	MUSCIA	9/13/94	T. M. KUZAY
3/32	1/16	DRAWN BY	DATE	SP. LEADER
		D. SHU	10/12/94	
		DESIGNER	DATE	PROJECT MGR.
		MUSCIA	10/12/94	
		RESPONSIBLE ENGINEER	DATE	APPROVED/RELEASED
		D. SHU	10/12/94	
		MATERIAL	DATE	SCALE
		SEE PARTS LIST		1:1
				SHEET 1 of 1

REV	CHANGE DESCRIPTION	BY	CHKD	DATE

ADVANCED PHOTON SOURCE
W1-94 I.D. FRONT END
COMMISSIONING BERYLLIUM
WINDOW ASSEMBLY