

- NOTES:
- THIS IS A UHV ASSEMBLY, KEEP THE UHV PARTS CLEAN DURING ASSEMBLY AND WRAP UP FOR UHV PACKING WITH ALUMINUM FOL.
 - DEVICE 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-16
 - DU PONT 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.

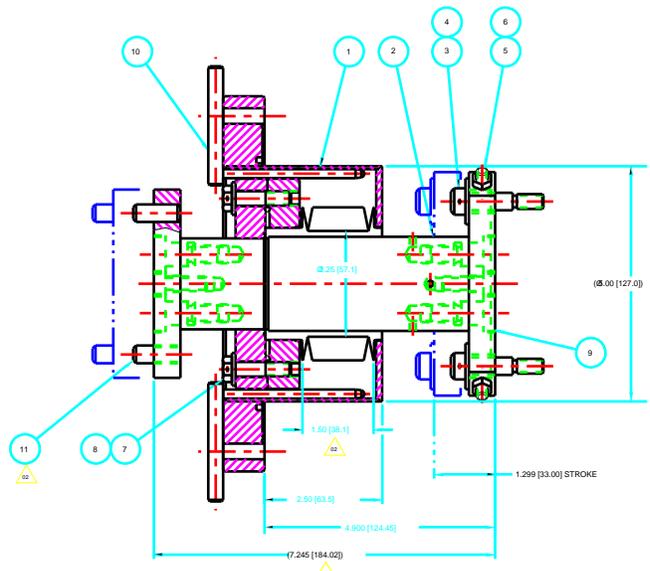
3. THE OPERATING STROKE IS 1.299 IN. (33mm)

4. USE L-PINS TO LOCATE $\varnothing 1/2"$ FLANGE IN THE CENTER OF $\varnothing 8"$ FLANGE WHEN INSTALLING ITEM 2 AND WHENEVER HANDLING THE ABOVE ASSEMBLY TO PREVENT AXIAL MOVEMENT.

5. FLANGE HOLE HAS TO LINE UP WITH SHOULDER SCREW HOLES UPON ASSEMBLY WITH ITEM 2.

6. ALL DIMENSIONS WITH \varnothing ARE MILLIMETERS

7. ITEM 10, "L" PIN, IS FOR HANDLING & INSTALLATION MUST BE REMOVED AT ASSEMBLY AFTER ALIGNMENT - SEE INSTALLATION PROCEDURE - P410509104-810200-02, STEP 5

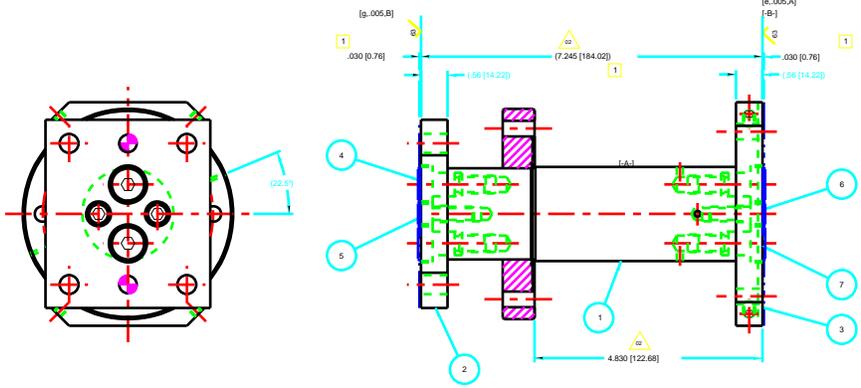


SOURCE
 U.C.COMPOONENTS, INC.
 2330 OLD MIDDLEFIELD WAY
 SUITE 18
 MOUNTAIN VIEW, CA 94043-2408
 PHONE: (415) 964-3827

ITEM	QUANTITY	DESCRIPTION	MATERIAL / SPEC.	QTY
11	2	$\varnothing 8"$ x 1" LG. DOWEL PIN	SST	2
10	4	$\varnothing 1/16"$ L-PIN AMERICA DRILL BUSHING CO. OR EQUIV.	HT-STEEL	4
9	4	VENTED SOCKET SET SCREW #10-32 UNF-3A x 3/16 LG.	SST-SILVER PLATED	4
8	4	5/16-18 UNC-2B SOC HD SCR x 7/8 LG.	SS	4
7	8	$\varnothing 1/2$ x 1/2 LG. SHOULDER SCREW	SST-SILVER PLATED	8
6	4	5/16-18 UNC-2B SOC HD SCR x 7/8 LG.	SS	4
5	4	PIN T-1010-A $\varnothing 1/2$ x 1/2 LG. SHOULDER SCREW	SST-SILVER PLATED	4
4	4	$\varnothing 8"$ PLAIN WASHER	SS	4
3	4	P410509104-810200-01 A4 MODIFIED SHOULDER SCREW	SST-SILVER PLATED	4
2	1	P410509104-810200-02 SEE SHEET 2 OF 2		1
1	1	P410509104-810204-01 A4 BELLOWS WELDMENT		1

DATE	BY	CHKD	DATE	BY	CHKD
02	DM	4.830	WAS	6.420	BK
02	DM	7.245	WAS	6.420	BK
01	ADD	NOTE 6		J.G.	J.C.
01	SHEET	2	WAS	SHEET	1
01	REV			CHG	DATE

PLOT SCALE: 1=1



- NOTES:
- ASSEMBLE PARTS AS SHOWN. MACHINING ENTIRE SURFACE (INCLUDING HEAD OF BOLTS) TO DIMENSION SHOWN.
 - THE PARTS NEED TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOWDOWN. THEN TO BE ELECTROPOLISHED BEFORE ASSEMBLY WITH BELLOWS & FLANGE ASSEMBLY DWG#P410509104-810200
 - THIS IS A UHV SUB-ASSEMBLY. KEEP THE UHV PARTS CLEAN DURING ASSEMBLY, AND WRAP FOR UHV PACKING WITH ALUMINUM FOL.
 - WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
 - A) CIMCOOL-5 STAR 49
 - B) TRIM SOL.
 - ALL DIMENSIONS WITH \varnothing ARE MILLIMETERS

ITEM	QUANTITY	DESCRIPTION	MATERIAL / SPEC.	QTY
7	2	$\varnothing 1/2$ x 1/2 LG. SHOULDER SCREW	SST (SILVER PLATED)	2
6	2	5/16-18 UNC-2B SOC HD SCR x 7/8 LG.	SST (SILVER PLATED)	2
5	2	$\varnothing 1/2$ x 1/2 LG. SHOULDER SCREW	SST	2
4	2	5/16-18 UNC-2B SOC HD SCR x 7/8 LG.	SST	2
3	1	P410509104-810203-02 A4 LOWER MTS. PLATE	SST 304	1
2	1	P410509104-810202-02 A4 UPPER MTS. PLATE	SST 304	1
1	1	P410509104-810201-02 A4 ROD WELDMENT		1

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02	DM	7.245	WAS	6.420	BK
01	ADD	NOTE 6		J.G.	J.C.
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