

NOTES: UNLESS OTHERWISE SPECIFIED

1. INTERPRET DRAWING IAW THE GLOBAL PROFESSIONAL PUBLICATIONS "DRAWING REQUIREMENTS MANUAL", EIGHTH EDITION.

2. INTERPRET DIMENSIONS AND TOLERANCES IAW ANSI Y14.5M - 1982.

3. BREAK SHARP EDGES .002-015.

4. INTERPRET ABBREVIATIONS IAW MIL-STD-12.

5. LENGTH OF POWER CENTER CONDUCTOR CABLE ASSY (PART OF ITEM 7) IS FOR A STANDARD 1 1/2" BASEPLATE/CHAMBER WALL CONFIGURATION. PLEASE SPECIFY CHAMBER WALL THICKNESS WHEN ORDERING TO ENSURE PROPER CABLE LENGTH AT TIME OF ASSY.

6. GAS FITTING (INCLUDED), SWAGELOK (ITEM 6) IS AVAILABLE FROM: HTTP://WWW.SWAGELOK.COM

7. MINIMUM 60" LONG POLYETHYLENE LINES REQUIRED FOR SAFE OPERATION. USER MUST SUPPLY ADDITIONAL 42" LONG POLYETHYLENE WATER LINES TO MEET THIS REQUIREMENT. DO NOT SUBSTITUTE METAL WATER FITTINGS FOR ITEM 8.

8. WATER LINE CONNECTORS (INCLUDED, ITEM 8) ARE AVAILABLE FROM: HTTP://WWW.JOHNQUEST.COM

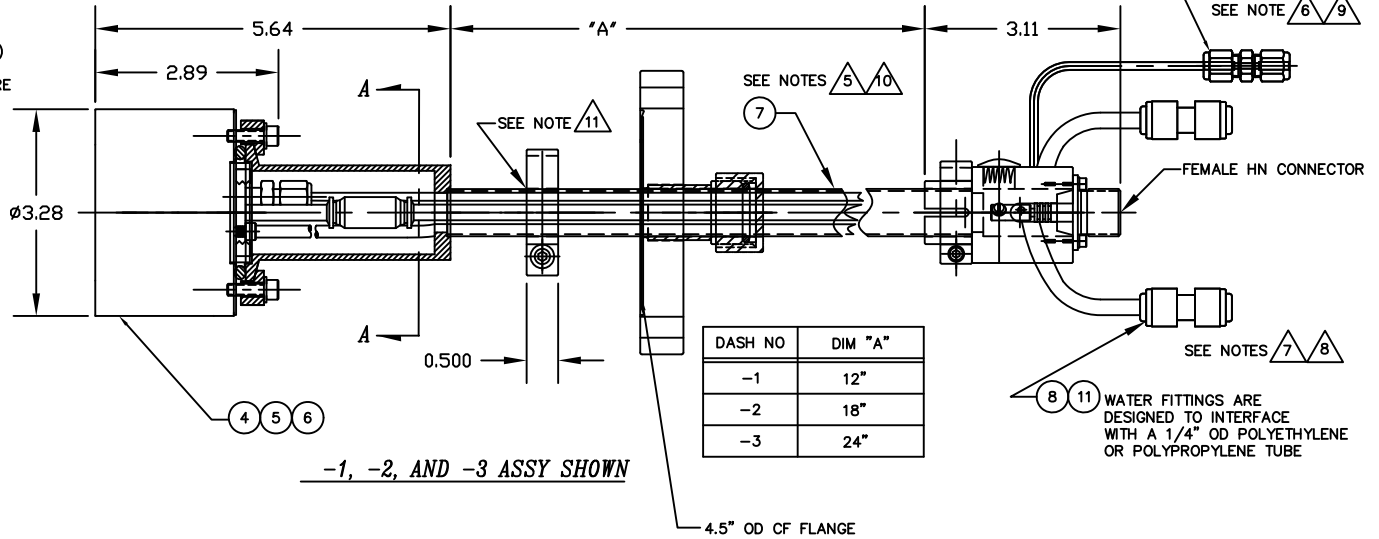
9. MINIMUM 36" LONG TEFLON PFA LINE REQUIRED (36" INCLUDED WITH SOURCE) FOR SAFE OPERATION. DO NOT USE METAL GAS LINES TO MEET THIS REQUIREMENT - ELECTRICAL ISOLATION IS NECESSARY.

10. INTERNAL POWER CONDUCTOR LENGTH FOR P/N 00000009 (PART OF ITEM 7 ASSEMBLY) = 3.740 INCHES LONG PLUS "A" DIMENSION OF ITEM 11.

11. WRAP TUBE WHERE CLAMP WILL BE LOCATED WITH TEFLON TAPE PRIOR TO TIGHTENING COMPRESSION CLAMP. TAKE CARE NOT TO DING, SCRATCH OR GOUGE POLISHED SURFACE.

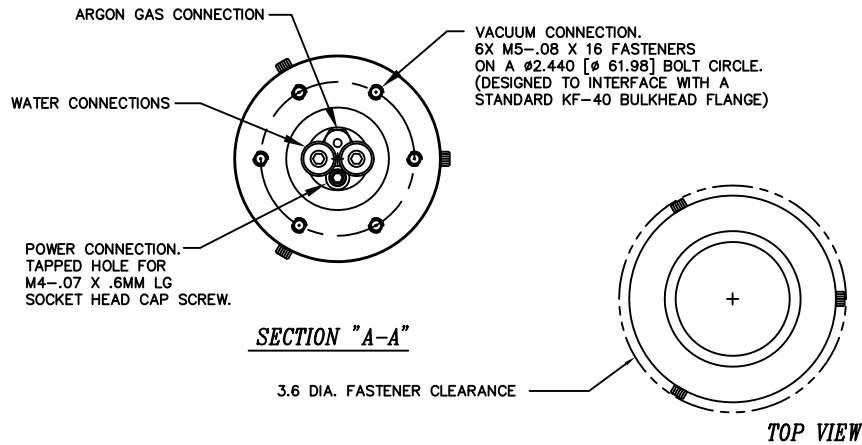
12. SEE MATERIALS SCIENCE, INC. DOCUMENT NO. 251011 FOR PROPER INSTALLATION, OPERATION AND USE OF POLARIS SPUTTERING SOURCES.
13. MASS OF SPUTTERING SOURCE FULLY ASSEMBLED IS 7 LBS.[3.18 KG], DRY.

ZONE	REV	DESCRIPTION	REVISION	DATE	APPROVED
		INITIAL RELEASE		160809	



DASH NO	DIM "A"
-1	12"
-2	18"
-3	24"

-1, -2, AND -3 ASSY SHOWN



QTY	UNIT	ASSEMBLY	ITEM NO	DASH NO	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ZONE	ITEM NO
1	1	1	7	00000074-1	TUBING, 1/4" OD X .170" ID X 18"	POLYETHYLENE			11
1	1	1	9	00000038-1	TUBING, 1/8" OD X 1/16" ID X 36" MINIMUM	TEFLON PFA			10
1	1	1	6	000000316	FITTING, SWAGELOK, SS-200-6	316 CRES			9
2	2	2		00000281-1	1/4 INCH OD COUPLING, QUICK CONNECT	P/N C10408W			8
1	1	1	5	00002515	3/4 INCH TUBE FEEDTHROUGH ASSEMBLY	304 CRES			7
1				00000778-3	2 INCH INTERNAL CATHODE (CLAMPED TARGET)				6
	1			00000778-2	2 INCH INT CATHODE (DIRECT WATER COOLED TGT)				5
		1		00000778-1	2 INCH INTERNAL CATHODE (BONDED TARGET)				4
				00002919-3	2" POLARIS SOURCE, 3/4" OD TUBE FEEDTHRU ASSY				3
				00002919-2	2" POLARIS SOURCE, 3/4" OD TUBE FEEDTHRU ASSY				2
				00002919-1	2" POLARIS SOURCE, 3/4" OD TUBE FEEDTHRU ASSY				1

QUANTITY PER ASSEMBLY	CAGE CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ZONE	ITEM NO

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:	DRAWN J. MILLER 16/08/09	MATERIALS SCIENCE, INC. Vacuum and Thin Film Technology www.msinc.com
DECIMALS ±.010 FRACTIONS ±1/32 HOLE DIMENSIONS UNLESS OTHERWISE SPECIFIED USE	APPROVAL	
THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND ANY REPRODUCTION, MODIFICATION OR USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MATERIALS SCIENCE, INC. IS EXPRESSLY PROHIBITED.		2 INCH POLARIS, 4.5" OD CF FLG RF/DC FEEDTHROUGH ASSY
NEXT ASSEMBLY	USED ON	
APPLICATION	DO NOT SCALE DRAWING	SIZE D SCALE 1/1 SHEET 1 OF 1

INSTALLATION CONTROL DRAWING