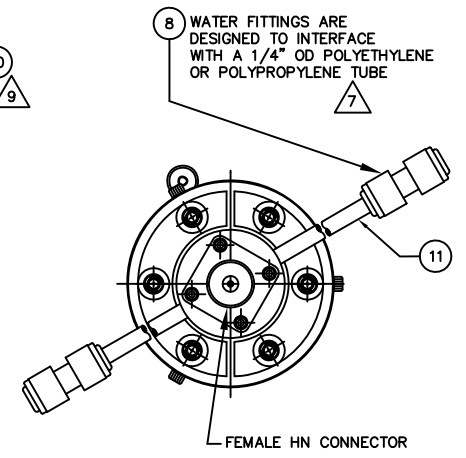
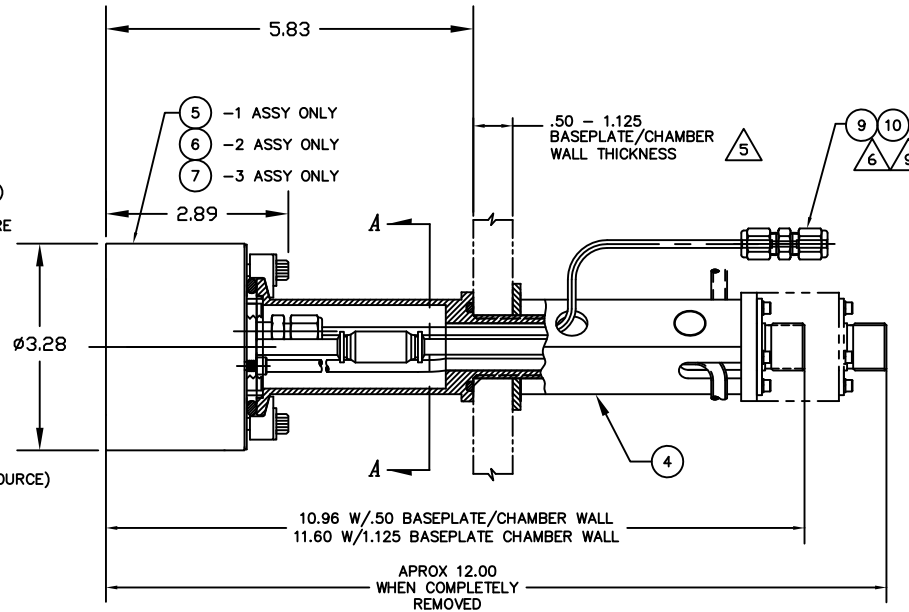


NOTES: UNLESS OTHERWISE SPECIFIED

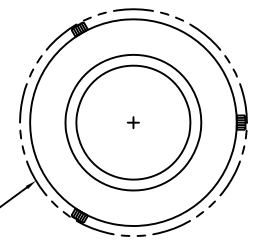
1. INTERPRET DRAWING IAW THE GLOBAL PROFESSIONAL PUBLICATIONS "DRAWING REQUIREMENTS MANUAL", EIGHTH EDITION.
2. INTERPRET DIMENSIONS AND TOLERANCES IAW ANSI Y14.5M - 1982.
3. BREAK SHARP EDGES .002-015.
4. INTERPRET ABBREVIATIONS IAW MIL-STD-12.
5. LENGTH OF POWER CENTER CONDUCTOR CABLE ASSY (PART OF ITEM 4) IS FOR A STANDARD 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 9) IS AVAILABLE FROM: [HTTP://WWW.SWAGELOK.COM](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](http://www.johnguest.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. SEE MATERIALS SCIENCE, INC. DOCUMENT NO. 251011 FOR PROPER INSTALLATION, OPERATION AND USE OF POLARIS SPUTTERING SOURCES.
11. MASS OF SPUTTERING SOURCE FULLY ASSEMBLED IS 5 LBS., DRY.



-1, -2, AND -3 ASSY SHOWN



SECTION "A-A"



INSTALLATION CONTROL DRAWING

QTY	REV	DESCRIPTION	MATERIAL SPECIFICATION	ZONE	ITEM NO				
1	1	1	7	0000074-1	TUBING, 1/4" OD X .170" ID X 18"	POLYETHYLENE	11		
1	1	1	9	0000038-1	TUBING, 1/8" OD X 1/16" ID X 36" MINIMUM	TEFLON PFA	10		
1	1	1	6	00000316	FITTING, SWAGelok, SS-200-6	316 CRES	9		
2	2	2	8	00000281-1	1/4 INCH OD COUPLING, QUICK CONNECT	P/N C10408W	8		
1				00000778-3	2 INCH INTERNAL CATHODE ASSY		7		
	1			00000778-2	2 INCH INTERNAL CATHODE ASSY		6		
		1		00000778-1	2 INCH INTERNAL CATHODE ASSY		5		
1	1	1		00000787-1	RF FEEDTHROUGH ASSY, KF-40 /1" BASEPLATE		4		
				00000784-3	2 INCH INTERNAL CATHODE (CLAMPED TARGET)		3		
				00000784-2	2 INCH INT CATHODE (DIRECT WATER COOLED TGT)		2		
				00000784-1	2 INCH INTERNAL CATHODE (BONDED TARGET)		1		
-3	-2	-1		CAGE CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ZONE	ITEM NO

QUANTITY PER ASSEMBLY		DRAWN J. MILLER 07/08/17		MATERIALS SCIENCE, INC. Vacuum and Thin Film Technology msi@msi-inc.com	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		APPROVAL		THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MATERIALS SCIENCE, INC IS EXPRESSLY PROHIBITED.	
NEXT ASSEMBLY		FRONT		SIZE D DATE CODE 00000784 REV -	
APPLICATION		DO NOT SCALE DRAWING		SCALE 1/1" = 1" SHEET 1 OF 1	