

REV	DATE	DESCRIPTION	BY	APP'D
1	100801	INITIAL RELEASE		

- NOTES: UNLESS OTHERWISE SPECIFIED
- INTERPRET DRAWING IAW THE GLOBAL PROFESSIONAL PUBLICATIONS "DRAWING REQUIREMENTS MANUAL", EIGHTH EDITION.
 - INTERPRET DIMENSIONS AND TOLERANCES IAW ANSI Y14.5M - 1982.
 - INTERPRET ABBREVIATIONS IAW MIL-STD-12.

WARNING:
WATER FITTINGS HAVE A CLEAR ID OF .375 INCHES. USING A SLEEVE OR SIMILAR DEVICE INSIDE THE WATER HOSE MAY CAUSE FLUID RESTRICTIONS AND INTERFERENCE WITH THE NORMAL OPERATION OF THE CATHODE AND THEREFORE IS NOT RECOMMENDED.

5 WATER CHANNELS ARE SYMMETRICAL THROUGHOUT. ORIENTATION OF WATER INLET OR OUTLET IS NOT CRITICAL.

6 **WARNING:**
MINIMUM HOSE LENGTH OF 60" IS REQUIRED TO ENSURE RESISTIVITY RELATIVE TO ELECTRICAL GROUND WITHIN 50 KILO OHMS. TEST CABLE WITH AN OHM METER OR OTHER SUITABLE DEVICE BEFORE USE.

7 MULTI-CONTACT-USA:
5560 SKYLANE BLVD.
SANTA ROSA, CA 95403
VOICE: (707) 575-7575
FAX: (707) 575-7373
INTERNET:
www.multi-contact-usa.com

8 FOR PROPER INSTALLATION, OPERATION, AND USE OF THE SUNSOURCE PLANAR MAGNETRON CATHODE(S), SEE MATERIALS SCIENCE, INC. DOCUMENT NUMBER 251091.

9 MANUFACTURED BY ALPHA TECHNOLOGIES
P/N 88130-08
HTTP://WWW.ALPHAFITTINGS.COM
DISTRIBUTED BY MSC INDUSTRIAL SUPPLY COMPANY.
MSC P/N 82901109
HTTP://WWW.MSCDIRECT.COM

10 ALL FASTENERS ARE METRIC.

11 DIMENSIONS IN BRACKETS "[]" DENOTE REFERENCE DIMENSIONS IN MILLIMETERS.

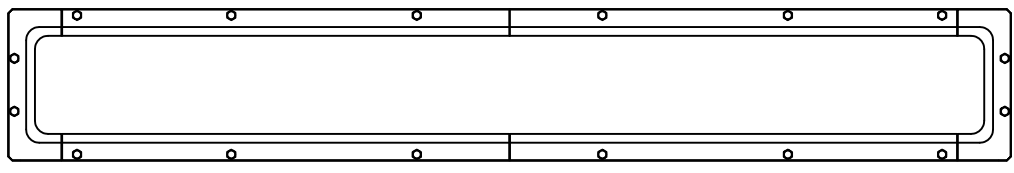
12 TARGET UTILIZATION IS HIGHEST FOR BONDED & CLAMPED TARGETS. DIRECTLY WATER COOLED TARGETS MUST BE SLIGHTLY LONGER & WIDER - THIS EXTRA AREA IS NOT SPATTERED. THEREFORE TARGET UTILIZATION IS LOWER - BY DEFINITION.

13 ADD .100 [2.54] WHEN CLAMPED TARGETS ARE USED. A TALLER SET OF SIDE ANODE/GROUND SHIELDS ARE REQUIRED TO MAINTAIN THE PROPER DARK SPACE GAP WHEN CLAMPED TARGETS ARE USED. BONDED AND DIRECTLY WATER COOLED TARGETS USE THE STANDARD SIDE SHIELDS SHOWN AND DIMENSIONED.

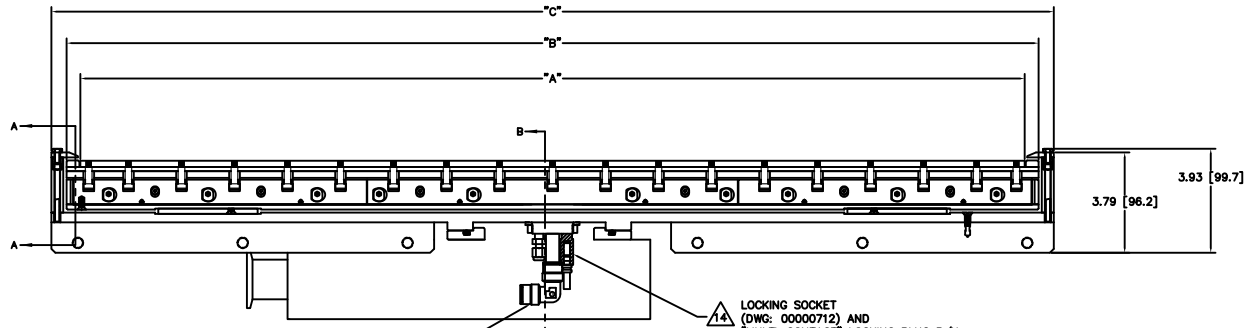
14 TYPICAL MOUNTING ARRANGEMENT SHOWN FOR 90 X 905 SOURCE. LENGTH OF MOUNTING RAILS AND TYPE AND NUMBER OF HOLES IS ADJUSTED DEPENDING UPON SOURCE LENGTH AND CUSTOMER SPECIFICATION.

TARGET LENGTH	"A" DIMENSION	"B" DIMENSION	"C" DIMENSION
11.81 [300]	11.81 [300]	12.85 [326,4]	14.00 [355,6]
13.80 [350]	13.80 [350]	14.84 [376,9]	14.99 [380,7]
14.96 [380]	14.96 [380]	16.00 [406,4]	17.15 [435,6]
19.68 [500]	19.68 [500]	20.72 [526,3]	21.87 [555,5]
29.53 [750]	29.53 [750]	30.57 [776,5]	31.72 [805,7]
35.63 [905]	35.63 [905]	36.67 [931,4]	37.82 [960,6]

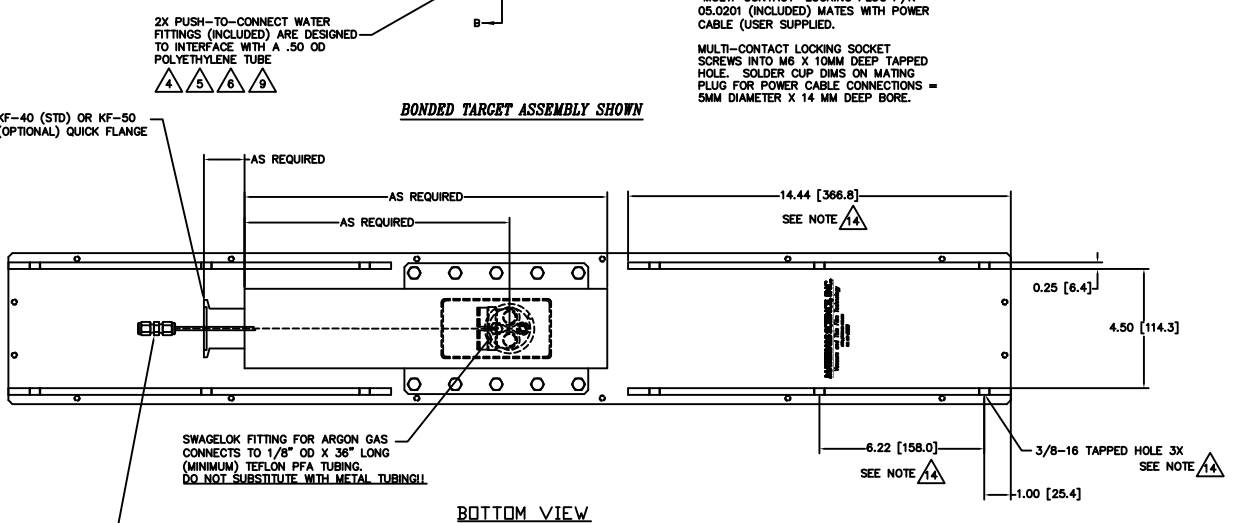
- NOTES:
A. TARGET DIMENSIONS NOTED IN TABLE ARE FOR COMMON SIZES.
B. OTHER TARGET LENGTHS CAN BE ACCOMMODATED.
C. LINEAR DIMENSIONS IN TABLE SCALE EXACTLY.



TOP VIEW



BONDED TARGET ASSEMBLY SHOWN



BOTTOM VIEW

SWAGLOK UNION (INCLUDED) IS DESIGNED TO INTERFACE WITH 1/8" OD TUBE

SWAGLOK FITTING FOR ARGON GAS CONNECTS TO 1/8" OD X 36" LONG (MINIMUM) TEFLON PFA TUBING. DO NOT SUBSTITUTE WITH METAL TUBING!!

2X PUSH-TO-CONNECT WATER FITTINGS (INCLUDED) ARE DESIGNED TO INTERFACE WITH A .50 OD POLYETHYLENE TUBE

14A LOCKING SOCKET (DWG: 00000712) AND "MULTI-CONTACT" LOCKING PLUG P/N 05.0201 (INCLUDED) MATES WITH POWER CABLE (USER SUPPLIED).

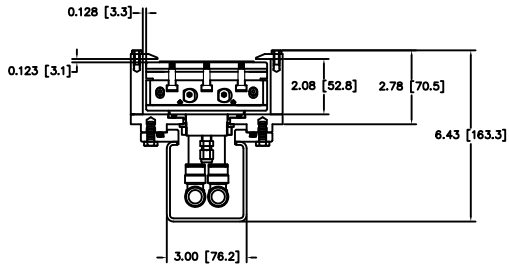
MULTI-CONTACT LOCKING SOCKET SCREWS INTO M6 X 10MM DEEP TAPPED HOLE. SOLDER CUP DIMS ON MATING PLUG FOR POWER CABLE CONNECTIONS = 5MM DIAMETER X 14 MM DEEP BORE.

INSTALLATION CONTROL DRAWING

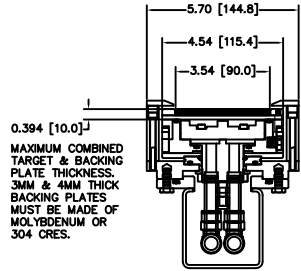
QUANTITY FOR ASSEMBLY	CAGE CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ZONE	ITEM NO.
			PARTS LIST			
			DATE: J. MILLER 1/6/09/07			
			MATERIALS SCIENCE, INC. Vacuum and Thin Film Technology			
			SUNSOURCE, 90MM INTERNAL WITH FEEDTHRU HOUSING			
431						00002214
NEXT ASSEMBLY	USED ON					
APPLICATION			DO NOT SCALE DRAWING			

00002214

A

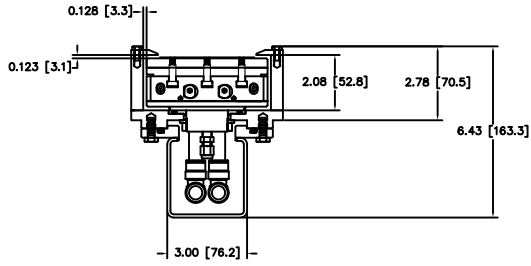


SECTION A-A

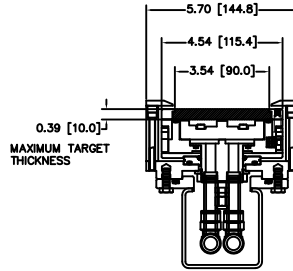


SECTION B-B

BONDED TARGET ASSEMBLY

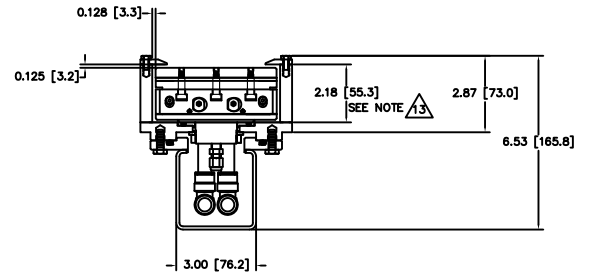


SECTION A-A

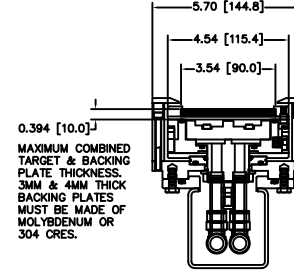


SECTION B-B

DIRECTLY WATER COOLED TARGET ASSEMBLY



SECTION A-A



SECTION B-B

CLAMPED TARGET ASSEMBLY

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