

REV	DATE	DESCRIPTION	BY	APP'D
1		INITIAL RELEASE	100627	

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. INTERPRET ABBREVIATIONS IAW MIL-STD-12.

4. METRIC DIMENSIONS NOTED IN BRACKETS " []".

△ TOP AND SIDE GROUND SHIELDS ARE FABRICATED FROM 304 CRIES.

⚠ WARNING:
WATER FITTINGS HAVE A CLEAR ID OF .375 (1/8" OD) OR .50 (3/4" OD) 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.

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

⚠ 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.

△ MULTI-CONTACT-USA:
2560 SKYLINE BLVD.
SANTA ROSA, CA 95403
VOICE: (707) 575-7575
FAX: (707) 575-7373
INTERNET:
www.multi-contact-usa.com

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

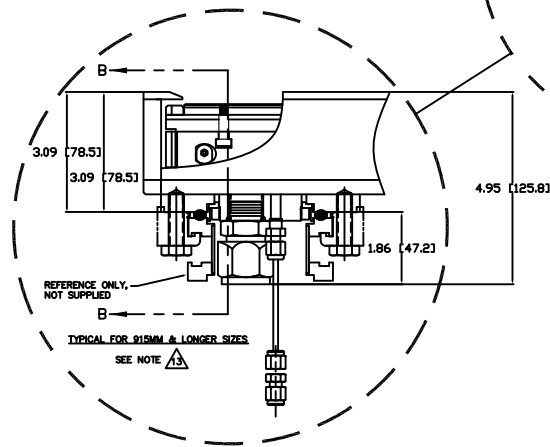
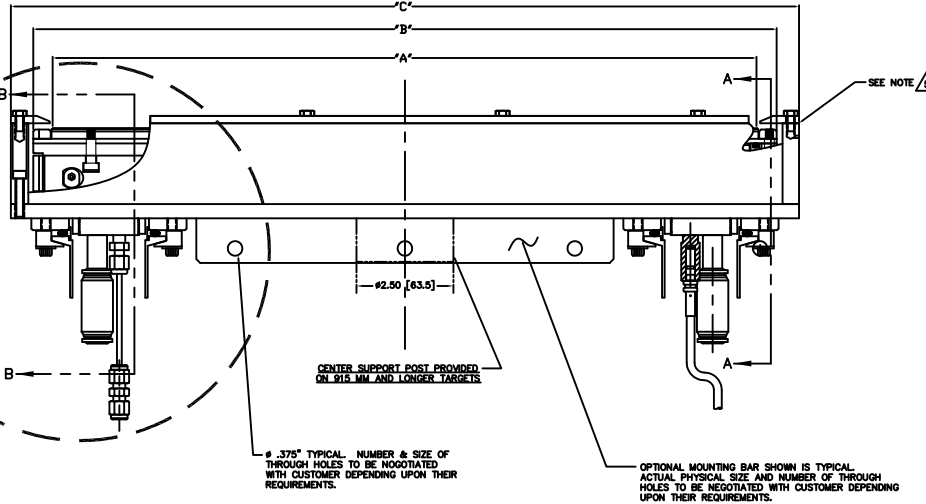
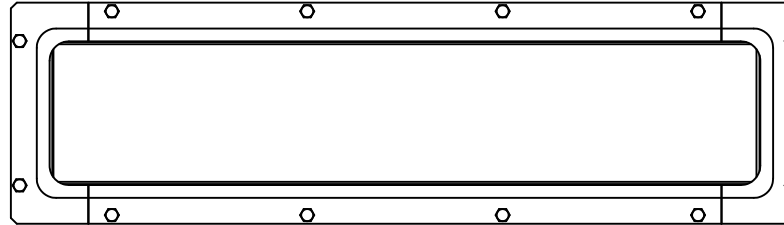
△ P/N 88040-08 IS AVAILABLE FROM:
ALPHA TECHNOLOGIES
320 PREMIER COURT, SUITE 222
FRANKLIN, TN 37087
TEL: (615) 771-8650
HTTP://WWW.ALPHAFITTINGS.COM

△ P/N A100-12-10 IS AVAILABLE FROM:
LENZ, INC.
1301 KLEPPINGER ROAD
DAYTON, OH 45408-1842
TEL: (937) 277-8518
HTTP://WWW.LENZINC.COM

13. ALL FASTENERS ARE METRIC.

△ 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.

15. 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.



TARGET LENGTH	"A" DIMENSION	"B" DIMENSION	"C" DIMENSION
380MM	14.961 [380]	15.962 [405,4]	17.161 [435,9]
500MM	19.685 [500]	20.686 [525,4]	21.885 [555,9]
915MM	38.024 [915]	37.025 [940,4]	38.224 [970,9]
1500MM	59.055 [1500]	60.056 [1525,4]	61.255 [1555,9]
2000MM	78.740 [2000]	79.741 [2025,4]	80.940 [2055,9]

- 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.

INSTALLATION CONTROL DRAWING

QUANTITY PER ASSEMBLY	CAGE CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ZONE	ITEM NO
			PARTS LIST			
			DATE: J. MILLER 10/06/11			
			MATERIALS SCIENCE, INC. Vacuum and Ion Film Technology			
			SUNSOURCE, 90 MM WIDE, INT. MOUNT, LONG & HIGH POWER			
			REV: E	DATE CODE: 00001052		
			APPLICATION	DO NOT SCALE DRAWING		

WATER FITTINGS FOR 3/4" OD TUBING & ISO 63 FLANGES

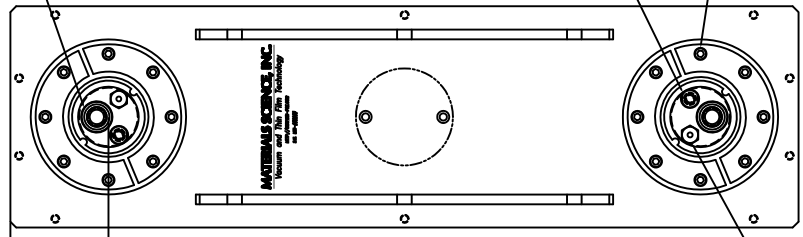
00001052

A

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

2X (MULTI-CONTACT LOCKING SOCKET SCREWS INTO M8 X 10 DEEP TAPPED HOLE. SOLDER CUP DIMS ON MATING PLUG FOR POWER CABLE CONNECTION = 5mm DIAMETER X 14mm DEEP BORE

2X 6X M5-1.0 FASTENERS ON A #3.250 BOLT CIRCLE. (DESIGNED TO INTERFACE WITH A STANDARD KF-50 BULKHEAD FLANGE)

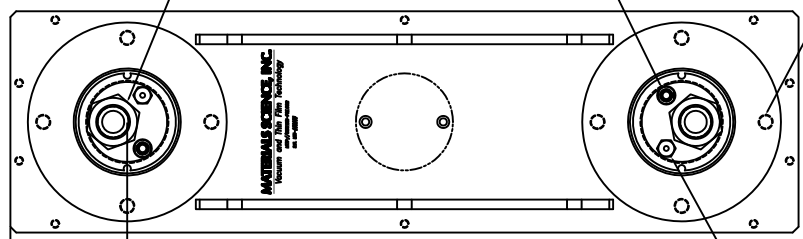


WATER FITTINGS FOR 1/2" OD TUBING & KF-50 FLANGES

SWAGelok FITTING 2X FOR ARGON GAS CAN CONNECT TO DUAL OR SINGLE GAS MANIFOLD - CONTACT FACTORY. 1/8" OD X 36" LG (MINIMUM)

0-RING SEALED TUBE FITTINGS (INCLUDED) ARE DESIGNED TO INTERFACE WITH A 3/4" OD POLYETHYLENE TUBE 2X

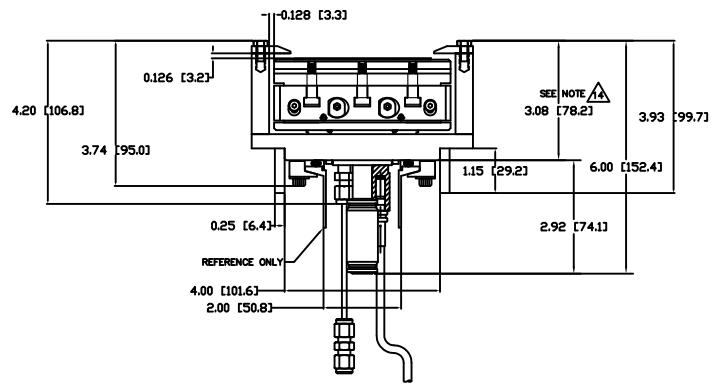
2X (MULTI-CONTACT LOCKING SOCKET SCREWS INTO M8 X 10 DEEP TAPPED HOLE. SOLDER CUP DIMS ON MATING PLUG FOR POWER CABLE CONNECTION = 5mm DIAMETER X 14mm DEEP BORE



WATER FITTINGS FOR 3/4" OD TUBING & ISO 63 FLANGES

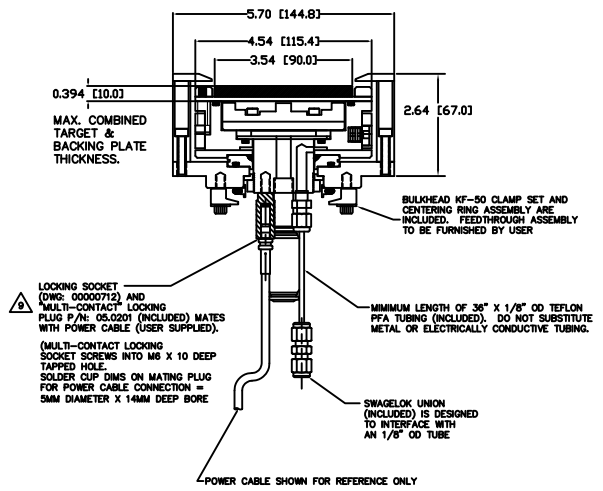
2X 4X M8-1.25 FASTENERS ON A #4.330 BOLT CIRCLE. (DESIGNED TO INTERFACE WITH A STANDARD ISO-63 BULKHEAD FLANGE)

SWAGelok FITTING 2X FOR ARGON GAS CAN CONNECT TO DUAL OR SINGLE GAS MANIFOLD - CONTACT FACTORY. 1/8" OD X 36" LG (MINIMUM)



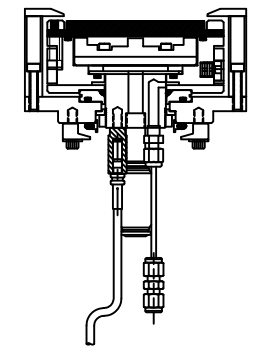
BONDED TARGET ASSEMBLY WITH KF-50 FLANGES & 1/2" OD WATER FITTINGS SHOWN
 (SEE SHEET 1 FOR ISO-63 FLANGES & 3/4" OF WATER FITTINGS)

SECTION A-A



BONDED TARGET ASSEMBLY SHOWN

SECTION B-B



DIRECT WATER COOLED TARGET SHOWN