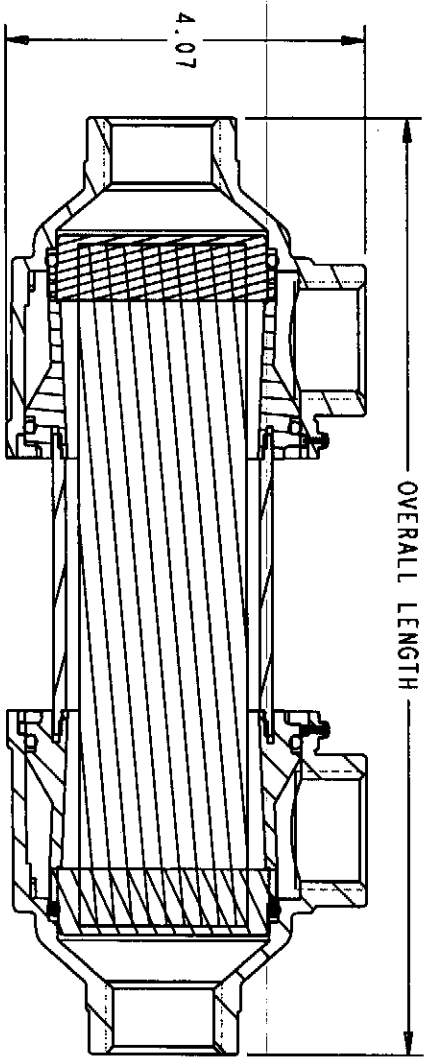
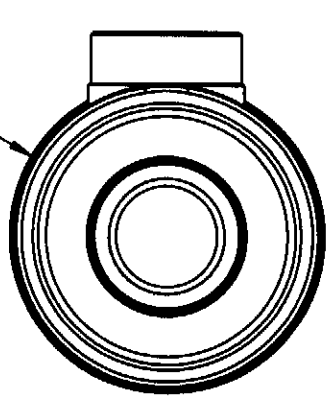
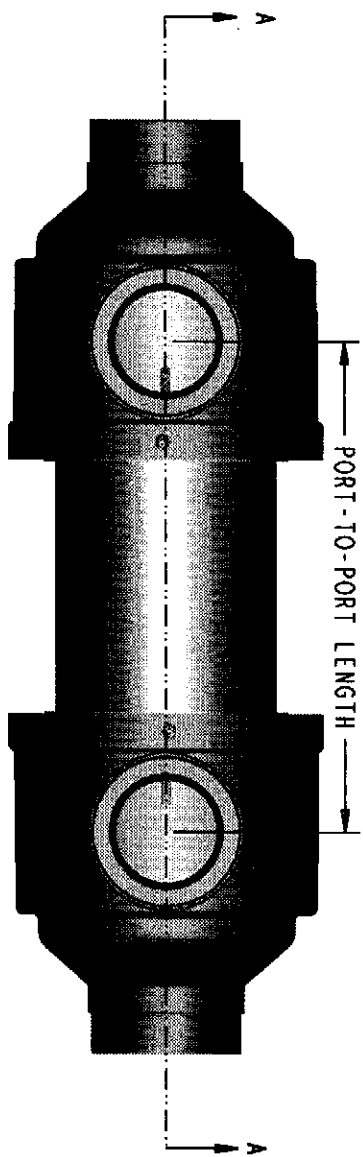


10/16/08 PORTS ON SAME SIDE



SECTION A-A

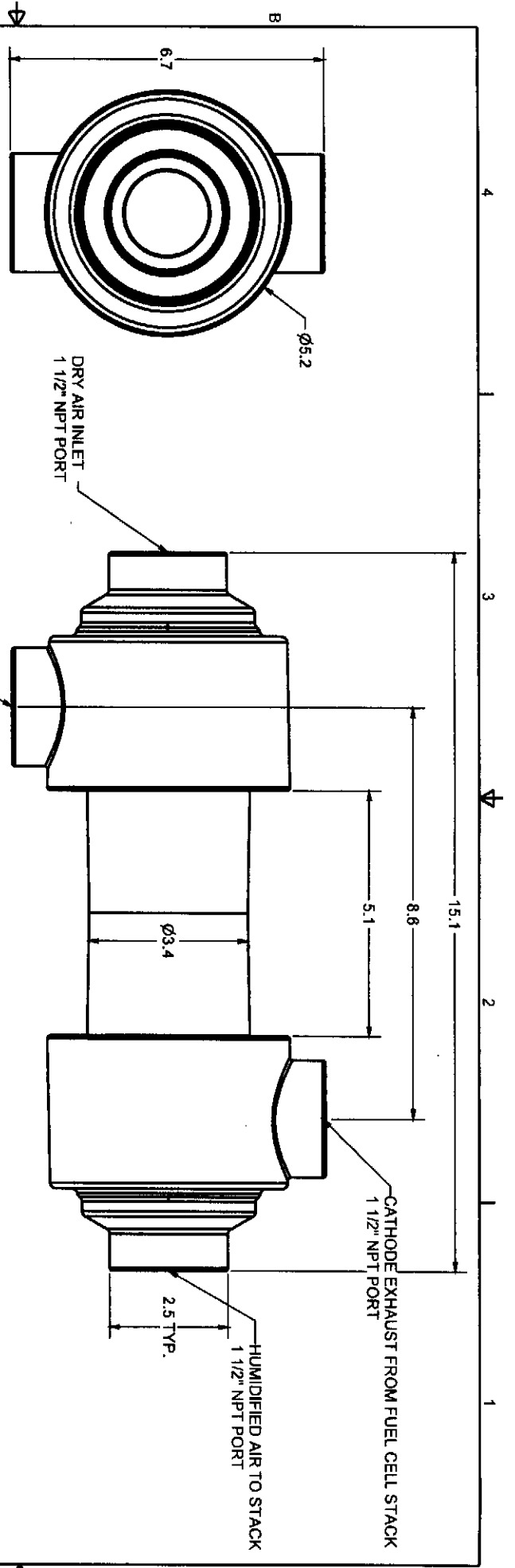
CONFIGURATION TABLE		
MODEL NO.	PORT-TO-PORT LENGTH	OVERALL LENGTH
FC200-780-7MP	6.16	11.1
FC200-780-10MP	9.16	14.1



NOTES:
 Shell housing constructed from polypropylene.
 End caps constructed out of modified PPO (GE Noryl).
 All ports have 1" NPT threads.
 Membrane element consists of 780 tubes of TT-040 Nafion.
 Maximum pressure is 3 bar absolute.
 Maximum temperature is 80°C.

DRAWN	GJS	26-Jan-07	PERMA PURE LLC	
APPROVED			8 EXECUTIVE DRIVE, TOMS RIVER, NJ 08754	
REFERENCE	FC200-780-7MP	TITLES	Fuel Cell Humidifier	
	(EXCEPT AS NOTED)	TOLERANCES		
		FRACTIONAL & DECIMAL		
		FRACTIONAL		
		DECIMAL		
		ANGLES		
		± 0.01		
		± 0.005		
		± 1/2°		
		SCALE 0.750	UNITS IN INCHES SHEET 1 of 1	

10/16/08 PORTS ON OPPOSITE SIDES



CATHODE EXHAUST TO ATMOSPHERE
1 1/2" NPT PORT

- NOTES:
1. HOUSING CONSTRUCTED OF NORYL, GFN3 PLASTIC.
 2. MEMBRANE ELEMENT CONSISTS OF 1660 TUBES OF TT-040 NAFION TUBING.
 3. MAXIMUM OPERATING PRESSURE - 4 BAR ABS.
 4. MAXIMUM OPERATING TEMPERATURE - 100C.

PRINTED	2/21/2008	PERMA PURE LLC
APPROVED	<i>[Signature]</i>	8 EXECUTIVE DRIVE, TOMS RIVER, NJ 08754
DATE	08/11/2008	
REF P/N	FC300-1660-10HP	TITLE
TOLERANCES (EXCEPT AS NOTED)		HUMIDIFIER CUTSHEET
FRACTIONAL AND XX DECIMAL	+/- 1/64	SIZE
XXX DECIMAL	+/- .005	DWG NO
ANGULAR	+/- 1/2°	FC300-1660-01-04
		SCALE
		SHEET 1 OF 1