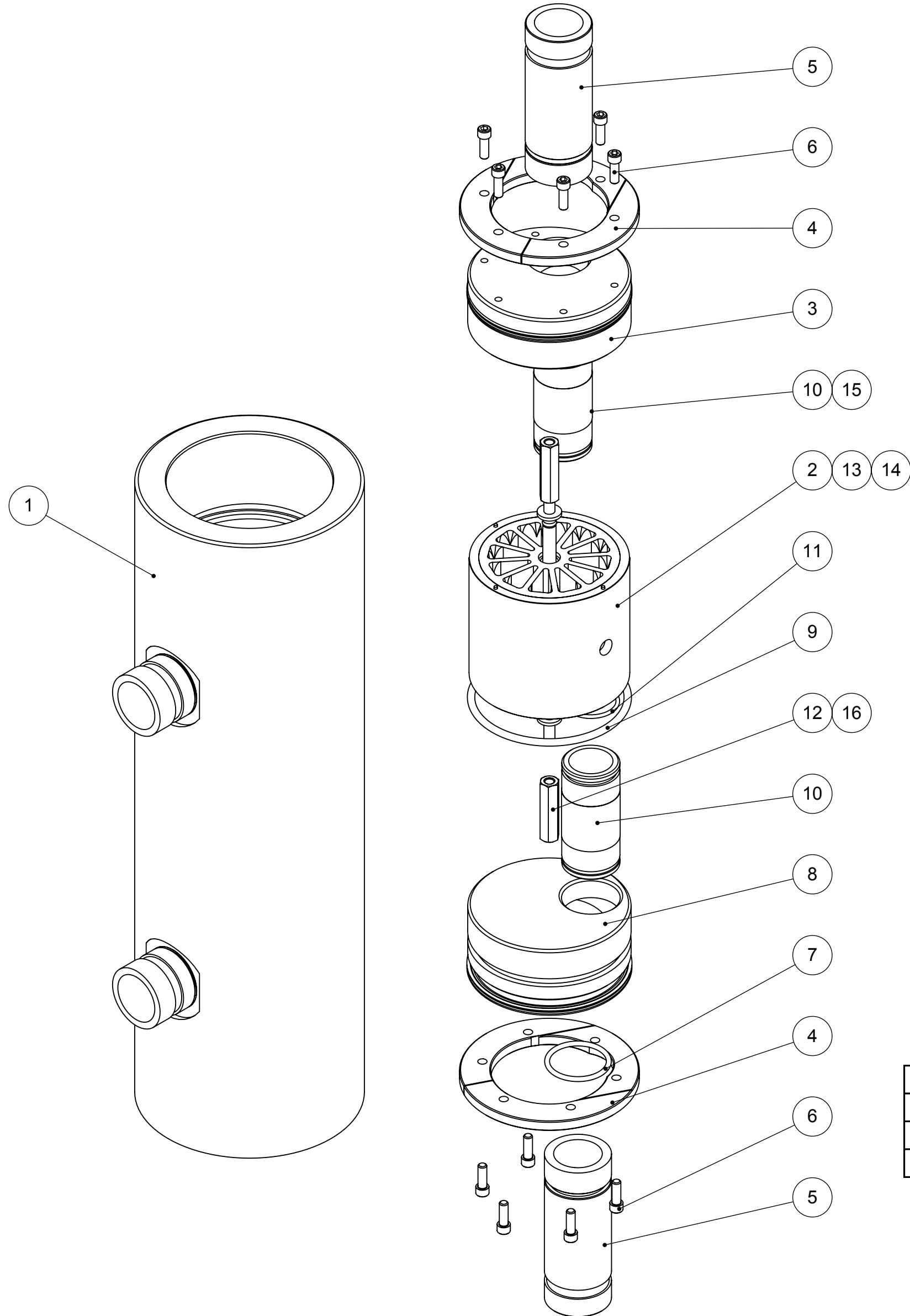


BILL OF MATERIALS						
ITEM NO.	-01/QTY.	-02/QTY.	-03/QTY.	PART NO.	DESCRIPTION	MATERIAL
1	1	1	1	41106-01	VESSEL, PRESSURE, 4S SINGLE, BLUE	FIBERGLASS
2	1	-	-	41105-01	CARTRIDGE, INTERNAL, PX-45SB	---
3	2	2	2	41030-01	END CAP, 1 1/2" PORT	FIBERGLASS
4	2	2	2	41039-01	RING, LOCK	FIBERGLASS
5	2	2	2	41090-01	PORT, STRAIGHT, 1 1/2"	GRP
6	12	12	12	10012-01	SCRW, SC, 1/4-20X.62L, 316	316 SS
7	2	2	2	10158-01	O-RING, NSF, -223, EPDM	EPDM
8	2	2	2	10192-01	SEAL, QUAD RING, NSF, -347, EPDM	EPDM
9	1	1	1	10164-01	O-RING, NSF, -347, EPDM	EPDM
10	2	2	-	41102-02	NIPPLE, 1 1/4", LOW PRESSURE	PVC
11	4	4	4	10152-01	O-RING, NSF, -127, EPDM	EPDM
12	2	2	-	41071-01	STANDOFF, HEX	TITANIUM
13	-	1	-	41118-01	CARTRIDGE, INTERNAL, PX-70SB	---
14	-	-	1	41121-01	CARTRIDGE, INTERNAL, PX-90SB	---
15	-	-	2	41102-01	NIPPLE, 1 1/4", LOW PRESSURE	PVC
16	-	-	2	41071-02	STANDOFF, HEX	TITANIUM

F  
E  
D  
C  
B  
A



PART NUMBER	DESCRIPTION
40019-01	PX-45SB PRESSURE EXCHANGER
40019-02	PX-70SB PRESSURE EXCHANGER
40019-03	PX-90SB PRESSURE EXCHANGER

**-01 SHOWN  
INCH**

UNLESS OTHERWISE SPECIFIED:  
 TOLERANCES:  
 FRACTIONAL: ± 1/32"  
 ANGULAR: MACH ± .5°  
 BEND ± 1°  
 TWO PLACE DECIMAL: ± .01"  
 THREE PLACE DECIMAL: ± .005"  
 FOUR PLACE DECIMAL: ± .0002"  
 SURFACE FINISH:  
 ON PART 125 RMS  
 ON O-RING SURFACES 32 RMS  
 DIMENSIONING AND TOLERANCING PER ANSI  
 Y14.5M (LATEST)  
 FINISH:  
 MATERIAL:  
 SHOWN

REV.	ECN NO.	DESCRIPTION	BY	DATE
02	-	CHANGED HOUSING COLOR TO BLUE	TDR	8/6/14
1	07-006	ADDED PX-70 & PX-90 BRACKISH TO ASSEMBLY	FTM	3/12/2007
0	05-045	ORIGIN	JGM	09/21/2005

**ENERGY RECOVERY INC.**  
 1908 Doolittle Drive, San Leandro, CA 94577  
 Ph. (510)483-7370 / Fax: (510)483-7371  
 www.energyrecovery.com

**ASSY, 4S SINGLE,  
BRACKISH**

SIZE DWG. NO. REV  
**C** 40019 02

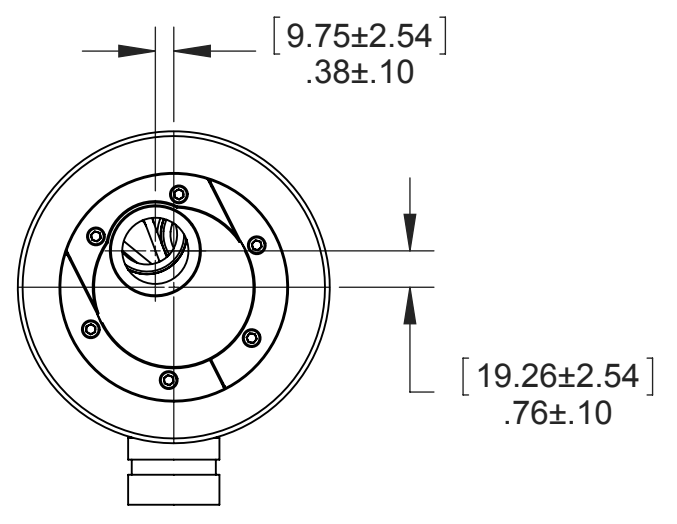
SCALE: 1:8 WEIGHT: SHEET 1 OF 3

**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ENERGY RECOVERY INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ENERGY RECOVERY INC. IS PROHIBITED.

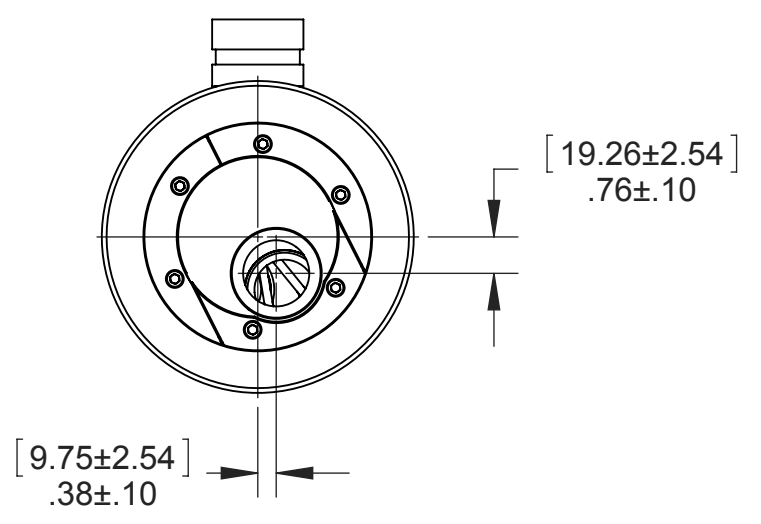
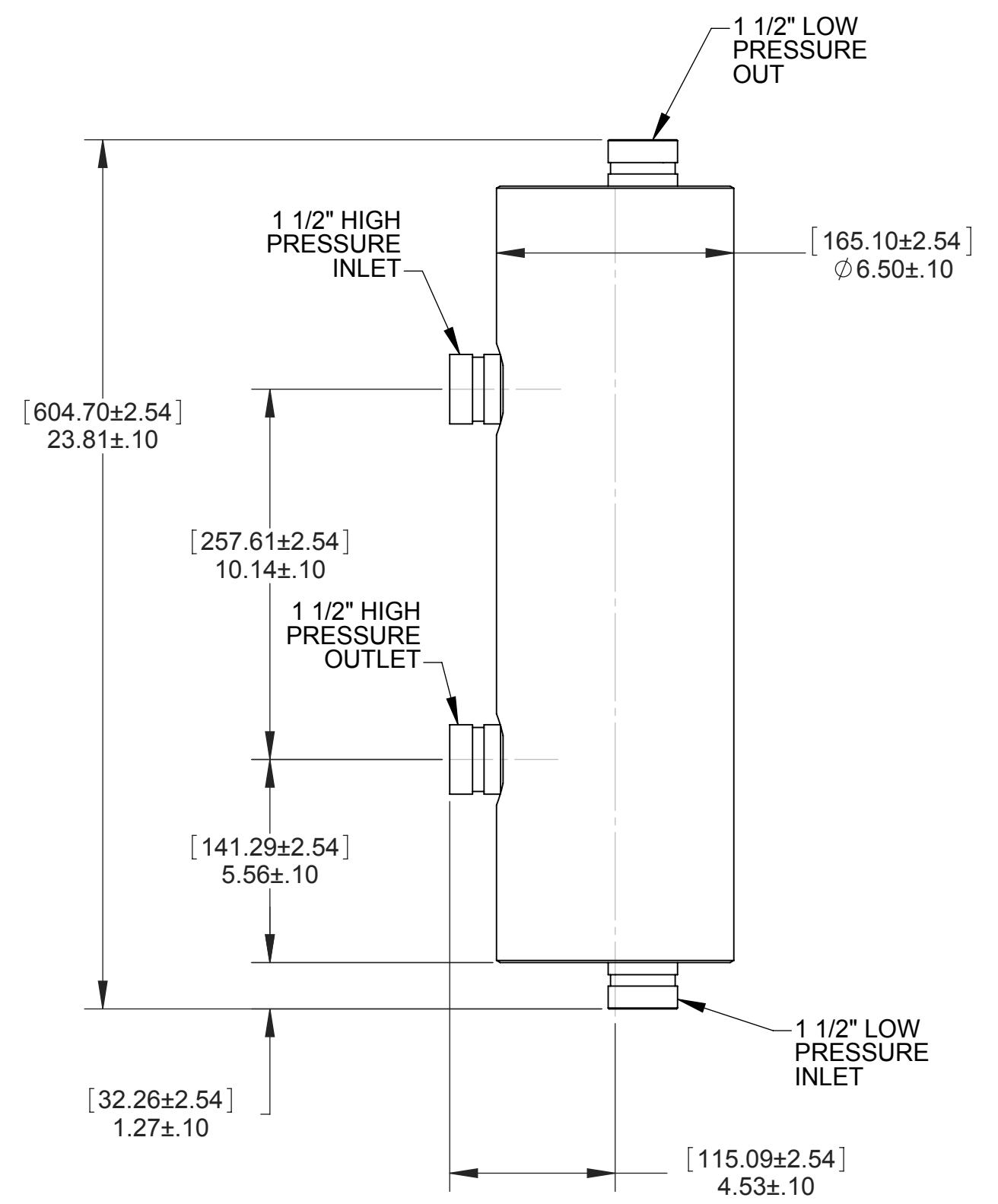
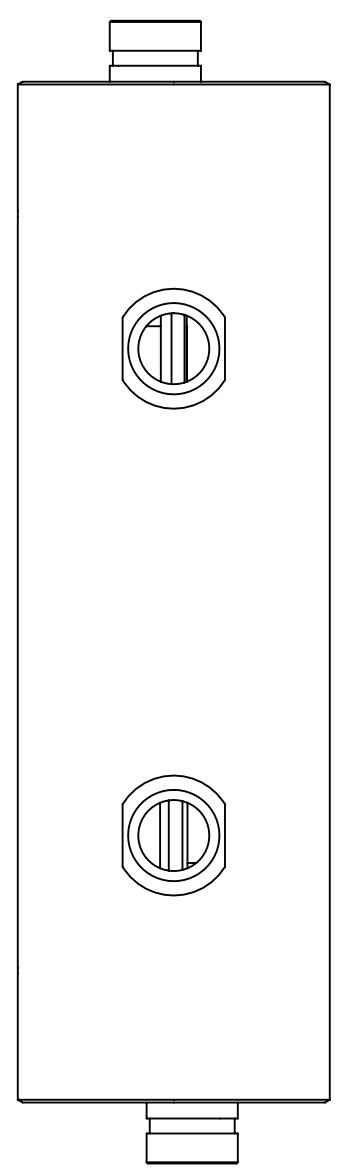
**PRODUCT**  
 DRAWING STATUS

**© 2007 , ENERGY RECOVERY, INC.**

- NOTES:**
1. SHIM AS REQUIRED BETWEEN VESSEL AND MOUNTING SURFACE.
  2. HOUSING MUST BE INDEPENDENTLY SUPPORTED. REFER TO OPERATIONS AND MAINTENANCE MANUAL.
  3. PX DRY WEIGHT: 46 LBS. (20.9 KGS).
  4. ALL HOUSING CONNECTIONS ARE FLEXIBLE TYPE.
  5. DO NOT USE INLET/OUTLET PORTS FOR LIFTING.
  6. ENERGY RECOVERY, INC. RESERVES THE RIGHT TO MAKE SPECIFICATION OR DIMENSION CHANGES AT ANY TIME WITHOUT PRIOR NOTICE.



**DO NOT USE  
INLET/OUTLET PORTS  
FOR LIFTING**



**[METRIC]  
INCH**

UNLESS OTHERWISE SPECIFIED:  
TOLERANCES: (IN INCHES)

FRACTIONAL: ± 1/32"  
ANGULAR: MACH ±.5°  
BEND ±1°  
TWO PLACE DECIMAL: ±.01"  
THREE PLACE DECIMAL: ±.005"  
FOUR PLACE DECIMAL: ±.0002"

SURFACE FINISH:  
ON PART 125 RMS  
ON O-RING SURFACES 32 RMS

DIMENSIONING AND TOLERANCING PER ANSI  
Y14.5M (LATEST)  
FINISH:

MATERIAL:  
SHOWN



**ENERGY RECOVERY INC.**  
1908 Doolittle Drive, San Leandro, CA 94577  
Ph. (510)483-7370 / Fax: (510)483-7371  
www.energyrecovery.com

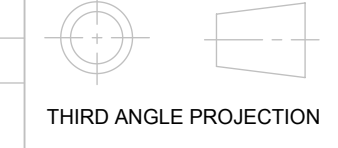
**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ENERGY RECOVERY INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ENERGY RECOVERY INC. IS PROHIBITED.

**PRODUCT**  
DRAWING STATUS

**© 2007 , ENERGY RECOVERY, INC.**

DRAWN	JGM	09/21/2005
CHECKED	TLS	10/03/2005
ENG APPR.	RLS	10/03/2005

TITLE:  
**ASSY, 4S SINGLE,  
BRACKISH**



SIZE	DWG. NO.	REV
<b>C</b>	<b>40019</b>	<b>02</b>
SCALE: 1:4	WEIGHT:	SHEET 2 OF 3

**Model PX-45SB  
Pressure Exchanger**

Capacity: 25-45 gpm (6-10 m<sup>3</sup>/hr)  
Maximum Pressure: 400 psi (27.5 bar)  
Do not mix PX models on same manifold  
Cavitation and permanent damage may result

ERI P/N 30046-01

**Model PX-70SB  
Pressure Exchanger**

Capacity: 45-70 gpm (10-16 m<sup>3</sup>/hr)  
Maximum Pressure: 400 psi (27.5 bar)  
Do not mix PX models on same manifold  
Cavitation and permanent damage may result

ERI P/N 30064-01

**Model PX-90SB  
Pressure Exchanger**

Capacity: 60-90 gpm (13.6-20.4 m<sup>3</sup>/hr)  
Maximum Pressure: 400 psi (27.5 bar)  
Do not mix PX models on same manifold  
Cavitation and permanent damage may result

ERI P/N 30065-01

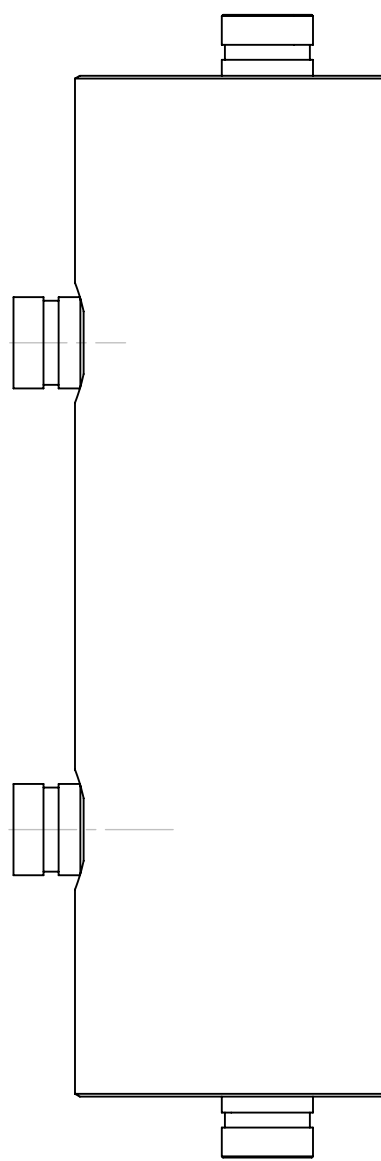
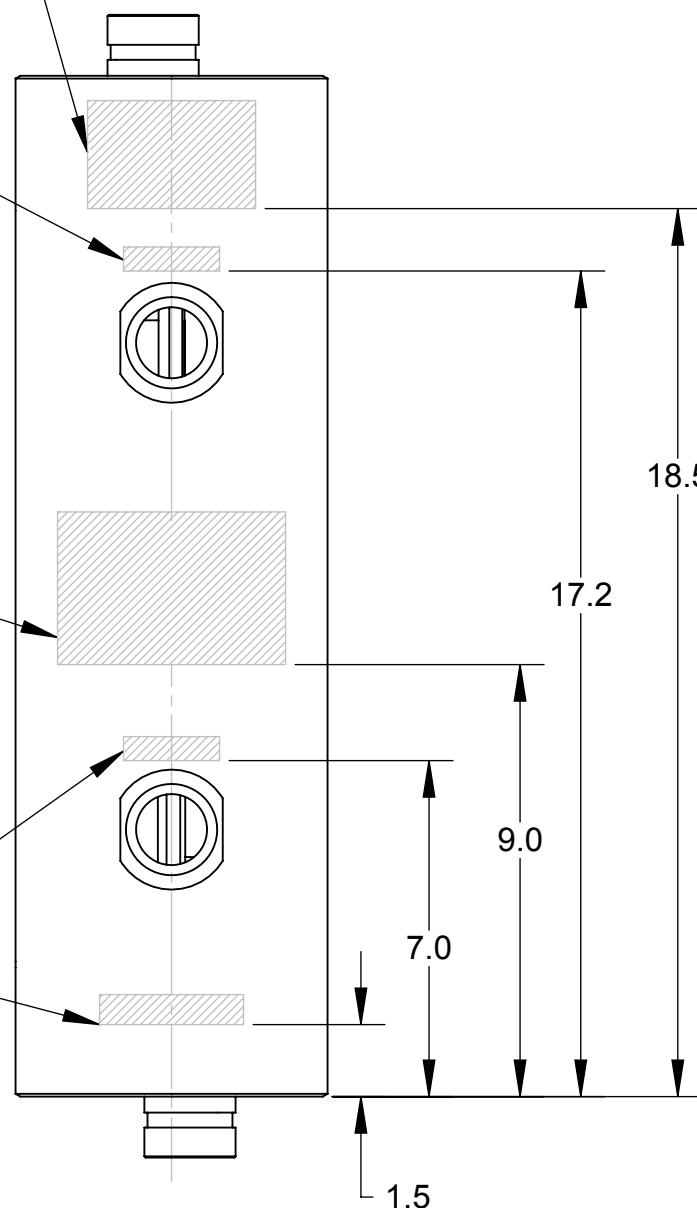
**HP IN**  
ERI P/N 30050-02



ERI P/N 30066-01

**HP OUT**  
ERI P/N 30050-01

SERIAL NUMBER PLATE  
ERI P/N 30024-01



**LP OUT**  
ERI P/N 30050-03

**Warning**  
Do not allow high-pressure to exceed 400 psi (27.5 bar). Serious injury to personnel and/or equipment may result! If necessary, install a pressure switch and/or safety valve.

**Caution**  
Do not exceed maximum flow capacity of PX. Over flowing the PX and/or lack of sufficient instruments and controls may result in damage to the equipment! The low-pressure flow through the PX is separate and independent from the high-pressure flow through the PX. Separate instruments and flow controls must be applied to both streams to comply with the warranty. See O&M manual for more information.

**Caution**  
Always read the Operations and Maintenance Manual completely before attempting to install, operate or service PX equipment.

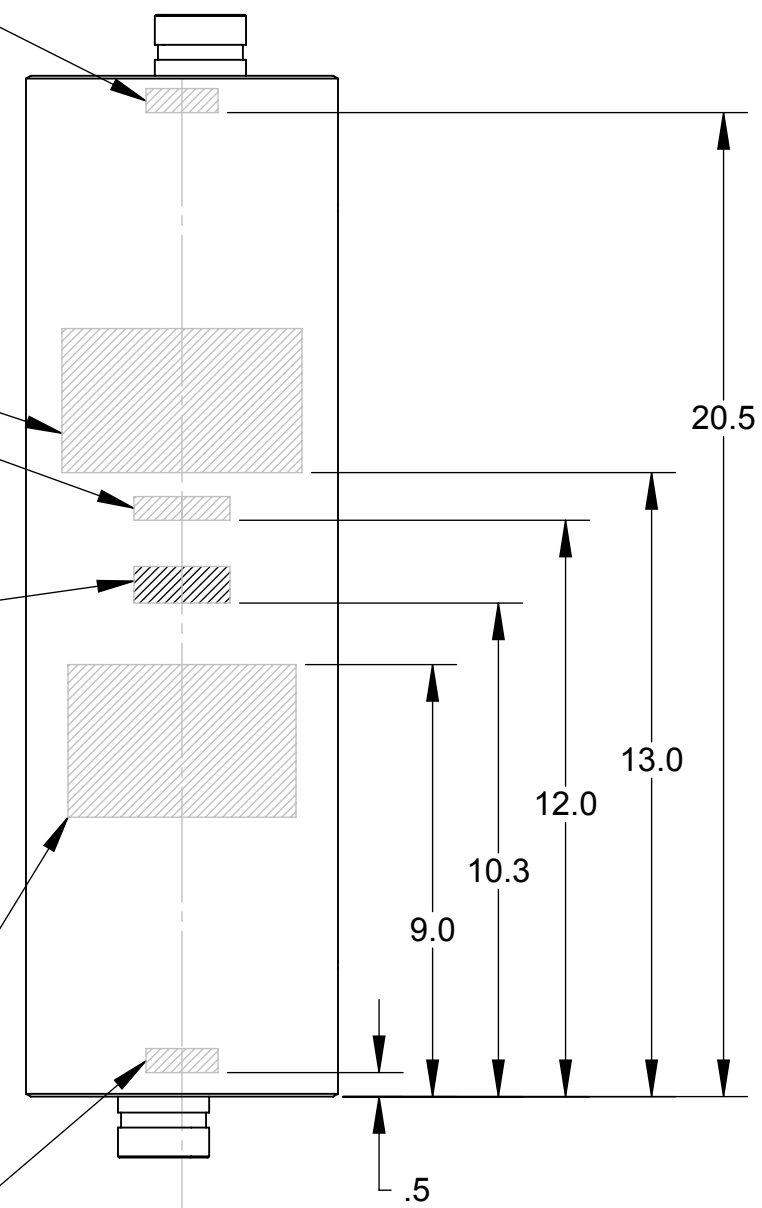
**MADE IN U.S.A.**

PROTECTED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS:  
4,887,942; 5,988,993; 5,338,158;  
6,540,487; 6,659,731



ERI P/N 30066-01

**LP IN**  
ERI P/N 30050-04



4	1	1	1	30050-01	LABEL, "HP OUT"
5	1	1	1	30050-02	LABEL, "HP IN"
6	1	1	1	30050-03	LABEL, "LP OUT"
7	1	1	1	30050-04	LABEL, "LP IN"
8	1	1	1	30050-05	LABEL, "MADE IN U.S.A."
9	1	1	1	30047-01	LABEL, "WARNING"
10	1	1	1	30024-01	LABEL, "SERIAL NUMBER"
11	1	1	1	30051-01	LABEL, "PATENT"
12	2	2	2	30066-01	LABEL, "ERI"
13	--	1	--	30046-01	LABEL, "PX-70SB"
14	--	--	1	30046-01	LABEL, "PX-90SB"

**[METRIC]  
INCH**

UNLESS OTHERWISE SPECIFIED:  
TOLERANCES: (IN INCHES)  
FRACTIONAL: ± 1/32"  
ANGULAR: MACH ± .5°  
BEND ± 1°  
TWO PLACE DECIMAL: ± .01"  
THREE PLACE DECIMAL: ± .005"  
FOUR PLACE DECIMAL: ± .0002"  
SURFACE FINISH:  
ON PART 125 RMS  
ON O-RING SURFACES 32 RMS

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ENERGY RECOVERY INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ENERGY RECOVERY INC. IS PROHIBITED.

**PRODUCT**

DRAWING STATUS

© 2007, ENERGY RECOVERY, INC.

DIMENSIONING AND TOLERANCING PER ANSI Y14.5M (LATEST)  
FINISH:  
MATERIAL:  
SHOWN



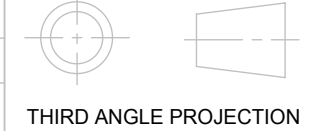
**ENERGY RECOVERY INC.**

1908 Doolittle Drive, San Leandro, CA 94577  
Ph. (510)483-7370 / Fax: (510)483-7371  
www.energyrecovery.com

DRAWN	JGM	09/21/2005
CHECKED	TLS	10/03/2005
ENG APPR.	RLS	10/03/2005

TITLE:  
**ASSY, 4S SINGLE,  
BRACKISH**

SIZE DWG. NO. REV  
**C 40019 02**



SCALE: 1:8 WEIGHT: SHEET 3 OF 3