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**Energy Recovery,
Inc. Pressure
Exchanger
PX - 90S**

REV	BY	CKD	REVISION	DATE
0	RBC	RLS	Issued for distribution	6/15/2004
SHEET 1 of 1				
Document Number 80030-01				
MANUFACTURER ERI				

**DESCRIPTION:
TECHNICAL DATA SHEET,
POSITIVE DISPLACEMENT ENERGY
RECOVERY DEVICE**

1. Tag:	2. Service:	3. Reference:
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Item No.	Category	Description	Value	Item No.	Category	Description	Value	Yes	No	
4	OPERATING CONDITIONS	Liquid	Seawater	42	TEST	Manufacturer's Std.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5		Operating Temperature	33°F-113°F (0.6-45°C)	43		Performance		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6		Max Temperature	113°F (45°C)	44		Case Hydrotest		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7		Specific Gravity	1025.18 kg/cu.m	45		Dismantle and Inspection		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8		Vapor Pressure [psia]	water=1.0 @ 100°F	46		Cavitation Test		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9		Viscosity (cP)	1.060 cP @ 70°F	47		Vibration Test		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10		High Pressure Inlet Max. Rated Flow [gpm]	90 gpm (20.4m3/hr)	48	Witnessed Test		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
11		Low Pressure Outlet Max. Rated Flow [gpm]	90 gpm (20.4m3/hr)	49						
12		Rated Max. High Pressure [psig]	1200 psig (82.7 bar)	50	INSPECTIONS	Piping Dimensions		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13		Rated Max. Low Pressure [psig]	150 psig (10.3 bar)	51		Port Connections		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14		Maximum High Pressure Suction [psig]	1200 psig (82.7 bar)	52		Vessel Housing Dimensions		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
15		Minimum Low Pressure Suction [psig]	N/A	53		Ceramic Dimensions		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16		Minimum Discharge Pressure (MDP)	14.5 psig (1 bar)	54						
17		Peak Efficiency [%]	96%	55						
18		PERFORMANCE	High Pressure Flow Differential Max. [psig]	18 psig (1.2 bar)	56	SHIPPING WEIGHT & DIMENSIONS	Shipping Dimensions	30" x 12" x 10"		
19			Low Pressure Flow Differential Max. [psig]	15 psig (1.0 bar)	57		Shipping Weight	55 lbs.		
20	Maximum Lubrication Flow [gpm]		1.80 gpm (0.41m3/hr)	58	Cartridge Weight					
21	Maximum Speed [rpm]		1500 rpm	59	Cartridge Shipping Dimensions					
22	Salinity Increase at Membranes at 40% Recovery		2-3%	60	Spare Parts Kit Weight					
23	Maximum Noise Allowable [dBA]		89 dBA	61	Spare Parts Kit Dimensions					
24			62	Tool Kit Weight						
25			63	Tool Kit Dimensions						
26	MATERIALS	Vessel/ Housing	GRP	64	MISCELLANEOUS					
27		Rotor, Sleeve, Endcover Assembly	Ceramics-alumina	65						
28		*Low Pressure Inlet Port Fitting	*AL-6XN	66						
29		*Low Pressure Outlet Port Fitting	*AL-6XN	67						
30		High Pressure Inlet Port Fitting	254SMO	68						
31		High Pressure Outlet Port Fitting	254SMO	69						
32		Access Cover, Vessel Endclosure	GRP	70						
33		Fasteners/Hardware (non-wetted)	316SS	71						
34		Tension Rod Assembly	Titanium	72						
35	O-rings	EPDM	73							
36	PIPING CONNECTIONS	Low Pressure Inlet Port Fitting	1-1/2" flexible type	74						
37		Low Pressure Outlet Port Fitting	1-1/2" flexible type	75						
38		High Pressure Inlet Port Fitting	1-1/2" flexible type	76						
39		High Pressure Outlet Port Fitting	1-1/2" flexible type	77						
40				78						
41			79							

*AL-6XN is a registered trademark of Allegheny Ludlum

ERI RESERVES THE RIGHT TO MAKE SPECIFICATION CHANGES AT ANY TIME WITHOUT PRIOR NOTICE.

PRICE: sales@energy-recovery.com	SHIPPING:	DELIVERY:
MANUFACTURER: Energy Recovery, Inc.	MODEL NO. PX-90S	WEIGHT: 55 lbs.