

		1717 Doolittle Dr. San Leandro, CA 94577, USA Phone: 1-510-483-7370	Energy Recovery, Inc. Specifications Sheet PX 90S/SR	REV	BY	CKD	REVISION	DATE
				01	IBC	RLS	Added filter requirement	3/7/2007
				02	JMP	JGM	New format	4/1/2009
DESCRIPTION: TECHNICAL DATA SHEET, POSITIVE DISPLACEMENT ENERGY RECOVERY DEVICE			Sheet Page 1 of 1	03	RC	RBC	Filtration requirement	8/5/2010
			Document number: 80030-01	04	RBC	RAB	General update	2/13/2012
				05	AKP	KYK	Updated Material	12/2/2024
1.Part number 40017			2. Service:		3. Reference			
4	OPERATING CONDITIONS	Liquid	Seawater	44	TESTS	Performance	Standard	
5		Operating Temperature	33°F-120°F (0.6-49°C)	45		Case Hydrotest	Standard	
6		Max. Temperature	120°F (49°C)	46		Rotation Speed Test	Standard	
7		Specific Gravity	1.03	47		Die Penetrat Test (ceramics)	Standard	
8		Viscosity	1.06 cP @ 70°F (21.1°C)	48		Cavitation Test	Standard	
9		Maximum High-Pressure Inlet Flow	90 gpm (20 m3/hr)	49		Witnessed Test	Optional	
10		Maximum Low-Pressure Outlet Flow	90 gpm (20 m3/hr)	50				
11		Maximum Intlet Low Pressure	300 psig (20.7 barg)	51				
12		Maximum Inlet High Pressure	1200 psig (82.7 barg)	52				
13		Minimum Discharge Pressure	14.5 psig (1 bar)	53				
14		Filtration Requirement (Nominal)	20µm	54		Outside Dimensions	Standard	
15				55		Internal Components	Standard	
16				56		Housing Dimensions	Standard	
17				57		Ceramic Dimensions	Standard	
18	PERFORMANCE	Peak Efficiency	97%	58	INSPECTION	Material Certificates	Standard	
19		Maximum High Pressure Differential	20 psig (1.4 bar) @ 90 gpm	59		Visual	Standard	
20		Maximum Low Pressure Differential	17 psig (1.2 bar) @ 90 gpm	60		Packing and Crating	Standard	
21		Maximum Lubrication Flow	2.2 gpm (0.5 m3/hr)	61				
22		Maximum Rotational Speed	1500 rpm	62				
23		Maximum Salinity Increase at Membranes	3% @ 40% Recovery	63				
24				64				
25				65				
26	MATERIALS	Housing**	GRP	66	SHIPPING WEIGHT AND DIMENSIONS	PX90S unit Shipping Dimensions	30x11x12 inch 76x28x30 cm	
27		Rotor, Sleeve, Endcover Assembly	Ceramic-alumina	67		Cartridge Shipping Dimensions	15x11x12 inch 38x28x30 cm	
28		Low Pressure Inlet Port Fitting	AL6XN*	68		PX90S unit Shipping Weight	56 lbs. (25 kg)	
29		Low Pressure Outlet Port Fitting	AL6XN*	69		Cartridge Weight	16 lbs. (7 kg)	
30		High Pressure Inlet Port Fitting	2507 Super Duplex	70		Shipping and storage temperature	33°F - 120°F (0.6°C - 49°C)	
31		High Pressure Outlet Port Fitting	2507 Super Duplex	71				
32		Internal Low Pressure Interconnector	Titanium	72				
33		Fasteners/Hardware (non-wetted)	316SS	73				
34		Tension Rod Assembly	Titanium	74				
35		O-rings	EPDM	75				
36			76					
37	PIPING CONNECTIONS	Low Pressure Inlet Port Fitting	1 -1/2" Grooved-end Flexible Pipe Coupling	77	MISCELLANEOUS			
38		Low Pressure Outlet Port Fitting		78				
39		High Pressure Inlet Port Fitting		79				
40		High Pressure Outlet Port Fitting		80				
41			81					
42			82					
43			83					
*AL-6XN is a registered trademark of Allegheny Ludlum **Housing designed in accordance with the engineering standards of the Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers. ERI RESERVES THE RIGHT TO MAKE SPECIFICATION CHANGES AT ANY TIME WITHOUT PRIOR NOTICE.								
PRICE: sales@energyrecovery.com								
MANUFACTURER: Energy Recovery Inc			MODEL: PX-90S					