

		1717 Doolittle Dr. San Leandro, CA 94577, USA Phone: 1-510-483-7370 FAX: 1-510-483-7371	Energy Recovery, Inc. Specifications Sheet PX-90SB		REV	BY	CKD	REVISION	DATE
DESCRIPTION: TECHNICAL DATA SHEET, POSITIVE DISPLACEMENT ENERGY RECOVERY DEVICE		Sheet Page 1 of 1		00	JMP	JGM	Initial Release	4/1/09	
				01	RC	RBC	Updated Filtration	8/5/10	
		Document number: 80161-03		02	KYK	DKH	Updated Performance and Format	6/7/22	
1. Part number 40019-01			2. Service BWRO		3. Reference				
4	OPERATING CONDITIONS	Liquid	Brackish Water	46	TESTS	Performance	Standard		
5		Operating Temperature	33°F-120°F (0.6-49°C)	47		Rotation Speed Test	Standard		
6		Max. Temperature	120°F (49°C)	48		Dye Penetrant Test (ceramics)	Standard		
7		Specific Gravity	1.01	49		Cavitation Test	Standard		
8		Viscosity	0.991 cP @ 70°F (21.1°C)	50		Witnessed Test	Optional		
9		Flow range	60 - 90 gpm (13.6-20.4 m3/h)	51					
10		Maximum High-Pressure Inlet Flow	90 gpm (20.4 m3/h)	52					
11		Maximum Low-Pressure Outlet Flow	90 gpm (20.4 m3/h)	53					
12		Maximum Inlet High Pressure	400 psi (27.6 bar)	54					
13		Maximum Inlet Low Pressure	150 psi (10.3 bar)	55					
14	PERFORMANCE	Minimum Discharge Pressure	14.5 psi (1 bar)	56	INSPECTION				
15		Filtration Requirement (Nominal)	20 µm	57					
16				58		Outside Dimensions	Standard		
17				59		Internal Components	Standard		
18				60		Housing Dimensions	Standard		
19				61		Ceramic Dimensions	Standard		
20		Peak Efficiency	93%	62		Material Certificates	Standard		
21		Maximum High Pressure Differential	20 psi (1.4 bar)	63		Visual	Standard		
22		Maximum Low Pressure Differential	17 psi (1.2 bar)	64		Packing and Crating	Standard		
23		Maximum Lubrication Flow	1.3 gpm (.3 m3/hr)	65					
24	MATERIALS	Maximum Salinity Increase at Membranes	3% @ 40% Recovery	66	SHIPPING WEIGHT AND DIMENSIONS				
25		Noise Per ISO 3744	84 dB (A)	67					
26				68					
27				69					
28		Housing	GRP	70		PX unit Shipping Dimensions	30x11x12 inch 76x28x30 cm		
29		Rotor, Sleeve, Endcover Assembly	Ceramic-alumina	71		PX unit Shipping Weight	56 lbs. (25 kg)		
30		Low Pressure Inlet Port Fitting	GRP	72		Dry PX unit weight	46 lbs. (21 kg)		
31		Low Pressure Outlet Port Fitting	GRP	73		Cartridge Shipping Dimensions	15x11x12 inch 38x28x30 cm		
32		High Pressure Inlet Port Fitting	254 SMO*	74		Cartridge Weight	16 lbs. (7 kg)		
33		High Pressure Outlet Port Fitting	254 SMO*	75		Shipping and Storage Temperature	33°F-120°F (0.6-49°C)		
34	PIPE CONNECTIONS	Internal Low Pressure Interconnector	PVC	76	MISCELLANEOUS				
35		Fasteners/Hardware (non-wetted)	316SS	77					
36		Tension Rod Assembly*	Ti / C-276	78					
37		O-rings	EPDM	79					
38				80					
39				81					
40		Low Pressure Inlet Port Fitting	1-1/2" Grooved-end Flexible Pipe Coupling	82					
41		Low Pressure Outlet Port Fitting		83					
42		High Pressure Inlet Port Fitting		84					
43		High Pressure Outlet Port Fitting							
44									
45									
* 254 SMO is a registered trademark of Avesta Sheffield Aktiebolag Corporation ERI RESERVES THE RIGHT TO MAKE SPECIFICATION CHANGES AT ANY TIME WITHOUT PRIOR NOTICE.									
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MANUFACTURER: Energy Recovery Inc			MODEL: PX-90SB						