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Energy Recovery, Inc.
Technical Data Sheet
CPXP 34

REV	BY	CKD	REVISION	DATE
00	SYB	EK	Initial Release	11/20/2025

DESCRIPTION:
TECHNICAL DATA SHEET
CPXP 34 High-Pressure Pump

Sheet
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Document number:
81012-01

1. Part number **81012-01** 2. Service **SWRO** 3. Reference

1	OPERATING CONDITIONS	Medium	Seawater	37	CURVES	Flow -Pressure Curve	See Pump Curve Doc# 81042-01	
2		Operating Temperature	35.6°F-122°F (2-50°C)	38		Flow-Speed Curve	See Pump Curve Doc# 81042-01	
3		Operating State	Continuous	39		Shaft Power-Pressure Curve	See Pump Curve Doc# 81042-01	
4		Medium Characteristics	Corrosive	40				
5		Specific Gravity	1030 kg/m ³	41	MATERIALS	Shaft / Shell / Wetted Metals	2507	
6		Viscosity	1.060 cP @ 70°F (21.1°C)	42		Shaft Coupling	Galv. Steel w/ Zn-Ni Alloy	
7		Filtration Requirement*	10 µm	43		Gaskets	FKM	
8				44		Mechanical Seal	Hastelloy Alloy	
9	Geometric Displacement	90 cm ³ /rev	45	Fasteners		2507		
10	Max Outlet Pressure	1200 psi (83 bar)	46	Required Motor Power* *		Refer to pump calculation results		
11	Min Outlet Pressure	290 psi (20 bar)	47	Motor Technical Details		Refer to Motor TDS document		
12	Inlet Pressure	29-72.5 psi (2-5 bar)	48					
13	Min Speed	700 rpm	49	TYPICAL MOTOR SIZE	Space Heater/Fungus Proof/Tropicalization	Optional		
14	Max Speed	1,800 rpm	50		Thermal Protection	Optional		
15	Rated Flow@1500rpm&80bar	7.7 m ³ /h	51					
16	Flow Control	Speed Regulated	52					
17	PUMP PERFORMANCE	Inlet	M42X1.5 (DN 40) Female Thread		53	DIMENSIONS	Shipping Dimensions & Weight	See Packaging Drawing Doc# 92512-01
18		Outlet	M42X1.5 (DN 40) Female Thread		54			
19		Inlet & Outlet Piping Connections	Grooved-End Flexible Coupling DN40 (Optional)		55			
20		Discharge High-Pressure Flexible Hose	DN40, 1m (Optional)		57		Scope of Supply	Pump Head, Motor, Bell Housing, Shaft Coupling. (Optional: Inlet Joint, Outlet Check Valve, Discharge High-Pressure Flexible Hose)
21		Pump Base	NO	58				
22		Internal Intergrated Flushing Valve	YES	59				
23		Sealing Cooling Method	Self-cooling	60				
24		Bearing Lubrication Method	Self-lubricating	61				
25	PUMP DESIGN	Rotation Direction	Clockwise (viewed from the motor towards the pump head)	62	INSPECTION & TESTS	Material Conformance	Material Certificate	
26				63		Dimensional and Visual Inspection	Certified Drawing	
27				64		External Leakage Test	Test Reports	
28				65		Performance Test	Test Reports	
29				66		Shipping Authorization	Client Shipment Release	
30				67				
31				68				
32				69				
33			70					
34			71					
35			72					
36			73					

NOTES:

* ERI recommends to use a precision depth filter cartridge with efficiency of 99.98% at 10 micron and β10>5000 to protect the key components of the pump. Bag filters or string-wound filter cartridges are not recommended.

** The required motor power depends on your flow rate and pressure. Please contact ERII for accurate motor power information.

PRICE: sales@energyrecovery.com		
MANUFACTURER: Energy Recovery, Inc	MODEL: CPXP 34	