



1717 Doolittle Dr.
San Leandro, CA
94577, USA
Phone: 1-510-483-7370

Energy Recovery, Inc.
Technical Data Sheet
CPXP 14

| REV | BY | CKD | REVISION | DATE |
|-----|-----|-----|-----------------|------------|
| 00 | SYB | EK | Initial Release | 11/20/2025 |
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Document number:
81006-01

DESCRIPTION:
TECHNICAL DATA SHEET
CPXP 14 High-Pressure Pump

| 1. Part number | | 81006-01 | | 2. Service | | SWRO | | 3. Reference | |
|----------------|--------------------------|---------------------------------------|--|-------------------------|---|-----------------------------------|--|--------------|--|
| 1 | OPERATING CONDITIONS | Medium | Seawater | 37 | CURVES | Flow -Pressure Curve | See Pump Curve Doc# 81036-01 | | |
| 2 | | Operating Temperature | 35.6°F-122°F (2-50°C) | 38 | | Flow-Speed Curve | See Pump Curve Doc# 81036-01 | | |
| 3 | | Operating State | Continuous | 39 | | Shaft Power-Pressure Curve | See Pump Curve Doc# 81036-01 | | |
| 4 | | Medium Characteristics | Corrosive | 40 | | | | | |
| 5 | | Specific Gravity | 1030 kg/m³ | 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 | 18 cm³/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 | 14.5-72.5 psi (1-5 bar) | 48 | | | | | | |
| 13 | Min Speed | 1500 rpm | 49 | TYPICAL MOTOR SIZE | Space Heater/Fungus Proof/Tropicalization | Optional | | | |
| 14 | Max Speed | 3000 rpm | 50 | | Thermal Protection | Optional | | | |
| 15 | Rated Flow@3000rpm&80bar | 3.1 m³/h | 51 | | | | | | |
| 16 | Flow Control | Speed Regulated | 52 | | | | | | |
| 17 | PUMP PERFORMANCE | Inlet | G3/4 (DN 25) Female Thread | 53 | DIMENSIONS | Shipping Dimensions & Weight | See Packaging Drawing Doc# 92506-01 | | |
| 18 | | Outlet | G3/4 (DN 25) Female Thread | 54 | | | | | |
| 19 | | Inlet & Outlet Piping Connections | Grooved-End Flexible Coupling DN25 (Optional) | 55 | | SCOPE OF SUPPLY | Pump Head, Motor, Bell Housing, Shaft Coupling. (Optional: Inlet Joint, Outlet Check Valve, Discharge High-Pressure Flexible Hose) | | |
| 20 | | Discharge High-Pressure Flexible Hose | DN25, 1m (Optional) | 57 | | | | | |
| 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 | | | |
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| 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 14 |