



Ocean Pumps®

Ocean Pacific Technologies (OPT) manufactures a unique line of advanced axial piston pumps (APP) designed for corrosive, low viscosity fluids such as seawater. OPT's patented ceramic bearing systems allow our APP to tolerate a wide range of process water quality and particulate/solids material. And our axial piston pump can be efficiently and economically applied over a wide range of flow rates from a few gallons per minute to thousands of gallons per minute at pressures up to 1000 psi/69 bar. **Ocean Pumps® are the most efficient (up to 95%), light weight, compact and low maintenance pumps in their class.**

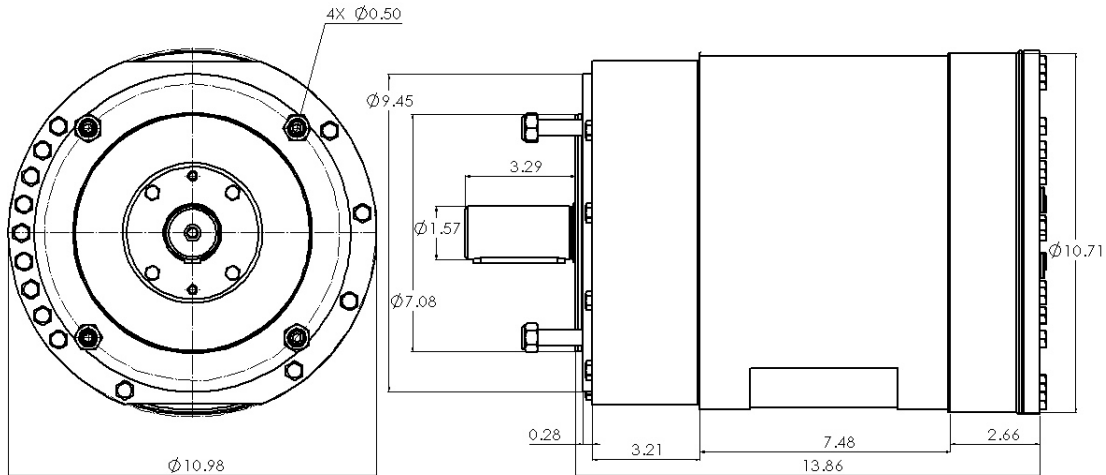


Some features and benefits include:

- **Ultra-low maintenance water lubricated design** - 8000 hour maintenance free operation with no oil changes or other preventative maintenance tasks.
- **Lowest energy consumption** - Positive displacement design operates at up to 95% efficiency
- **Smooth flow operation** - Axial piston rotary design requires no pulsation dampeners even at high flows
- **Corrosion resistant** - Constructed from Duplex stainless steel, ceramic and polymer materials for seawater, brine and other corrosive fluids
- **Compact design** - APP pumps require approximately ½ the space and weight of plunger pumps and can be close coupled to electric motor.
- **Modular design** - Simply add pumps to increase flow.

Ocean Pumps® Performance Specifications

| Model # | OP-135 | OP-165 |
|--|--------------------|----------|
| RPM (min / max) | 700 / 1500 | |
| Max flow (gpm) / (m ³ /hr) | 138 / 31 | 169 / 38 |
| Pump kW @ 1500 rpm and 1000 psi (69 bar) | 72 | 87 |
| Max discharge press (psi / bar) | 1160 / 80 | |
| Min inlet press (psi / bar) | 29 / 2 | |
| Max inlet press (psi / bar) | 75 / 5.2 | |
| Weight (lb / kg) | 232 / 105 | |
| Inlet port | 3" grooved Vic | |
| Outlet port | 2-1/2" grooved Vic | |



DRAFT

Notes:

1. Maximum discharge pressure 69 bar / 1000 psi
2. Pre-filtration requirement is 100 micron strainer.
3. Units are manufactured in duplex stainless steel as standard.
4. Pumps will not lift water, a positive head is required at all times.
5. Pumps are supplied with clockwise rotation when facing shaft.
6. Contact OPT for performance and operating parameters outside specified limits
7. Manufacturer reserves the right to make changes to specifications at any time.