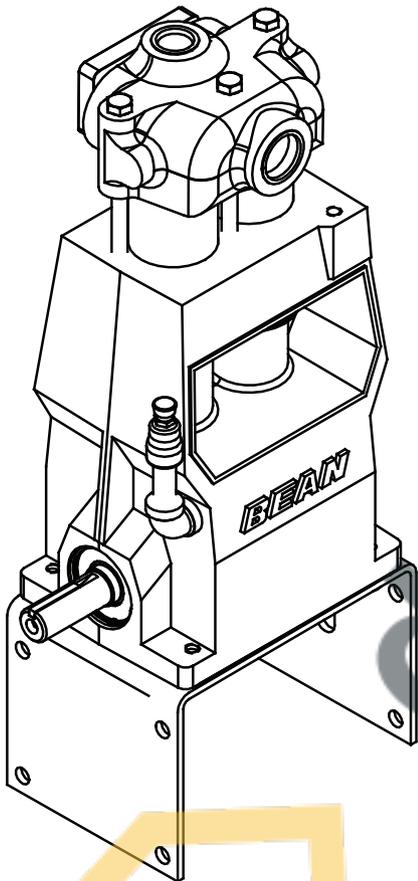


Ao4 Piston Pump Data

2.6 BHP Continuous Duty (3.2 BHP Intermittent Duty)

Ao4

Standard Cast ISO Drawing



Specifications

| | |
|--------------------------------|--------------------------------|
| Pump Model | Ao4 |
| Configuration | Ao4 Vertical Duplex Piston |
| Number of Pistons | 2 |
| Stroke Length | 1.0 Inches |
| Frame Load Rating | 1,140 lbs |
| Pump Weight (Average) | 43 lbs |
| Direction of Rotation | Either |
| Internal Gear Ratio | NA |
| Intermittent Duty Speed Rating | 500 RPM |
| Continuous Duty Speed Rating | 400 RPM |
| Ball Valve Max Speed Rating | NA |
| Minimum Speed | 300 RPM |
| Mechanical Efficiency | 90% |
| Lubrication System (Standard) | Splash, Gravity Return |
| Lube Oil Capacity | 1 Quart |
| Lube Oil Type | SAE 30 |
| Maximum Fluid Temperature | 140 °F (250 °F Capability) |
| Minimum Fluid Temperature | 0 °F (-20 °F Capability) |
| Standard Suction Size | 1.00 Inch NPT |
| Standard Discharge Size | 0.50 Inch NPT 0.75 Inch NPT |
| Fluid End Material | Cast Iron, Aluminum Bronze |
| Valve Types | Disc Valves |
| Hydraulic Motor Mount | SAE A - 2 Bolt with 7/8"-13T |

Performance Table

| Pump Model | Piston Diameter (in) | Displacement (GAL/REV) | Maximum Pressure (PSI) | Pump Capacity (GPM) @ Input Speed (RPM) | | | | |
|------------|----------------------|------------------------|------------------------|---|---------|--------|--------|--------|
| | | | | 300 RPM | 350 RPM | 375RPM | 400RPM | 500RPM |
| Ao410 | 1.250 | 0.0106 | 900 | 3.19 | 3.72 | 3.98 | 4.25 | 5.31 |
| Ao411 | 1.375 | 0.0129 | 750 | 3.86 | 4.50 | 4.82 | 5.14 | 6.43 |
| Ao413 | 1.625 | 0.0180 | 550 | 5.39 | 6.28 | 6.73 | 7.18 | 8.98 |

* Horsepower based on 85 or 90% mechanical efficiency. Actual application horsepower requirements can be calculated using the equation:
 $BHP = (GPM * PSI) / (1714 * 0.85 \text{ or } 0.90)$

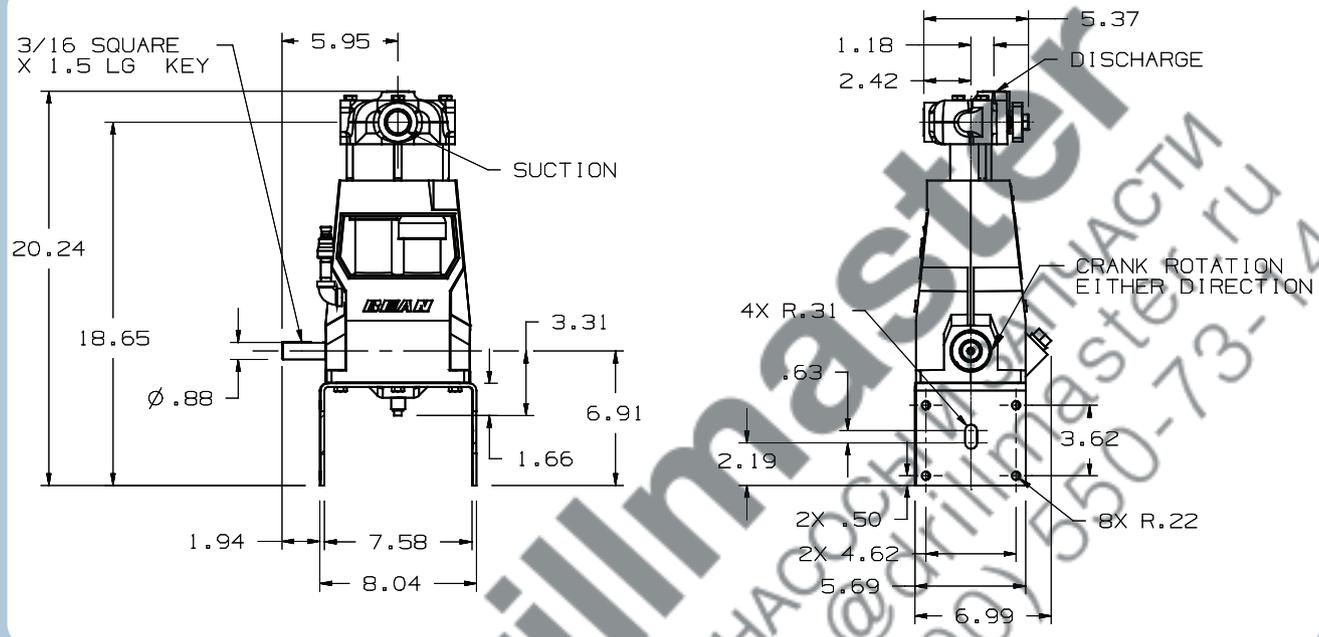
* Pump capacities shown are based on 100% volumetric efficiency.

* Dimensions shown are for general sizing purposes and should not be used for construction. Contact FMC for actual dimensions of pump ordered.

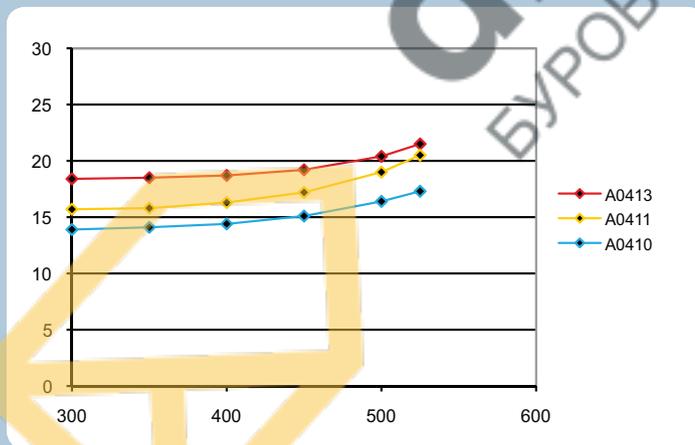
* FMC reserves the right to modify this information without prior notice.

Ao4

Cast Pump Engineering Dimensional Outline



Ao4 NPSHr value for Standard Disc Valves



- FMC recommends NPSHa (available) exceeds NPSHr (required) by 5 feet of water.
- Take special consideration when calculating NPSHa. Recalculate NPSHa after pump model has been selected for more accurate values.
- NPSHr values are in feet of water. If you are pumping a different liquid than water, convert the required NPSH from water to the liquid being pumped by dividing the published NPSHr value by the specific gravity of the liquid being pumped.
- FMC published NPSHr values are based on test data collected on specific pumps at the factory and are estimated values. Actual NPSHr values for an ordered pump can only be determined by a factor test. For NPSH critical applications, contact the factory for additional information and request an NPSHr test performed on your pump before shipment.
- Pump drawing dimensions in inches.

For additional information visit FMCPumps.com