

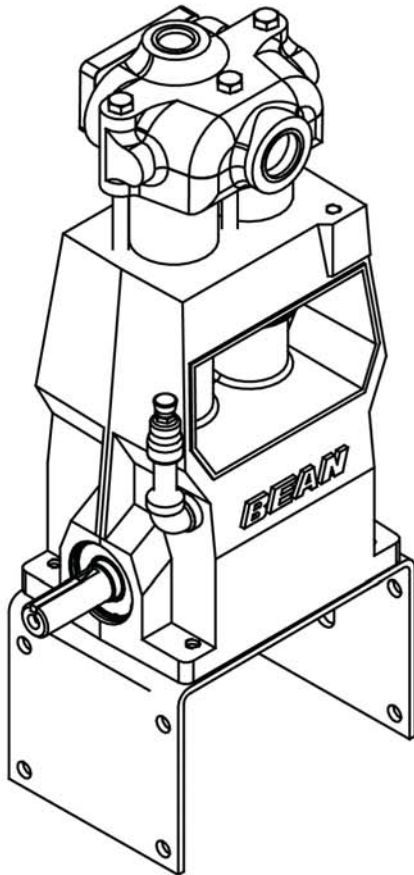
# FMC Technologies

## 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<br>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.