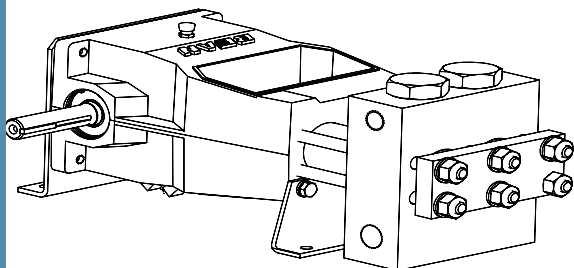


## FMC Technologies

### D04 Plunger Pump Data

3.3 BHP Continuous Duty (3.9 BHP Intermittent Duty)

#### Forged ISO Drawing



#### Specifications

Pump Model	D04
Design Standard	API-674, Second Edition
Configuration	Horizontal Duplex Plunger
Number of Plungers	2
Stroke Length	1.0 Inches
Frame Load Rating	1,162 lbs
Forged Fluid Cylinder Pressure Rating	2,150 psi
Cast Fluid Cylinder Pressure Rating	Not Available
Pump Weight (Average)	75 lbs
Intermittent Duty Speed Rating	600 RPM
Continuous Duty Speed Rating	500 RPM
API-674 Max Recommended Speed	500 RPM
Minimum Speed	25 RPM
Mechanical Efficiency	90%
Lubrication System (Standard)	Splash, Gravity Return
Lubrication System (Optional)	NA
Lube Oil Capacity	1 Quarts
Lube Oil Type	SAE 30
Maximum Fluid Temperature	200 °F (400 °F Capability)
Minimum Fluid Temperature	-20 °F (-50 °F Capability)
Valve Types	Disc Valves

Forged Fluid End Material	Cast Fluid End Material
A105 Carbon Steel	Not Available
A350-LF2 Carbon Steel	
316L Stainless Steel	
2205 Duplex Stainless Steel	

\* Special Materials available on request

Standard Connection Sizes	Suction	Discharge
D0404 - D0408	0.75	0.50

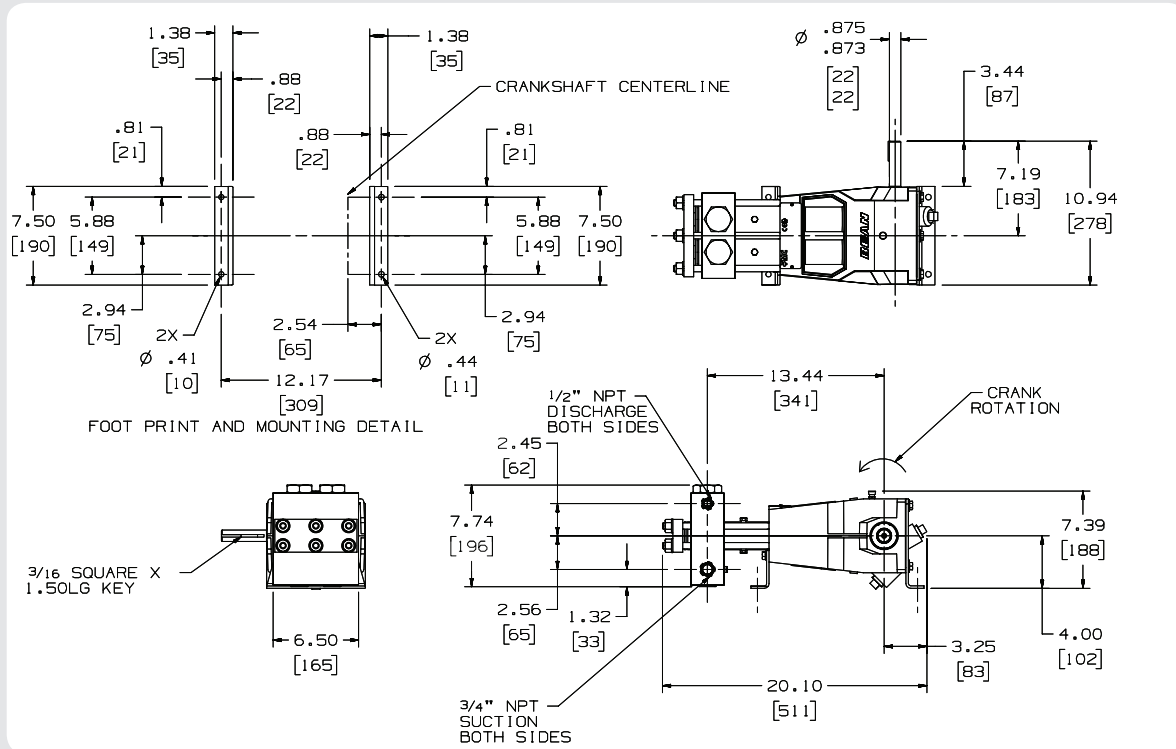
- \* Consult us for specific exceptions to API-674 and NACE standards.
- \* Consult us for any application where inlet pressures will exceed 10% of rated discharge pressures.
- \* Horsepower based on 90% mechanical efficiency. Actual application horsepower requirements can be calculated using the equation:  $BHP = (GPM * PSI) / (1714 * 0.90)$
- \* Direction of rotation is the top of the crankshaft towards the fluid head.

## D04 Performance Table

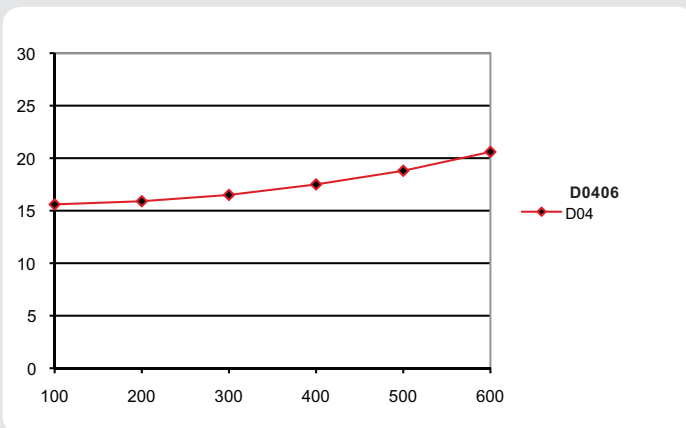
Pump Model	Plunger Diameter (in)	Displacement (GAL/REV)	Maximum Pressure (PSI)	Pump Capacity (GPM) @ Input Speed (RPM)				
				100 RPM	250 RPM	400RPM	500RPM	600RPM
D0404	0.500	0.0017	2,150 *	0.17	0.42	0.68	0.85	1.02
D0406	0.750	0.0038	2,150 *	0.38	0.96	1.53	1.91	2.29
D0408	1.000	0.0068	1,480	0.68	1.70	2.72	3.40	4.08
D0410	1.250	.0106	950	1.06	2.66	4.25	5.31	6.37

\* Based on standard carbon steel.

## Forged Pump Engineering Dimensional Outline



## D04 NPSHr values for Disc Valves with 1-spring



\* Pump capacities shown are based on 100% volumetric efficiency.  
 \* FMC recommends NSPha (available) exceeds NPSHr (required) by 5 feet of water.  
 \* Take special consideration when calculating NSPha. Recalculate NSPha 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 NSPha 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 a NPSHr test performed on your pump before shipment.