## TRIPLEX WATER PUMP

## Product Code: TP-220

- TP-220 series Triplex Pumps are generally designated pump water and mud.
- They can be equipped in three different ways as Electrical motor, Diesel engine and Hydraulic driven motor.
- Triplex Pumps spare parts, ceramic cylinders, stainless valves, balls and seals can be easily changed.
- The three cylinders, which are made of steel reinforced ceramic material, are durable against to corrosion and can be changed easily.
- The valves, which are in the form of ball, are made of stainless steel and the valve seats are manufactured from tempered steel.
- The pump safety valve adjusted according to 50 bar pressure.
- If the pressure in the system exceeds these values, then the safety valve activates and by means of this the pump housing is protected against to excessive pressure.
- The pump safety valve can be adjusted to lower values mentioned above, however, it should not be adjusted over 70 bar.
- The pressure values can be observed with a manometer 0-100 bar.



## PUMP SPECIFICATIONS

37 BHP Continuous Duty (52 BHP Intermittent Duty)

| Configuration | Horizontal Triplex Piston |
| :---: | :---: |
| Number of Pistons | 3 |
| Stroke Length | 69.9 mm (2.75 Inches) |
| Frame Load Rating | 2.721 kg (6000 lbs) |
| Pump Weight | 200 kg (440 lbs) |
| Direction of Rotation | Top of shaft away from head |
| Internal Gear Ratio | 3.6:1 |
| Intermittent Duty Speed Rating | 900 rpm |
| Continuous Duty Speed Rating | 750 rpm |
| Ball Valve Max Speed Rating | 635 rpm |
| Minumum Speed | 360 rpm |
| Mechanical Efficiency | \%85 |
| Lubrication System | Splash, Gravity Return |
| Lube Oil Capacity | 3.78 liters (1 Gallon) |
| Lube Oil Type | SAE 30 |
| Maximum Fluid Temperature | $140{ }^{\circ} \mathrm{F}\left(250^{\circ} \mathrm{F}\right.$ Capability) |
|  | $60^{\circ} \mathrm{C}\left(121^{\circ} \mathrm{C}\right.$ Capacity) |
| Minumum Fluid Temperature | $0^{\circ} \mathrm{F}\left(-20^{\circ} \mathrm{F}\right.$ Capability) |
|  | $-17.8^{\circ} \mathrm{C}\left(-28.9^{\circ} \mathrm{C}\right.$ Capacity) |
| Standard Suction Size | 50.8 mm (2.00 Inch NPT) |
| Standard Discharge Size | 31.8 mm (1.25 Inch NPT) |
| Fluid End Material | Cast Iron |
| Valve Types | Ball Valves, Disc Valves |
| Hydraulic Motor Mount | SAE C - 4 Bolt with 1.25"-14T |

## PERFORMANCE RATING

|  |  |  |  |  |  |  | Pump Capacity at Input Speed (RPM) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pump Model | Piston Diameter |  | Displacement |  | Maximum Pressure |  | 350 RPM |  | 625 RPM |  | 700 RPM |  | 750 RPM |  | 890 RPM |  |
|  | mm | Inch | Liter | Gallon | Bar | PSI | Ipm | gpm | Ipm | gpm | Ipm | gpm | Ipm | gpm | Ipm | gpm |
| TP220 | 69.9 | 2.75 | 0.223 | 0.0589 | 68.95 | 1000 | 80.25 | 21.2 | 112 | 29.5 | 200 | 53 | 234 | 61.9 | 284 | 75.1 |

* Horserpower based on \%85 or \%90 efficiency. Actual application horsepower requirements can be calculated using equation; BHP $=(G P M * P S I) /\left(1714^{*} 0.85\right.$ 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 Son-Mak for actual dimensions of pump ordered.
* Son-Mak reserves the right to modify this information without prior notice.


