

MODEL 14-P-220 TRIPLEX MUD PUMP

NATIONAL OILWELL VARCO

National Oilwell Varco's 14-P-220 Mud Pump is rated at 2200 input horsepower (1640 kW) at 105 strokes per minute, with a 14-inch (355.6 mm) stroke.

Multiple liner sizes allow pressures and volumes to handle circulation requirements in deep drilling applications.

| Specifications | |
|---|---|
| Dimensions | |
| Height, floor to center of front inlet suction, inches (mm) | 19 7/8* (505) |
| Height, floor to center of discharge, inches (mm) | 49 1/4" (1251) |
| Overall length over skids, inches (mm) | 218 1/4" (5544) |
| Width over frame, inches (mm) | 91" (2311) |
| Width over pinion shaft, inches (mm) | 125 3/4" (3194) |
| Height, floor to top of gear case, inches (mm) | 84 1/4" (2139) |
| Height over fluid cylinders, inches (mm) | 69 1/8" (1756) |
| Weight-complete, less sheave, lbs. (kg) | 86,000 (39,007) |
| Fluid Connections | |
| Suction connection | 10" ASA-150 lb. R.J. flange |
| Discharge connection, cross | 6" API-5000 lb. R.J. flange |
| Capacity Data | |
| Maximum liner bore, inches (mm) | 9" (228.6) |
| Stroke, inches (mm) | 14° (355.6) |
| Maximum input horsepower (kW) | 2200 (1640) |
| Rated pump speed, spm | 105 |
| Pinion speed, rpm | 417 |
| ydrostatic test pressure of fluid cylinders (High Pressure Fluid End), psi (kg/cm2) | 11,250 (791) |
| Hydrostatic test pressure of fluid cylinders (Standard Fluid End), psi (kg/cm2) | 10,000 (703) |
| Mechanical Data | |
| Fluid cylinder | Steel, 2 piece interchangeable modular design |
| Valves, API number | MOD. 8 |
| Valve seats Bottom shouldering, | modified for high pressure |
| Piston rod-piston connection | Piloted and shouldered, National CB-4 |
| Piston rod-intermediate rod connection | Piloted and shouldered, metal-to-metal lock |
| Type of gears | Relieved herringbone |
| Gear ratio | 3.969:1 |
| Gear and pinion | Through hardened alloy |
| Type of crosshead pin | Tapered |
| Number and type of pinion shaft bearing | 2 self aligning roller |
| Number and type of main bearing | 2 double row tapered roller |
| Number and type of crosshead bearing | 3 double row needle |
| Number and type of crankshaft-connecting rod bearing | 3 cylindrical roller |
| Sheave, QD Hub Type S | 53" 10-8V Section belts |