

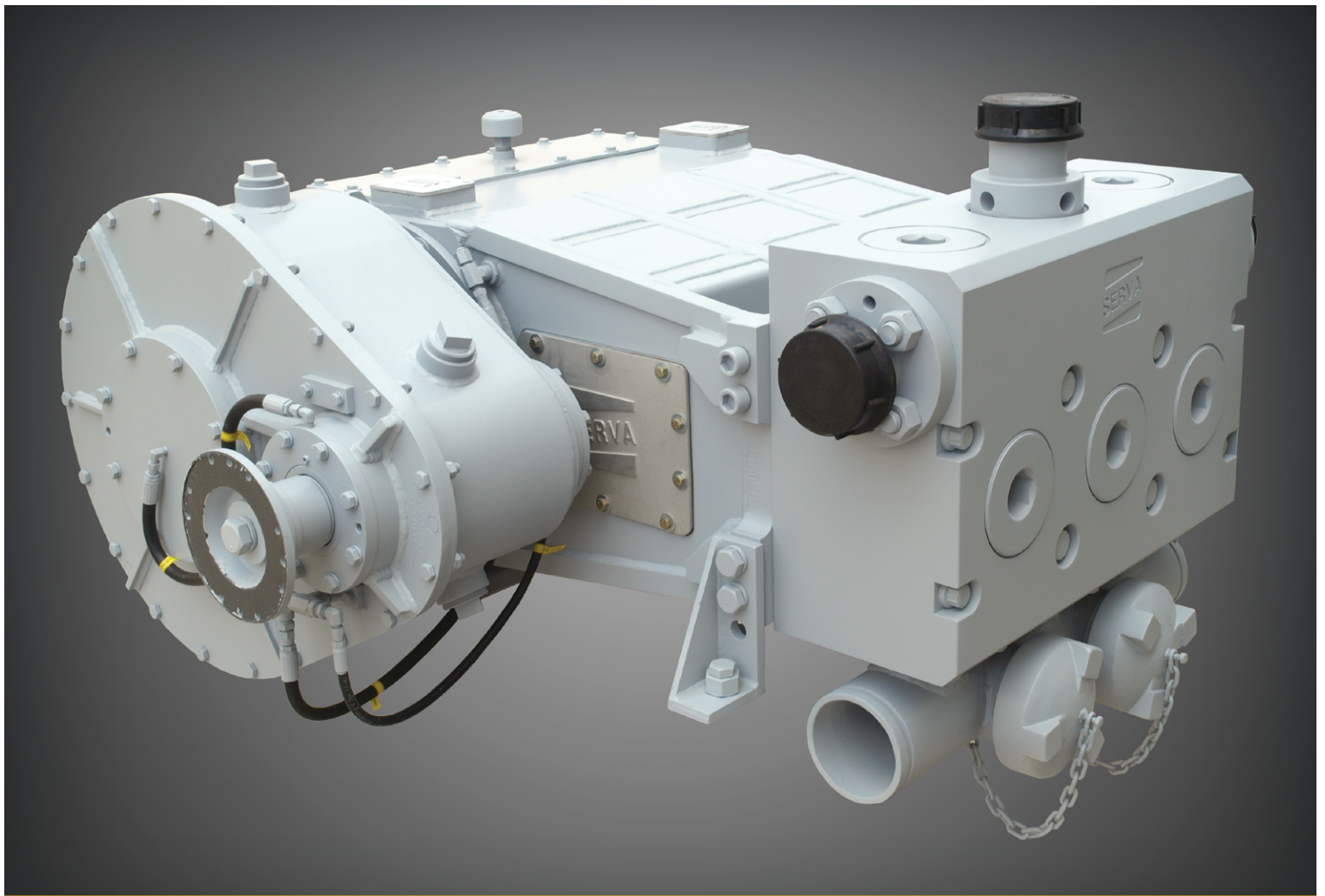
SERVA Pumps, Parts & Service

With vast resources of hundreds of engineers and unparalleled testing rigor, SERVA develops and manufactures thousands of pumps and pumping units for global applications, both offshore and onshore in triplex and quintuplex configurations. SERVA also supports its pump products with comprehensive and responsive support with parts and service to maximize your uptime no matter where in the world you happen to be.



EQUIPMENT & SERVICES

- **SERVA TPD-600 Triplex Pump**
- **SERVA TPH-400 Triplex Pump**
- **SERVA QPA-1000 Quintuplex Plunger Pump**
- **SERVA 2250 Frac Pump**
- **SERVA 2500 Frac Pump**
- **SERVA C-Pumps**
- **SERVA Pump Fluid Ends**
- **SERVA Parts & Service**



SERVA TPD 600 Triplex Pumps

SERVA TPD 600 Triplex Pumps are used for cementing and acidizing service. Their short length allows back-to-back placement of two pumps on the unit with less than 102" total width.

MAJOR FEATURES

Fluid End

- Forged alloy steel mono-block fluid end with removable stuffing box
- Valve-over-valve fluid end
- Left- or right-side suction and discharge connections
- Suction manifold with Victaulic connections
- Hard-coated plungers
- High-performance header-ring style packing
- Center-gauge connection
- Fabricated steel suction manifold
- Replaceable alloy steel wing-guided valves
- Replaceable urethane valve inserts

SPECIFICATIONS

Power End

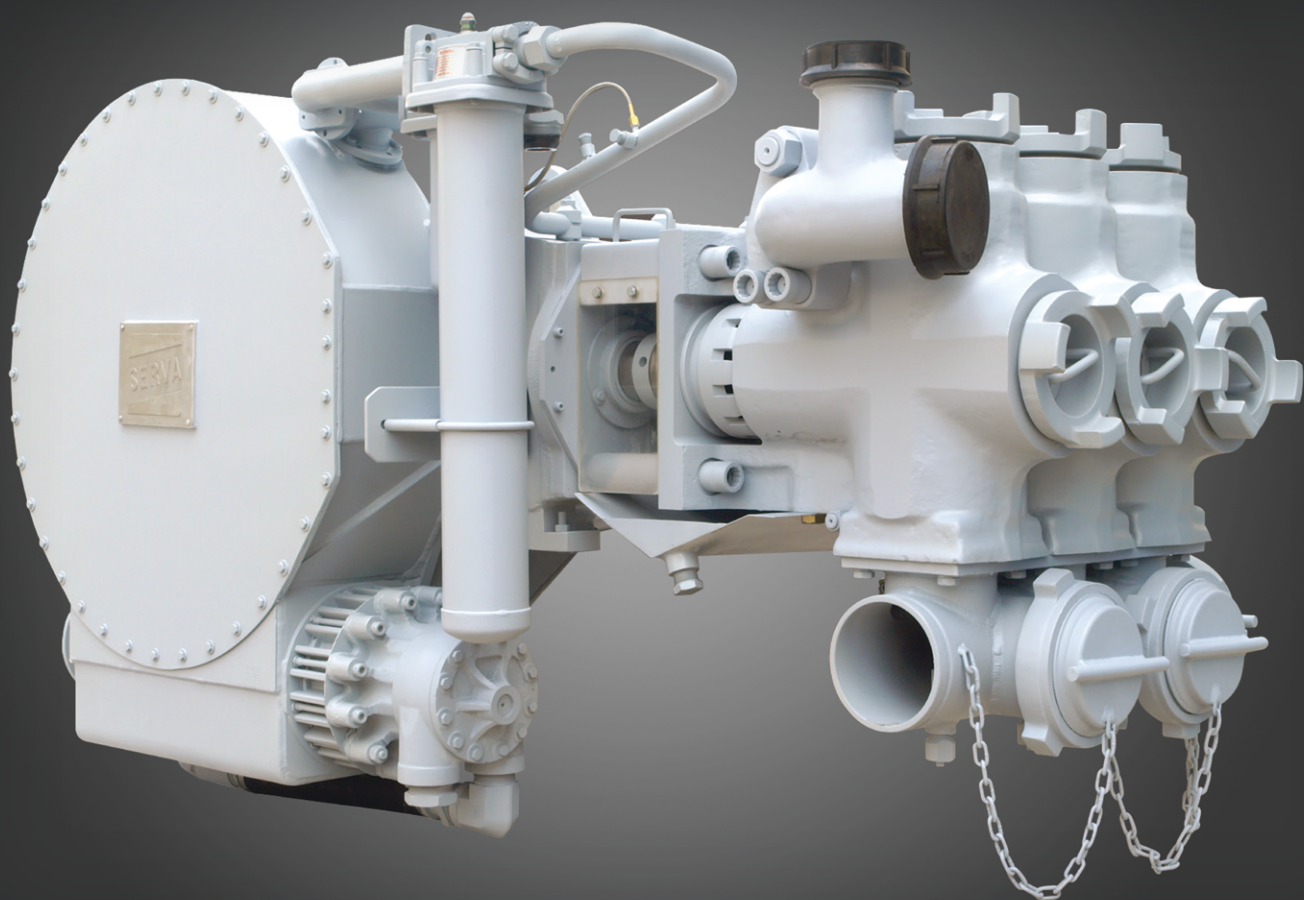
- Rated max brake horsepower..... 600 bhp
- Maximum rod load..... 100,000 lbs
- Stroke length6"
- Gear ratio..... 4.6:1
- Plunger..... 3" to 4.5"
- Pump weight..... 4,600 lbs

Power End Features

- Crankshaft construction
- Pressure-lubricated wrist pins through crankshaft
- Ground, honed crosshead guides
- Proprietary crosshead coating
- Left or right gearbox mounting
- 16 input drive positions

TPD 600 Triplex Pump Intermittent Well Service Ratings

Plunger Diameter	Displacement per Revolution	Displacement At Pump Plunger Strokes Per Minute/Pinion RPM									
		50/230		120/552		200/920		300/1,380		450/2,070	
inches (mm)	gal/rev (liter/rev)	gpm (m³pm)	psi (kg/cm²)	gpm (m³pm)	psi (kg/cm²)	gpm (m³pm)	psi (kg/cm²)	gpm (m³pm)	psi (kg/cm²)	gpm (m³pm)	psi (kg/cm²)
3 (76.2)	.55 (2.1)	28 (104)	14,147 (997)	66 (250)	14,003 (987)	110 (417)	8,402 (592)	165 (625)	5,601 (395)	248 (938)	3,734 (263)
3.5 (88.9)	.75 (2.8)	37 (142)	10,394 (732)	90 (341)	10,288 (725)	150 (568)	6,173 (435)	225 (851)	4,115 (290)	337 (1277)	2,744 (193)
4 (101.6)	.98 (3.7)	49 (185)	7,958 (561)	118 (445)	7,877 (555)	196 (741)	4,726 (333)	294 (1,112)	3,151 (222)	441 (1668)	2,100 (148)
4.5 (114.3)	1.24 (4.7)	62 (235)	6,288 (443)	149 (563)	6,224 (439)	248 (938)	3,734 (263)	372 (1,407)	2,489 (175)	558 (2111)	1,660 (117)
Input Power hp (kw)		253 (188)		600 (448)		600 (448)		600 (448)		600 (448)	



SERVA TPH 400 Triplex Pumps

SERVA TPH 400 Triplex Pumps are good for high-pressure well service. Each pump is equipped with an integral gear reduction box. The Triplex Pumps are designed to pump cement slurries, sand-laden fluids, crude oil, acids, mud and other oil well servicing fluids.

MAJOR FEATURES

Fluid End

- Gear train: Steel worm and bronze ring w/8.6:1 ratio (standard)
- Crankshaft: Forged steel, four main bearings
- Connecting rods: Forged aluminum, split caps and insert bearings
- Crossheads: Cast steel
- Case: High-strength steel weldment
- Bearing type: Roller and race
- Oil system: Gear pump driven off worm (std) or remote
- Oil filter: Replaceable elements and magnetic strainer
- Oil capacity: 22 USG
- Oil pressure: 80 to 100 psi

SPECIFICATIONS

Power End

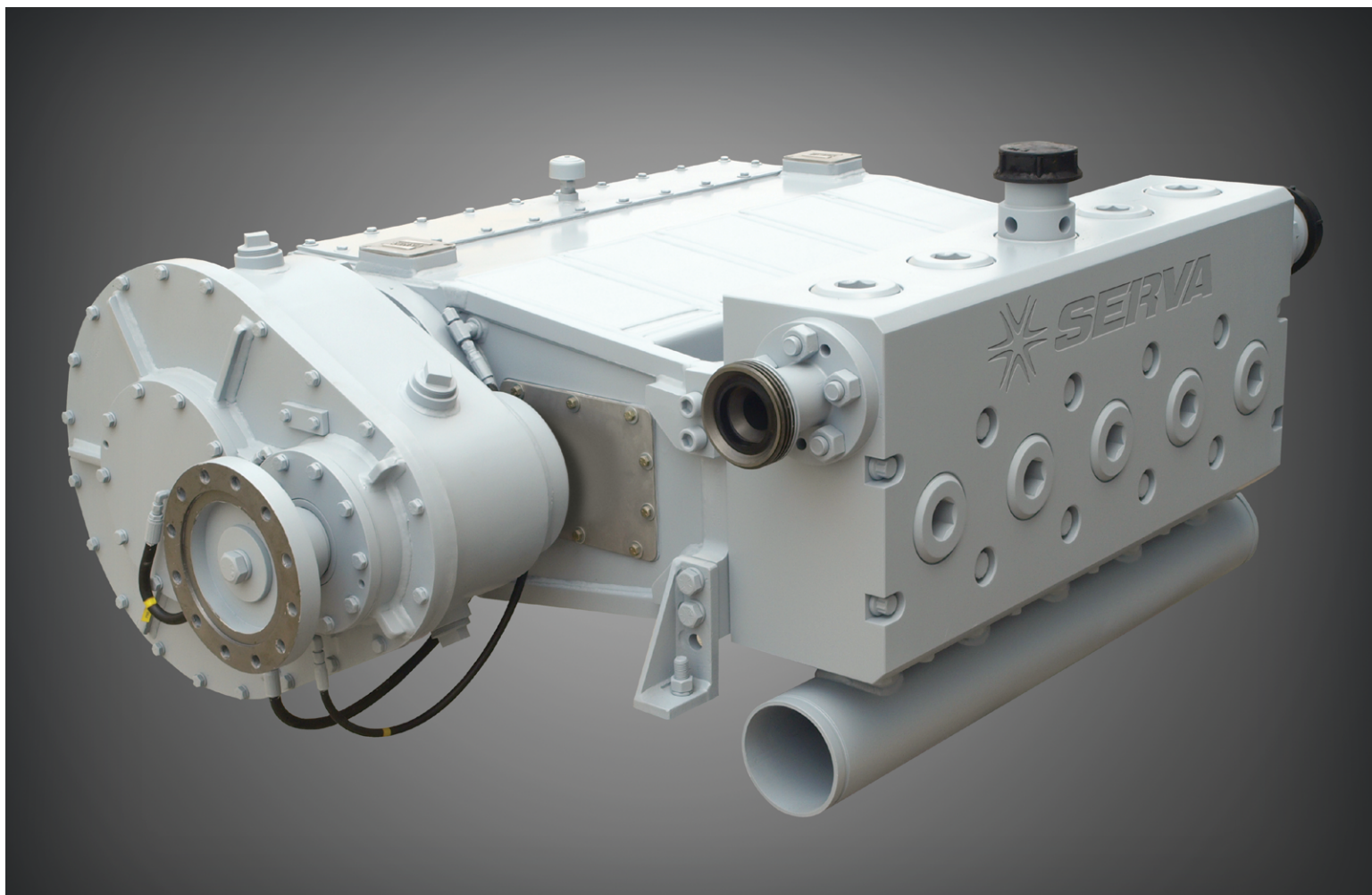
- Companion flange..... 1800 Series Spicer
- Input spline 3"–10 (7.62 cm)
- Input speed w/8.6:1 gears..... 2,400 rpm maximum
- Maximum input torque..... 7,215 ft-lb
- Maximum input horsepower..... 600 hp
- Maximum rod load..... 175,800 lbs

Fluid End

- Fluid-end type..... Three-piece forged steel
- Plunger type..... Hard-surfaced
- Valve type..... Double stem guided, carburized
- Valve seats Carburized
- Pressure packing High-performance packing
- Discharge flange (1) Blank, straight with one outlet or (2) ell with two outlets

TPH 400 Triplex Pump Intermittent Well Service Ratings

Plunger Diameter	Displacement per Revolution	Displacement At Pump Plunger Strokes Per Minute/Pinion RPM									
		32/275		70/598		128/1,099		171/1,469		244/2,100	
inches (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (mpa)	gpm (lpm)	psi (mpa)	gpm (lpm)	psi (mpa)	gpm (lpm)	psi (mpa)	gpm (lpm)	psi (mpa)
4 (101.6)	1.31 (4.94)	41.8 (158)	14,000 (96.5)	91 (344)	10,190 (70.3)	167 (632)	5,545 (38.2)	223 (844)	4,152 (28.6)	319 (1,206)	2,903 (20)
4.5 (114.3)	1.65 (6.25)	53 (200)	11,200 (77.2)	115 (435)	8,051 (55.5)	211 (800)	4,381 (30.2)	282 (1,067)	3,280 (22.6)	403 (1,527)	2,294 (15.8)
Input Power hp (kw)		346 (257)		600 (447)		600 (447)		600 (447)		600 (447)	



SERVA QPA 1000 Quintuplex Plunger Pump

SERVA QPA 1000 Quintuplex Plunger Pumps are good for high-pressure well service. Each pump is equipped with a gear case. The Quintuplex Pump is designed to pump cement slurries, sand-laden fluids, crude oil, acids, mud and other oil well servicing fluids.

MAJOR FEATURES

- Forged alloy steel mono-block fluid end with removable stuffing box
- Valve-over-valve fluid end
- Left- or right-side suction and discharge connections
- Suction manifold with Victaulic connections
- Hard-coated plungers
- High-performance header-ring style packing
- Center-gauge connection
- Fabricated steel suction manifold
- Replaceable alloy steel wing-guided valves
- Replaceable urethane valve inserts

SPECIFICATIONS

Power End

- Rated maximum brake horsepower 1,000 bhp
- Maximum rod load 100,000 lbs
- Stroke length 6"
- Gear ratio 4.6:1
- Plunger 3" to 4.5"
- Pump weight 7,000 lbs

Power End Features

- Crankshaft construction
- Pressure-lubricated wrist pins through crankshaft
- Ground, honed crosshead guides
- Proprietary crosshead coating
- Left or right gearbox mounting
- 16 input drive positions



SERVA 2250 Frac Pump

The TPA2250 is a reciprocating, positive displacement, horizontal single-acting, triplex plunger pump which is rated at 2250 brake horsepower input maximum. The pump is designed for severe-duty well service applications such as acidizing, fracturing, well killing, etc.

The TPA2250 Pump consists of a power end assembly and a fluid end assembly. Four different fluid cylinders are available to accommodate several plunger sizes for a variety of pressures and volumes.

MAJOR FEATURES

- Gear train: Steel worm and bronze ring w/8.6:1 ratio (standard)
- Crankshaft: Forged steel, four main bearings
- Connecting rods: Three, forged aluminum, split caps and insert bearings
- Crossheads: Three, cast steel
- Case: High-strength steel weldment
- Bearing type: Roller and race
- Oil system: Gear pump driven off worm (std) or remote
- Oil filter: Replaceable elements and magnetic strainer
- Oil capacity: 22 USG
- Oil pressure: 80 to 100 psi

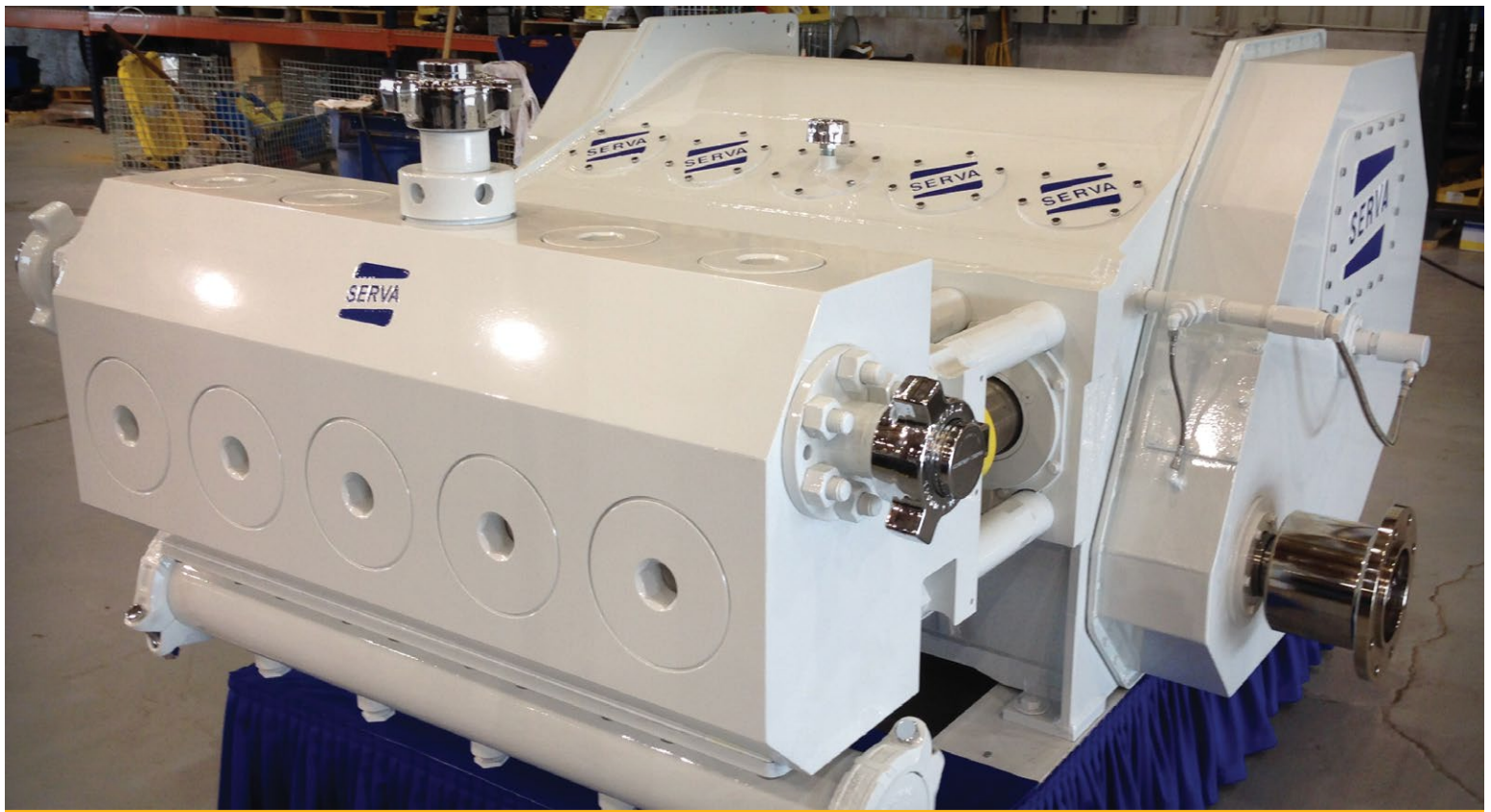
SPECIFICATIONS

Power End

- Companion flange..... 1800 Series Spicer
- Input spline 3"-10 (7.62 cm)
- Input speed w/18.4:1 or 8.6:1 gears..... 2,400 max rev/min
- Maximum input torque..... 7,215 ft-lb
- Maximum input horsepower..... 600 hp
- Maximum rod load 175,800 lbs

Fluid End

- Fluid-end type..... Three-piece forged steel
- Plunger type..... Hard-surfaced
- Valve type..... Double stem guided, carburized
- Valve seats Carburized
- Pressure packing High-performance packing
- Discharge flange (1) Blank, straight with one outlet
or (2) ell with two outlets



SERVA 2500 Frac Pump

The QPA2500 is a reciprocating, positive displacement, horizontal single-acting, Quintuplex plunger pump which is rated at 2,500 brake horsepower input maximum. The pump is designed for duty well service applications such as acidizing, fracturing, well killing, etc.

The heavy-duty QPA2500 pump consists of a power end assembly and a fluid end assembly. Four different fluid cylinders are available to accommodate several plunger sizes for a variety of pressures and volumes.

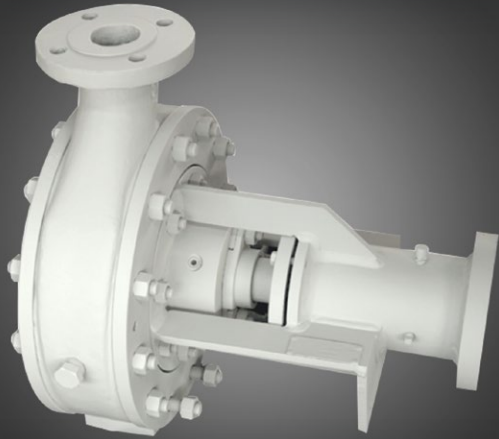
MAJOR FEATURES

- Housing weldment made from T1 which has the strength of two times the normal structural steel
- Crankshaft is machined from a heat-treated steel forging
- Precision-ground journals supported by six heavy-duty cylindrical main roller bearings
- Bull Gears: Double opposing helical type gears. High horsepower
- AGMA #8 quality. Precision-machined from high-strength alloy steel castings. Induction-hardened gear teeth. Rigidly supported on both ends by crankshaft extension
- Pinion Shaft: Double opposing helical-type gears integrally machined on heat-treated alloy steel shaft with high-horsepower AGMA #8 qualities. Induction-hardened gear teeth supported by two (2) heavy-duty spherical roller bearings
- Gear Ratio: 6.353:1 ratio allows direct drive from a 1,900 to 2,100
- RPM diesel engine / power shift transmission without over-speeding the pump
- Pony Rods: Replaceable type w/clamp connection at plunger end
- Machined from steel casting. Precision-ground hard overlay (60 HRC) seal surface
- Stay Rods: Precision machined from high-strength heat-treated alloy steel
- Connecting Rods: Precision machined from high-strength, ion nitrided steel forgings
- Crossheads: Precision machined from high-strength steel casting

- Crosshead Guides: Replaceable, full-cylindrical design. Precision-machined from bronze casting
- Wrist Pins: Precision-machined from heat-treated steel
- Lubrication: Equipped for pressurized lubrication to all moving parts. “Dry sump” type system

SPECIFICATIONS

- Rated maximum brake horsepower 2,500 bhp (1,862 Kw)
- Maximum rod load 192,325 lbs (87331.3 kg)
- Stroke length 8" (203.2 mm)
- Gear ratio 6.353:1
- Length 85" (2,160 mm)
- Width 74" (1,880 mm)
- Height 43" (1,092 mm)
- Weight dry (approximate) 15,000 lbs (6804 kg)



4 x 3 Centrifugal Pump

4 x 3 centrifugal pump, with a 4" suction and a 3" discharge, is used on cement, charge pump, blender, waterwell drilling and other mobile uses. It features compact structure, medium displacement and long service life.

MAJOR FEATURES

- Compact structure, thicker, stronger, concentric casing
- Power input design: SAE inner spline shaft, connect to hydraulic motor directly
- Mechanical seal options, without oil or grease or any other lubricant
- Solid frame base is stronger and eliminates broken feet that occur with pumps equipped with a split base
- Parts can be replaced with Mission 4 x 3 x 11 pump



5 x 4 Centrifugal Pump

The centrifugal pump, with 5" suction and a 4" discharge, is usually used as fitting in cementing and fracture units. It features compact structure, medium displacement, high lift, high efficiency and long service life.

MAJOR FEATURES

- Compact structure, legerity volume
- The square packing can work at 426°C (800°F)
- Two kinds of packing design, one is seal, the other is square packing, the parts can be replaced with DS RA45 pump

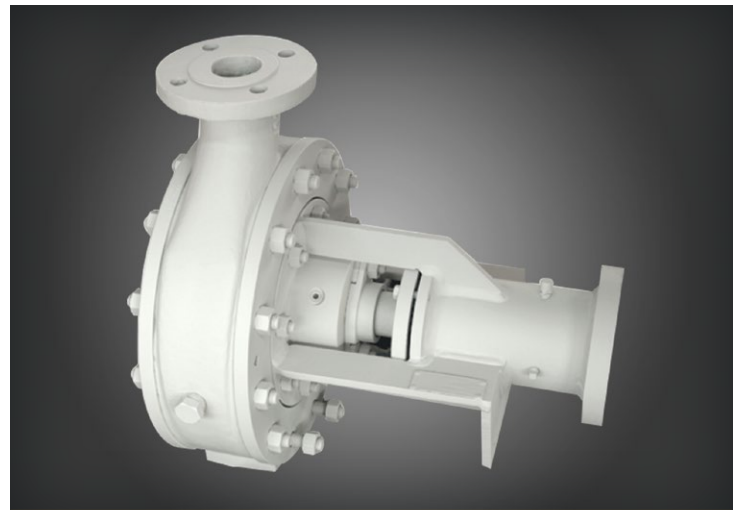


6 x 5 Centrifugal Pump

The centrifugal pump, with a 6" suction and a 5" discharge, is usually used as fitting in cementing and fracture units. It features compact structure, medium displacement, high lift, high efficiency and long service life.

MAJOR FEATURES

- Compact structure, legerity volume, larger flow than RA45
- The square packing can work at 426°C (800°F)
- Two kinds of packing design, one is seal, the other is square packing, the parts can be replaced with DS RA56 pump



2 x 3 Centrifugal Pump

The centrifugal pump, with a 3" suction and a 2" discharge, is used on recirculation mixers, paddle blenders and as a pressurizing pump on cementing units, ACS-II-180 skid etc. It features compact structure, medium displacement, high lift, high efficiency and long service life.

MAJOR FEATURES

- Compact structure, legerity volume
- The square packing can work at 426°C (800°F)
- Two kinds of packing design, one is seal, the other is square packing, the parts can be replaced with DS RA56 pump



SERVA Parts and Pump Repair

SERVA carries a diverse line of components which will fit most OEM product lines. If it's repairs you need in house or in the field, we have a highly trained team of technicians ready 24/7. Additionally, SERVA offers pump repair for most brands at its pump repair facility.

Give us a call at: 918-266-0710

MAJOR FEATURES

Parts

- SERVA has a huge inventory of parts for all oilfield service equipment. Where do we start? We have parts for fluid ends, c-pumps, blenders, hydration units, hydraulics, electronics, frac units, coiled tubing units, injector chain parts, cementers and a whole lot more. We have it!

Pump Repair

- SERVA has 24/7 inhouse pump repair services. From fluid ends to gearboxes to power ends, we have the experience and know-how to repair your pumps

FIELD SERVICE

Whether it is a cementer, coiled tubing unit, acid unit, or frac unit, we have the expertise to get you back up and running. On-location, in your yard or at our facility, our technicians can make the repairs. SERVA is strategically located to initiate the repairs in a timely manner. SERVA can also help with your preventative maintenance program and ongoing service needs. Additionally, SERVA has experienced trainers that can train your technicians for your own service or repair needs. They are available to be dispatched 24/7 to meet your needs.

Give us a call at: 918-266-0710





Well served.

From the Siberian tundra to the north China Sea to the Middle East, to Africa and all across the Americas, SERVA is defining this century's model of oil and gas production, onshore and offshore, with vision, innovation, manufacturing and resources to serve the growing demands of progress and opportunity.



STIMULATION EQUIPMENT



COILED TUBING



CEMENTING EQUIPMENT



Today, an evolving energy landscape is opening a world of possibilities in oil and gas development. And one company at the center of this energy revolution is uniquely equipped with the know-how and ingenuity to make those possibilities happen—SERVA.

SERVA PRODUCT

SERVA designs, manufactures and markets a diverse line of specialized products to surround the well with cementing, stimulation, coil tubing applications, ancillary pumps, well-servicing pumps, fluid ends, downhole tools, software and controls and more—for the most demanding environments on- and offshore.

SERVA LEADERSHIP

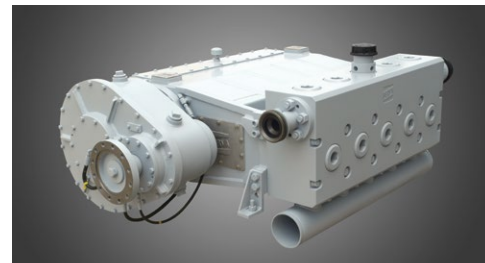
SERVA is the one company with leadership at the heart of oil and gas development for decades, building one-of-a-kind customer relationships and comprehensive on-site expertise.

SERVA ENGINEERING AND TESTING

One company with the most extensive testing facilities, hundreds of engineers and rigorous processes and controls. It's here that SERVA demonstrates its ingenuity, commitment to quality and in-field performance.

SERVA GLOBAL RESOURCES

As part of the EnTrans family of companies, SERVA joins Kalyn Siebert and Heil Trailer International in surrounding the well pad not only with stimulation and completion equipment, but also with oil and gas transportation—a comprehensive, pad-to-pump partnership to optimize even greater efficiencies and value.



FLUID ENDS & PUMPS



PARTS



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EnTrans International, LLC

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