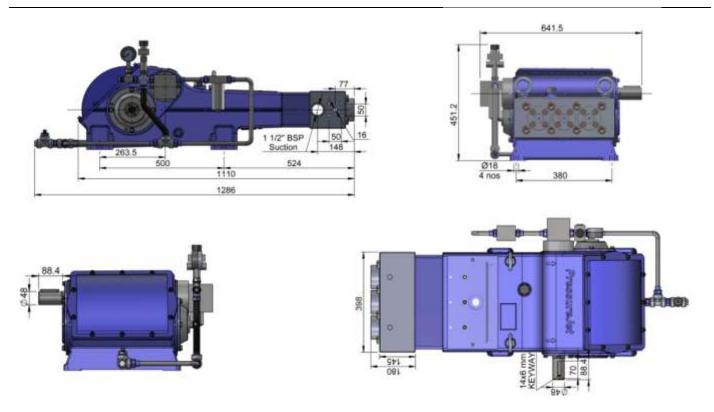


# High Pressure Triplex Plunger Pump KDD Series Catalogue

# Model Selection Chart

| Model     | SPM | Flow Rate in<br>LPM (GPM) | Max. Rated Pressure in Bar (PSI) |              |              |
|-----------|-----|---------------------------|----------------------------------|--------------|--------------|
|           |     |                           | 100 HP                           | 120 HP       | 150 HP       |
| KDD-20-75 | 435 | 30 (7.93)                 | 1250 (18130)                     | 1380 (20000) | -            |
| KDD-20-95 | 500 | 43 (11.36)                | 900 (13053)                      | 1000 (14503) | 1380 (20000) |
| KDD-22-75 | 435 | 37 (9.78)                 | 1000 (14503)                     | -            | -            |
| KDD-22-95 | 500 | 52 (13.75)                | 750 (10877)                      | 880 (12763)  | 1100 (15954) |
| KDD-24-95 | 500 | 62 (16.40)                | 650 (9427)                       | 750 (10877)  | 950 (13778)  |
| KDD-26-95 | 500 | 75 (19.81)                | 500 (7252)                       | 600 (8702)   | 800 (11603)  |
| KDD-28-95 | 500 | 86 (22.72)                | 450 (6527)                       | 525 (7614)   | 660 (9572)   |
| KDD-30-95 | 500 | 100 (26.42)               | 380 (5511)                       | 460 (6672)   | 575 (8340)   |

Note: All flow is based on 100% volumetric efficiency. Actual flow will be  $\geq$  92%. Dimension



Note: All dimensions are in mm & weight of bare pump is 410 Kg approx.



# Salient Features

- Pressure packing design with integrated cooling systems for long life of seal.
- In-built gear box.
- In line suction delivery line.
- Forced feed lubrication system. (For more details, please <u>click here</u>)

# **Technical Specifications**

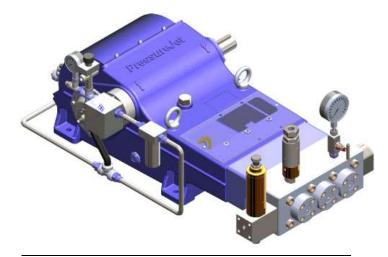
- Stroke length: 95 mm & 75 mm
- Max. plunger speed: <u>1.58 m/sec. @ 500 SPM</u>
- Plunger force: <u>43 KN (4396 kgf)</u>
- Inlet pressure min.-max.: <u>5-7 Bar (Booster</u> pump flow require minimum 1.5 times of rating flow)
- Oil type: Gear oil 220
- Oil capacity: <u>12 Litres.</u>
- Max. permissible oil temp.: <u>Room temp.+</u> <u>50°C</u>
- Max. inlet water temp.: <u>5°C to 43°C</u>
- Inlet connection: <u>1 <sup>1</sup>/<sub>2</sub>" BSPF</u>
- Outlet connection: <u>1/2" BSPF</u>

# Types of Systems

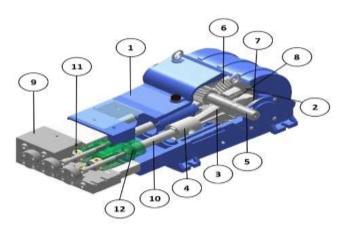
- Skid mounted system with electric motor and diesel engine
- Trolley mounted system with electric motor and diesel engine
- Road going trailer with electric motor and diesel engine
- All unit available in four side cover or canopy on request

# Application

- Hydro Jetting
- Hydro Blasting
- Hydro Test
- Tank & Reactor cleaning



Material of Construction



• Power End

## 1. Main body (Crank case)

Grey cast iron is **210-1993-GR**. FG260 (tensile strength of 260 N/mm<sup>2</sup>) with cross head **bore surface finish <0.2 Ra** for low fiction & low temperature with more mechanical efficiency. **All GD & T are maintained at 10 micron**.

## 2. Crankshaft

**Forged alloy steel** Crankshaft, nitride hardened and precision ground for extremely long life and durability. Surface roughness is extremely good i.e. **<0.3 Ra**.

#### 3. Connecting Rod

Alloy forged steel connecting rods with antifriction bearings. Heavy pin area construction, for added load strength. (Pressure Jet is only Indian manufacturer for such connecting rod)



### 4. Piston (Cross head)

Ductile Iron crosshead & stainless-steel piston rod are hardened & having super finish surface. Finish **Ra 0.2 micron** for low friction, low temperature & higher mechanical efficiency. Cross head pin made from the alloy steel. **All GD & T are maintained at 10 micron**.

#### 5. Pinion Shaft

Alloy steel Double helical, nitride hardened and precision ground for extremely long life with low noise and durability. **Accuracy class DIN-6.** 

#### 6. Helical Gear

Alloy steel Double helical, nitride hardened and precision ground for extremely long life with low noise and durability. **Accuracy class DIN-6.** 

#### 7. <u>Bearing</u>

Oversized for maximum life and load disbursement. Roller bearing enables it to handle 26% more load than other Pumps.

# Contact us

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## 8. White Metal Bearing

Antifriction bearings for long life of crankshaft.

### • Fluid End

#### 9. Pump Head

Pump Head made of high Resistance, forged Stainless steel heat treated with chemical and UT tested.

#### 10. Plunger

Primarily composed of **Solid Ceramic**. Surface roughness is extremely good for long life of the plunger seal i.e. **<0.05 Ra**.

#### 11. Complete Valve

Valves made of special **imported stainless steel** - hardened & anti corrosion hard surface coated for long life.

#### 12. Plunger Seal

Special Teflon base high pressure seal moulded with low pressure seal for plunger cooling systems which increase long life of H.P seal.