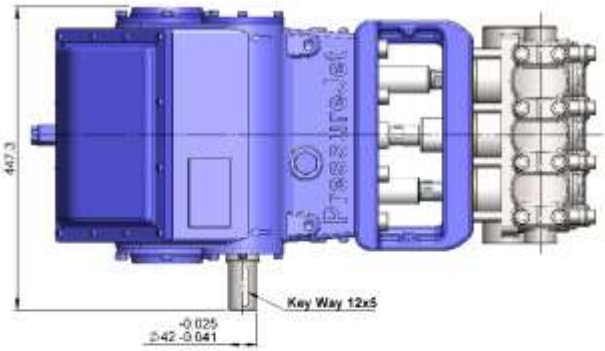
High Pressure Triplex Plunger Pump
KBD Series Catalogue

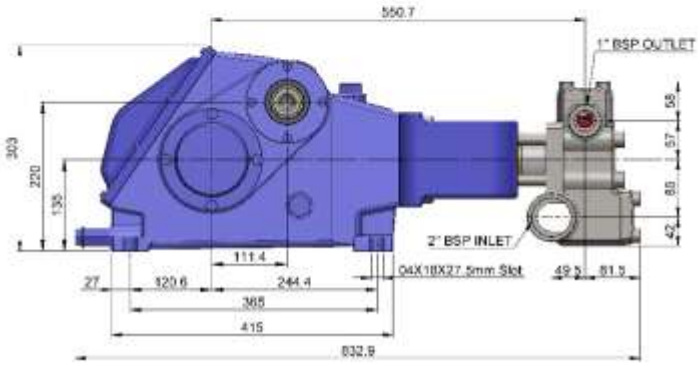
Model Selection Chart

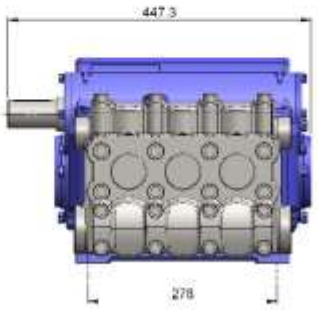
Model	Flow Rate in LPM (GPM)	Max. Rated Pressure in Bar (PSI)		
		60 HP	75 HP	100 HP
KBD-45	190 (50.26)	120 (1740)	150 (2175)	200 (2900)
KBD-50	234 (61.90)	95 (1377)	120 (1740)	160 (2320)

Note:
1. All flow is based on 100% volumetric efficiency. Actual flow will be ≥ 85%.
2. Max. SPM is 530 with 1500 RPM (Gear ratio: 2.75:1) & with 1800 RPM (Gear ratio: 3.4:1).

Dimension







Note: All dimensions are in mm & weight of bare pump is 210 Kg Approx.

Salient Features

- In-built gear.
- Splash type lubrication system

Technical Specifications

- Stroke length: 75 mm
- Max. plunger speed: 1.5 m/sec @ 600 SPM
- Plunger force: 31.15 KN (3179 kgf)
- Inlet pressure min.-max.: 2-4 Bar (Booster pump flow require minimum 1.5 times of rating flow)
- Oil type: Gear oil 220
- Oil capacity: 8 Ltrs.
- Max. permissible oil temp.: Room temp.+ 50°C
- Max. inlet water temp.: 5°C to 60°C
- Inlet connection: 2" BSPF
- Outlet connection: 1" BSPF

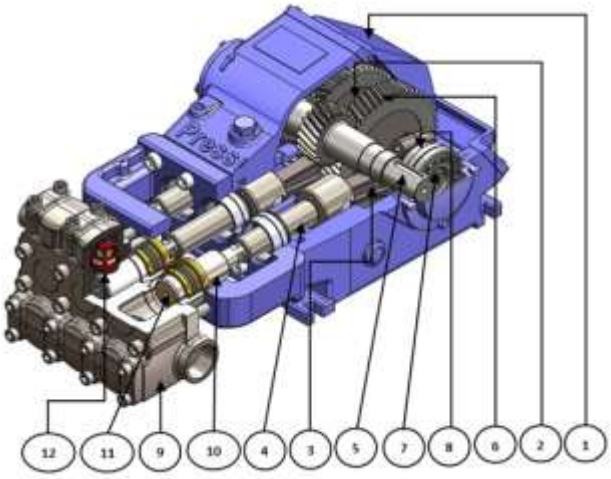
Types of Systems

- 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 test
- Sewer Jetting
- Fire Fighting

Material of Construction



- **Power End**

1. **Main body (Crank case)**
   Grey cast iron is **210-1993-GR**. FG260 (tensile strength of 260 N/mm^2) 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. **Cross head & Pin**
   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. **Bearing**
   Oversized for maximum life and load disbursement. Roller bearing enables it to handle 26% more load than other Pumps.

- **Fluid End**

8. **White Metal Bearing**
   Antifriction bearings for long life of crankshaft.

9. **Pump Head**
   Pump Head made of high Resistance, **casting stainless steel & SG 260**.

10. **Plunger**
    Primarily composed of **Ceramic Coated**. Surface roughness is extremely good for long life of the plunger seal i.e. **<0.2 Ra**.

11. **High Pressure 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.

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

Contact us

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