

High Pressure Triplex Plunger Pump KD Series Catalogue – 1800 RPM

Model Selection Chart

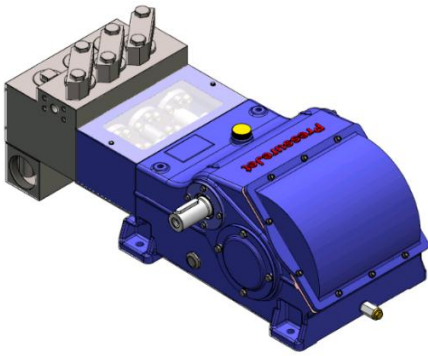
Max. SPM is 500 with 1800 RPM motor (Gear ratio-3.39:1)

Model	Flow Rate in LPM (GPM)	Max. Rated Pressure in Bar (PSI)			
		100 HP	120 HP	150 HP	180 HP
KDB-26	83 (21.95)	450 (6526)	550 (7977)	700 (10152)	-
KDB-28	97 (25.66)	390 (5656)	470 (6816)	590 (8557)	710 (10297)
KDB-30	111 (29.36)	340 (4931)	410 (5946)	520 (7541)	620 (8992)
KDB-32	126 (33.33)	300 (4351)	360 (5221)	460 (6671)	545 (7904)
KDB-36	160 (42.32)	230 (3335)	290 (4206)	360 (5221)	430 (6236)
KDC-40	197 (52.11)	200 (2900)	250 (3625)	290 (4206)	350 (5076)
KDC-45	250 (66.13)	150 (2175)	200 (2900)	230 (3335)	275 (3988)
KDC-50	309 (81.74)	125 (1812)	150 (2175)	185 (2683)	225 (3263)
KDC-55	374 (98.94)	100 (1450)	125 (1812)	155 (2248)	185 (2683)
KDC-60	445 (117.72)	85 (1232)	100 (1450)	130 (1885)	155 (2248)

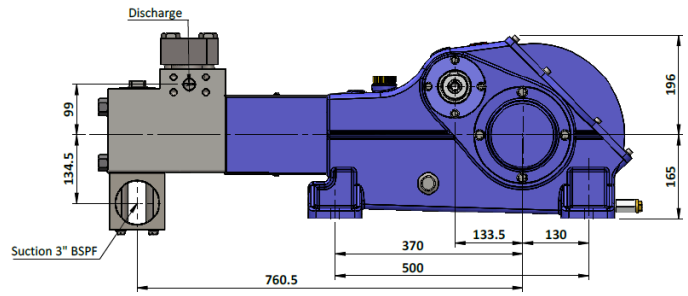
Note: All flow is based on 100% volumetric efficiency. Actual flow will be $\geq 85\%$.

Dimension

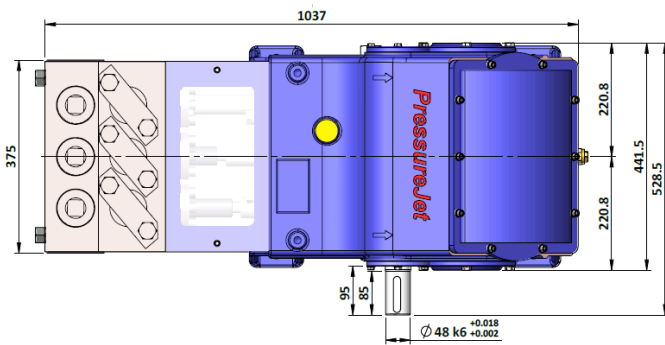
KDB Series Dimensions



KDB Bare Pump

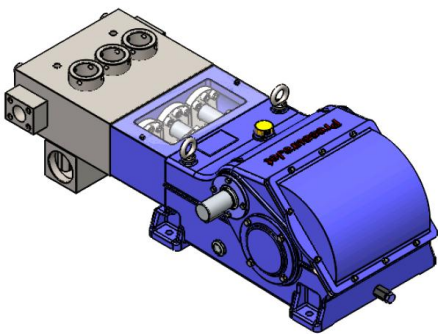


KDB Bare Pump Side View

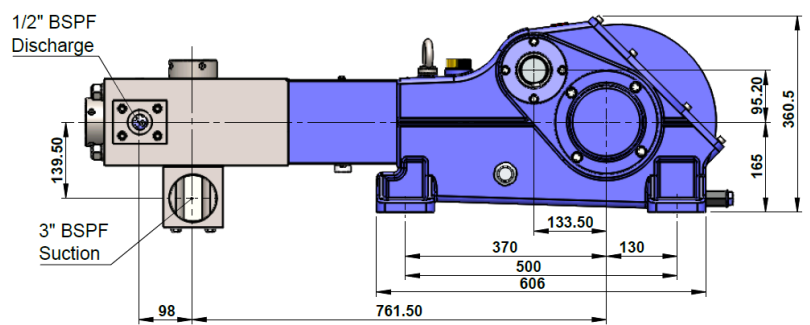


KDB Bare Pump Top View

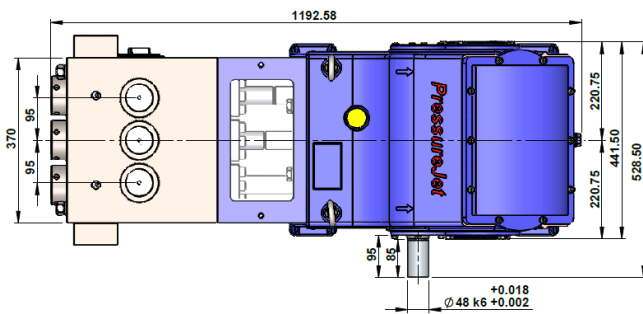
KDC Series Dimensions



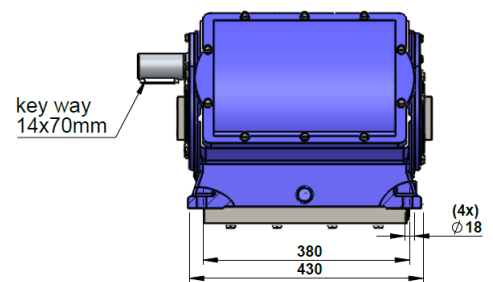
KDC Bare Pump



KDC Bare Pump Side View



KDC Bare Pump Top View



KD Bare Pump Back View

Note: All dimensions are in mm & approximately weight of bare pump is around 430 Kg.

Salient Features

- In-built gear box.
- Forced feed lubrication system. (For more details, please [click here](#))
- Available in 10 versions with two type of head.

Technical Specifications

- Stroke length: 105 mm
- Max. plunger speed: 1.57 m/sec. @ 435 SPM & 1.75 m/sec. @ 500 SPM
- Plunger force: 39.98 KN (4080 kgf)
- Inlet pressure min.-max.: 3-4 Bar (Booster pump flow require minimum 1.5 times of rating flow)
- Oil type: Gear oil 220
- Oil capacity: 12 Ltrs.
- Max. permissible oil temp.: Room temp.+ 50°C
- Max. inlet water temp.: 5°C to 43°C
- Inlet connection: 3" BSP (Both female type connection)
- Outlet connection: 1 1/2" BSP (Both female type connection)

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

Material of Construction

- **Power End**

1. **Main body / Crank case**

Gray cast iron IS 210-1993-Gr. FG26D (Tensile Strength of 260 N/mm²) with cross head bore **surface finish <0.2 Ra** for low friction & low temperature with more mechanical efficiency. **All GD&T are maintained at 0.010 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 0.010 micron.**

5. **Pinion Shaft**

Forged Alloy Steel Pinion shaft, nitride hardened and precision ground for extremely long life and durability. **Surface roughness is extremely good i.e. <0.3 Ra & Accuracy class DIN-6.**

6. **Helical Gear**

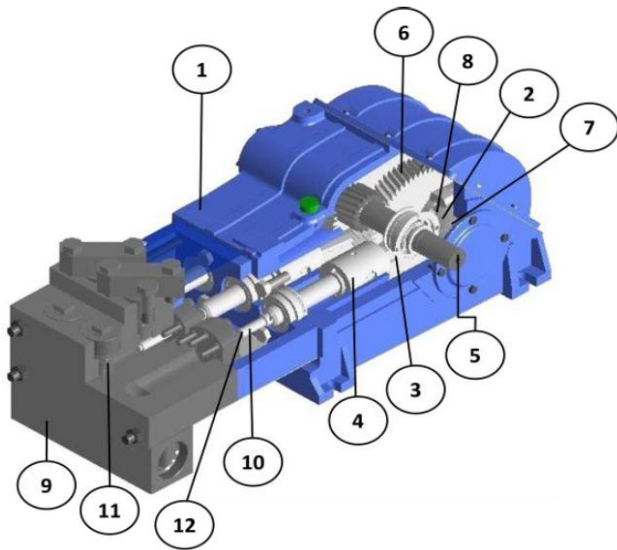
Alloy steel Double helical, nitride hardened and precision ground for extremely long life with low noise and durability. **Accuracy class DIN-6.**

7. **Bearing**

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

8. White Metal Bearing

Antifriction bearings for long life of crankshaft.



9. Pump Head

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

10. Plunger

Primarily composed of **Tungsten coated**. Surface roughness is extremely good for long life of the plunger seal i.e. **<0.2 Ra**.

11. Complete Valve

Valves made of special **imported stainless steel** - hardened & anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at 95% efficiency plus.

12. Plunger Seal

Special Teflon base high-pressure seal molded for high compressive & tensile strength ensure effective sealing.

Contact us

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