

HIGH PRESSURE PLUNGER PUMP

KD Series

Min. Flow rate 83 lpm (21.93 gpm) @ max. Pressure 700 kg/cm² (9955 psi)
Max. Flow rate 445 lpm (117.56 gpm) @ max. Pressure 180 kg/cm² (2560 psi)

Salient Features

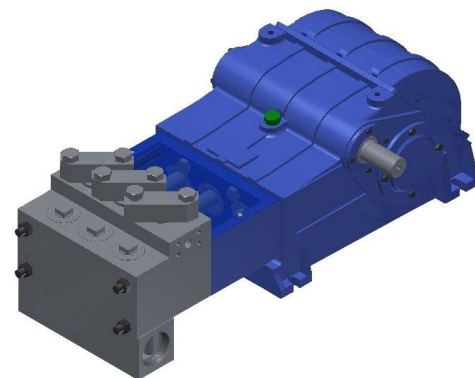
- KD Series Designed with in built gear.
- Force feed lubrication also available on request.
- Available in 10 versions with 2 types of head.

Pump Selection Chart

MAX. SPM. IS 500 WITH 1500 RPM MOTOR (GEAR RATIO - 3:1)

MAX. SPM. IS 500 WITH 1800 RPM MOTOR (GEAR RATIO - 3.39:1)

Model	Flow lpm (gpm)	Max. Rated Pressure-kg/cm ² (psi)		
		150 HP	180 HP	240 HP
KDB-26	83 (21.93)	700 (9955)	-	-
KDB-28	97 (25.62)	600 (8535)	710 (10100)	-
KDB-30	111 (29.32)	525 (7470)	620 (8820)	710 (10100)
KDB-32	126 (33.29)	460 (6545)	545 (7750)	620 (8820)
KDB-36	160 (42.27)	365 (5190)	430 (6115)	490 (6970)
KDC-40	197 (52.04)	295 (4195)	350 (4980)	400 (5690)
KDC-45	250 (66.04)	235 (3345)	275 (3910)	315 (4480)
KDC-50	309 (81.63)	190 (2705)	225 (3200)	255 (3625)
KDC-55	374 (98.80)	155 (2205)	185 (2630)	210 (2985)
KDC-60	445 (117.56)	130 (1850)	155 (2205)	180 (2560)



Specification

- Plunger Stroke: 105 mm
- Max. plunger speed: 1.52 m/sec. @ 500 spm
- Plunger force: 40 kN (4080 kgf)
- Inlet Pressure min./max.: 2-3 bar
- Oil Type: 80W 90
- Oil capacity: 8 liter.
- Max. Liquid Temp.: 70 °C (160°F)
- Discharge Connection: Ø G Hole (as per drawing)
- Suction Connection: 3" BSPF

Type of systems – Complete systems available various type

- Stationary unit with electric motor
- Stationary unit with diesel engine
- Mobile unit with electric motor
- Mobile unit with diesel engine
- Road going trailer with electric motor
- All unit available in 4 side cover or canopy on request

MAX. SPM. IS 435 WITH 1500 RPM MOTOR (GEAR RATIO - 3.39:1)

Model	Flow lpm (gpm)	Max. Rated Pressure-kg/cm ² (psi)		
		100 HP	120 HP	150 HP
KDA-22	52 (13.74)	775 (11025)	-	-
KDB-24	62 (16.38)	655 (9315)	790 (11235)	-
KDB-26	73 (19.28)	560 (7965)	670 (9530)	770 (10950)
KDB-28	84 (22.19)	485 (6900)	580 (8250)	665 (9460)
KDB-30	97 (25.62)	420 (5975)	505 (7185)	580 (8250)
KDB-32	110 (29.06)	370 (5265)	445 (6330)	505 (7185)
KDB-36	139 (36.72)	285 (4055)	340 (4835)	400 (5690)
KDC-40	172 (45.44)	225 (3200)	270 (3840)	325 (4625)
KDC-45	218 (57.59)	175 (2490)	210 (2985)	255 (3625)
KDC-50	269 (71.06)	145 (2065)	170 (2420)	205 (2915)
KDC-55	326 (86.12)	120 (1705)	140 (1990)	170 (2420)
KDC-60	367 (96.95)	100 (1425)	120 (1705)	145 (2065)

Note: All flows are based on 100% volumetric efficiency. Volumetric efficiency will be ≥ 90%.

Applications



Hydro Blasting



Tube & Pipe Cleaning



Hydrostatic Pressure Test

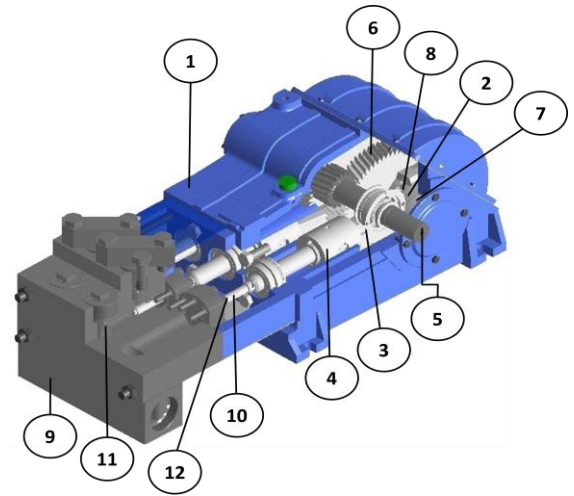
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Power End

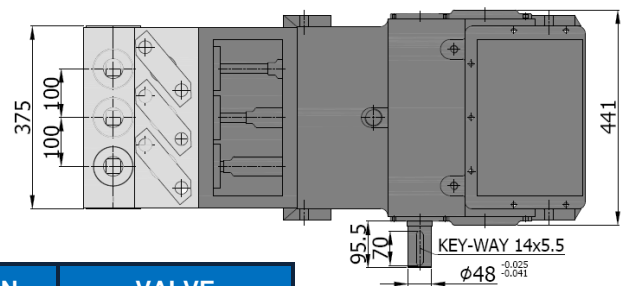
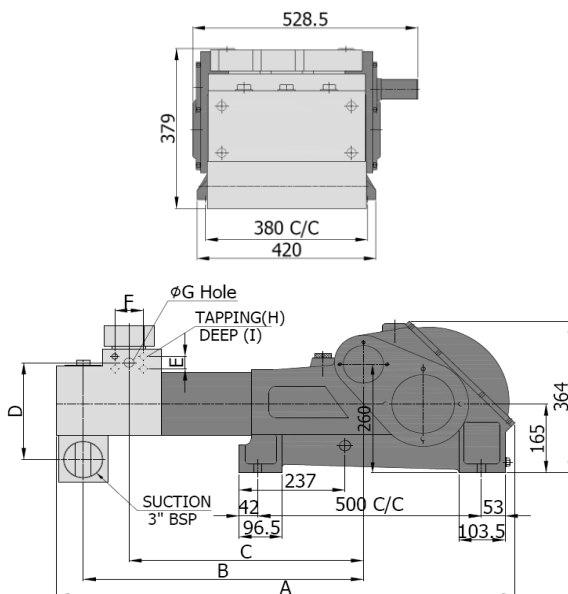
- 1. Main Body (Crank Case)**
Spheroidal Graphite Iron: Main body in spheroidal graphite Iron casting with honned surface finish bore.
- 2. Crankshaft**
Alloy steel: Crankshaft is made of nitride, hardened and precision ground for extremely long life and durability.
- 3. Connecting Rod**
Alloy Steel: Forged steel connecting rods with antifricition bearings. Heavy pin area construction, for added load strength.
- 4. Piston (Cross Head)**
Grey Iron & Stainless Steel: Alloy steel casting piston & stainless steel piston rod are hardened & super finish surface.
- 5. Pinion Shaft**
Alloy steel: Pinion shaft is nitride hardened and precision ground for extremely long life and durability.
- 6. Helical Gear**
Alloy steel: Helical gear is nitride hardened and precision ground for extremely long life and durability.
- 7. Bearing**
Oversized for maximum life and load disbursement. Self-alignment roller bearing enables it to handle 26% more load than other pumps.
- 8. White Metal Bearing**
Antifricition bearings for long life of crankshaft.



Fluid End

- 9. Pump Head**
Stainless Steel: Liquid end is made of high corrosion resistant. Forged stainless steel.
- 10. Plunger (Ceramic / Tungsten coated)**
Primarily composed of ceramic coated or Tungsten coated. Surface roughness is extremely good i.e. <0.2 Ra.
- 11. Complete Valve**
Stainless Steel: Valves made stainless steel for hardened & anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at 95% efficiency plus.
- 12. Plunger Seal**
PTFE Aramide: Aramide fibre yarn packing with PTFE fibre face or carbonaceous aramide yarn packing with GFO fibre face for high compressive & tensile strength ensure effective sealing.

KD Bare Pump - Dimension



All dimensions are in mm
Approx weight of bare pump: 340 Kg

DIMENSION	VALVE
A	1026
B	627
C	524
D	232.5
E	30
F	64
G	Ø 22
H	M - 14
I	30

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