

High Pressure Triplex Plunger Pumps

Sewer Jetting Application







About Company

PressureJet Systems Pvt. Ltd. was established in 1996 in Ahmedabad, India. PressureJet (an ISO 9001:2008 certified company) is a leading manufacturer of High Pressure, Positive Displacement, Reciprocating Triplex Plunger Pumps, Systems and relevant accessories. These pumps are widely used for various applications like Granite & Marble Texturing, Wet Sand Blasting, Sewer Jetting, Hydro Blasting, Water Jet Cleaning, Hydro test, Descaling, Fire Fighting, Transfer & many more.

Today, PressureJet has a workforce of more than 70 dedicated people. We have 11000 Sq. ft. area in Asia's premier industrial estate in Ahmedabad. Out of which, 5000 Sq. ft. area has been allocated for manufacturing activities.



Our Quality

All components are quality checked in the controlled environment of the QC department. We have the most modern measurement equipment such as 3D CMM (Coordinate Measuring Machine), Surface Roughness Tester, Hardness Tester etc. All components are tracked by barcode system with oracle ERP.









3D modelling is an important aid in designing the technical aspects of engineering product. Simulation can really help in making the correct design decisions during the development stage.

At PressureJet, we are using all latest Design Softwares.





Machine Shop







Our Ultra-modern machine shop enables us to manufacture an extremely wide range of components. We can be very flexible in our production planning, while maintaining a high standard of quality with fully automatic machining station. Computer controlled machining stations ensure constant dimensional accuracy.

Assembly & Testing







In this area, all components for the various pump units come together. Pumps and engine or motors are assembled on the skid frame, Accessories such as booster pump, Strainers, PRV, Safety Valve etc. are assembled.

PressureJet products are subject to stringent quality control. All pumps are tested at maximum load prior to dispatch for decided time period. All measurement taken during the testing are electronically stored in computer through fully Automatic Test Bench and then it can be printed. Test report is always provided with the pump.

Store / Service





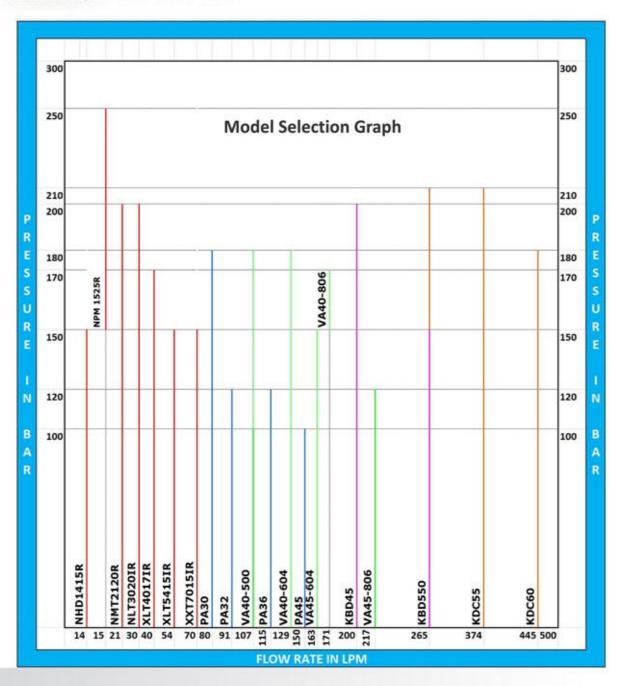


A product is only as good as the service backing it. We have a dedicated team of technicians available for 24 X 7. We keep majority of spares Ex-stock to reduce down time.















Selection Chart

			Pump Select	ion Chart					
Pump Series	Model	Pump Speed (SPM)	Input RPM Reqd.	Flow Rate in LPM		Pressure in Bar (Min. Engine HP Required)			
	NHD1415R			14	150 (8)	100 (5.5)	80 (5)		
	NPM1525R			15	250 (15)	180 (10)	140 (8)		
	NMT2120R			21	200 (16)	180 (15)	130 (11)		
HW	NLT3020IR	1500	1500	30	200 (23)	155 (18)	125 (15)		
	XLT4017IR			40	170 (26)	140 (23)	95 (15)		
	XLT5415IR			54	150 (28)	130 (27)	100 (21)		
	XXT7015IR	7015IR		70	150 (32)	130 (28)	100 (27)		
PA32	PA30			80	175 (45)	155 (40)	115 (30)		
	PA32	950	950	91	150 (44)	125 (37)	100 (30)		
PA	PA36			115	120 (45)	90 (29)	-		
	PA45	800	800	150	100 (50)	75 (36)	1.5		
		500		107	180 (60)	150 (50)	120 (40)		
	VA40	604		129	180 (72)	140 (56)	100 (40)		
VA		806	1500	171	170 (90)	140 (75)	100 (30)		
	VA45	604		163	150 (76)	130 (65)	100 (50)		
	*****	806		217	130 (90)	100 (68)	3.53		
23.00	KBD45	500		200	200 (124)	150 (93)	100 (62)		
KB	KBD50	600		265	155 (127)	130 (107)	100 (82)		
WD.	KDC55			374	210 (244)	185 (216)	155 (180		
KD	KDC60	500	1500	445	180 (248)	155 (213)	130 (180		

Note: (1) Flow rates indicated are at 100% volumetric efficiency. Actual Flow rates will be > 90% approx.

(2) All models are suitable for 50 Hz and 60 Hz power specification.

PRV Selection Chart										
Model	Make	Max. Flow Rate (LPM)	Max. Pressure (Bar)	Inlet (BSP)	Outlet (BSP)	Bypass (BSP)	Weight (Kgs)	Volume in mm (L x B x H)		
VS 160	PA, Italy	14	160	1/4" M	1/4" M	1/8" F	0.135	35 X 22 X 75		
VS 220	PA, Italy	24	250	3/8" F	3/8" F	3/8" F	0.36	50 X 40 X 116		
T 30	PressureJet	120	500	3/4" F	3/4" F	3/4" F	3.5	81 X 60 X 272		
T 60	PressureJet	450	300	1-1/2" F	1-1/2" F	1-1/2" F	10.5	117 X 88 X 350		







HW Series

Salient Features

- · Field proven design.
- · Forged brass fluid and construction with high strength.
- · Rigorously subjected to full load testing.
- · Manufactured on state of the art machinery.
- . Light in weight & heavy duty construction with intermediate duty model.
- · Splash lubrication.
- · Available Direct Couple 1450 RPM Drives.
- · Easy field maintenance.

Note:

- (1) Flow rates indicated are at 100% volumetric efficiency. Actual Flow rates will be > 90% approx.
- (2) All models are suitable for 50 Hz and 60 Hz power specification.



Specifications - HW Series

Sr. No.	Pump Model	Plunger Dia. (mm)	Stroke Length (mm)	Max. Thrust on Plunger (Kgs)	Inlet Connection Size (BSPF)	Outlet Connection Size (BSPF)	Required Suction Pressure	Oil Grade	Oil Capacity (Ltr)	Bare Pump Weight (Kg)
1	NHD1415R	10	13	356					0.4	6.6
2	NPM1525R	18	14.5	636	4 (21)	3/8"			0.7	9.5
3	NMT2120R	22		760	1/2"		Flooded	SAE 10W - 40		
4	NMT3020IR	22	20	760						14.8
5	XLT4017IR		17	862	3/4"	1/2"				17.2
6	XLT5415IR				3/4					17.2
7	XXT7015IR	28	20	924	1"	3/4"			1.2	18.4

Note:

(1) Flow rates indicated are at 100% volumetric efficiency. Actual Flow rates will be > 90% approx.

(2) All models are suitable for 50 Hz and 60 Hz power specification.

Model Selection Chart HW Series									
Model	Pump Speed (SPM)	Read Flow Rate Pressure in Bar (Min. Engine HP Requi							
NHD1415R			14	150 (8)	100 (5.5)	80 (5)			
NPM1525R			15	250 (15)	180 (10)	140 (8)			
NMT2120R			21	200 (16)	180 (15)	130 (11)			
NLT3020IR	1500	1500	30	200 (23)	155 (18)	125 (15)			
XLT4017IR			40	170 (26)	140 (23)	95 (15)			
XLT5415IR			54	150 (28)	130 (27)	100 (21)			
XXT7015IR			70	150 (32)	130 (28)	100 (27)			





HW Series

HIGH PRESSURE PLUNGER PLIMP

Material of Construction of Major Internal Parts

1 Crank Case (Main Body)

Crank Case in High Strength Aluminum Pressure Die Casting. With fit led antifriction bush.

2 Crankshaft

Crankshaft is made of Forged Alloy Steel, with Hardened & Ground.

3 Bearing

Oversized for maximum life and load disbursement. Self-alignment roller bearing enables it to handle 26% more load than other pumps.

4 Connecting Rod

Forged Aluminium connecting rods with antifriction bearings. Heavy pin area construction, for added load strength.

5 Piston

Stainless Steel Construction for hard surface coating and super finish.

6 Pump Head

Pump head is made of High Strength Forged Brass.

7 Plunger

Primarily composed of High Finish Solid Ceramic Plunger and Surface roughness is extremely good i.e. < 0.25 Ra for less wear of Plunger seal.

8 Plunger Seal

Durable Fiber Impregnated Buna-n Seal packing (Make Parker, Germany) for high compressive & tensile strength ensures effective sealing.

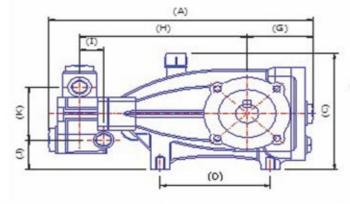
9 Complete Valve

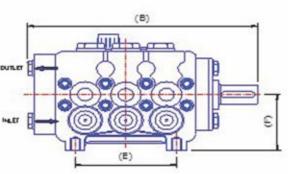
Valves made of Stainless Steel anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at more than 95% efficiency.



HW Series Bare Pump Dimensions

All Dimensions are in MM





Model	Α	В	С	D	E	F:	G	Н	1	J	K
NHD1415R	250.5	213	135	80	90	60.5	60.5	140	5	30.5	56
NPM1525R	272.5	220			405	70		470.5	25	27	
NMT2120R	273.5	238	144.5	90	105	70	68	173.5	25	37	66
NMT3020IR	333	248	168.5	105	145	82	81.5	204.5	12	42	77
XLT4017IR	341	263	168.2	145	105	82		217.5	28	35	87
XLT5415IR	541	203	100.2	145	105	02		217.5	20	33	0/
XXT7015IR	344	263	168.5	145	105	82	2	198.5	10	35	91

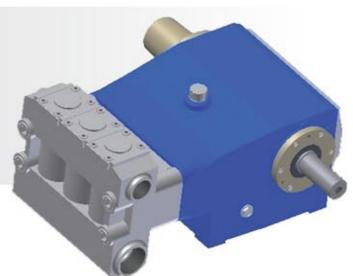




PA Series

Salient Features

- · Field proven design. Easy field maintenance.
- · Fluid end construction SG Iron Casting.
- · Rigorously Subjected to full load testing.
- · Manufactured on state of the art machinery.
- · Light in weight (Heavy duty construction, light in weight)
- · Splash lubrication.
- · Available direct couple or pulley belts drive.





Specification

· Plunger Stroke: 40 mm

Max. plunger speed: 1.26 m/sec. @ 950 spm

Plunger force: 12.5 kN (1274 kgf)
 Inlet Pressure min./max.: 1 to 3 bar

Oil Type: 15W 40Oil capacity: 4 ltr.

Max. Liquid Temp.: 70 °C (160°F)
 Discharge Connection: 1" BSPF

Suction Connection: 1 1/2" BSPF

Transmission Type: Belt or External Gear

Dimensions: 475x464x223 (lxbxh) in mm

Model Selection Chart - PA Series									
Model Pump Speed (SPM) Input RPM Reqd. Flow Rate in LPM Pressure in Bar (Min. Engine HP Requ									
PA30			80	175 (45)	155 (40)	115 (30)			
PA32	950	950	91	150 (44)	125 (37)	100 (30)			
PA36			115	120 (45)	90 (29)	4			
PA45	800	800	150	100 (50)	75 (36)	-			

Note:

- (1) Flow rates indicated are at 100% volumetric efficiency. Actual Flow rates will be > 90% approx.
- (2) All models are suitable for 50 Hz and 60 Hz power specification.







PA Series

HIGH PRESSURE PLUNGER PUMP

Material of Construction of Major Internal Parts

Power End

1 Crank Case (Main Body)

<u>Grey Iron</u>: Main body in grey iron casting FG-260. With Honned surface finish bore.

2 Crankshaft

<u>Spheroidal Graphite Iron</u>: Crankshaft is made of nitrated, hardened and tempered Spheroidal Graphite Iron casting.

3 Connecting Rod

<u>Alloy Steel</u>: Forged steel connecting rods with antifriction bearings. Heavy pin area construction, for added load strength.

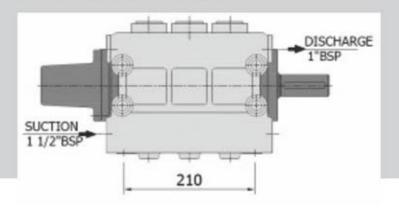
4 Piston / Cross Head

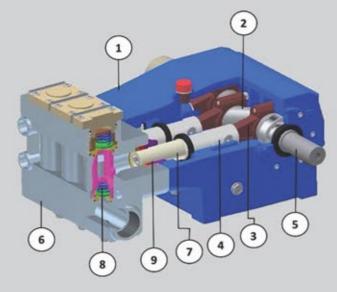
<u>Alloy Steel</u>: Alloy steel construction for hard surface coating and super finish.

5 Bearing

Oversized for maximum life and load disbursement. Self-alignment roller bearing enables it to handle 26% more load than other pumps.

PA Series Bare Pump Dimension





Fluid End

6 Pump Head

SG Iron: Pump Head is Made of SG Iron Casting.

7 Plunger Ceramic Coated

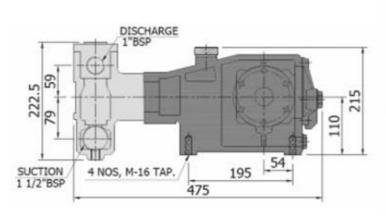
Primarily composed of ceramic coated. Surface roughness is extremely good i.e. < 0.2 Ra.

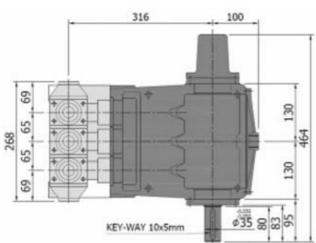
8 Complete Valve Internal (Valve Assembly)

<u>Stainless Steel</u>: Valves made stainless steel for hardened & anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at 95% efficiency plus.

9 Plunger Seal

<u>Chevron Seal</u>: "V" style strong and tightens under load packing for high compressive & tensile strength ensure effective sealing.









Salient Features

- · Casting stainless steel pump head construction with high strength.
- · Light in weight & heavy duty construction.
- · Splash lubrication.
- · Easy field maintenance.
- · Both side mounting available.
- · Pumps design suitable for inbuilt gear & belt drive.



Specification

- Plunger Stroke: 57 mm
- Max. plunger speed: 1.14 m/sec. @ 600 spm
- Plunger force: 23.5 kN (2400 kgf)
 Required Inlet Pressure: Flooded
- Oil Type: SAE 80 W 90
- · Oil capacity: 8 ltrs.
- Max. Liquid Temp.: 70 °C (158 °F)
- Discharge Connection: 1" BSPF
- Suction Connection: 2" BSPF
- Transmission Type: External Gear
- Dimensions: 716x501x264 (lxbxh) in mm



Accessories



T - 30 Pressure Regulating Valve





T Type Strainer

	Mo	del Selecti	on Chart -	VA Series			
Model	Pump Speed (SPM)	Input RPM Reqd.	Flow Rate in LPM	Pressure in	Bar (Min. Eng	gine HP Required	
		500		107	180 (60)	150 (50)	120 (40)
VA40	604	1500	129	180 (72)	140 (56)	100 (40)	
	806		171	170 (90)	140 (75)	100 (30)	
VA45	604		163	150 (76)	130 (65)	100 (50)	
	806		217	130 (90)	100 (68)	-	

Note: (1) Flow rates indicated are at 100% volumetric efficiency. Actual Flow rates will be > 90% approx. (2) All models are suitable for 50 Hz and 60 Hz power specification.







VA Series

HIGH PRESSURE PLUNGER PUMP

Material of Construction of Major Internal Parts

Power End

1 Crank Case (Main Body)

Grey Iron: Main body in grey iron casting FG-260 with Honned surface finish bore.

2 External Helical Gear Box

Alloy Steel: Helical gear is nitride hardened and precision ground for extremely long life and durability.

3 Rearing

Oversized for maximum life and load disbursement. Self-alignment roller bearing enables it to handle 26% more load than other pumps.

4 Crankshaft

<u>Alloy steel</u>: Crankshaft is made of nitrated, hardened and precision ground for extremely long life and durability

5 Connecting Rod

<u>Alloy Steel:</u> Forged steel connecting rods with antifriction bearings. Heavy pin area construction, for added load strength.

6 Piston / Cross Head

<u>Grey Iron & Stainless Steel</u>: Alloy steel casting piston & stainless steel piston rod are hardened & super finish surface.

10 9 8 7 6 5 4 3 2 1

Fluid End

7 Pump Head

SG Iron: Pump Head is Made of SG Iron Casting.

8 Plunger Ceramic Coated

Primarily composed of ceramic coated on SS. Surface roughness is extremely good i.e. <0.2 Ra.

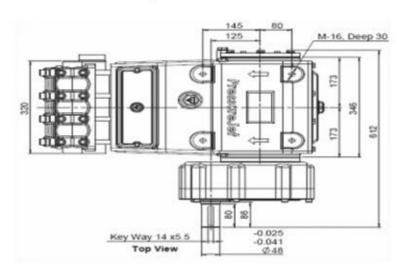
9 Plunger Seal

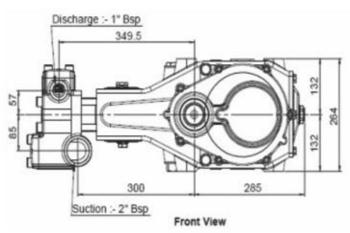
<u>PTFE Aramide / GFO Aramide rope</u>: Aramide fibre yarn packing with PTFE fibre face or carbonaceous aramide yarn packing with GFO fibre face for high compressive & tensile strength ensure effective sealing.

10 Complete Valve Internal (Valve Assembly)

<u>Stainless Steel</u>: Valves made of stainless steel for hardened & anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at 95% plus efficiency.

VA Series Bare Pump Dimension











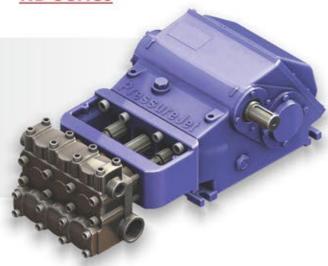


Salient Features

- · KB Series Designed in built gear.
- · Casting stainless steel pump head construction with high strength.
- · Light in weight & heavy duty construction.
- · Splash lubrication.
- · Easy field maintenance.



KB Series



Specification

- Plunger Stroke: 75 mm
- Max. plunger speed: 1.32 m/sec. @ 600 spm
- Plunger force: 31.28 kN (3190 kgf)
 Inlet Pressure min./max.: 2-3 bar
- Oil Type: 80W 90
- · Oil capacity: 8 ltrs.
- Max. Liquid Temp.: 70 °C (160°F)
- Discharge Connection: Ø G Hole (as per drawing)
- Suction Connection: 2" BSPF
- Transmission Type: Direct Couple (In-built gears)
- Dimensions: 825x442x303 (lxbxh) in mm





Sewer Jetting Nozzle



T - 60 Pressure Regulating Valve



T Type Strainer

		Model Sel	ection Cha	rt - KB Se	ries	
Model	Pump Speed (SPM)	Input RPM Reqd.	Flow Rate in LPM	Pressure in	Bar (Min. Eng	zine HP Required)
KBD45		,	200	200 (124)	150 (93)	100 (62)
KBD50	600	1500	265	155 (127)	130 (107)	100 (82)



Note: (1) Flow rates indicated are at 100% volumetric efficiency. Actual Flow rates will be > 90% approx. (2) All models are suitable for 50 Hz and 60 Hz power specification.





KB Series

HIGH PRESSURE PLUNGER POWIF

Material of Construction of Major Internal Parts

Power End

1 Crank Case (Main Body)

<u>Spheroidal Graphite Iron</u>: Main body in spheroidal graphite Iron casting with honned surface finish bore.

2 Crankshaft

<u>Alloy steel:</u> Crankshaft is made of nitrated, hardened and precision ground for extremely long life and durability.

3 Connecting Rod

<u>Alloy Steel:</u> Forged steel connecting rods with antifriction bearings. Heavy pin area construction, for added load strength.

4 Piston / Cross Head

<u>Grey Iron & Stainless Steel</u>: 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.

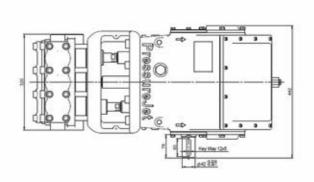
6 Helical Gear

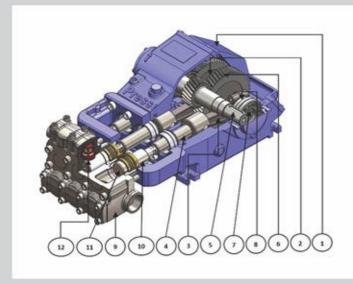
Alloy steel: Helical gear is nitride hardened and precision ground for extremely long life and durability.

7 Bearing

Oversized for maximum life and load disbursement. Self-alignment roller bearing enables it to handle 26% more load than other pumps.

KB Series Bare Pump Dimension





Fluid End

8 White Metal Bearing

Antifriction bearings for long life of crankshaft

9 Pump Head

SG Iron: Pump Head is Made of SG Iron Casting.

10 Plunger Ceramic coated

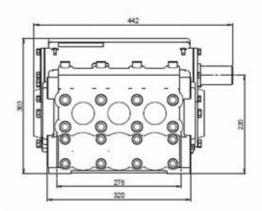
Primarily composed of ceramic coated on SS. Surface roughness is extremely good i.e. < 0.2 Ra.

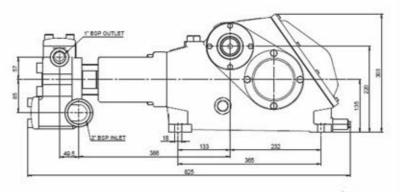
11 Plunger Seal

<u>PTFE Aramide / GFO Aramide rope</u>: 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.

12 Complete Valve Internal (Valve Assembly)

<u>Stainless Steel</u>: Valves made of stainless steel for hardened & anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at 95% plus efficiency.





All Dimensions are in mm and Bare Pump Weight - 210 Kg





Salient Features

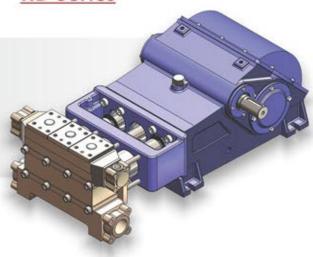
- · KD Series Designed in built gear.
- · Casting stainless steel pump head construction with high strength.
- · Light in weight & heavy duty construction.
- · Splash lubrication.
- · Easy field maintenance.

Note: (1) Flow rates indicated are at 100% volumetric efficiency. Actual Flow rates will be > 90% approx.

(2) All models are suitable for 50 Hz and 60 Hz power specification.



KD Series



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: SAE 80 W 90
- Oil capacity: 8 ltr.
- Max. Liquid Temp.: 70 °C (160 °F)
- Suction Connection: 3" BSPF
- Dimensions: 1044x531x365 (lxbxh) in mm

Accessories



Sewer Jetting Nozzle



T-60 Pressure Regulating Valves



Y Type Strainerss

Model Selection Chart - KD Series										
Model	Pump Speed (SPM)	Input RPM Reqd.	Flow Rate in LPM	Pressure in	Bar (Min. En	gine HP Required				
KDC55	E00	1500	374	210 (244)	185 (216)	155 (180)				
KDC60 500		1500	445	180 (248)	155 (213)	130 (180)				

Note: (1) Flow rates indicated are at 100% volumetric efficiency. Actual Flow rates will be > 90% approx. (2) All models are suitable for 50 Hz and 60 Hz power specification.







KD Series

HIGH PRESSURE PLUNGER PUMP

Material of Construction of Major Internal Parts

Power End

1 Crank Case (Main Body)

<u>Spheroidal Graphite Iron</u>: Main body in spheroidal graphite Iron casting with honned surface finish bore.

2 Crankshaft

<u>Alloy steel:</u> Crankshaft is made of nitrated, hardened and precision ground for extremely long life and durability.

3 Connecting Rod

<u>Alloy Steel:</u> Forged steel connecting rods with antifriction bearings. Heavy pin area construction, for added load strength.

4 Piston / Cross Head

<u>Grey Iron & Stainless Steel</u>: 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.

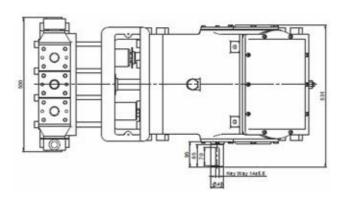
6 Helical Gear

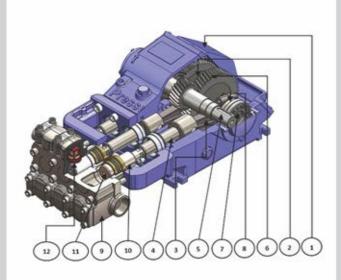
<u>Alloy steel</u>: Helical gear is nitride hardened and precision ground for extremely long life and durability.

7 Bearing

Oversized for maximum life and load disbursement. Self-alignment roller bearing enables it to handle 26% more load than other pumps.

KD Series Bare Pump Dimension





Fluid End

8 White Metal Bearing

Antifriction bearings for long life of crankshaft

9 Pump Head

SG Iron: Pump Head is Made of SG Iron Casting.

10 Plunger Ceramic coated

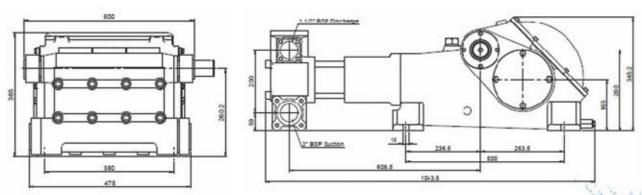
Primarily composed of ceramic coated on SS. Surface roughness is extremely good i.e. < 0.2 Ra.

11 Plunger Seal

PTFE Aramide / GFO Aramide rope: 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.

12 Complete Valve Internal (Valve Assembly)

<u>Stainless Steel</u>: Valves made of stainless steel for hardened & anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at 95% plus efficiency.



All Dimension are in mm and Bare Pump Weight - 340 Kg



WARTHOG® - 5 Models to Fit Your Pumps and Lines

	WT-3/8-C	WS-1/2	WH-1/2 & 3/4	WG-1	WD 1-1/4
Maximum Pressure (psi)	4000	4000	8000	3000	3000
Operating Pressure (psi)	1500-4000	1500-4000	1500-8000	1500-3000	1500-3000
Rotating Speed (RPM)	300-500	200-500	150-300	150-300	150-300
Flow Rate (GPM)	5-12	8-20	10-45	50-80	80-120
Flow Rating (Cv)	0.75	1.3	3	4.6	7.6
Pulling Force (lb)	5-20	9.27	18-50	70-100	130-190
Inlet Port (NPT or BSPP)	3/8	1/2	1/2 , 3/4	1	1-1/4
Tool Diam. (Incl. Skid) inch	1.9	1.9	3.4	4.8	4.8
Suitable For Pipe Diameter (mm)	76-152	102-204	152-457	203-914	203-914
Length (inches)	3	4.4	7.5	9.1	9.1
Nozzle Ports	3 x 1/8 NPT	3 x 1/8 NPT	3 x 1/8 NPT	5 x 1/8 NPT	7 x 1/8 NPT
Weight Complete (Grams)	544	1338	2131	4944	4989

Optional Descaling Heads Maximize Cleaning Power



Important Note: Owing to continuous R & D, any technical details & specifications mentioned in this catalogue are liable to change anytime. All rights reserved to PressurJet. For latest Information & more details, please visit our website. Our Website is fully informative, exhaustive and communicative. It is designed to provide maximum information in most precise form to help our valued customers to take a quick and right decision.

Contact:

PressureJet Systems Pvt. Ltd.

62/13, Phase-1, Vatva GIDC, Ahmedabad - 382 445. Gujarat, India

Phone: +91-79-25830762 / 25835598 • M: 93750 22359 • E-mail: sales@pressurejet.com • URL: www.pressurejet.com