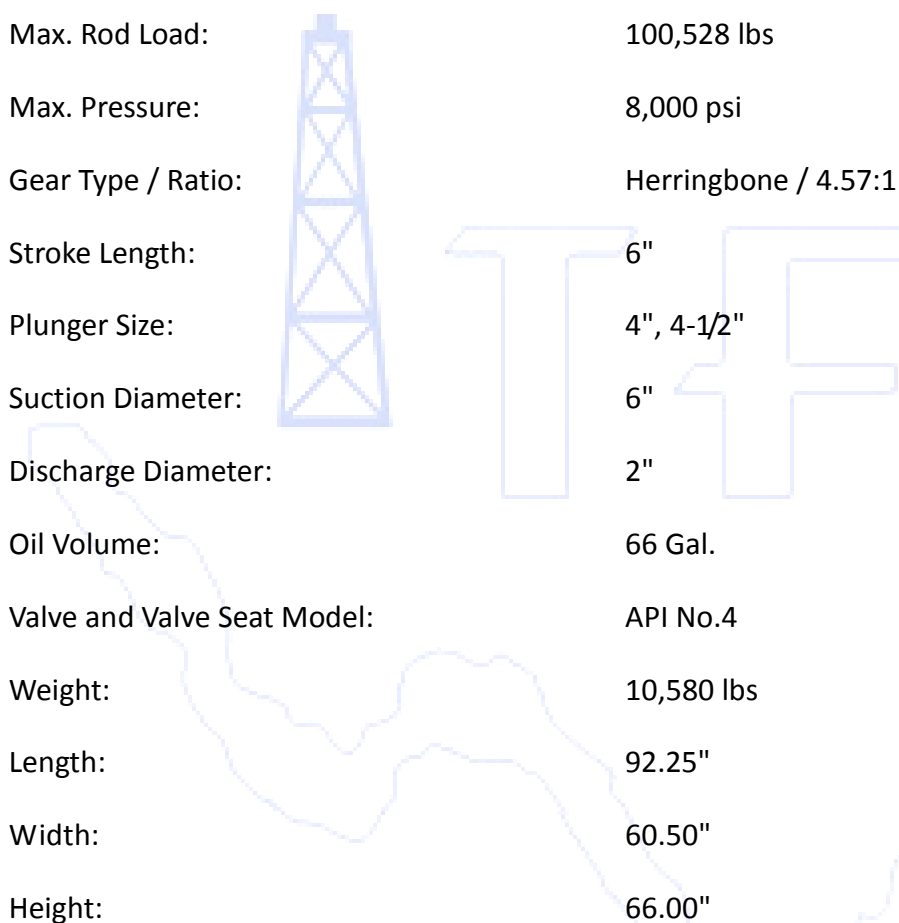


TFI ZB-400II Mud Pump

TFI ZB-400II mud pumps are designed and manufactured according to API 7K.

1. Specifications

Max. Input Power:	400 HP
Max. Rod Load:	100,528 lbs
Max. Pressure:	8,000 psi
Gear Type / Ratio:	Herringbone / 4.57:1
Stroke Length:	6"
Plunger Size:	4", 4-1/2"
Suction Diameter:	6"
Discharge Diameter:	2"
Oil Volume:	66 Gal.
Valve and Valve Seat Model:	API No.4
Weight:	10,580 lbs
Length:	92.25"
Width:	60.50"
Height:	66.00"



ZB-400II Mud Pump Sizes and Ratings

Plunger Dia.	Output Per Rev.	Displacement at Pump Strokes per Minute / Pinion RPM									
		50 / 229		100 / 457		200 / 914		300 / 1371		400 / 1828	
in (mm)	GPM (LPR)	GPM (LPM)	PSI (MPa)	GPM (LPM)	PSI (MPa)	GPM (LPM)	PSI (MPa)	GPM (LPM)	PSI (MPa)	GPM (LPM)	PSI (MPa)
4" (101.6)	0.98 (3.7)	49 (185)	8,000 (56)	98 (371)	6,370 (44.4)	196 (742)	3,150 (22.0)	294 (1,113)	2,100 (14.8)	392 (1,484)	1,560 (11)
4.5" (114.3)	1.24 (4.7)	62 (235)	6,000 (42)	124 (470)	5,030 (35)	248 (940)	2,485 (17.5)	372 (1,408)	1,660 (11.7)	496 (1,880)	1220 (8.6)

Note: Mechanical Efficiency 90%; Volumetric Efficiency 100%

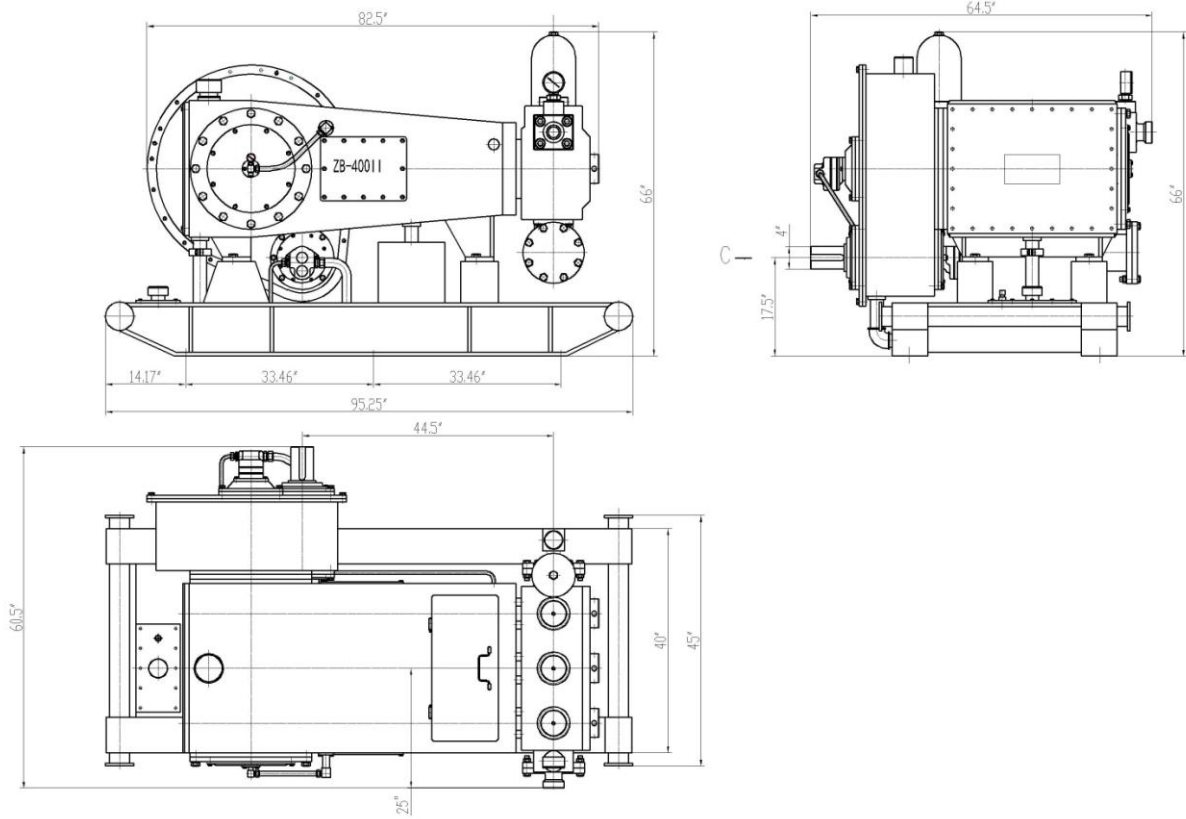
2. Key Features

- A. Every mud pump is fabricated with a high strength, heat treated low carbon steel frame;
- B. Forged alloy steel crankshaft with high loading capacity;
- C. Forged cross head pin;
- D. Gear and gear reducer are forged and experienced special heat treatment;
- E. Cast alloy connecting rod and cross head;
- F. Crank shaft and pinion shaft are supported by wear-resistant albronz roller bearing
- G. TFI can provide complete pump packages, including prime movers, controls, manifolds, piping, and accessories;
- H. Forced and splash lubrication for power end and fluid end;
- I. Fluid modules are forged alloy and experienced special heat treatment;
- J. TFI mud pumps are rated for 24 hour-a-day continuous duty;
- K. Complete range of replacement parts is available in our service facility at Brookshire, TX.;

3. Scope of Supply

- A. ZB-400II Mud Pump × 1 set;
- B. Complete Fluid Ends and Parts × 3 sets;
- C. Fluid End Lubrication System × 1 set;
- D. Power End Lubrication System × 1 set;
- E. External Gear Reducer × 1 set;
- F. Pump Skid × 1 set;
- G. Suction Manifold × 1 set;
- H. Discharge union × 1 set;
- I. Fittings × 1 set;
- J. Operation manuals, Parts List and Certificates × 1 set;
- K. Optional-Recommended Spare Parts;

4. Overall Dimension Schematic
 (Measurements are in inches)



5. Recommended Spares List

No.	Model Number	Description	Specification	Qty.
1	ZB-03Y-01-06	Guide sleeve		1
2	ZB-03Y-01-07	Stuffing (rubber)		5
3	ZB-03Y-01-08	Caulking Ring		1
4	ZB-03Y-06	Valve Assembly		6
5	ZB-03Y-07	Valve Seat		6
6	ZB-03Y-05	Discharge Spring		3
7	ZB-03Y-10	Suction Spring		3
8	GB3452.1-92	O-Ring	115 × 5.3	12
9	GB3452.1-92	O-Ring	97.5 × 5.3	6
10	GB3452.1-92	O-Ring	140 × 5.3	3
11	ZB-03Y-20-02	Pin	21 MPa	1
12	ZB-03Y-20-03	Pin	35 MPa	1
13	ZB-03Y-20-09	Piston		1
14	ZB-03Y-01-01	Plunger		1

6. Product Picture

