

INJECTION PUMP

UNIT: PUM017

PERFORMANCE

Maximum Operating Pressure	3,110 psi (21.4 MPa)
Maximum Flow Rate	103 m ³ /day

INJECTION DRIVE

Model	4.3L GM Vortec V6
Horse Power	52 HP
Maximum RPM	1800 RPM
Fuel Type	Natural Gas

PUMP

Make	Triplex
Model	T40A
Plungers	3
Installed Plunger Diameter	1.5" (38.1 mm)
Maximum Input	40 HP (30 kW)
Maximum RPM	880 RPM
Stroke Length	2.95" (75 mm)



SUCTION PIPING

Maximum Allowable Working Pressure	675 psi (4,654 kPa)
Size	3" (88.9 mm)
Connection	CL300 RF

DISCHARGE PIPING

Maximum Allowable Working	5,000 psi (34.5 MPa)
Size	2" (60.3 mm)
Connection	CL1500 RF

FUEL CONSUMPTION

Fuel (Heat Value Ratings)	Fuel Consumption
Vaporized Propane (2,300 BTU/ft ³)	57.6 scf/hr
Ethane Gas (1,700 BTU/ft ³)	77.9 scf/hr
Methane Gas (962 BTU/ft ³)	137.6 scf/hr

** Approximate: Will vary based on site conditions**



SOUND RATING

Distance	@50%	@100%
In Building	Field Verify dB(A)	Field Verify dB(A)
1.2 m (4 ft)	Field Verify dB(A)	Field Verify dB(A)
7.5 m (25 ft)	Field Verify dB(A)	Field Verify dB(A)
15.2 m (50 ft)	Field Verify dB(A)	Field Verify dB(A)

** Sound ratings will be field verified**

SHIPPING DIMENSIONS

Width	10' 4" (3.15 m)
Length	21' (6.4 m)
Height	11' (3.35 m)
Weight Estimate	16,000 lbs (7,258 kg)

POWER REQUIREMENTS

Building Total	1 kW
Main Disconnect	None On Skid
Voltage Input	120 V
Phase	1Ø

CERTIFICATION

Area Classification	TBD
Piping	TBD
Electrical	TBD

FEATURES

Building Equipped With Heater and Lights
Suitable For Sour Service
Pulsation Dampener
12V Battery System
Suction Strainer On Inlet Piping
Built In Tool Box
Removable Catch Tank
Insulated Stainless Steel Rib Panels
Discharge Piping Complete With MC-III Flow Meter





OPERATIONS SOLUTIONS EQUIPMENT SPECIFICATION SHEET

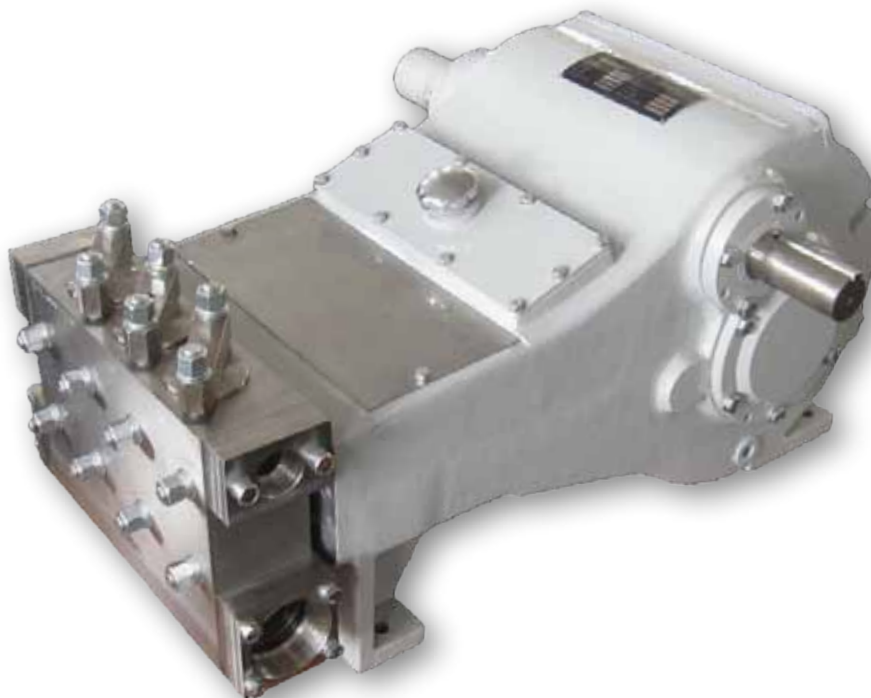
SHUTDOWNS

High/Low Discharge Pressure
High/Low Suction Pressure
Manual ESD
Vibration Switch
Low Power End Oil
Baird Adjustable Pressure Relief Valve



Model T40 Triplex Power Pump

Weatherford's Model T40 is a single-acting triplex plunger pump rated at 41 HP in continuous-duty service and up to 66 HP in intermittent duty. This versatile pump is offered with a variety of material and design options that allow it to be used in a wide range of applications.

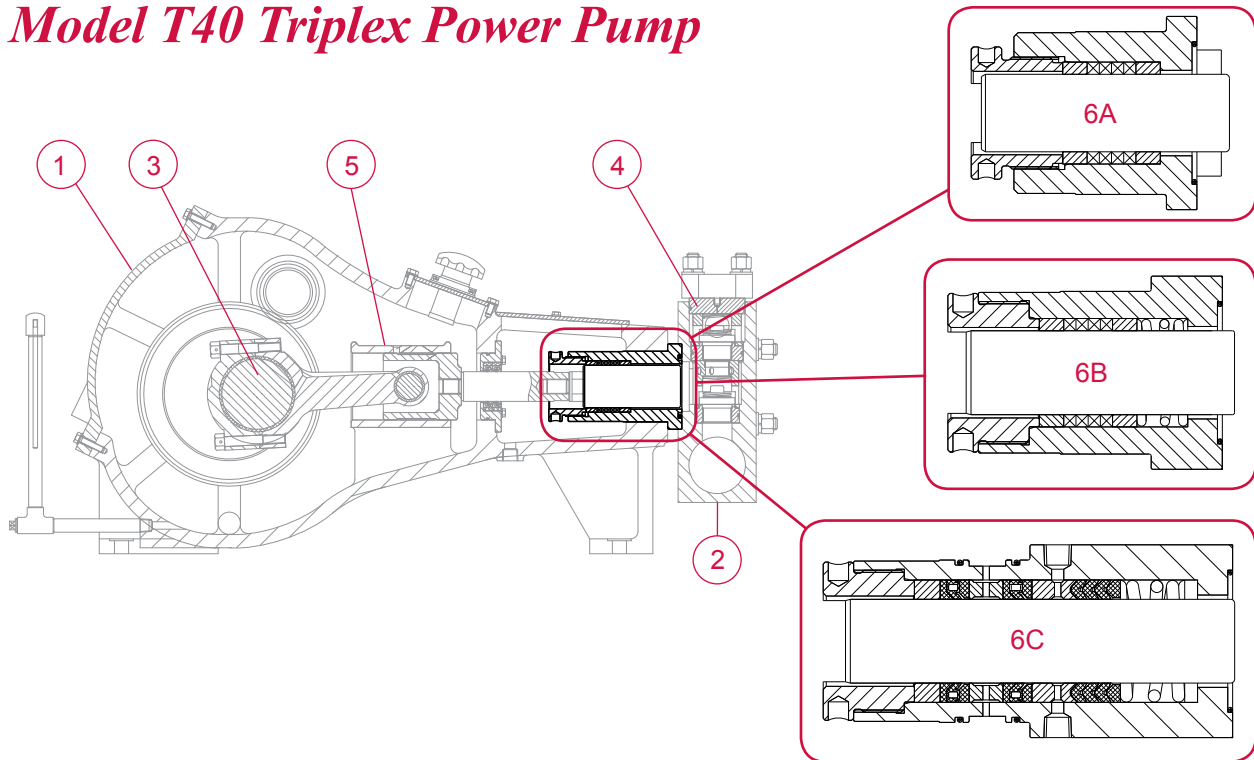


Applications

- Amine gas sweetening
- Ammonia
- Chemical injection
- Core drilling
- Crude transfer
- Detergent and soap slurries
- Dust suppression
- Glycol gas dehydration
- High-pressure washdown
- Horizontal directional drilling
- Hot-oil truck injection
- Hydrostatic testing
- Light hydrocarbon transportation
- Machine tool coolant
- Methanol injection
- Municipal jetting
- Polymer flood
- Produced water disposal
- Pulp and paper
- Reverse osmosis
- Secondary recovery
- Steam boiler feed
- Steel mill descaling
- Water injection



Model T40 Triplex Power Pump



Features, Advantages and Benefits

1. The graphite flake microstructure of the cast iron power frame ensures robust, fatigue-free durability and excellent wear resistance of moving surfaces.
2. All fluid cylinders are made from forged carbon steel, duplex stainless-steel, or nickel-aluminum-bronze material for increased durability and extended life. Cast materials are never used as they are susceptible to internal defects resulting from solidification shrinkage during casting.
3. Critical components—crankshafts, connecting rods, crossheads, and bearings—are comparatively larger than industry-standard components, enabling them to withstand continuous duty service and harsh operating conditions.
4. Stacked valve assemblies use O-ring seals on the seats, allowing easy accessibility for quicker service.
5. The oil trough is designed to evenly lubricate the crossheads and wrist-pin bearings during operation to reduce wear and extend component life. Pump vendors often exclude this critical feature to simplify the design and reduce the cost of the power end.
6. A variety of packing arrangements are available to meet the requirements of any applications:
 - a. Standard, manually adjustable packing.
 - b. Optional spring-loaded packing does not require manual adjustment.
 - c. Optional stuffing box design that minimizes fluid and vapor leakage to atmosphere for critical fluids.

Model T40 Triplex Power Pump

Specifications

Plunger Ratings

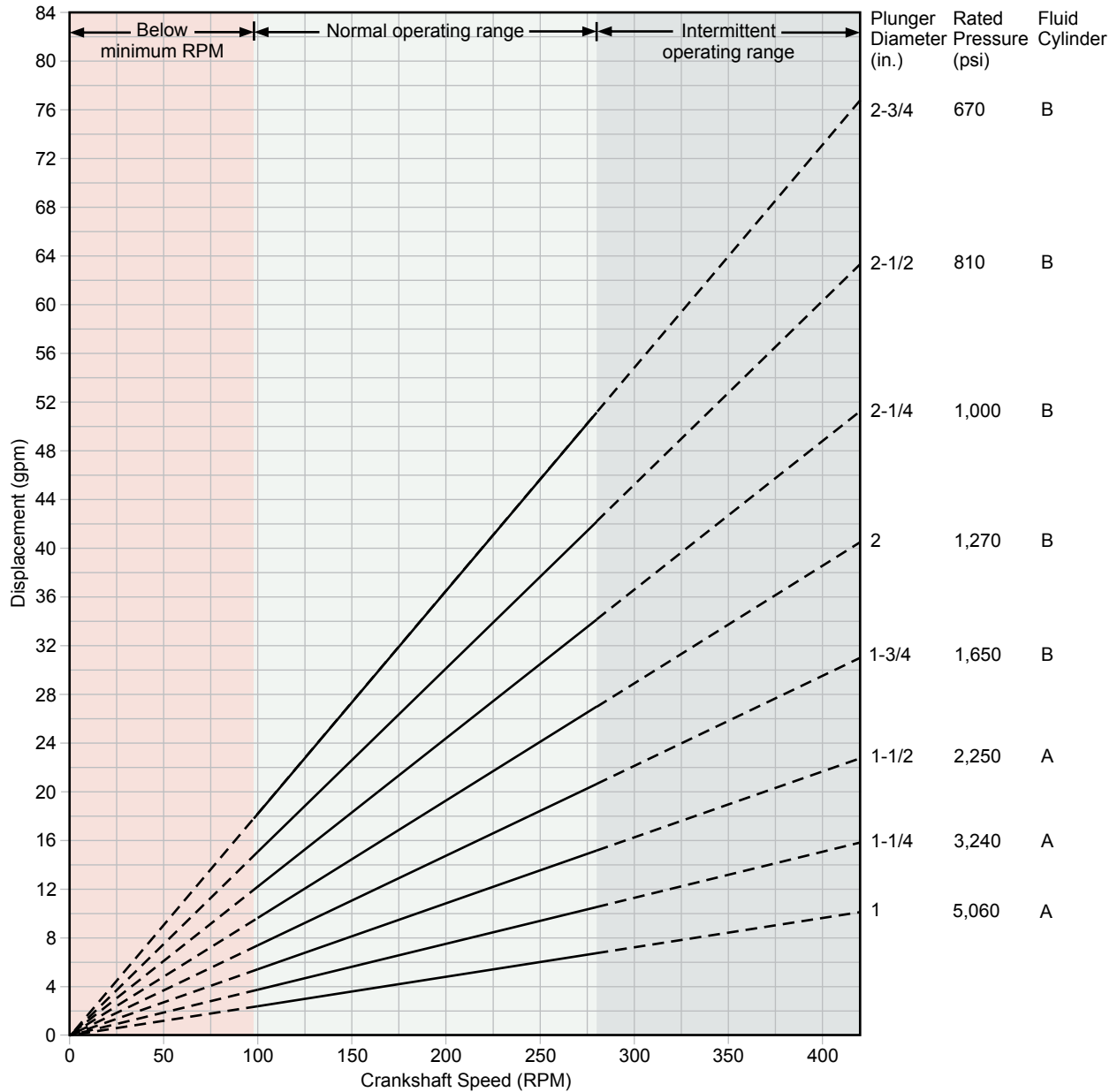
Pump Model	Plunger Size (in./mm)	Displacement (Gal/Rev)	Rated Pressure (psi/MPa)	Rated Capacity (GPM/BPD)		
				Minimum	Continuous	Intermittent
T40A	1.000 25	0.0096	4,480 30.89	2.7 93	8.4 288	13.6 465
	1.250 32	0.0149	4,480 30.89	4.3 146	13.1 451	21.2 727
	1.500 38	0.0215	3,110 21.44	6.1 210	18.9 649	30.5 1,047
T40B	1.750 45	0.0293	2,290 15.79	8.3 286	25.8 883	41.6 1,426
	2.000 51	0.0382	1,750 12.07	11.0 374	34.0 1,154	54.0 1,862
	2.250 57	0.0484	1,380 9.515	14.0 473	43.0 1,460	69.0 2,357
	2.500 64	0.0598	1,120 7.722	17.0 584	53.0 1,803	85.0 2,909

	Continuous Duty	Intermittent Duty
Rated power (HP)	41	66
Maximum speed (RPM)	880	1,420
Minimum speed (RPM)	285	

Stroke length (in./mm)	2.95 75
Rated rod load (lb/kg)	5,500 2,500
Weight (lb/kg)	945 430
Oil capacity (qt/L)	21.4 20.3
Maximum fluid temperature (°F/°C)	180 82
Gear reduction ratio	3.15:1
Mechanical efficiency	85%

Model T40 Triplex Power Pump

Selection Graph

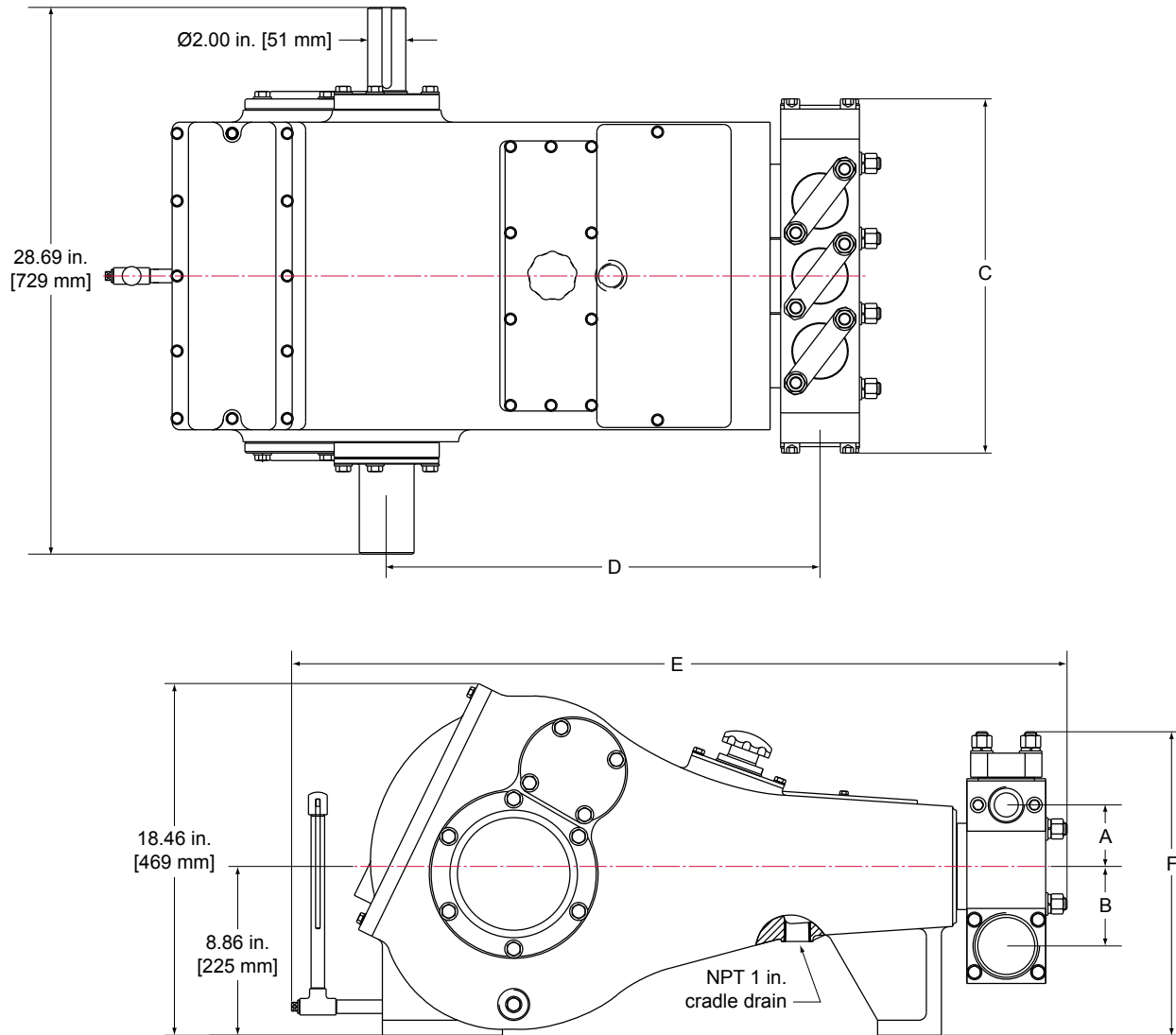


2.95-in. stroke, maximum rod load 5,500 lb (2,495 kg)



Model T40 Triplex Power Pump

General Dimensions



Pump Model	Flange Connections (in./mm)		Dimensions (in./mm)					
	Discharge Connection Sizes	Suction Connection Sizes	A	B	C	D	E	F
T40A	1 (25.4) NPT	2 (50.8) NPT	3.23	4.17	18.62	25.85	40.87	16.11
T40B	1-1/2 (38.1) NPT	3 (76.2) NPT	82	106	473	656	1,038	409