

# UNIFORCE TRIPLEX PUMP UNIFORCE TRIPLEX PUMP UNIFORCE TRIPLEX PUMP



**GLOBAL SOLUTIONS**DESIGNING, MANUFACTURING AND PACKAGING FOR THE OIL & GAS INDUSTRY

## **UNIFORCE<sup>™</sup> UF175**

#### **Performance Criteria**

Rated BHP @ 450 RPM Continuous Duty: 175 HP (130 kW)

Maximum strokes per minute: 450

Stroke Length: 5 inches (127 mm)

Maximum Plunger Diameter: 4 inches (101 mm)

Minimum Plunger Diameter: 2.25 inches (57 mm)

Suction Manifold: either 4 inches or 5 inches NPT

Discharge Manifold: either 2 inches or 3 inches RTJ Flange

Maximum Working Pressure for Med. Pressure Fluid End: 3,000 PSI (211 Kg/cm²)

Fluid End: 955 ALBZ (Medium Pressure Fluid End)

Oil Capacity: 12 gallons (45 liters)
Dry Weight: 4,750 lbs (2,155 kg)

#### **Performance Characteristics**

<b>UF175</b> Performance Data	Input BHP	HP	50	100	125	150	175	175	175
		KW	37	75	93	112	130	130	130
Plunger Diameter	RPM		100	200	250	300	350	400	450
2.25"	Flow rate, GPM		26	52	65	77	90	103	116
	Max. Pressure (PSI)		2,987	2,987	2,987	2,987	2,987	2,614	2,323
2.5"	Flow rate, GPM		32	64	80	96	112	128	143
	Max. Pressure (PSI)		2,420	2,420	2,420	2,420	2,420	2,117	1,882
2.75"	Flow rate, GPM		39	77	96	116	135	154	174
	Max. Pressure (PSI)		2,000	2,000	2,000	2,000	2,000	1,750	1,555
3"	Flow rate, GPM		46	92	115	138	161	184	207
	Max. Pressure (PSI)		1,680	1,680	1,680	1,680	1,680	1,470	1,307
3.25"	Flow rate, GPM		54	108	135	162	189	215	242
	Max. Pressure (PSI)		1,432	1,432	1,432	1,432	1,432	1,253	1,114
3.5"	Flow rate, GPM		62	125	156	187	219	250	281
	Max. Pressure (PSI)		1,234	1,234	1,234	1,234	1,234	1,080	960
3.75"	Flow rate, GPM		72	143	179	215	251	287	323
	Max. Pressure (PSI)		1,075	1,075	1,075	1,075	1,075	941	836
4"	Flow rate, GPM		82	163	204	245	286	326	367
	Max. Pressure (PSI)		945	945	945	945	945	827	735

#### Notes:

- All data subject to change without notice
- Data is based on 100% volumetric efficiency and 90% mechanical efficiency
- Achievable pressure will be limited by input power and fluid end module pressure limitations



## **UNIFORCE™ UF175**

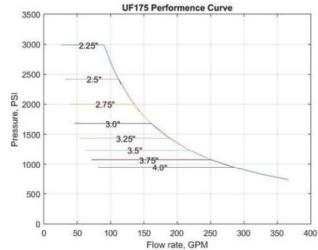


#### Standard Features

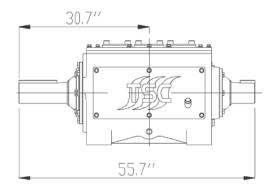
- Compact Footprint
- 955 Aluminum Bronze Fluid End
- 17-4 Stainless Steel Valves (Caged Style)
- Double Extended Crankshaft
- Oil Level Dipstick
- Forced Internal Power End Lubrication System

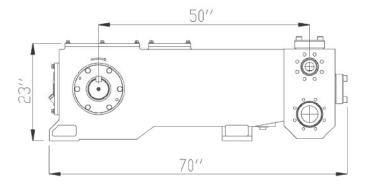
#### **Options**

- Fluid End Variations
   Duplex Stainless Steel
   Cast Ductile
   Cast Forged Steel
   955 Aluminum Bronze
   Forged Steel Billet Block
- Plunger Materials
   316 Stainless Steel
   Colomonoy
   Tungsten Carbide
   Ceramic, TSCeramic
- Valve Variations & Materials
   Caged Valves Albz., 316 S.S., Monel
   Wing Guided Valves Albz., 316 S.S., Monel
   Abrasive Resistant Valves Albz., 316 S.S. Monel



- Force Feed Plunger Lubrication System
- Pulsation Damper
- Relief Valve
- Skid Mounted Unitization of Complete Pumping Unit
- Powered Unitization of Pumping Unit
- Multiple Size Configurations of Discharge Outlets and Discharge Outlets
- Suction Inlet Variation in Diameters: 4" or 5" NPT
- Discharge Outlet Variation in Diameters: 2" or 3" 3,000 Series RTJ







## **UNIFORCE™** Triplex Pump

### UNIFORCE™ The Innovative Difference?

#### WHEN PERFORMANCE COUNTS. TSC'S UNIFORCE FAMILY OF PUMPS ARE THE ULTIMATE IN DESIGN AND PERFORMANCE WITH RUGIDABLITY AND DEPENDABLITY BUILT INTO EACH AND EVERY PUMP.

- ✓ Power Frame Forged and Heat Treated Steel & Stress Relieved
- ✓ Crankshaft Forged, Heat Treated Alloy Steel, and Balanced
- ✓ Bearings Premium Timken and SKF with L10 Life of 30,000 Hrs
- ✓ Crossheads Nodular Ductile Cast Iron
- ✓ Internal Power Frame Lube System Dependable Geared Pumping System
- Fluid End Modules 955 Albz., Duplex Cast S.S., Billet Block, and Cast Ductile
- Balanced Performance Longer Pump Life
- ✓ Lower Pump Cost Better Value

#### **UNIFORCE™** Triplex Pump Markets

- Agriculture Applications Salt Water Disposal Water Flood Projects Chemical Industry
- Petroleum Line Transfer Food Industry Fracturing & Stimulation
- Fertilizer Plants **Cement Slurries** Solvents, Acids, Alkali
- Aircraft De-icing, Airport Areas Pulp & Lumber Industry
- BOP Actuator, Blow Out Preventer Pumps
- **Public Transportation**
- Fire Suppression & Fire Control Service
- Beverage Industries
- Ultra High Pressure Water Jetting
- **Engineering Industries**
- Glass and Ceramic Industries
- Hydraulic Casing Pulling
- Hot Oil Services
- Self Service Car Wash Systems
- Automatic Car Wash Systems
- **Tunnel Wall Concrete Reinforcement**
- Mixing Pump Applications
- Methanol & Ethanol Injection
- Casing Pulling Applications
- Tank & Vessel Hydra Blasting
- **Underground Directional Boring**
- Surface Power Unit for Downhole Jet Pump

- Military Services
- Iron & Steel Mills
- Polymer Injection
- Research Laboratories
- Sludge & Waste Water
- **Nuclear Power Plants**
- Reverse Osmosis
- Borehole Pump
- Ship Building
- Mining Industry
- Offshore Platform Wash
- Hydrostatic Testing
- Hydro Mining
- API Process Pump
- High Viscosity Pumping
- Well Kill Trucks
- Sour Applications
- Pipe Cleaning
- Marine Pump Apps
- Industrial Pump Apps

