

FTS4630 SKID Series – Diesel Engine

APPLICATIONS

Equipped with a powerful diesel or gasoline engine, this model is a great option for use in remote applications where electric power isn't readily available. For emergency response teams, managing fuel is critical when providing disaster relief, and the Tri-Lobe suction lift capability really comes in handy when pulling fuel from deep in an underground storage tank or over a long distance.

This skid can be used in a stationary or mobile configuration, with metering and hose management options, to transfer fluids at flow rates between 30 and 150 GPM up to 100 psi in applications such as fleet, aviation, marina, construction, and agriculture refueling as well as bulk loading/unloading for rail, truck, and marine vessels. Typical fluids include Fuels, Oils, Lubes, Anti-freeze, Petroleum Contact Water (PCW), Transmission Fluid, and some petrochemicals.

PUMP

Our systems feature patented Tri-Lobe positive displacement impeller technology that provides dry-run, dry suction lift, and flow performance like no other positive displacement pump in the industry.

- **DRY-RUN** – Our pump can be operated without fluid in the pump chamber. Pulling fluid through an empty pipe or hose is no problem. There's no need to prime the pump...just turn it on!
- **SUCTION LIFT PERFORMANCE** - When it's time to pump fluid from down deep, the Dixon Pumps Tri-Lobe impellers can generate a vacuum that will lift fluids over 28 ft. at sea level!

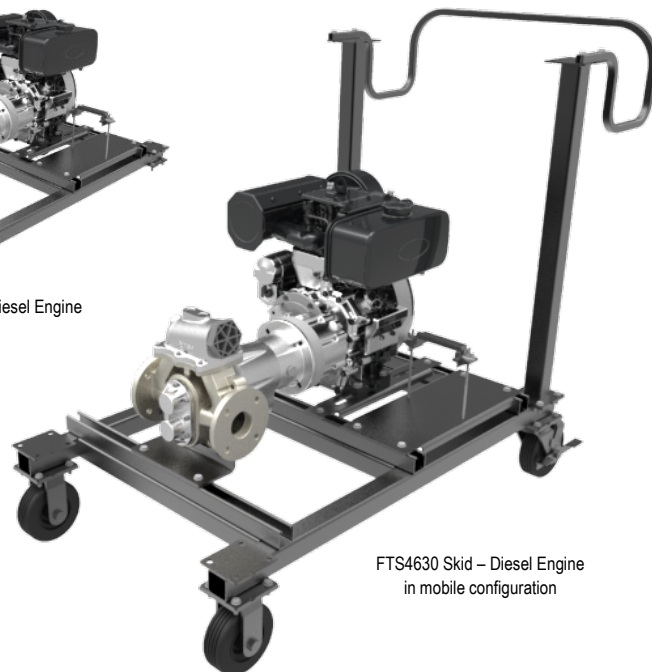
	1500 Series	2000 Series
PUMP	Patented Dixon Pumps Positive Displacement Tri-Lobe Impeller Technology	
Pump Technology	Patented Dixon Pumps Positive Displacement Tri-Lobe Impeller Technology	
Inlet Size and Type	1.5 in. FNPT	2.0 in. FNPT
Outlet Size and Type	1.5 in. FNPT	2.0 in. FNPT
Pump Shaft Material	Carbon Steel	
Impeller/Vane Material	Proprietary Engineered Resin	
Pump Housing Material	Aluminum	
Wetted O-Ring and Shaft Lip Seal	Viton®	
Bypass Options*	20 psi, 50 psi, 75 psi, 100 psi External Bypass Required over 100 psi Dual By-pass available for bi-directional flow	
Maximum Particle Size Clean Fluids**	300 micron / 50 mesh / .297 mm / .0117 in	
Maximum Particle Size Debris Removal**	74 micron / 200 mesh / .074 mm / .0029 in	
Maximum Differential Pressure	125 psi / 8.6 bar	
Maximum Viscosity	3,000 cSt	
Maximum time in Bypass	1 min for volatile fluids. Consult factory for extended use applications.	

* Bypass limits determined by power source overload limits

** Particle size tolerance depends on duration and volume of exposure. Larger particles can be tolerated during intermittent and incidental exposure. Long-term exposure when removing dirty oil and debris, or during tank cleaning can damage the pump, requiring filtration or screening to smaller particle size.



FTS4630 Skid – Diesel Engine



FTS4630 Skid – Diesel Engine
in mobile configuration

AVAILABLE POWER OPTIONS

Our FTS 4630 Series can be equipped with three engine options, providing up to 13.4 HP.

POWER SOURCE SPECIFICATION			
Power Type	Diesel Engine	Gasoline Engine	Gasoline Engine
Engine Fuel	DIESEL	GASOLINE	GASOLINE
Manufacturer	Kubota	Kohler	Honda
Model	OC95-E4	PA-CH440-3031	GX390-QNE2
Emission Reg.	Tier 4	Carb Tier III, EPA phase 3 and RFI compliant	CARB and EPA certified
HP	9.4 HP	13.4 HP	11.7 HP
Max Shaft Speed	3600 RPM	3600 RPM	3600 RPM
Idle Shaft Speed	1300 RPM	1300 RPM	1400 RPM
Starting System	Electric Start	Electric Start	Electric Start
Start Battery Volts/Amps*	12 V / 10 A	12 V / 10 A	12 V / 10 A
Backup Start	None	Hand Pull Recoil	Hand Pull Recoil
On/Off Switch	Key Start / Kill Switch	Key Start / Kill Switch	Key Start / Kill Switch
Speed Control	Throttle	Throttle	Throttle
Net Power Output	9.4 HP @ 3600 RPM	13.4 HP @ 3600 RPM	11.7 HP @ 3600 RPM
Max Net (Peak) Torque (ft-lb)	15.9 @ 2500 RPM	22.7 @ 3000 RPM	19.5 @ 2500 RPM
Fuel Tank Capacity	1.45 Gal	1.90 Gal	1.40 Gal
Fuel Consumption (@3600 RPM)	.63 Gal / Hr	1.0 Gal / Hr	.925 Gal / Hr
Run Time at Max RPM	2.3 Hrs	1.0 Hrs	1.5 Hrs

* Battery not supplied with the unit



HONDA – 11.7 hp – GX390
GASOLINE



KUBOTA – 9.4 hp – OC95-E4
DIESEL



KOHLER – 13.4 hp – PA-
CH440-3031

PERFORMANCE – DRY VACUUM, NPSHr

VACUUM (in Hg) AND DRY-LIFT (in Ft.) - at Sea Level						
2000 Series (2.0")						
Pump RPM:	200	400	600	800	1000	1200
Vacuum (Inches of Hg)	5.1	12.7	17.8	20.2	22.2	22.8
Dry Lift of Water in Feet (SG=1)	5.8	14.4	20.2	22.9	25.1	25.8
Dry Lift of Gasoline in Feet (SG=.73)*	8.0	18.0	18.0	18.0	18.0	18.0
Dry Lift of Diesel in Feet (SG=.88)	6.6	16.4	22.9	26.0	28.6	29.3

* Dry lift of gasoline varies depending on vapor pressure. This specification is for summer fuel RVP = 9, sea level.

NET POSITIVE SUCTION HEAD REQUIRED (NPSHr)									
RPM:		450	575	700	800	900	1000	1100	1200
Inlet	Unit								
1.5"	Water (ft.)	18.0	18.1	18.4	19.0	19.4	19.6	19.8	20.0
1.5"	Diesel (ft.)	20.0	20.1	20.4	21.1	21.6	21.8	22.0	22.2
2.0"	Water (ft.)	18.0	18.1	18.4	19.0	19.5	20.0	20.4	20.8
2.0"	Diesel (ft.)	20.0	20.1	20.4	21.1	21.7	22.2	22.7	23.1

PERFORMANCE – FLOW AND PRESSURE

TYPICAL PERFORMANCE DATA (Flow Rate For 3 cSt Fluid At 80% of Bypass Pressure)											
				2.0" Pump							
				FLOW (GPM) / BYPASS PRESSURE (PSI)							
EP	HP	Type	GR.	1.3 : 1	1.6 : 1	2.0 : 1	2.5 : 1	3.0 : 1	4.1 : 1	5.0 : 1	7.2 : 1
NO	9.4	Engine - Diesel (Kubota)						150/50			
NO	13.4	Engine - Gasoline (Kohler)						150/100			
NO	11.7	Engine - Gasoline (Honda)						150/100			

EP = Explosion-Proof, HP = Horse Power

WEIGHT

TOTAL SYSTEM WEIGHT (Lbs.)		
2.0" Pump		
Type	FTS4630 Stationary	FTS4630 Mobile
Engine - Diesel (Kubota) - 9.4 HP	156	186
Engine - Gasoline (Kohler) - 13.4 HP	172	202
Engine - Gasoline (Honda) - 11.7 HP	169	199

ACCESSORIES - Meters

For custody transfer applications, precision meters from Liquid Controls and Total Control Systems are available, mounted to the 46x30 base on a sturdy framework for easy access and operation.



Liquid Controls (Mechanical)



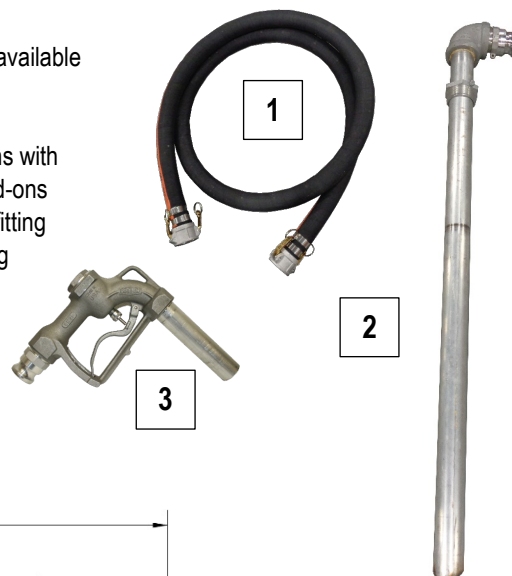
Total Controls (Mechanical)

ACCESSORIES - Hardware

Hoses, nozzles and suction drop pipes are available for purchase separately

(available in F x F or F x M configuration)

- Hose kits – 10ft, 20ft, and 30 ft, sections with Camlock fittings for easy extension add-ons
- 1.5" Mechanical Nozzle with Camlock fitting
- 1.5", 3 ft. Drop Pipe with Camlock fitting



DIMENSIONS (in Inches)

2.0 inch 9.4 Diesel Model Shown Here for Reference

