FM13X FLUID MANAGEMENT SYTEM



FEATURES & BENEFITS

POWER TO PERFORM

Powered by an 11.7-hp engine equipped with an optional 500-gallon (1893-L) or 950-gallon (3596-L) tank, matching the needs of mid-size utility-installation jobs. Supports all sizes of HDD drill units.

INCREASED PRODUCTIVITY

Features a high-performance Flomax® pump, delivering 200-gpm (757-l/min) of 42-viscosity drilling fluid.

ENGINEERED FOR EFFICIENCY

A one-piece mixing jet handles 8 bags, yielding up to 950 gallons (3596-L) of fluid in fewer than 8 minutes.

CUSTOMER-DRIVEN DESIGN

Includes a new wet hopper design, increasing the venturi inlet from 1.25 to 2 inches—a 60 percent larger opening for material flow and superior fluid mixing. Steep sides incorporated in design to help speed mixing cycles.

EFFECTIVE OPERATION

The tank's sloping bottom ensures unit effectiveness, allowing drilling fluid to be thoroughly mixed and flow through the pump.

UNDENIABLE DURABILITY

Features powder-coated finish, making the unit more durable, economical and resistant to chips, rusting or fading.

FM13X FLUID MANAGEMENT SYSTEM SPECIFICATIONS

DIMENSIONS	U.S.	METRIC
MIXING SYSTEM W/400-GALLON TANK		
Length	100 in	2.54 m
Width	20 in	510 mm
Height	69 in	1.75 m
Weight, empty	450 lb	204 kg
Weight, full of water	4,253 lb	1929 kg
MIXING SYSTEM W/500-GALLON TANK		
Length	150 in	3810 mm
Width	31 in	787 mm
Height		
Tank assembly w/out fill pipe	68 in	1727 mm
Tank assembly w/fill pipe	75 in	1905 mm
Mixing unit	450 lb	204 kg
Weight, empty	550 lb	250 kg
Weight, full of water	5,180 lb	2350 kg
MIXING SYSTEM W/950-GALLON TANK		
Length	180 in	4572 mm
Width	42 in	1067 mm
Height		
Tank assembly w/out fill pipe	72 in	1829 mm
Tank assembly w/fill pipe	80 in	2032 mm
Mixing unit	450 lb	204 kg
Weight, empty	1,050 lb	477 kg
Weight, full of water	9,383 lb	4256 kg

FLUID/MIXING SYSTEM

Centrifugal pumps		
Suction port diameter	3 in	76 mm
Discharge port diameter	3 in	76 mm
Fluid pressure, max	50 psi	3.4 bar
Pump discharge rate, water, max	270 gpm	1020 l/min
Flow rate to boring unit, max	220 gpm	832 l/min
Drilling fluid tank capacity	400/500/950 gal	1514/1893/3596 L
Solids addition rate, w/metering plate	30 lb/min	14 kg/m
Solids addition rate, w/out metering plate	75 lb/min	34 kg/m
Mixing hopper capacity (each hopper)	1 ft^3	28 L
Typical tank mixing time	7-10 min	

POWER	U.S.	METRIC
Engine	Honda® GX390	
Fuel	Gasoline	
Cooling medium	Air	
Number of cylinders	1	
Displacement	23.7 in^3	0.39 L
Bore	3.46 in	88 mm
Stroke	2.52 in	64 mm
Manufacturer's net power rating	11.7 hp	8.7 kW
Rated speed	3,600 rpm	
Emissions compliance	EPA Phase 3	EU Stage IV

FLUID CAPACITIES

Air flow	512 cfm	14.5 m^3/min
Vacuum, max	15 in Hg	381 mm Hg

NOISE LEVEL

Sound Pressure	92 dbA	
Sound Power	105 dbA	

HYDRAULIC SYSTEM

Flow rate	3.6 gpm	14 l/min
Pressure	2,500 psi	172 bar

Specifications are general and subject to change without notice. If exact measurements are required, equipment should be weighed and measured. Due to selected options, delivered equipment may not necessarily match that shown.

©2020 The Charles Machine Works, Inc.