



LIQUIDYNAMICS™

FLUID HANDLING
TECHNOLOGY

DIESEL EXHAUST FLUID

This latest brochure dedicated to Diesel Exhaust Fluid (DEF) handling products has several new additions to better serve the evolving world of DEF. Liquidynamics continues to be at the leading edge of DEF product development and product offerings, this latest brochure includes several new hand pump options, meters and most importantly the Liquidynamics DEF Fluid Management and Tank Monitoring systems for DEF.

DEF handling products shown in this brochure conform to ISO specifications and include 115 VAC and 12 VDC pumps as well as

air operated pumps, hand pumps and gravity flow kits. Also included in this brochure are our most popular DEF bulk transfer carts and skids which can be easily “customized” to specific user requirements by using the included Selection Guides. Additionally, Liquidynamics offers a complete selection of hose reels, meters, control valves, filters and fittings thus allowing our users a wide selection of equipment to best fit their needs.

Please visit our website www.liquidynamics.com for additional information and products not shown in this brochure.



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"CLOSED" IBC TRANSFER SYSTEMS FOR DIESEL EXHAUST FLUID (DEF)

P/N 970027-06A

275 or 330 Gallon DEF IBC Tote system for use with closed system couplers and valves of your choice. This system is designed to be compatible with MicroMatic RSV and EPV series couplers as well as Colder Products "DrumQuick Pro" couplers. Order an appropriate coupler separately to match your system requirements.

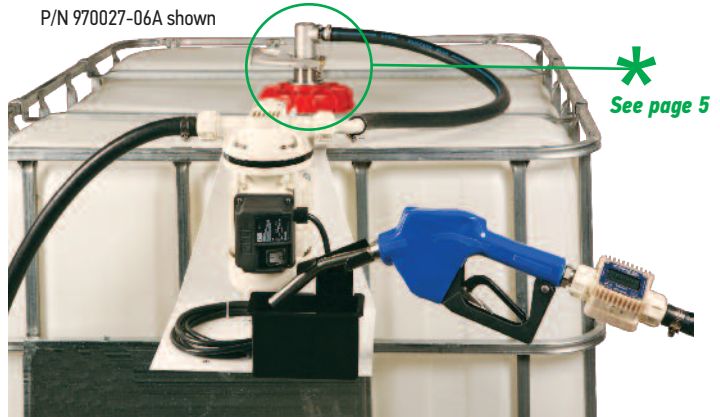
System includes:

- 8 GPM, 115 VAC Self Priming Pump, w/ 6 min. timeout feature
- Electronic Digital Turbine Meter
- Stainless Steel Automatic Discharge Nozzle
- 3/4" x 12' Discharge & Pump Connection Hose
- Convenient Pump Hanger Plate w/Nozzle Holder and Drip Cup

P/N 970027-06M

Same as 970027-06A above, except with manual nozzle.

P/N 970027-06A shown



Note: IBC Tote Tank and coupler not included

P/N 970027-02A

275 or 330 Gallon DEF IBC Tote system for use with closed system couplers and valves of your choice. This system is designed to be compatible with MicroMatic RSV and EPV series couplers as well as Colder Products "DrumQuick Pro" couplers. Order an appropriate coupler separately to match your system requirements.

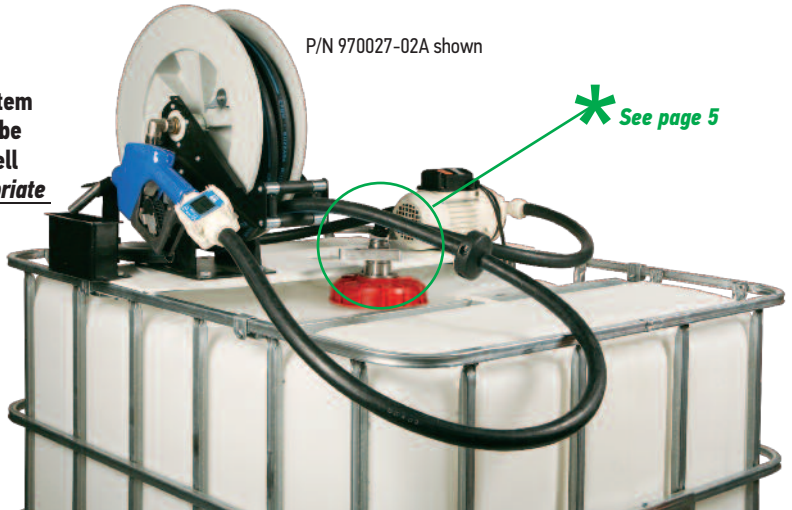
System includes:

- 8 GPM, 115 VAC Self Priming Pump, w/ 6 min. timeout feature
- Electronic Digital Turbine Meter
- Stainless Steel Automatic Discharge Nozzle
- 3/4" x 25' Hose reel
- Tote Mounting Plate and Hardware
- Nozzle Holder and Drip Cup

P/N 970027-02M

Same as 970027-02A above, except with manual nozzle.

P/N 970027-02A shown



Note: IBC Tote Tank and coupler not included

P/N 970020-12A

This simple system is designed to draw from the bottom of the Tote tank, therefore eliminating air pockets which cause DEF crystallization. A separate air vent is required to allow the IBC Tote to breathe, see page 11 for choice of vents, P/N 950391, 950392 and P/N 950392P. **System includes:**

- 8 GPM, 115 VAC Self Priming Pump, w/ 6 min. timeout feature
- Electronic Digital Turbine Meter
- Stainless Steel Automatic Discharge Nozzle
- 3/4" x 12' DEF Discharge Hose
- Pump Connection Hose w /2" NPTF Tote Connection Fitting
- Convenient Pump Hanger Plate w/Nozzle Holder and Drip Cup

P/N 970020-12M

Same as 970020-12A above, except the stainless steel automatic nozzle is replaced by a manual nozzle.

P/N 970020-12A shown



Note: IBC Tote Tank not included

COMPLETE TOP DRAW SYSTEMS INCLUDE 4 PIN COUPLER

P/N 970014-AC

Complete DEF system for use with 275 and 330 gallon IBC tote tanks, includes all components required to transfer DEF fluid from your tote tank including a 4 pin coupler to fit standard 4 pin valves.

System includes:

- 115 VAC, 8 GPM self-priming pump
- Automatic shutoff DEF nozzle with built-in meter and stainless steel spout and break away system
- DEF filter to ensure DEF cleanliness
- Strong stainless steel mounting plate with built-in roll bar for added protection, mounting plate fastens securely to IBC frame via a security lock bracket
- Mounting plate incorporates a high capacity hose retainer for convenient hose storage of the included 3/4" x 20' DEF hose
- 4 Pin coupler to fit standard 4 pin stainless steel or poly RSV valves

P/N 970014-DC

Same as 970014-AC above, except pump is replaced with 12 VDC pump.



Note: IBC Tote Tank not included

"CLOSED" 55 GALLON DRUM CART SYSTEM FOR DEF

P/N 51009C-S9A

55 Gallon Drum Cart system for use with closed couplers and valves of your choice. This system is compatible with MicroMatic RSV and EPV couplers as well as Colder Products "DrumQuick Pro" couplers. Order your choice of coupler separately to match your system requirements.

- 8 GPM, 115 VAC Self Priming Pump, w/ 6 min. timeout feature
- Electronic Digital Turbine Meter
- SS Automatic Discharge Nozzle
- 3/4" x 12' Discharge & Pump Connection Hose
- Heavy Duty Mobile Cart, with 2,600 lb. load rating

P/N 51009C-S9M

Same as 51009C-S9A above except the stainless steel automatic nozzle is replaced by a manual nozzle.



P/N 51009C-S9A shown

Note: Drum and Coupler not included

* See page 5

DEF HAND PUMPS SYSTEMS

P/N 51009C-S15A

55 Gallon drum cart system is designed to maintain DEF product integrity while still allowing easy drum change as necessary.

System includes:

- 55 Gallon heavy duty drum cart
- Lever action piston pump with stainless steel RSV coupler
- 3/4" x 12' discharge hose
- Stainless steel automatic nozzle

P/N 51009C-S15M

Same as 560008V-S15A above, except with manual nozzle.



Note: Drum not included

P/N 51009C-S15M shown

P/N 51009C-S18AP

Same as 51009C-S15A except it uses a poly RSV coupler and poly nozzle in place of the stainless steel coupler and nozzle, has 3/4" x 15' discharge hose.

P/N 51009C-S18M

Same as 51009C-S15M except it uses a poly RSV coupler in place of the stainless steel coupler, has 3/4" x 15' discharge hose.



P/N 51009C-S18AP shown

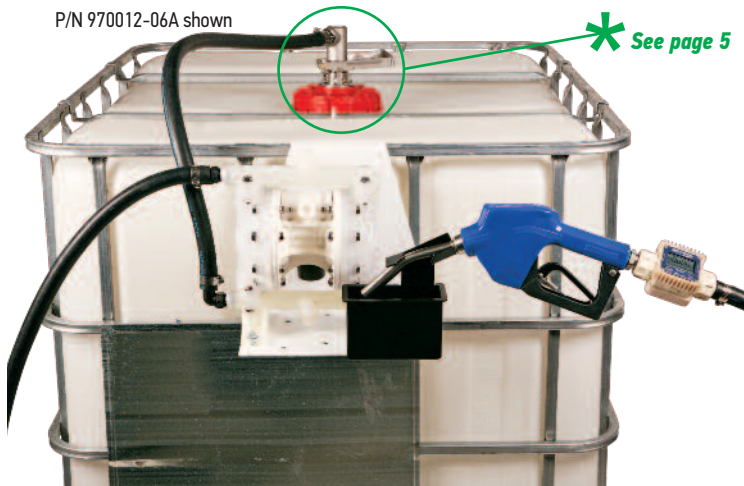
Note: Drum not included

AIR OPERATED PUMP SYSTEMS FOR DEF

The air operated pump systems offered on this page utilize a 1:1 ratio pump that is rated at up to 14 GPM, flow rate can be controlled via the discharge nozzle or with the included air regulator. These systems provide an economical solution for pumping DEF

fluid and are offered in both "open" and "closed" variations in order to accommodate most any application. These systems offer the added advantage of not having to constantly switch the pump on and off manually, as is the case with electric pumps.

P/N 970012-06A shown



Note: IBC Tote Tank and coupler not included

P/N 970012-06A

275 or 330 Gallon DEF IBC Tote system for use with closed system couplers and valves of your choice. This system is designed to be compatible with MicroMatic RSV and EPV series couplers as well as Colder Products "DrumQuick Pro" couplers. Order an appropriate coupler separately to match your system requirements.

System includes:

- 14 GPM Air Operated Double Diaphragm Pump
- Electronic Digital Turbine Meter
- Stainless Steel Automatic Discharge Nozzle
- 3/4" x 12' Discharge & Pump Connection Hose
- Convenient Pump Hanger Plate w/Nozzle Holder and Drip Cup

P/N 970012-06M

Same as 970012-06A above, except the stainless steel automatic nozzle is replaced by a manual nozzle.

P/N 560008A-S1A

Economical "Closed" 1:1 ratio air operated pump system designed for use with 55 gallon drums that are fitted with the MicroMatic RSV drum valve. May also be used with 275 and 330 gallon IBC tote tanks fitted with the MicroMatic RSV valve.

System includes;

- 1:1 ratio air operated pump, 6 GPM
- 3/4" x 12' DEF discharge hose
- Poly automatic nozzle
- Stainless steel MicroMatic coupler

P/N 560008A-S1M

Same specification as P/N 560008A-S1A, but supplied with poly manual nozzle in place of the poly auto nozzle.

P/N 560008A-S1M shown



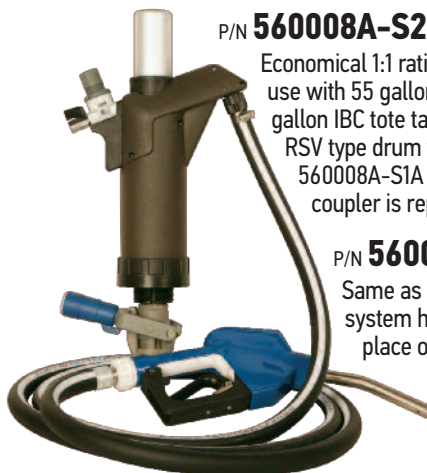
Note: Drum not included

P/N 560008A-S2A

Economical 1:1 ratio pneumatic pump designed for use with 55 gallon drums as well as 275 and 330 gallon IBC tote tanks that are fitted with 4 pin RSV type drum valves. System is the same as 560008A-S1A except the stainless steel RSV coupler is replaced with a poly RPV coupler.

P/N 560008A-S2M

Same as 560008A-S2A except the this system has a poly manual nozzle in place of the poly auto nozzle.

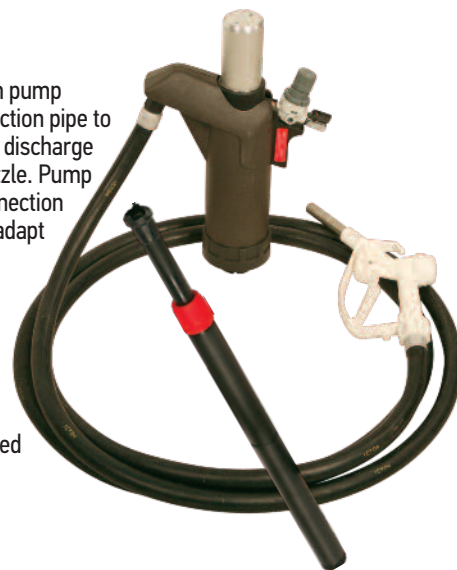


P/N 560008A-12A

"Open" 1:1 air operated piston pump supplied with telescoping suction pipe to fit 55 gallon drum, 3/4" x 12' discharge hose and poly automatic nozzle. Pump has 2" male NPS thread connection to drum. Use P/N 560101 to adapt to buttress threaded drums.

P/N 560008A-12M

Same specification as P/N 560008A-12A but supplied with poly manual nozzle.



55 GALLON DRUM TOPPER SYSTEMS FOR DEF

P/N 33115-S1A

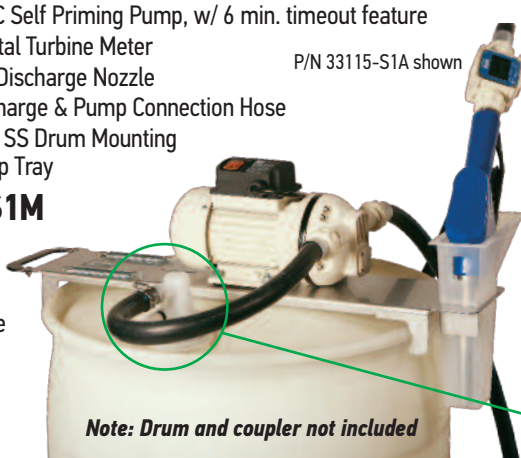
115 VAC 55 Gallon Drum Topper System for use with closed couplers and valves of your choice. This system is compatible with MicroMatic RSV and EPV couplers as well as Colder Products "DrumQuick Pro" couplers. Order your choice of couplers separately to match your system requirements. System includes:

- 8 GPM, 115 VAC Self Priming Pump, w/ 6 min. timeout feature
- Electronic Digital Turbine Meter
- SS Automatic Discharge Nozzle
- 3/4" x 12' Discharge & Pump Connection Hose
- Spring Loaded SS Drum Mounting Bracket w/ Drip Tray

P/N 33115-S1A shown

P/N 33115-S1M

Same as 33115-S1A above except the SS automatic nozzle is replaced by a manual nozzle



Note: Drum and coupler not included

P/N 33115-S2A

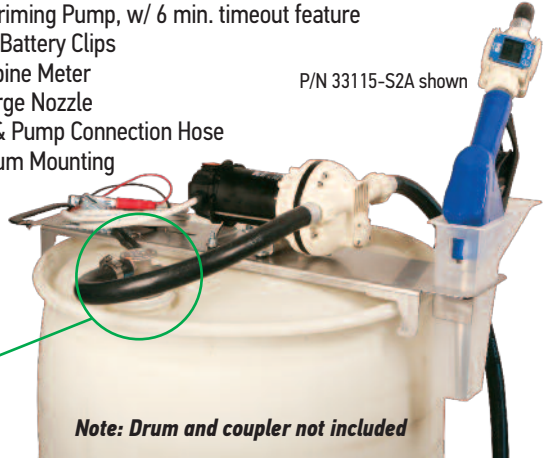
12 VDC 55 Gallon Drum Topper System for use with closed couplers and valves of your choice. This system is compatible with MicroMatic RSV and EPV couplers as well as Colder Products "DrumQuick Pro" couplers. Order your choice of couplers separately to match your system requirements. System includes:

- 8 GPM, 12 VDC Self Priming Pump, w/ 6 min. timeout feature
- 18' Power Cable with Battery Clips
- Electronic Digital Turbine Meter
- SS Automatic Discharge Nozzle
- 3/4" x 12' Discharge & Pump Connection Hose
- Spring Loaded SS Drum Mounting Bracket w/ Drip Tray

P/N 33115-S2A shown

P/N 33115-S2M

Same as 33115-S2A above except the SS automatic nozzle is replaced by a manual nozzle



Note: Drum and coupler not included

* See below

DEF SYSTEMS SELECTION GUIDE

SYSTEM IDENTIFIER

- DR** DEF Tote "Closed" System w/ Hose Reel Capability
DS DEF Tote "Closed" System (hanger system on side of tote)
DT DEF Drum Topper System (not for use with Hose Reels)
DC DEF Drum Cart System (can be used with 25' Hose Reel)

PUMP SELECTION

- 12** 12 VDC Membrane Pump
15 115 VAC Membrane Pump
20 1/2" DD Air Operated Pump (includes air F/R)

HOSE/REEL SELECTION

- H08** 3/4" x 8' DEF Hose
H10 3/4" x 10' DEF Hose
H12 3/4" x 12' DEF Hose
H15 3/4" x 15' DEF Hose
H20 3/4" x 20' DEF Hose
H25 3/4" x 25' DEF Hose
H30 3/4" x 30' DEF Hose
R25 3/4" x 25' Hose Reel (may be used on DR tote or DC cart systems)
R50 3/4" x 50' Hose Reel (for use on DR tote system only)

METER SELECTION

- X** No Meter
T Digital Turbine Meter

CONTROL HANDLE SELECTION

- XX** Not Required
MP Manual Poly Nozzle
AS Automatic SS Nozzle
AP Automatic Poly Nozzle
AM Automatic Poly Nozzle with Meter

CART SELECTION

- XX** Not Required
D4 Drum Dolly, 55 Gallon (can not be used with reel)
C8 Heavy Duty 4 Wheel Cart (will accept 25' reel)

COUPLER SELECTION

- XXX** Not Required
COL Colder Products DrumQuick Coupler
EPV MicroMatic EPV Coupler
RPV MicroMatic RPV Coupler (poly)
RSV MicroMatic RSV Coupler (stainless)

Order Coupler Separately



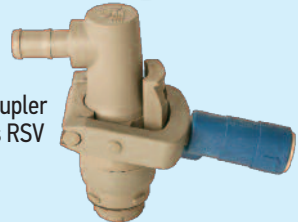
P/N 195205D

- Stainless Steel RSV Series Quick Coupler



P/N 195205P

- Closed, 4 pin poly coupler works with stainless RSV or poly RPV valves



P/N 195206A

- Stainless Steel EPV Dispensing Coupler



P/N 195207A

- Polypropylene DrumQuick® PRO Coupler

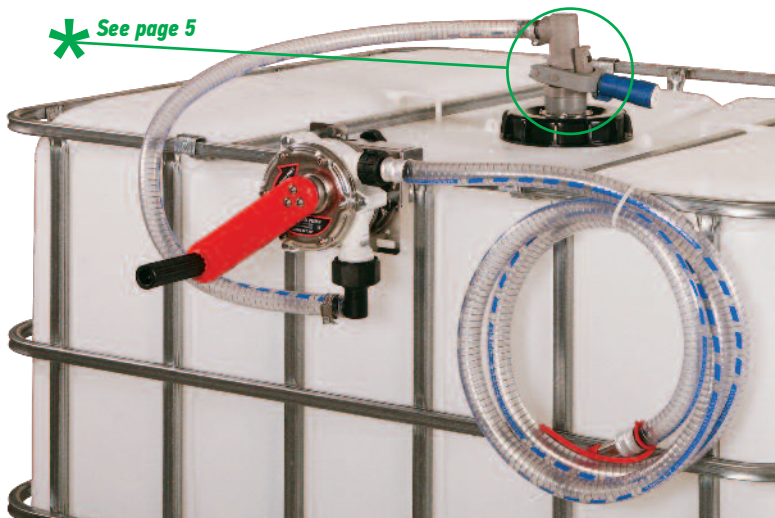


DEF HAND PUMPS AND SYSTEMS

P/N 10034

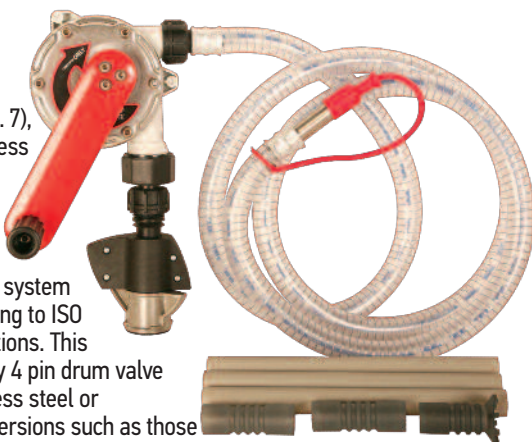
This unique rotary hand pump kit allows you to conveniently pump DEF from 275 and 330 gal. IBC Tote tanks. This has been accomplished by attaching the rotary hand pump to a sturdy stainless steel support bracket which is designed to fit most IBC frames. The bracket is easily attached to the IBC frame and can be moved from tote to tote as necessary. The kit includes a rotary hand pump, mounting bracket, 3/4" x 4' suction hose and 3/4" x 8' discharge hose with dust cap. This pump can also be fitted with an optional discharge filter P/N 70170 shown below. **Order an appropriate coupler separately to match your system requirements.**

* See page 5



P/N 10036

Same as P/N 10035 pump (pg. 7), except the buttress bung fitting is replaced by a 4 pin compatible RSV coupler to maintain closed system integrity according to ISO 22241 specifications. This pump will fit any 4 pin drum valve including stainless steel or polypropylene versions such as those supplied by MicroMatic.



P/N 70170

3D filter kit designed to fit onto the discharge fitting of the P/N 10034, 10035 and 10036 rotary hand pumps as shown. Filter protects against possible particulate contamination of the vehicle catalyst during DEF transfer operations. Order replacement filter element P/N 70170-01 as necessary.



P/N 560008V-S1A

Economy lever action piston pump system without a cart is designed to maintain product integrity.

System includes:

- Lever action piston pump with stainless steel RSV coupler
- 3/4" x 12' discharge hose
- Poly automatic nozzle
- Stainless steel Micro Matic closure system



Note: Drum not included

P/N 560008V-S1A shown

P/N 560008V-S1M

Same as 56008V-S1A above, except the automatic nozzle is replaced by a manual nozzle.

P/N 560008V-S3AP-55

Complete DEF hand pump system includes everything you need to outfit your 55 gallon DEF drum. System includes suction tube and drum valve.

P/N 560008V-3AP-275

Same as 560008V-3AP-55 except suction tube length fits 275 gal. IBC totes

P/N 560008V-S3A-330

Same as 560008V-3AP-55 except suction tube length fits 330 gal. IBC totes



P/N 560008V-S3M-55

Same as 560008V-S3AP-55 except auto nozzle is replaced by manual nozzle..

P/N 560008V-S3M-275

Same as 560008V-S3M-55 except suction tube length fits 275 gal. IBC totes

P/N 560008V-S3M-330

Same as 560008V-S3M-55 except suction tube length fits 330 gal. IBC totes



P/N **560008V** MA-20V

Polypropylene piston pump uses viton seals for use with various industrial chemicals such as mild acids, mild alkali solutions, diesel exhaust fluid and similar water based fluids. Complete with telescoping suction pipe to fit drums up to 55 gallon. Approx. 12 strokes/gal.



P/N **10031** MA-31

Polypropylene construction with nitrile seals and stainless steel piston shaft which allows use with water, water based chemicals, mild acids and mild alkali solutions as well as oils and DEF fluid. Approx. 16 strokes/gal.

P/N **560008V-12M**

Lever action piston hand pump with telescoping suction pipe to fit 55 gallon drum, includes 3/4" x 12' discharge hose and manual shutoff nozzle with trigger lock, approx. 12 strokes/gallon.



P/N **10035**

This rotary hand pump is constructed of stainless steel and heavy duty polymers and is specifically designed for use with DEF, non-potable water, anti-freeze and similar water based fluids. The pump is fitted with a 2.5" x 5 buttress bung fitting, 3/4" x 8' discharge hose w/spout cap and modular suction tubes to fit various drum sizes. Pump has a discharge capacity of 10 gallons per 100 revolutions and features an inlet check valve to maintain pump prime.



Note: Drum not included

NOTE: Pumping cavity must be filled initially with operating fluid for proper operation.

"OPEN" SYSTEMS FOR DEF

P/N **51009C-S4A**

55 Gallon Drum Mobile Cart System with in-line meter is a complete transfer system, including:

- Submersed Impellor Drum Pump, 115 VAC, 15 GPM
- Electronic Digital Turbine Meter
- Stainless Steel Automatic Discharge Nozzle
- 3/4" x 12' Discharge Hose
- 2" Bung Adapter w/filtered air breather
- Heavy Duty Mobile Cart, with 2,600 lb. load rating



Note: Drum not included

P/N **51009C-S4M**

Same as 51009C-S4A above, except the automatic nozzle is replaced by a manual nozzle.

P/N 51009C-S4A shown

P/N **970019-12A**

Economical pump system designed for use with 275 Gal. IBC Tote tanks, system includes:

- Two Speed, 115 VAC, DEF Pump, 15 GPM w/ filtered air vent and sealed bung adapter
- 3/4" x 12' Discharge Hose
- Electronic Digital Turbine Meter
- Stainless Steel Automatic Discharge Nozzle
- Nozzle Holder, Drip Tray and Mounting Hardware



P/N 970019-12M shown

Note: IBC Tote Tank not included

P/N **970019-12M**

Same as above, except the automatic nozzle is replaced with a manual nozzle.

DEF HOSE REELS

P/N 43002DEF-25

Hose reel utilizes stainless steel hub and swivel to ensure DEF compatibility. Includes 3/4" x 25' hose mounted on reel, has 3/4" NPTM poly discharge fitting, **other fittings available.**

P/N 43002DEF-25A

Same as 43002DEF-25 except has P/N 100378 fitting at end of hose to mate directly to DEF meter P/N 100386

P/N 43002DEF-25B

Same as 43002DEF-25 except has P/N 100378B fitting at end of hose to mate directly to DEF manual nozzle P/N 100389M (with blue grip)

P/N 43002DEF-25C

Same as 43002DEF-25 except has P/N 100383 fitting at end of hose to mate directly to stainless steel auto nozzle P/N 100389A



P/N 88402DEF-50

This compact and sturdy hose reel has double pedestal and double arm support for rigidity and is powder coated for durability. Reel has stainless steel hub and swivel and is supplied with 3/4" x 50' DEF hose, has 3/4" NPTM poly discharge fitting, **other fittings available.**

P/N 88402DEF-50A

Same as 88402DEF-50 except has P/N 100378 fitting at end of hose to mate directly to DEF meter P/N 100386

P/N 88402DEF-50B

Same as 88402-50 except has P/N 100378B fitting at end of hose to mate directly with DEF manual nozzle P/N 100389M (with blue grip)

P/N 88402DEF-50C

Same as 88402DEF-50 except has P/N 100383 fitting at end of hose to fit 100389A stainless steel auto nozzle

DEF HOSE

An EPDM hose with polyester braid reinforcement. This hose is processed without any zinc during manufacturing and has been peroxide cured for use with DEF.



PART NUMBER

81240-10	3/4" x 10' DEF hose w/ male Poly NPT fittings both ends
81240-12	3/4" x 12' DEF hose w/ male Poly NPT fittings both ends
81240-15	3/4" x 15' DEF hose w/ male Poly NPT fittings both ends
81240-20	3/4" x 20' DEF hose w/ male Poly NPT fittings both ends
81240-25	3/4" x 25' DEF hose w/ male Poly NPT fittings both ends
81240-50	3/4" x 50' DEF hose w/ male Poly NPT fittings both ends
81241-10	1" x 10' DEF Hose w/rigid, male SS NPTM fittings both ends
81241-20	1" x 20' DEF Hose w/rigid, male SS NPTM fittings both ends
81241-25	1" x 25' DEF Hose w/rigid, male SS NPTM fittings both ends

SUCTION HOSES WITH DRY-MATE CONNECTION

81242C-10	1 1/2" x 10' DEF Suction Hose with male Dry-Mate x 1 1/2" NPTM.
81242C-15	1 1/2" x 15' DEF Suction Hose with male Dry-Mate x 1 1/2" NPTM.
81242C-20	1 1/2" x 20' DEF Suction Hose with male Dry-Mate x 1 1/2" NPTM.

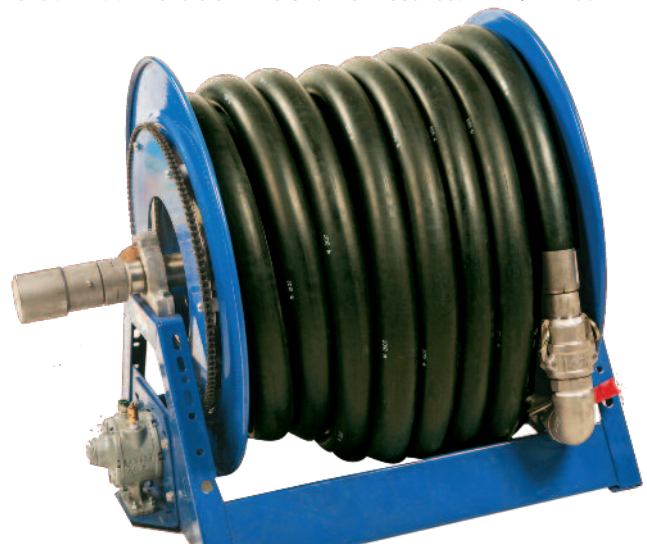
NOTE: Contact Liquidynamics for additional hose lengths and fitting options.

HIGH VOLUME TRANSFER HOSE REELS

Heavy duty hose reel with one piece welded steel frame and durable powder coated finish ensures long trouble free operating life. Reels are available for use with 50', 75' or 100' of 1 1/2" DEF hose. These reels have stainless steel swivels with EPDM seals and are available with 12 VDC, 115 VAC or air operated motor drives. All reels are supplied with an integral hand crank system as backup if power is unavailable, which also serves to provide an adjustable tension on the reel spool to prevent "freewheeling."

PART NUMBER

195158A-50	Air motor driven hose reel with 1 1/2" x 50' DEF hose
195158B-50	12 VDC motor driven hose reel with 1 1/2" x 50' DEF hose
195158C-50	115 VAC motor driven hose reel with 1 1/2" x 50' DEF hose
195158D-50	Hand crank hose reel with 1 1/2" x 50' DEF hose
195159A-75	Air Motor driven hose reel with 1 1/2" x 75' DEF hose
195159B-75	12 VDC motor driven hose reel with 1 1/2" x 75' DEF hose
195159C-75	115 AC motor driven hose reel with 1 1/2" x 75' DEF hose
195159D-75	Hand crank hose reel with 1 1/2" x 75' DEF hose
195160A-100	Air motor Driven hose reel with 1 1/2" x 100' DEF hose
195160B-100	12 VDC motor driven hose reel with 1 1/2" x 100' DEF hose
195160C-100	115 VAC motor driven hose reel with 1 1/2" x 100' DEF hose
195160D-100	Hand crank motor driven hose reel with 1 1/2" x 100 DEF hose



CONTROL HANDLES AND METERS



P/N **100389A**
Stainless Steel Automatic Nozzle with 3/4" BSP female inlet threads.

P/N **100389M**
Manual poly discharge nozzle with 3/4" hose barb and manual trigger lock.



P/N **100389PA**
Poly automatic shutoff nozzle w/ SS spout has 1" BSPM inlet and supplied with 3/4" hose barb inlet. Provides an

economical auto shutoff solution for DEF applications.

P/N **100396**
All poly construction automatic shutoff nozzle has 1" BSP male inlet and includes a 3/4" hose barb inlet fitting. Nozzle is lightweight and easy to handle, flow rate up to 9 GPM.



P/N **100398**
This ergonomic, all poly construction automatic nozzle and meter combination is compact, lightweight and offers improved reliability for handling DEF. Has 1" male BSP inlet and is supplied with a 3/4" hose barb for easy connection.



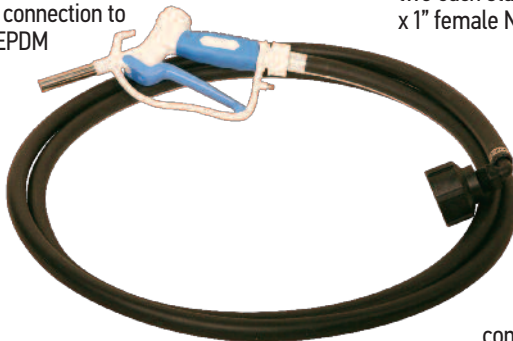
P/N **100386**
In Line Electronic Digital Turbine Meter, 1" BSPP male threads.

GRAVITY FLOW KITS FOR TOTES

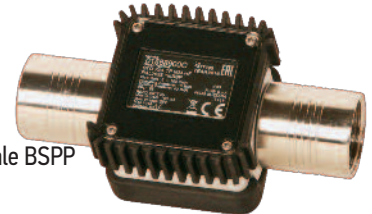
P/N **950390-12M**
Gravity flow dispensing kit for use with 275 and 330 gallon IBC totes. Kit has 2" poly NPTF adapter to allow connection to bottom of IBC tote tank, 3/4" x 12' EPDM hose and manual shutoff nozzle.

P/N **950390-25M**
Same as P/N 950390-12M above except it has 3/4" x 25' EPDM hose.

NOTE: Use P/N 950391 or 950392 vent kits to allow filtered air into tote as fluid is being drained.



P/N **100388**
DEF turbine pulse meter has a flow range of 1.5 – 26 GPM and working pressure up to 145 PSI. Fittings are 1" male BSPP and two each stainless steel adapters, 1" female BSPP x 1" female NPT are included.



P/N **560038**
In Line Electronic DEF Turbine Meter, 1" NPT inlet/outlet with flow range of 2 – 35 GPM, +/- 1% accuracy, 50 PSI operating pressure. Uses 2 ea. AA batteries, units of measure can be easily changed from pints to quarts, liters or gallons. Polypropylene construction with an operating temperature of 0° F – 130° F. For use with DEF, Anti-Freeze, De-icing fluid and Non-Potable water.



These stainless steel meters are weights and measures approved for use with DEF fluid. Meters are supplied standard with an air eliminator, 40 mesh inlet strainer and 5 digit reset-able mechanical register (8 digit non-reset totalizer). Inlet/outlet fittings are 1 1/2" NPTF. The meter can also be configured to include a ticket printer as well as pre-set capability.



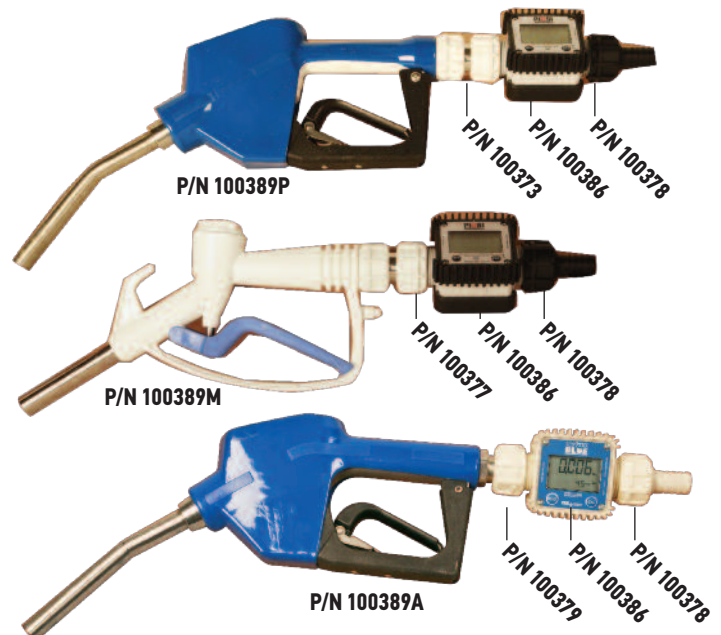
P/N **195260A**
40 GPM SS Meter, 1 1/2" w/ mechanical register

P/N **195260B**
40 GPM SS Meter, 1 1/2" w/ mechanical register and printer

P/N **195261A**
40 GPM SS Meter, 1 1/2" w/ preset and mechanical register

P/N **195261B**
40 GPM SS Meter, 1 1/2" w/ preset, mechanical register and printer

NOTE: Contact Liquidynamics for additional meter configurations.

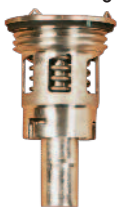


CLOSED VALVES AND COUPLERS

Closed Drum Valves and Couplers

P/N 195205A

Closed stainless steel RSV coupler, self venting with 1" BSP thread.



P/N 195205B

Closed stainless steel RSV series drum valve, 2.5" x 5 buttress thread.



P/N 195205C

RSV series drum key for installation and removal of P/N 195205B and 195205N drum valves.



P/N 195205D

Closed stainless steel RSV coupler, self venting with 3/4" hose barb connection used to pump DEF from container.



P/N 195205F

Stainless steel coupler for filling closed systems using RSV valves. Allows approximately 30 GPM fill rate, coupler is self venting and has 1" NPTM inlet fitting.



P/N 195205E

MicroMatic RSV dust cover protects RSV valve from dirt and debris when the RSV coupler is disconnected. HDPE construction.



P/N 195206A

Stainless Steel EPV series coupler, 3/4" hose barb connection.



P/N 195206B

Plastic EPV series drum valve, 2.5" x 5 buttress thread.



P/N 195206C

Keyed tool used to install and remove EPV valves, uses standard 1/2" socket driver.



Non Sealed Drum Valves and Couplers Polypropylene Couplers and HDPE Drum Valves

P/N 195207A

DrumQuik PRO coupler, 3/4" hose barb discharge.



P/N 195207B

DrumQuik PRO drum valve, 2" NPS.



P/N 195207C

DrumQuik PRO drum valve, 2.5" x 5 buttress thread.



P/N 195207D

Torque tool for installation and removal of "DrumQuik" PRO" drum valves, P/N 195207B and 195207C.

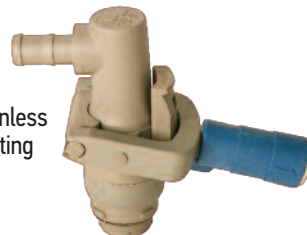


P/N 195205N

Closed, 4 pin poly valve works with stainless RSV or poly RPV couplers

P/N 195205P

Closed, 4 pin poly coupler works with stainless RSV or poly RPV valves, 3/4" hose barb fitting



P/N 195205Q

"Closed" 4 pin poly coupler is compatible with stainless steel RSV and poly RPV valves, has 1" NPTM fitting at top of valve.

TOTE CAP

P/N 901081

6" IBC Tote Cap with two 2" NPS openings

P/N 901081-A

6" IBC Tote Cap with one 2.5" x 5 buttress opening

P/N 901089

6" IBC Tote Cap with two standard 2.5" x 5 buttress openings



P/N 560101

Buttress adapter allows use of NPT threaded pumps to be used on drums with buttress threads, 2" NPT female x 2.5" x 5 buttress male thread.



P/N 560102

NPT adapter allows use of buttress threaded pumps to be used on drums with 2" NPT threads. 2.5" x 5 female buttress x 2" NPT male.



Suction tubes for RSV and RPV drum valves

Poly flex suction tube assembly for drums and totes, fits RSV and RPV valves

P/N 195205-32 For 55 gallon drums

P/N 195205-40 For 275 gallon totes

P/N 195205-46 For 330 gallon totes



Suction tubes for EPV series drum valves

Poly flex suction tube assembly for drums and totes, fits EPV valves

P/N 195206-32 For 55 gallon drums

P/N 195206-40 For 275 gallon totes

P/N 195206-46 For 330 gallon totes



Suction tubes for DrumQuik® PRO drum valves

HDPE suction tube for drums and totes

P/N 195207-35 For 55 gallon drums

P/N 195207-39 For 275 gallon totes

P/N 195207-47 For 330 gallon totes

ACCESSORIES FOR DIESEL EXHAUST FLUID (DEF)

P/N 100373

Adapts manual and auto poly nozzles to DEF meter, 1" BSPPF x 1" BSPPF

P/N 100376

Manual nozzle adapter, 1" BSPPF x 1" NPTF.

P/N 100377

Couples manual nozzle to adapter, 1" BSPPF x 1" BSPPM.

P/N 100378

Meter to supply hose, 1" BSPPF x 3/4" hose barb.

P/N 100379

Couples S.S. auto nozzle to meter, 3/4" BSPPM x 1" BSPPF.

P/N 100383

Stainless Steel 3/4" BSP x 3/4" Hose Barb swivel used to connect P/N 100389A SS auto nozzle to DEF hose.

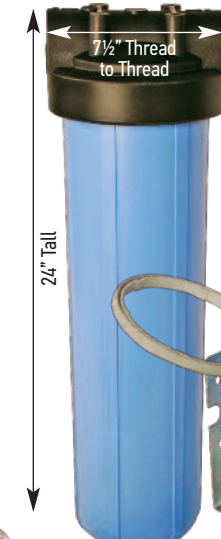


P/N 70177-01

DEF compatible filter assembly includes filter housing and 1 micron filter element. Large 10" element ensures low pressure drop and large dirt holding capacity. Filter wrench included, 3/4" NPTF ports.

P/N 70176-01

Replacement filter element for above filter assembly, 1 micron



P/N 70180-01

Polypropylene, high flow capacity DEF filter housing has 1 1/2" NPTF inlet/outlet ports, uses 20" filter cartridge for maximum contaminant holding capacity, filter included. Up to 60 GPM flow rate capacity.

P/N 70179-01

Replacement filter element for above filter assembly, 1 micron.

P/N 70182

Filter Wrench.

P/N 70183

Filter mounting bracket.

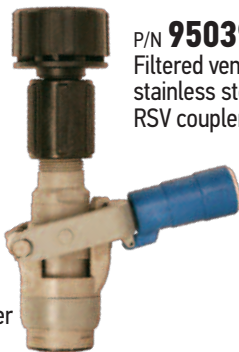
IBC TOTE FILTERED VENTS

In order to adequately vent your IBC tote when using bottom draw/flooded suction, you must order separately one of three available vent kits below. These vent kits provide 10 micron air filtration at up to 19.3 CFM (144 GPM):



P/N 950391

Filtered vent with 2.5" x 5" buttress fitting



P/N 950392

Filtered vent with stainless steel RSV coupler



P/N 950392P

Filtered air vent with 4 pin poly RPV coupler

DRY-MATE FITTINGS

Polypropylene Dry-Mate fittings use cam levers for positive connection and provide an economical way to minimize leaks and eliminate accidental spillage when disconnecting hoses. These fittings provide unrestricted 1 1/2" flow, are light weight and are easy to use, maximum operating pressure is 100 PSI. The Dry-Mate fittings are available in two sizes, part numbers shown below, and are supplied with dust covers and lanyard to protect balls and seals when not in use:

P/N 900580A

1 1/2" female Dry-Mate x 1 1/2" NPTF

P/N 900581A

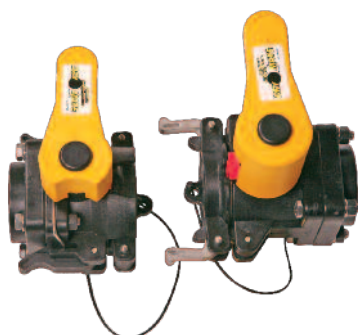
1 1/2" male Dry-Mate x 1 1/2" NPTF

P/N 900580

2" female Dry-Mate x 2" NPTF

P/N 900581

2" male Dry-Mate x 2" NPTF



P/N 195195

High flow stainless steel filter housing is rated to 105 GPM, uses 30" long, 1 micron cartridges (5 ea.) with 2" NPTM inlet/outlet, filter elements not included.

P/N 195194-01

Replacement 1 micron filter cartridge for 195195 filter housing, 5 ea. required



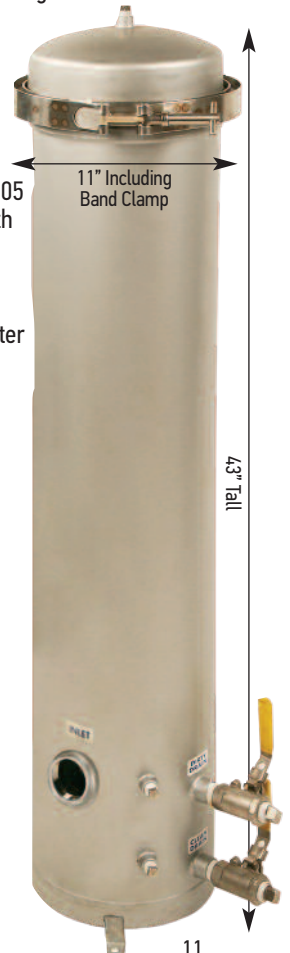
P/N 904013

Heron Dripstop 940 pipe thread sealant is third party tested and approved, as specified in ISO-22241-2, for use with diesel exhaust fluid (DEF), 8.25 Fl. Oz. (250 ml) tube for use with NPT threads.



P/N 904014

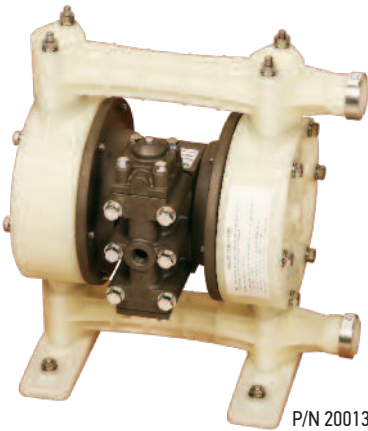
Heron Dripstop 940 thread sealant for DEF, 50 ml. tube



DEF PUMPS

P/N 20012-VS

1/2" Double Diaphragm pump has polypropylene construction with Santoprene seals and diaphragm. Pump is rated at up to 14 GPM. Has 1/4" air connection and 1/2" NPTF inlet and outlet.



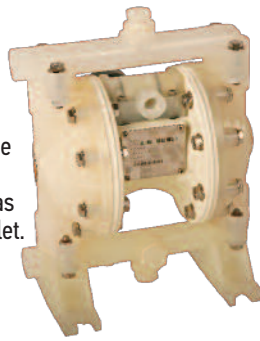
P/N 20015-YPS

3/4" Double Diaphragm Pump rated up to 30 GPM, has 3/4" NPTF inlet/outlet and 1/4" air inlet.

P/N 20013-YPS

1" Double Diaphragm Pump rated up to 45 GPM, has 1" NPTF inlet/outlet and 3/8" air inlet.

P/N 20013-YPS shown



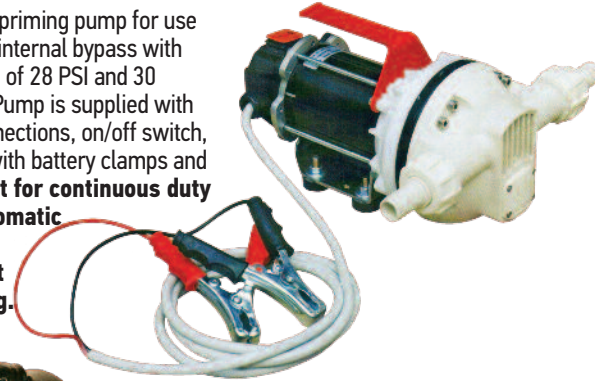
P/N 33101

115 VAC, 8 GPM self priming pump for use with DEF fluid, has internal bypass with maximum pressure of 22 PSI. Pump is supplied with 3/4" hose barb connections, 6 ft. electrical cable and integrated ON/OFF switch. **Not for continuous duty use, includes automatic 6 minute timeout feature to prevent motor overheating.**



P/N 33102

12 VDC, 8 GPM self priming pump for use with DEF fluid, has internal bypass with maximum pressure of 28 PSI and 30 minute duty cycle. Pump is supplied with 3/4" hose barb connections, on/off switch, 18 ft. power cable with battery clamps and carrying handle. **Not for continuous duty use, includes automatic 6 minute timeout feature to prevent motor overheating.**



P/N 195257

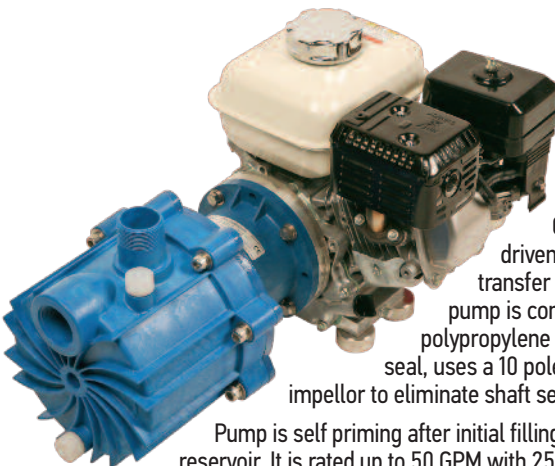
Self Priming centrifugal pump with 1 1/2" inlet/outlet features stainless steel construction with Viton seals, ideal for use with DEF and other water based fluids such as 50/50 anti-freeze. This pump uses a 1 HP TEFC motor, 115/230 VAC and is rated at 30 GPM with 60' head pressure (26 PSI). 61 lb shipping weight.



P/N 195250

Gasoline engine driven pump for bulk transfer of DEF fluid. This pump is constructed of polypropylene with EPDM static seal, uses a 10 pole magnetically driven impellor to eliminate shaft seal problems.

Pump is self priming after initial filling of the pump housing reservoir. It is rated up to 50 GPM with 25' lift capability (water), with maximum discharge pressure of 90 PSI and is driven by a high quality 4 HP Honda engine. 1 1/2" NPT inlet and outlet.



P/N 195254

Same as 195250 above, except that it is powered by a 2 HP, 115 VAC motor.



DEF FLUID EXTRACTOR

P/N 24226

This DEF fluid extractor is used to easily and safely remove DEF fluid from on-board DEF tanks to allow repair or removal of contaminated fluid. The 8 gallon capacity stainless steel tank will allow removal of up to 5 gallons of DEF with one vacuum charge. Simply connect shop air supply at approximately 100 PSI for 45 seconds to charge the tank with a vacuum. The extractor is then completely mobile and can be used without an air connection until the next vacuum charge is required. Two suction probes, 7 and 8 mm dia. x 60" long are supplied as standard equipment. 13" D x 16" W x 32"H, 21.5 lb. empty.



DEF MINI BULK TRANSFER CARTS

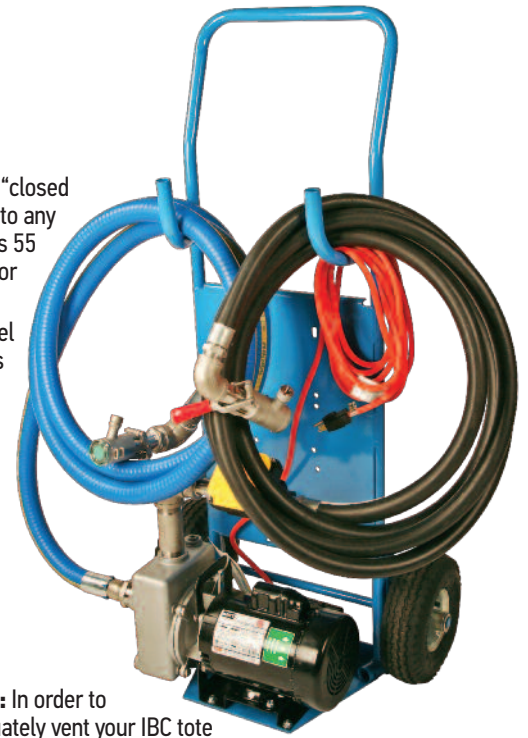
P/N **33296-S3 (Bottom Draw)**

This is a very capable and compact two wheel DEF mini transfer cart with features that are normally only found in large skid configurations. The cart includes stainless steel plumbing and components in conformance with ISO 22241 specifications and features a 1 micron high capacity poly filter, weights and measures approved meter, with ticket printer, and 30 GPM flow capability.

The cart is configured to allow suction via an included 1½" x 15' suction hose with 2"NPTM fitting that can then easily connect to the bottom of a 275 or 330 gallon IBC tote tank for transfer to 55 gallon drums, bulk tanks or another tote. A MicroMatic fill valve is supplied on the 1" x 20'

discharge hose to allow "closed system" transfer of DEF to any mating container such as 55 gallon drums, IBC totes or bulk containers.

The heavy duty two wheel cart with "no flat" tires is nicely balanced and is easily maneuvered.



BOTTOM DRAW SELECTION GUIDE

The BD mini transfer cart is intended for use where the primary purpose of the cart will be to draw DEF fluid from the bottom/flooded suction of an IBC tote, typically through a shutoff valve and Cam & Groove adapter, and then transfer to another tank or drum.

NOTE: This system is designed to maximize flow rate when used with Weights and Measures Meters.

Example of cart with Weights and Measures approved meter with bottom draw capability:

This system is a two wheel DEF Mini Bulk Cart Bottom Draw system (BD) that uses a (P1) 30 GPM non self-priming pump, a 15' suction hose (S15) with a 2" NPTM fitting (BF), Filtered Tank Vent with RSV Coupler (V2), One micron poly filter assembly (F2), a Weights & Measures approved meter w/o printer (M2), 20' discharge hose (H20) with RSV fill coupler (FM).

SYSTEM IDENTIFIER

BD DEF Mini Transfer Cart System for bottom draw

PUMP SELECTION

P1 30 GPM Non Self Priming

SUCTION HOSE SELECTION

XXX No Suction Hose
S10 1½" x 10' Suction Hose
S15 1½" x 15' Suction Hose
S20 1½" x 20' Suction Hose

SUCTION HOSE FITTING SELECTION

BF 2" NPTM fitting (order Cam Lock or IBC adapter fitting separately)
SV MicroMatic RSV Suction/Fill Valve

TANK VENT

XX No Vent
V1 Filtered Vent with 2" Buttress Fitting
V2 Filtered Vent with RSV Coupler

FILTER SELECTION

XX No Filter
F1 1 Micron SS Filter Assembly
F2 1 Micron Poly Filter

METER SELECTION

XX No Meter
M1 Reference Meter
M2 Weights and Measures Approved Meter w/o printer
M3 Weights and Measures approved Meter w/printer

DISCHARGE HOSE SELECTION

XXX No Discharge Hose
H10 1" x 10' Discharge Hose
H15 1" x 15' Discharge Hose
H20 1" x 20' Discharge Hose
H25 1" x 25' Discharge Hose

DISCHARGE HOSE FITTING SELECTION

XX No Fitting
FM MicroMatic RSV Fill Coupler

Example:

BD P1 S15 BF V2 F2 M2 H20 FM

DEF HEAVY DUTY 4 WHEEL CART

P/N **33381DEF**

DEF Heavy Duty 4 Wheel Cart w/4 HP Gas Engine, Resale Meter w/Ticket Printer, One Micron Filter and 1" x 50' Hose Reel. Order suction hose separately from choices shown on page 8. Suction hose sets include Dry-Mates for easy connection to cart on one end of hose and 1½" NPTF on the other end.

P/N **33383DEF**

DEF Heavy Duty 4 Wheel Cart w/2 HP 115 VAC Electric Motor, Resale Meter w/Ticket Printer, One Micron Filter and 1" x 50' Hose Reel. Order suction hose separately from choices shown on page 8. Suction hose sets include Dry-Mates for easy connection to cart on one end of hose and 1½" NPTF on the other end.

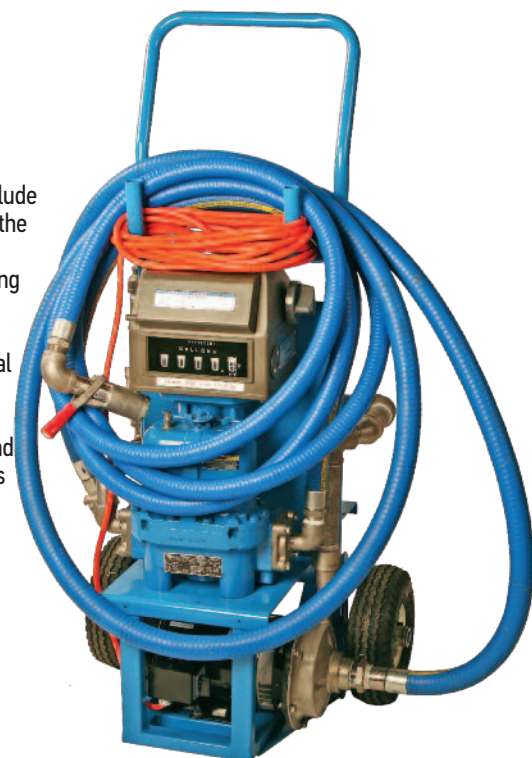


DEF MINI BULK TRANSFER CARTS

P/N **33295P-S4 (Top Draw)**

This economical Mini Bulk Transfer Cart is designed for use in transferring intermediate quantities of DEF, such as from one IBC tote tank to another or to fill 55 gallon drums. At the heart of the system is a 115 VAC, 316 stainless steel, 25 GPM, self priming pump (up to 20' lift capability) that allows DEF fluid to be pulled through the MicroMatic RSV valve located at the top of 275 or 330 gallon IBC tote tanks therefore maintaining "closed" system integrity. A 1½" x 15' suction hose with attached RSV fill coupler allows easy connection to a MicroMatic RSV fill valve, while on the discharge side of the pump a 1" x 20' discharge hose with RSV fill coupler allows connection to the receiving tanks' RSV

valve. These fill valves include venting capability on both the supply tank as well as the receiving tank thus ensuring efficient transfer of fluid. An included flow meter provides flow rate and total indication for inventory purposes. Meter accuracy is approximately +/- 1% and is powered by AA batteries that are field replaceable.



TOP DRAW SELECTION GUIDE

The TD mini transfer cart is intended for use where the primary purpose of the cart will be to draw DEF fluid via the top of an IBC tote, typically through a MicroMatic RSV fill coupler, and then transfer to another tank or drum.

Example of cart without a Weights and Measures approved meter:

In this case the system is a two wheel DEF Mini Bulk Cart Top Draw system (TD) with a 25 GPM self-priming pump (P2), a 15' suction hose (S15) with RSV coupler (SV), 1 micron poly filter assembly (F2), a reference meter (M1), 20' discharge hose (H20) with a RSV coupler at the discharge end (FM).

***NOTE: This system will result in reduced flow rates when used with Weights and Measures Meters.**

SYSTEM IDENTIFIER

TD

DEF Mini Transfer Cart for top draw capability

Pump Selection

P2

25 GPM Self Priming Pump

SUCTION HOSE SELECTION

XXX No Suction Hose

S10 1½" x 10' Suction Hose

S15 1½" x 15' Suction Hose

S20 1½" x 20' Suction Hose

SUCTION HOSE FITTING SELECTION

XX No Fitting

BF 2" NPTM fitting (order Cam Lock or IBC adapter fitting separately)

SV MicroMatic RSV Suction/Fill Valve

FILTER SELECTION

XX No Filter

F1 1 Micron SS Filter Assembly

F2 1 Micron Poly Filter

METER SELECTION

XX No Meter

M1 Reference Meter

M2* Weights and Measures Approved Meter w/o printer

M3* Weights and Measures approved Meter w/printer

DISCHARGE HOSE SELECTION

XXX No Discharge Hose

H10 1" x 10' Discharge Hose

H15 1" x 15' Discharge Hose

H20 1" x 20' Discharge Hose

H25 1" x 25' Discharge Hose

DISCHARGE HOSE FITTING SELECTION

XX No Fitting

FM MicroMatic RSV Fill Coupler

Example:

TD

P2

S15

SV

F2

M1

H20

FM

1" DOUBLE DIAPHRAGM MINI BULK DEF TRANSFER CART

P/N **33297-S1 (Top Draw)**

A perfect solution when you need to transfer large amounts of DEF in a short period of time. This two wheel Mini Bulk cart is designed for use in transferring intermediate quantities of DEF, such as from one IBC tote tank to another, to fill 55 gallon drums or to fill larger capacity vehicle DEF tanks such as those found on farm and other off road equipment. This system includes the following:

- 1" Double Diaphragm Pump
- Electronic Digital Meter (for inventory purposes – not for resale use)
- High Flow Polypropylene 1 Micron Filter
- 1" x 15' Suction hose w/MicroMatic Fill Valve
- 1" x 20' Discharge Hose w/Poly Nozzle

- Cam Lock Fittings to allow quick and easy removal of hoses
- Heavy Duty Two Wheel Cart

The double diaphragm pump is rated up to 45 GPM and requires an air supply of up to 40 cfm.



DEF BULK TRANSFER SKIDS

DEF Bulk Transfer Skids can be easily configured to meet customer specific requirements. These skids are configured to pump either 40 or 70 GPM via gasoline engine or 115/230 VAC motor driven pumps. Various hose reel configurations are available as well as "for-resale" meters, high flow filters and other accessories to help make the transfer of bulk DEF as easy and efficient as possible.

The selection guide below is a great tool to help you configure your skid to your own specifications.

Liquidynamics offers a unique combination of DEF Bulk Transfer Skids that can be easily customized to fit your specific application via this easy to use Selection Guide.

This guides you through the selection process with the end result being a unique model number detailing your specific system configuration.

The model S1 P2 R10 D4 H2 FH P5 4KXX (shown below) includes a 45 GPM gasoline engine driven pump, 1½" x 100' AC motor powered hose reel with a 1½" x 15' suction hose, MicroMatic Fill Head w/Cam Lock and Ball Valve on the discharge side, pre-settable meter with air eliminator, counter and printer. The system also includes the four sided guard rail option along with the poly dry break suction valve kit and the 115 VAC, 23 amp generator.

DEF BULK TRANSFER SKID SELECTION GUIDE

SYSTEM IDENTIFIER

- S1** 45 GPM DEF Skid
- S2** 75 GPM DEF Skid

PUMP SELECTION

- P2** 115/230 VAC Motor Drive
- P3** Gasoline Engine Drive

REEL SELECTION

- R50** 1½" x 50' Hose Reel
- R75** 1½" x 75' Hose Reel
- R10** 1½" x 100' Hose Reel

HOSE REEL DRIVE

- D1** Hand Crank
- D2** 12 VDC Motor
- D4** 115 VAC Motor
- A6** Air Operated Motor

SUCTION HOSE OPTIONS

- XX** No Suction Hose
- H1** 1½" x 10' Suction Hose
- H2** 1½" x 15' Suction Hose
- H3** 1½" x 20' Suction Hose

DISCHARGE OPTIONS

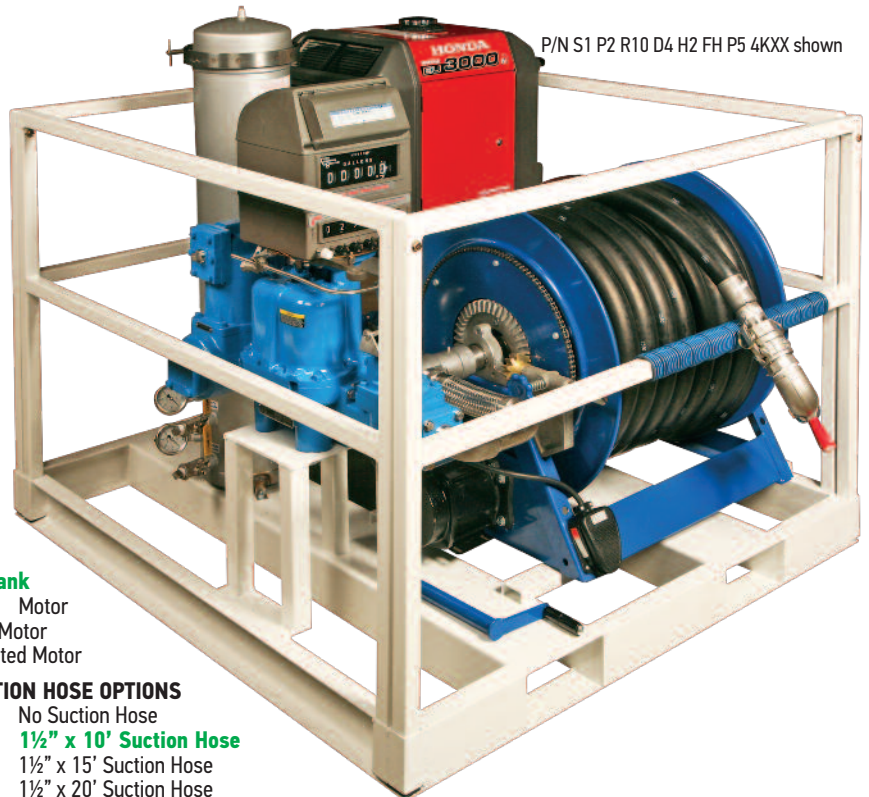
- BV** 1½" SS Ball Valve w/Cam Lock Set
- FH** MicroMatic Fill Head w/Cam Lock and Ball Valve

METER SELECTION

- XX** No Meter
- M3** Meter w/Air Eliminator, Register
- M5** Meter w/Air Eliminator, Register, Printer
- P3** Preset Meter w/Air Eliminator, Register
- P5** Preset Meter w/Air Eliminator, Register, Printer

ACCESSORIES

- X X X X** No Accessories
- 4** Four Sided Guard Rail
- K** 115/230 VAC, 23/11 Amp Generator
- A** Air Eliminator Recovery container
- - T** Hose Storage Tray



P/N S1 P2 R10 D4 H2 FH P5 4KXX shown

S1 **P3** **R75** **D1** **H1** **BV** **M3** **XXXX**

Example: Bulk transfer DEF skid system with 45 GPM Gasoline Engine driven pump, 1½" x 75' Hand Crank Hose Reel, 1½" x 10' Suction Hose (includes Dry Mate dry disconnect set at each end of hose), 1½" Stainless Steel Ball Valve shutoff with Cam Lock at discharge hose and weights and measure approved meter with air eliminator and register. No additional accessories are selected in this example.

DEF FLUID MANAGEMENT

P/N 950372

DEF Fluid Management Kit, includes OilCop Jr. Console (P/N 100902) w/keypad and flash drive to easily download/transfer information, DEF turbine pulser (P/N 100388) with a flow range of 1.5 – 26 GPM and stainless steel, solenoid valve (P/N 540085-A).



P/N 100905

Optional remote LED display provides excellent visibility of amount being dispensed from a distance via brightly lit 2 1/2" tall digits.



P/N 100906B

Optional transaction printer provides the ability to print transaction details such as; date and time of transaction, work order number, name of technician and amount dispensed.



DEF TANK MONITORING

P/N 950373-6

DEF OilCop Tank Monitoring kit, includes all components required to remotely monitor DEF tank levels. The system includes a Tank Monitor Module (P/N 100908A), Controller (P/N 100854B), Communication Data Module (P/N 100904) and 6' tank probe (P/N 100881). System can be easily expanded to monitor additional tanks with fluids such as oil, hyd. fluid, anti-freeze, etc.

P/N 950373-21

Same as 950373-6 except tank probe has a working depth range of 21' (probe P/N 100881A)

P/N 950373-BOT

Same as 950373-6 except tank probe is fitted with 1/2" NPTM threads intended for connection at bottom of Poly tanks or IBC totes, has a working range of up to 54" depth.

