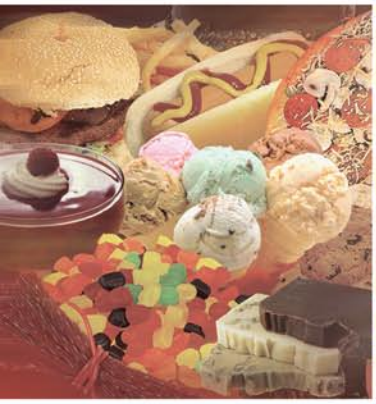
STANDARD Pump, Inc.



Sanitary Pumps & Metering Systems

P/N: SP2009

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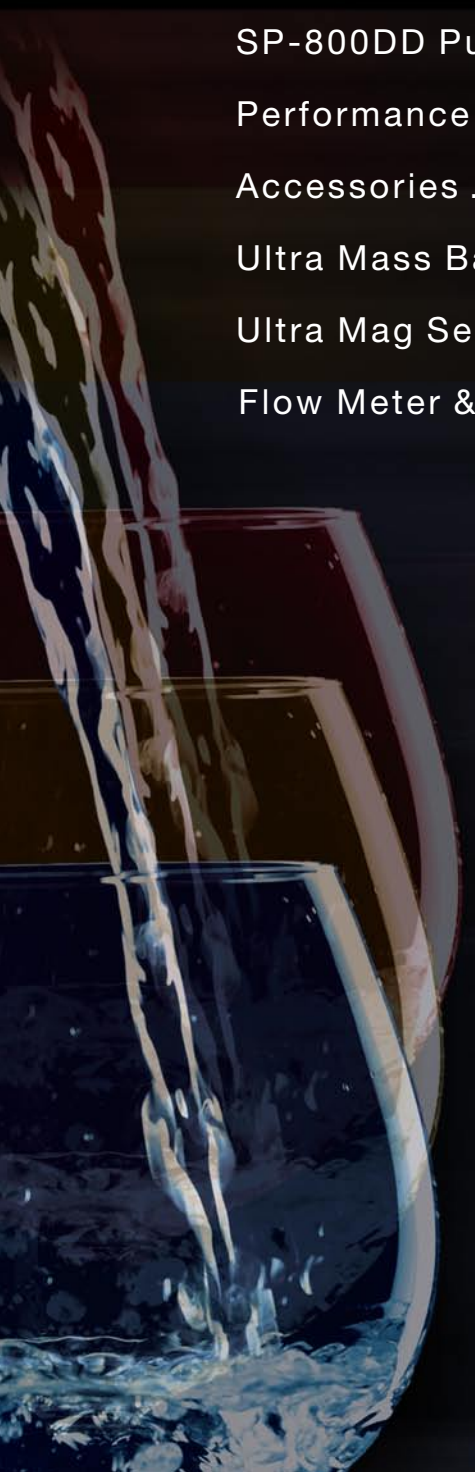
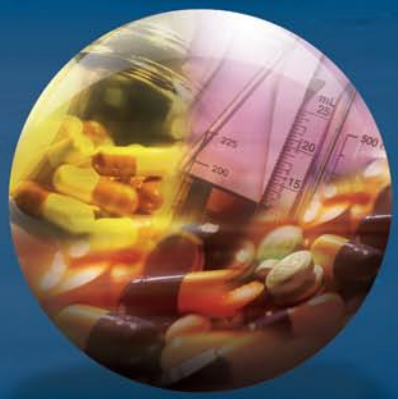


STANDARD

Pharmaceutical



Food

Beverage

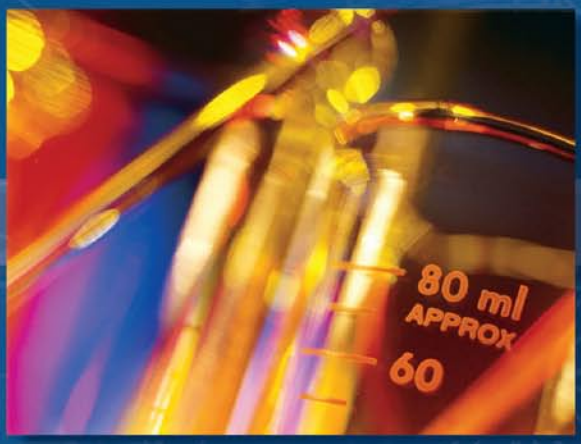
Biotech

Cosmetic

Poultry

Applications

Drums & Barrels



Laboratory

Large Storage Vessels

Stainless Tanks

SP-8100 Ultra Flow Series

Standard's 8100 series pump is engineered to transfer low viscosity food products, pharmaceutical materials and personal care solutions from drums, ToteTanks® and kettles. The pumps' wetted surfaces are constructed with FDA compliant materials which provide an ideal solution for sanitary applications.

Features

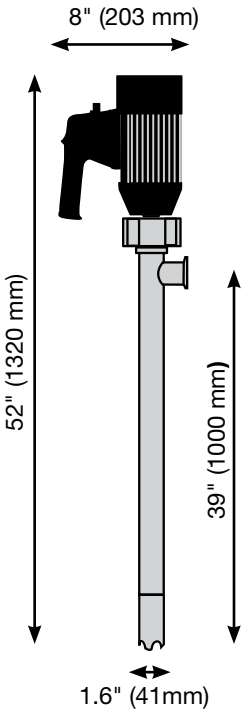
- FDA Compliant Materials
- Flow Rates To 32 GPM (121 LPM)
- Easy To Clean
- Tri-Clamp Fittings
- Light Weight & Portable
- Variable Speed Motors

Common Applications

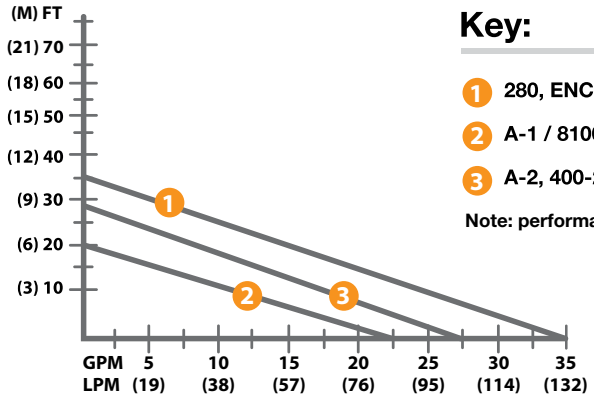
- Sauces
- Dairy Products
- Pharmaceutical Materials
- Wine & Beer
- Juices
- Cosmetic Fragrances

Technical Specifications

Model Number:	SP-8100-39 SP-8100-47
Immersion Length:	39" (1000 mm) 47" (1200 mm)
Wetted Components:	316 SS, Teflon & Buna
Motor Drive:	SP-ENC, SP-280P, SP-A1, SP-A2, SP-400-2
Inlet/Discharge:	1.6" (41 mm) / 1.25" (32 mm)
Maximum Viscosity:	1,000 cps (mPAS)
Maximum Flow Rate:	32 GPM (121 LPM)
Maximum Discharge Pressure:	16 psi (1,1 bar) based on water
Pump Weight:	11 lbs (5 kg) motor weight varies upon model
Maximum Temperature:	175° F (80° C)



Flow Curves



Key:

1. 280, ENC / 8100 Pump Tube
2. A-1 / 8100 Pump Tube
3. A-2, 400-2 / 8100 Pump Tube

Note: performance based on water

Note: Pump is constructed with FDA compliant materials; however, the system does not have FDA certification.

Motor Drives

SP-280 Series

SP-ENC Series

SP-400-2 Series

SP-A1 Series

SP-A2 Series

SP-8200 Sanitary Series

Standard's 8200 Series pump is engineered to transfer low viscosity food products, pharmaceutical materials and personal care solutions from drums, ToteTanks® and kettles. The pumps' wetted surfaces are constructed with FDA compliant materials which provide an ideal solution for sanitary applications.

Features

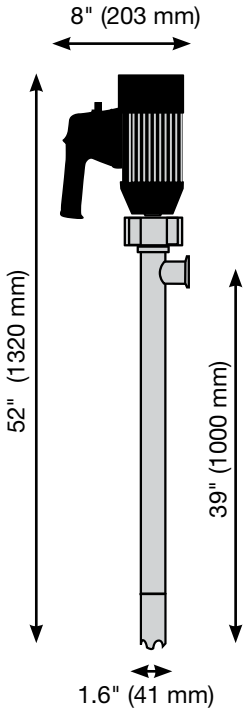
- FDA Compliant Materials
- Flow Rates To 15 GPM (57 LPM)
- Discharge Pressure 70 FT (22 M)
- Easy To Clean
- Tri-Clamp Fittings
- Light Weight & Portable
- Variable Speed Motors

Common Applications

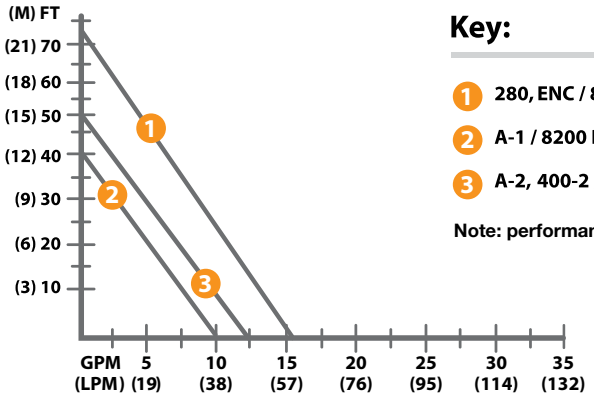
- Sauces
- Dairy Products
- Pharmaceutical Materials
- Wine & Beer
- Juices
- Cosmetic Fragrances

Technical Specifications

Model Number:	SP-8200-39 SP-8200-47
Immersion Length:	39" (1000 mm) 47" (1200 mm)
Wetted Components:	316 SS, Buna & Teflon
Motor Drive:	SP-ENC, SP-280P, SP-A1, SP-A2, SP-400-2
Inlet/Discharge:	1.6" (41 mm) / 1.25" (32 mm)
Maximum Viscosity:	1,000 cps (mPAS)
Maximum Discharge Pressure:	32 psi (2,2 bar) based on water
Maximum Flow Rate:	15 GPM (57 LPM)
Pump Weight:	11 lbs (5 kg) motor weight varies upon model
Maximum Temperature:	175° F (80° C)



Flow Curves



Key:

1. 280, ENC / 8200 Pump Tube
2. A-1 / 8200 Pump Tube
3. A-2, 400-2 / 8200 Pump Tube

Note: performance based on water

Note: Pump is constructed with FDA compliant materials; however, the system does not have FDA certification.

Motor Drives

SP-280 Series

SP-ENC Series

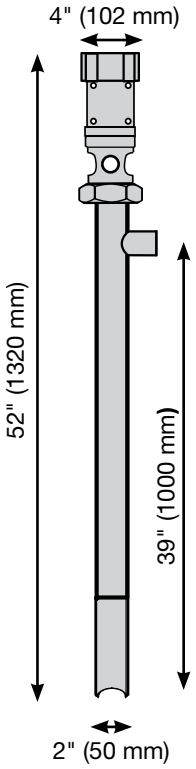
SP-400-2 Series

SP-A1 Series

SP-A2 Series

SP-800SR Sanitary Series

Standard's 800SR Series Pumps are engineered specifically for transferring viscous food products, pharmaceutical materials and cosmetic lotions from drums, ToteTanks® and kettles. The progressive cavity design delivers a continuous flow of material with little product degradation. Maximum viscosity is **25,000 cps (mPAS).**



Common Applications

- Pie Fillings
- Tomato Paste
- Lotions
- Juice Concentrates
- Chocolate
- Shampoo

Technical Data

Design:	Progressive Cavity / Positive Displacement
Maximum Viscosity:	
751& 752 Series	25,000 cps (mPAS)
1851 Series	10,000 cps (mPAS)
Discharge Port:	1.5" (38 mm) Tri-Clamp Hose Barb, Optional 1.25" (32 mm)
Stator Materials:	Teflon or White Buna
Mechanical Seal:	SiC/Viton/SiC
Immersion Lengths:	27" (700 mm) 39" (1000 mm) 47" (1200 mm) *Please add 6" (150 mm) to the immersion length of pump for the 752 series pumps.*
Wetted Material:	Tube & Rotor Assembly: 316 Stainless Steel Stator Material: Teflon or White Buna
Pump Finish:	316 SS Polished to 32 Ra
Fittings:	Large Type Acme Thread design enables operator to disassemble pump quickly for cleaning, maintenance and inspection
Maximum Flow Rate:	
1851 Series	12 GPM (45 LPM) *based on water*
751& 752 Series	7 GPM (26 LPM) *based on water*
Maximum Discharge Pressure:	
751 & 1851 Series	87 psi (6 bar)
752 Series	174 psi (12 bar)
Bag Liner Series:	Optional pump intake design available for applications with hygienic liners

Benefits

- Hygienic Design
- Easy To Clean & Maintain
- Gentle Product Treatment
- Continuous Flow

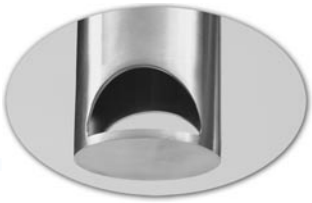
Motor Drives

SP-280 Series

SP-ENC Series

SP-400-2 Series

Bag Liner Series



Pump Intake

⚠ Warning: When pumping flammable or combustible liquids pump tube must be used in conjunction with an explosion proof motor.

Note: Pump is constructed with FDA compliant materials; however, the system does not have FDA certification.

SP-8100, SP-8200 & SP-800SR Pump Motors

SP-280P Series

MODEL	ENCLOSURE	POWER	WATT	V.S.D.	SHIPPING WT lbs (kgs)
SP-280P	Open Drip Proof (IP44)	110-120V/1/50-60Hz	825	No	9.0 (4,0)
SP-280P-V	Open Drip Proof (IP44)	110-120V/1/50-60Hz	825	Yes	9.0 (4,0)
SP-280P-2	Open Drip Proof (IP44)	220-240V/1/50-60Hz	825	No	9.0 (4,0)
SP-280P-2-V	Open Drip Proof (IP44)	220-240V/1/50-60Hz	825	Yes	9.0 (4,0)

⚠ Warning: Not suitable for pumping flammable or combustible liquids

V.S.D. = Variable Speed Drive

SP-280 Series

SP-ENC Series

MODEL	ENCLOSURE	POWER	WATT	V.S.D.	SHIPPING WT lbs (kgs)
SP-ENC	TEFC (IP54)	110-120V/1/50-60Hz	825	No	12.7 (5,7)
SP-ENC-V	TEFC (IP54)	110-120V/1/50-60Hz	825	Yes	12.7 (5,7)
SP-ENC-2	TEFC (IP54)	220-240V/1/50-60Hz	825	No	12.7 (5,7)
SP-ENC-2-V	TEFC (IP54)	220-240V/1/50-60Hz	825	Yes	12.7 (5,7)

⚠ Warning: Not suitable for pumping flammable or combustible liquids

V.S.D. = Variable Speed Drive

SP-ENC Series

SP-400 Series

MODEL	ENCLOSURE	POWER	WATT	V.S.D.	SHIPPING WT lbs (kgs)
SP-400-2	Explosion Proof	220-240V/1/50-60Hz	550	No	24.0 (11,0)

⚠ May be used for pumping flammable or combustible liquids and must be used with stainless pump tube only

SP-400-2 Series

SP-A2 Series

MODEL	CONSUMPTION	MAX. INLET PRESSURE	OUTPUT
SP-A2	28 CFM @ 90 psi	100 psi	3/4 Hp
	13.2 L/sec @ 6,2 bar	6,8 bar	560 W
SP-A2L	28 CFM @ 90 psi	100 psi	3/4 Hp
(trigger lock)	13.2 L/sec @ 6,2 bar	6,8 bar	560 W

⚠ Not recommended for use on SP-800SR Series pumps

SP-A2 Series

SP-A1 Series

MODEL	CONSUMPTION	MAX. INLET PRESSURE	OUTPUT
SP-A1	22 CFM @ 90 psi	100 psi	1/2 Hp
	10.4 L/sec @ 6,2 bar	6,8 bar	370 W

⚠ Not recommended for use on SP-800SR Series pumps

SP-A1 Series

SP-800DD Sanitary Series

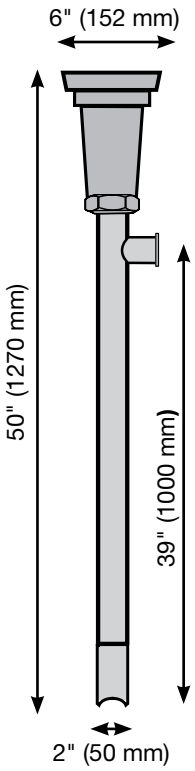
Standard's 800DD Series Pumps are engineered specifically for transferring viscous food products, pharmaceutical materials and cosmetic lotions from drums, ToteTanks® and kettles. The progressive cavity design delivers a continuous, smooth flow of material with little product degradation. Maximum viscosity is **100,000 cps (mPAS).**

Common Applications

- Pie Fillings
- Tomato Paste
- Lotions
- Juice Concentrates
- Chocolate
- Shampoo

Technical Data

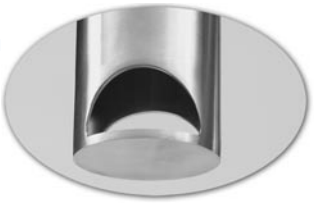
Design:	Progressive Cavity / Positive Displacement
Maximum Viscosity:	
751& 752 Series	100,000 cps (mPAS)
1851 Series	10,000 cps (mPAS)
Discharge Port:	1.5" (38 mm) Tri-Clamp Hose Barb, Optional 1.25" (32 mm)
Stator Materials:	Teflon or White Buna
Mechanical Seal:	SiC/Viton/SiC
Immersion Lengths:	27" (700 mm) 39" (1000 mm) 47" (1200 mm) *Please add 6" (150 mm) to the immersion length of pump for the 752 series pumps*
Wetted Material:	Tube & Rotor Assembly: 316 Stainless Steel Stator Material: Teflon or White Buna
Pump Finish:	316 SS Polished to 32 Ra
Motor Drives:	TEFC, Washdown, Stainless Steel & Air
Fittings:	Large Type Acme Thread design enables operator to disassemble pump quickly for cleaning, maintenance and inspection
Mounting Flange:	B14/C140-160
Maximum Flow Rate:	
1851 Series	12 GPM (45 LPM) *based on water*
751& 752 Series	7 GPM (26 LPM) *based on water*
Maximum Discharge Pressure:	
751 & 1851 Series	87 psi (6 bar)
752 Series	174 psi (12 bar)
Bag Liner Series:	Optional pump intake design available for applications with hygienic liners



Benefits

- Hygienic Design
- Easy To Clean & Maintain
- Gentle Product Treatment
- Continuous Flow

Bag Liner Series



Pump Intake

Motor Drives

TEFC Electric Motor

Washdown Electric Motor

Stainless Steel Electric Motor

Pneumatic Motor

Warning: When pumping flammable or combustible liquids pump tube must be used in conjunction with an explosion proof motor.

Note: Pump is constructed with FDA compliant materials; however, the system does not have FDA certification.

SP-800DD Pump Motors

TEFC Motors — 230-460V / 380-415V / 3 / 50-60 Hz

(Interchangeable with DD Series pumps on page 7)

MODEL	HP	KW	RPM	ENCLOSURE	FRAME	FLANGE	SHIPPING WT lbs (kg)
SP-502	0.75	,55	750–900	TEFC (IP55)	90LC	B14/C140	40 (18)
SP-512*	1	,75	750–900	TEFC (IP55)	100LC	B14/C160	52 (24)
SP-522*	1.5	1,1	750–900	TEFC (IP55)	100LC	B14/C160	58 (25)
0017	Motor wiring for 230V/3/50-60 Hz which includes 570, 571, 572, 8708						

TEFC Electric Motor

Washdown Motors — 230-460V / 380-415V / 3 / 50-60 Hz

(Interchangeable with DD Series pumps on page 7)

MODEL	HP	KW	RPM	ENCLOSURE	FRAME	FLANGE	SHIPPING WT lbs (kg)
SP-504	0.75	0,55	750-900	Washdown	90LC	B14/C140	40 (18)
SP-514*	1	0,75	750-900	Washdown	100LC	B14/C160	52 (24)
SP-524*	1.5	1,1	750-900	Washdown	100LC	B14/C160	58 (25)
0017	Motor wiring for 230V/3/50-60 Hz which includes parts 570, 571, 572, 8708						

Washdown Electric Motor

Stainless Steel Motors — 230-460V / 380-415V / 3 / 50-60 Hz

(Interchangeable with DD Series pumps on page 7)

MODEL	HP	KW	RPM	ENCLOSURE	FRAME	FLANGE	SHIPPING WT lbs (kg)
SP-508	0.75	0,55	750-900	Encapsulated	90LC	B14/C140	65 (30)
SP-518*	1	0,75	750-900	Encapsulated	100LC	B14/C160	96 (44)
SP-528*	1.5	1,1	750-900	Encapsulated	100LC	B14/C160	115 (52)
0017	Motor wiring for 230V/3/50-60 Hz which includes parts 570, 571, 572, 8708						

Stainless Steel Electric Motor

Sanitary Pneumatic Motor

(Interchangeable with DD Series pumps on page 7)

MODEL	HP	kW	RPM	AIR CONSUMPTION	FRAME	Air CONN. Inch (mm)	SHIPPING WT LBS (Kg)
SP-A4FP	2	1,5	300–900	80 CFM @ 100 psi 37 L/Sec @ 7 bar	IEC#72/D71	1/4" (6,35)	12.0 (5,0)
SP-A6FP	4	3,0	300–900	130 CFM @ 100 psi 65 L/Sec @ 7 bar	IEC#72/D80	1/2" (12,7)	24.0 (11,0)
SP-A8FP	5	3,7	300–900	170 CFM @ 100 psi 80 L/Sec @ 7 bar	IEC#72/D90	1/2" (12,7)	26.0 (12,0)

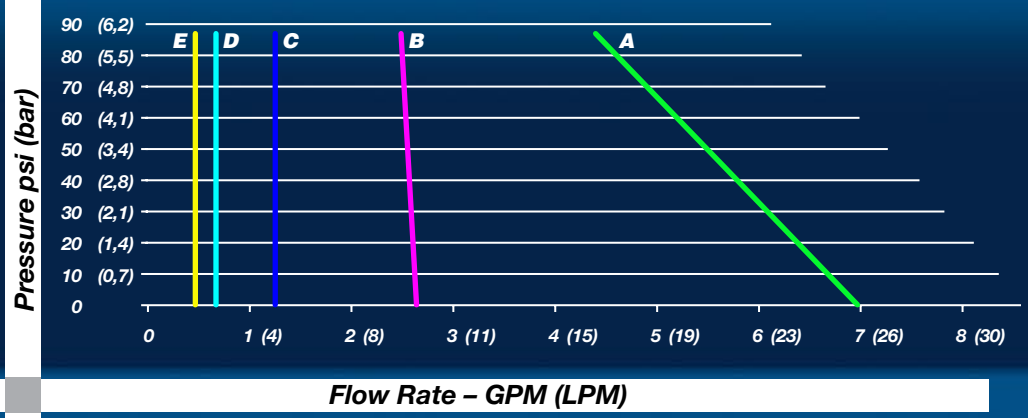
*Indicates pump requires two flanges

Pneumatic Motor

Performance Curves

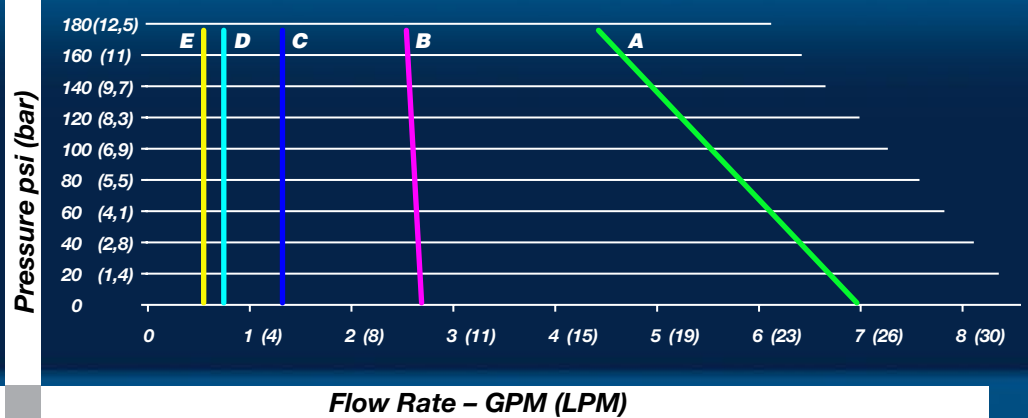
900 RPM 60 Hz Operation & Pneumatic Motors

751 Series Pumps



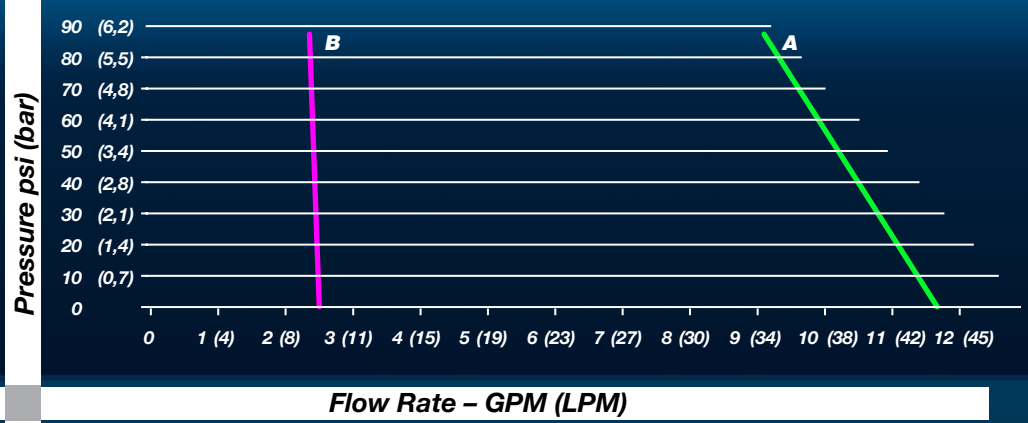
	Viscosity cps (mPAS)	Electric HP (KW)	Air HP (KW)
A	1	.75 (,55)	2 (1,5)
B	10,000	.75 (,55)	2 (1,5)
C	30,000	1 (,75)	4 (3)
D	60,000	1 (,75)	4 (3)
E	100,000	1.5 (1,1)	5 (3,7)

752 Series Pumps



	Viscosity cps (mPAS)	Electric HP (KW)	Air HP (KW)
A	1	.75 (,55)	2 (1,5)
B	10,000	.75 (,55)	2 (1,5)
C	30,000	1 (,75)	4 (3)
D	60,000	1 (,75)	4 (3)
E	100,000	1.5 (1,1)	5 (3,7)

1851 Series Pumps



	Viscosity cps (mPAS)	Electric HP (KW)	Air HP (KW)
A	1	.75 (,55)	2 (1,5)
B	10,000	.75 (,55)	2 (1,5)

Technical Notes

- Performance Curves are intended to be used as a guide only as individual results may vary.
- Pump Stator Elastomers (Teflon, Viton or Buna) may vary performance.
- Performance Curves were created using a 900 RPM motor. Reducing motor speed will decrease pump performance. Do NOT increase motor speed above 900 RPM's.
- Pump Curves were created with a Newtonian Polymer (Viscosity remains constant regardless of shear). Non-Newtonian materials (viscosity does not remain constant with shearing) may vary performance.

DISCHARGE HOSE CLAMP

Part Number
9038

Malleable iron two bolt clamp
Gripping ridges, reinforced lugs
Hose size from 1.75 (44,5 mm) to 2.05" (53 mm)
(44.50 mm to 27 mm)
Torque Value: 27 ft lbs (3,75 Kg /m)

PLICORD® GRAY FOOD TRANSFER HOSE

Part Number
9037

Flexible hose for gravity flow, pressure or suction service transferring edibles from tank truck and in-plant service. Construction: White Chemivic® synthetic rubber (FDA/USDA, 3A Sanitary Standard 18-03 compliant). Cover: Spiral-plied synthetic fabric with Galvanized Wire helix. Branding: Continuous spiral brand "Goodyear Plicord Gray Food; FDA, 3/A & USDA 150 psi."

Nom. ID in/mm	Nom. OD in/mm	Max WP psi/bar	Bend Radius in/mm	Vacuum in/mm	Weight lb-ft/kg-m	Temp Range F°/C°
1.5 / 38,1	1.97 / 50,04	150 / 10,2	4.0 / 102	29 / 736,6	0.85 / 1,26	-25 to 180 / -32 to 82

Plicord® & Chemivic® are registered trademarks of The Goodyear Tire & Rubber Company

PUMP HANGER

Part Number
8430

Pump Hanger For Direct Drive Series

HAND CLAMP

Part Number
9005

Engineered to vertically stabilize pump on open top containers

Standard's Ultra Mass Batch Control System is designed for high precision dosing applications from drums, ToteTanks® and kettles. Simply dial in your desired volume or weight and the Ultra Mass BCS will deliver a preset dose of product – virtually hands free. The systems components meet 3A Third Party Verification (TPV) Sanitary Standards insuring the highest quality product suitable for the Food Processing, Pharmaceutical, Dairy and Bio-Tech industries.

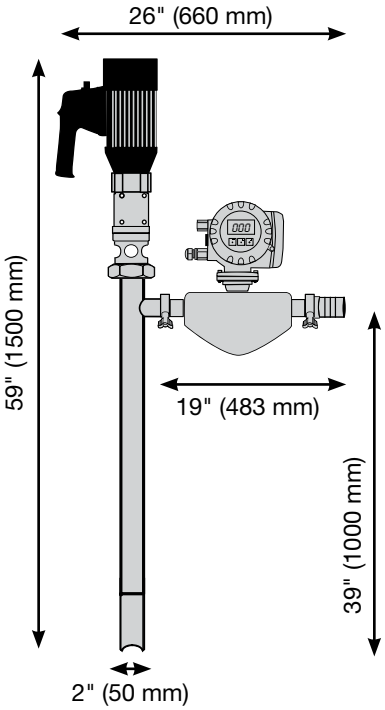
Features

- 3A (TPV) Components
- FDA Compliant Materials
- Low Shear Design
- Easy to Clean
- Tri-Clamp Fittings
- Interface Capabilities: HART, PROFIBUS, PA/DP, FOUNDATION FIELDBUS
- Suitable for Conductive & Non-Conductive Solutions
- Quick Setup Menus for In-field Commissioning

Common Applications

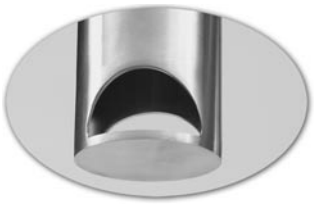
- Sauces
- Creams
- Dairy Products
- Shampoo & Conditioner
- Pharmaceutical Materials
- Pie Fillings

Technical Specifications



Wetted Components:	316SS (32 Ra or better), Teflon
Motor Drive:	Variable Speed / TEFC (IP54) / 1 HP (825w)
Inlet/Discharge:	2" (50 mm) / 1.5" (38 mm)
Metering Principle:	Coriolis Mass Flow Technology
System Accuracy:	+/- .30% of Reading
Check Valve:	316L Stainless Steel
Mechanical Pump Seal:	SiC / Viton / SiC
Pump Design:	Progressive Cavity
Immersion Length:	39" (1000 mm)
Maximum Solid Size:	.25" (6 mm)
Maximum Temperature:	185° F (85° C)
Viscosity Range:	
P/N: 8500 (110v), 8501 (220v)	1-10,000 cps (mPAS)
P/N: 8513 (110v), 8514 (220v)	10,000-25,000 cps (mPAS)
Maximum Discharge Pressure:	
P/N: 8500 (110v), 8501 (220v)	43 psi (3 bar) *based on water*
P/N: 8513 (110v), 8514 (220v)	87 psi (6 bar) *based on water*
Maximum Flow Rate:	
P/N: 8500 (110v), 8501 (220v)	8 GPM (30,2 LPM) *based on water*
P/N: 8513 (110v), 8514 (220v)	3 GPM (11,3 LPM) *based on water*
System Weight:	58 lbs (26 kg)
Bag Liner Series:	Optional pump intake design available for applications with hygienic liners

Bag Liner Series



Pump Intake

Note: Pump and meter is constructed with FDA compliant materials; however, the system does not have FDA certification.

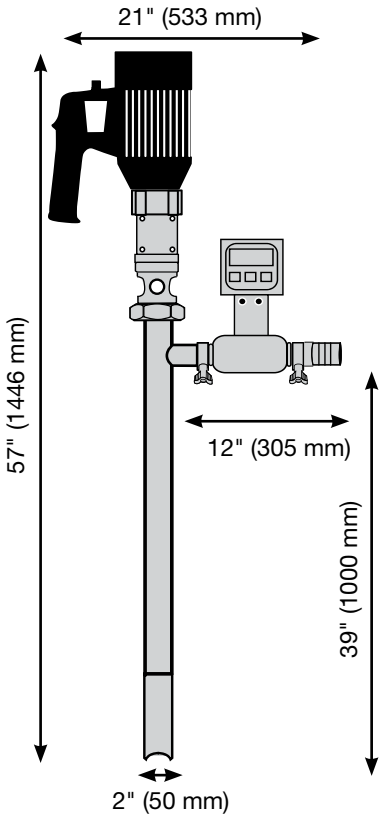
Standard's Sanitary Batch Control System is engineered for bulk, precision dosing and filling operations from drums, ToteTanks® and kettles - virtually hands free. This system utilizes a non-invasive Full Bore Magmeter for flow / volume measurement. Simply dial in desired volume, press enter, and the Sanitary Batch Control delivers a preset volume of material within .05% accuracy. The system is an excellent solution for conductive food products, pharmaceuticals, and cosmetic materials.

Features

- Large Graphic Display
- .05%+/- Repeatability
- Non-Invasive Measurement
- Max. Viscosity 25,000 cps (mPAS)
- Standard Or Metric Units Of Measure
- Tri-Clamp Fittings
- Low Shear Design
- Easy To Clean Design
- Multi-language Display
- Measures Volume
- 3A Certification

Common Applications

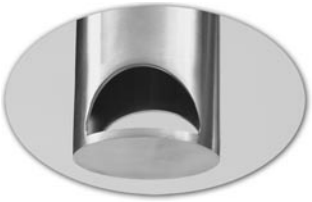
- Lotions
- Chocolate
- Juice Concentrates
- Pharmaceuticals
- Shampoo
- Pie Fillings
- Brine
- Tomato Paste



Technical Specifications

Wetted Parts:	316 SS (32 Ra finish or better) & Teflon
Motor Drive:	TEFC (IP 54) 110v or 230v
Inlet / Discharge Size:	2" (50 mm) / 1.5" (38 mm)
Pump Seal:	Mechanical SiC / Viton / SiC
Pump Design:	Progressive Cavity / Positive Displacement
Metering Principle:	Full Bore Mag Flowmeter
Viscosity Range:	
P/N: 8300 (110v), 8301 (220v)	1-10,000 cps (mPAS)
P/N: 8313 (110v), 8314 (220v)	10,000-25,000 cps (mPAS)
Maximum Discharge Pressure:	
P/N: 8300 (110v), 8301 (220v)	43 psi (3 bar) *based on water*
P/N: 8313 (110v), 8314 (220v)	87 psi (6 bar) *based on water*
Maximum Flow Rate:	
P/N: 8300 (110v), 8301 (220v)	10 GPM (38 LPM) *based on water*
P/N: 8313 (110v), 8314 (220v)	3 GPM (11,3 LPM) *based on water*
System Weight:	54 lbs (24 Kg)
Immersion Length:	39" (1000 mm)
Conductivity:	System requires 5 micro-semans (µS/cm) of conductivity
Bag Liner Series:	Optional pump intake design available for applications with hygienic liners

Bag Liner Series



Pump Intake

Note: Pump and meter is constructed with FDA compliant materials; however, the system does not have FDA certification.

Flow Meter & Pump System

Standard's Flow Meter & Pump System is engineered to dispense and meter materials from drums, ToteTanks® and kettles. The system includes a 3A Sanitary Transfer Pump in addition to a 3A Turbine Flow Meter. The Meter offers a truly hygienic design and accurate performance. A two-piece design enables operators to quickly disassemble and clean internal components. In addition, the unique design eliminates the need for internal locking rings. The proven Flow Meter & Pump System is an excellent choice for metering low viscosity liquids.

Features

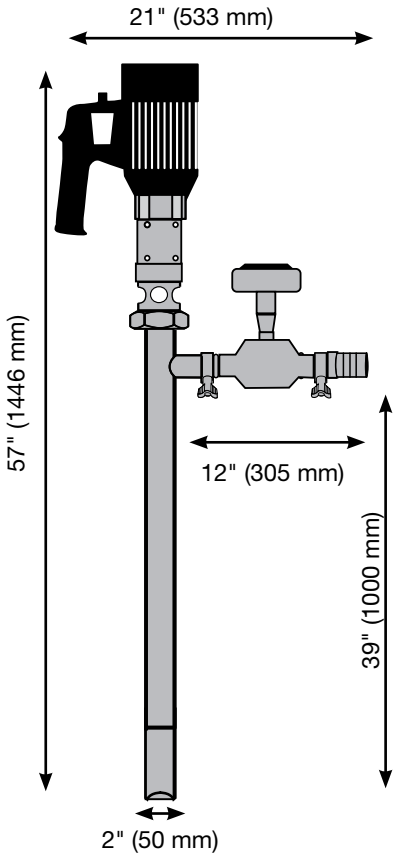
- Tri-Clamp Fittings
- Turbine Paddle Wheel
- Easy to Clean Design
- 3A Certification
- Viscosity to 100 cps (mPAS)
- Remote Mount Meter Display

Common Applications

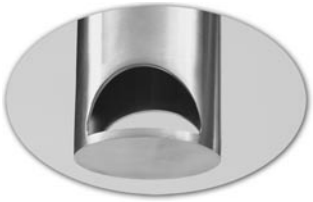
- Milk
- Brine Solutions
- Beer
- Filtered Juice
- Water
- Filtered Wine

Technical Specifications

Wetted Parts:	316SS (32Ra or better), Teflon, Rulon 641
Accuracy:	+/– 0.5% (.10% Repeatability)
Maximum Viscosity:	100 cps m/PAS
Flow Range:	10 GPM (38 LPM) *based on water*
Inlet / Discharge:	2" (50 mm) / 1.5" (38 mm) Tri-Clamp Hose Barb
Pump Seal:	Mechanical SiC / Viton / SiC
Pump Design:	Progressive Cavity / Positive Displacement
Motor Drive:	TEFC 110v or 230v / Variable Speed Control
Maximum Discharge Pressure:	70 psi (4,8 bar)
System Weight:	40 lbs (18 Kg)
Immersion Length:	39" (1000 mm)
Maximum Temperature:	250° F (121° C)
Meter Power Supply:	12 v/DC
Bag Liner Series:	Optional pump intake design available for applications with hygienic liners



Bag Liner Series



Pump Intake

Notes: Pump and meter is constructed with FDA compliant materials; however, the system does not have FDA certification.
Remote mount display to 90 ft (27 m)

Additional Markets Served:

Industrial Drum & Container Pumps

AdBlue / Urea Pumps

Distributed By:

STANDARD Pump, Inc.

1540 University Dr.
Auburn, GA 30011 USA

1.866.558.8611
Tel 770.307.1003
Fax 770.307.1009

www.standardpump.com

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