

SERFILCO HIGH VISCOSITY | DRUM PUMPS

2900 MacArthur Blvd. Northbrook, IL. USA 60062 www.serfilco.com (800) 323 - 5431

BULLETIN P-411 B OCT 2012



INDUSTRIAL & SANITARY PUMP SERIES

- Flows to 12 GPM / 45 LPM
- Max Pressure 174 psi / 12 bar
- Rugged construction All 316 stainless steel Choice of stater elastomers
- Industrial Series 700 or Sanitary Series 800
 - Speed Reduced pump (SR) Max viscosity 25,000 cps/mPas
 - **Direct Drive pump (DD)** Max viscosity 100,000 cps/mPas



Progressive Cavity Design

Cavity SERFILCO Progressive Pumps engineered to transfer high viscosity materials from drums, tanks and IBC's. Utilizing the principle of positive displacement, these pumps deliver a continuous flow with little product degradation. The series 700 (Industrial) and series 800 (Sanitary) pumps can transfer materials ranging in viscosity up to 100,000 cps/ mPas. All pumps are constructed from robust 316SS with a choice of stator elastomers.

Series 700 Industrial Pump

SERFILCO series 700 Industrial Pumps are commonly used throughout the industrial marketplace for transferring viscous materials such as polymers,

paints, resins, adhesives and petroleum based products.

Series 800 Sanitary Pump

SERFILCO series 800 Sanitary Pumps are commonly used throughout the sanitary food processing, pharmaceutical, biotechnology. cosmetic and industries. Applications include the transfer of tomato paste, mayonnaise, pie fillings, salad dressing, shampoos, and cosmetic lotions. The series 800 pumps are manufactured according to standards with FDA approved materials of construction. The pumps utilize a threaded design and tri-clamp fittings for quick cleaning, inspection and maintenance.



PAINTS



PHARMACEUTICAL



COSMETICS



PETROLEUM

Fittings:



2900 MacArthur Blvd. Northbrook, IL. USA 60062 www.serfilco.com (800) 323 - 5431

SR - SPEED REDUCED PUMPS

Technical Data

Max. Viscosity: 25,000 cps (mPAS)

Discharge Port: 1.5" / 38mm hose barb, optional 1.25" / 32mm **Wetted Material:** Tube & Rotor Assembly: 316 Stainless Steel

Stator Material: See below

Mechanical Seal: SiC/Viton/SiC

Motor Drives: ENC-S, EXP-UL, EXP420

> Large Type Acme Thread design enables quick disassembly for cleaning and maintenance.

SR 700 Industrial Pump Series

Easy Maintenance

Continuous Flow

Threaded Components

Low Shearing Properties

Interchangeable Motors Drives

MODEL NUMBER	PRICE CODE NO.	FLOW RATE**	MAX PRESSURE	PUMP LENGTH	MAX VISCOSITY (CPS)
SR700-71-27-* SR700-71-39-* SR700-71-47-*	52-7700* 52-7703* 52-7706*	7 GPM	87 PSI	27" 39" 47"	25,000
SR700-72-27-* SR700-72-39-* SR700-72-47-*	52-7701* 52-7704* 52-7707*	7 GPM	174 PSI	33" 45" 53"	25,000
SR700-181-27-* SR700-181-39-* SR700-181-47-*	52-7702* 52-7705* 52-7708*	12 GPM	87 PSI	27" 39" 47"	10,000

^{*} Add to Model No. and Price Code No.

** Based on water

B for Buna-N T for PTFE

V for Viton

SR 800 Sanitary Series





Hygienic Design

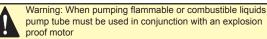
- Gentle Product Treatm
- Easy to Clean & Maintain
- Continuous Flow

MODEL NUMBER	PRICE CODE NO.	FLOW RATE**	MAX PRESSURE	PUMP LENGTH	MAX VISCOSITY (CPS)
SR800-71-27-* SR800-71-39-* SR800-71-47-*	52-7800* 52-7803* 52-7806*	7 GPM	87 PSI	27" 39" 47"	25,000
SR800-72-27-* SR800-72-39-* SR800-72-47-*	52-7801* 52-7804* 52-7807*	7 GPM	174 PSI	33" 45" 53"	25,000
SR800-181-27-* SR800-181-39-* SR800-181-47-*	52-7802* 52-7805* 52-7808*	12 GPM	87 PSI	27" 39" 47"	10.000

^{*} Add to Model No. and Price Code No. FG for food grade Buna

T for PTFE







^{**} Based on water

SR 700 & SR 800 PUMP MOTORS

ENC-S



ENC-S SEVERE DUTY TOTALLY ENCLOSED MOTOR w/speed control

1.1 HP (825 watts).

Totally enclosed motor in anodized aluminum housing for extra protection. Speed control knob allows for efficient, controlled liquid dispensing. ON/OFF switch conveniently located for single hand, thumb control. Resettable thermal overload protected, double insulated motor. Cartridge brush design extends life and greatly reduces replacement service time. Includes 16 ft. cord w/molded plug.

Weight: 12 lbs. (6 kg.)

MODEL NO.	PRICE CODE NO.	MOTOR VOLTAGE
ENC-S-115	52-3000	115V/1/50-60
ENC-S-240	52-3001	220-240V/1/50-60



Warning: Not suitable for pumping flammable or combustible liquids

EXP-UL



EXP-UL EXPLOSION-PROOF MOTOR (Ex)



Explosion-proof motor in aluminum housing. C.S.A. and U.L. listed Class I, Groups C and D. Thermal overload protected, automatic reset. Includes 16 ft. cord, no plug.

Weight: 20 lbs. (9.5 kg.)

MODEL NO.	PRICE CODE NO.	MOTOR VOLTAGE		
EXP-UL-115	55-0744	115V/1/50-60		



620 watt input / 430 watt output





May be used for pumping flammable or combustible liquids

EXP420



EXP420 EXPLOSION PROOF MOTOR $\langle \xi_x \rangle$



.80 HP (600 watts) FLA 2.6.73 Explosion proof (IP 54) enclosure Thermal overload protection 12 ft power cord, no plug Weight: 17 Lbs. (7.7 kg.)

MODEL NO.	PRICE CODE NO.	MOTOR VOLTAGE
EXP420	52-3101	220-240/1/50-60



May be used for pumping flammable or combustible liquids









DD -DIRECT DRIVE PUMPS

Technical Data

Design: Progressive Cavity / Positive Displacement

Max. Viscosity: 100,000cps (mPAS)

Discharge Port: 1.5" / 38mm hose barb, optional 1.25" / 32mm **Wetted Material:** Tube & Rotor Assembly: 316 Stainless Steel

Stator Material: See below

Mechanical Seal: SiC/Viton/SiC

Motor Drives: Pneumatic or electric; 3 phase / 50-60 Hz

See page 5 for motor selection.

Fittings: Large Type Acme Thread design enables quick

disassembly for cleaning and maintenance.

DD 700 Industrial Pump Series

Easy Maintenance

Continuous Flow

Threaded Components

- Low Shearing Properties
- Interchangeable Motors Drives

MODEL NUMBER	PRICE CODE NO.	FLOW RATE**	MAX PRES- SURE	PUMP LENGTH	MAX VISCOSITY CPS
DD700-71-27-* DD700-71-39-* DD700-71-47-*	52-7710* 52-7713* 52-7716*	7 GPM	87 PSI	27" 39" 47"	100,000
DD700-72-27-* DD700-72-39-* DD700-72-47-*	52-7711* 52-7714* 52-7717*	7 GPM	174 PSI	33" 45" 53"	100,000
DD700-181-27-* DD700-181-39-* DD700-181-47-*	52-7712* 52-7715* 52-7718*	12 GPM	87 PSI	27" 39" 47"	10,000

^{*} Add to Model No. and Price Code No.

** Based on water

B for Buna-N **T** for PTFE

V for Viton



DD 800 Sanitary Series

Hygenic Design

- Gentle Product Treatment
- Easy to Clean & Maintain
- Continuous Flow

MODEL NUMBER	PRICE CODE NO.	FLOW RATE**	MAX PRES- SURE	PUMP LENGTH	MAX VISCOSITY CPS
DD800-71-27-* DD800-71-39-* DD800-71-47-*	52-7810* 52-7813* 52-7816*	7 GPM	87 PSI	27" 39" 47"	100,000
DD800-72-27-* DD800-72-39-* DD800-72-47-*	52-7811* 52-7814* 52-7817*	7 GPM	174 PSI	33" 45" 53"	100,000
DD800-181-27-* DD800-181-39-* DD800-181-47-*	52-7812* 52-7815* 52-7818*	12 GPM	87 PSI	27" 39" 47"	10,000

^{*} Add to Model No. and Price Code No. **FG** for food grade Buna

T for PTFE







^{**} Based on water



DD700 & DD800 PUMP MOTORS

Industrial Electric Motor



Washdown Electric Motor



Stainless Steel Electric Motor



Industrial Pneumatic Motor



Sanitary Pneumatic Motor



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

MODEL	PRICE CODE NO.	HP	KW	RPM	ENCLOSURE	SHIPPING WT. LBS (Kg)
DD-502	52-8020	0.75	,55	750-900	TEFC (IP55)	40 (18)
DD-512	52-8021	1	,75	750-900	TEFC (IP55)	52 (24)
DD-522	52-8022	1.5	1,1	750-900	TEFC (IP55)	58 (25)

Motor wiring for 230V/3/50-60, P-52-1200

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

MODEL	PRICE CODE NO.	НР	KW	RPM	ENCLOSURE	SHIPPING WT. LBS (Kg)
DD-504	52-0504	0.75	,55	750-900	Washdown	40 (18)
DD-514	52-0514	1	,75	750-900	Washdown	52 (24)
DD-524	52-0524	1.5	1,1	750-900	Washdown	58 (25)

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

MODEL	PRICE CODE NO.	HP	KW	RPM	ENCLOSURE	SHIPPING WT. LBS (Kg)
DD-508	52-0508	0.75	,55	750-900	Encapsulated	65 (30)
DD-518	52-0518	1	,75	750-900	Encapsulated	96 (44)
DD-528	52-0528	1.5	1,1	750-900	Encapsulated	115 (52)

Industrial Pneumatic Motors

MODEL	PRICE CODE NO.	HP	KW	RPM	AIR CONSUMPTION	SHIPPING WT. LBS (Kg)
DD-A4	52-8030	2	1,5	300-900	80 CFM @ 100 psi 37 L/Sec @ 7 Bar	12 (5)
DD-A6	52-8031	4	3,0	300-900	130 CFM @ 100 psi 65 L/Sec @ 7 Bar	24 (11)
DD-A8	52-8032	5	3,7	300-900	170 CFM @ 100 psi 80 L/Sec @ 7 Bar	26 (12)

Sanitary Pneumatic Motors

MODEL	PRICE CODE NO.	HP	KW	RPM	AIR CONSUMPTION	SHIPPING WT. LBS (Kg)
DD-A4FP	52-8040	2	1,5	300-900	80 CFM @ 100 psi 37 L/Sec @ 7 Bar	12 (5)
DD-A6FP	52-8041	4	3,0	300-900	130 CFM @ 100 psi 65 L/Sec @ 7 Bar	24 (11)
DD-A8FP	52-8042	5	3,7	300-900	170 CFM @ 100 psi 80 L/Sec @ 7 Bar	26 (12)

NOTE: Optimal pneumatic motor speed is 900 RPM. Failure to comply may result in pump damage or premature failure.

KW

,37

,75

1,2

KW

,37

75

1,2

1,2

KW

37

,75

VISCOSITY

(cps)

1+

10.000+

20,000+

30,000+

VISCOSITY

(cps)

1+

10,000+

20,000+

30,000+

VISCOSITY

(cps)

1+

10,000+

20,000+ 30,000+ HP

.5

1

1

1.5

HP

.5

1.5

HP

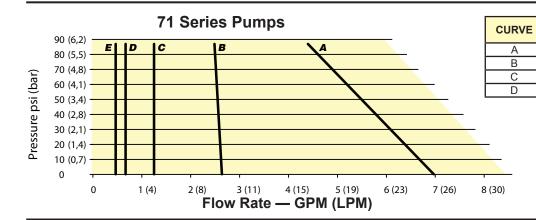
.5

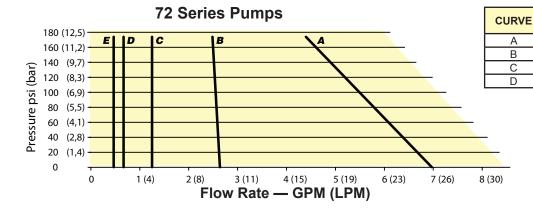
1.5

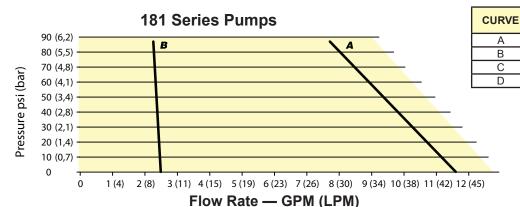


PERFORMANCE CURVES

750 RPM 50 Hz Operation







Technical Notes

- Performance Curves are intended to be used as a guide only as individual results may vary.
- Pump Stator Elastomers (Teflon or Buna) may vary performance
- Performance Curves were created using a 900 RPM (60 Hz) motor. Changing motor speed and/or frequency may after pump performance.
- Pump Curves were created with a Newtorian Polymer (Viscosity remains constant regardless of shear). Non-Newtonian materials (viscosity does not remain constant with shearing) may vary performance.

WARNING: Do NOT increase motor speed above 900 RPM's. Failure to compy will result in pump failure and possible injury.

DRUM PUMP ACCESSORIES

HOSE & CLAMPS

Price Code

HIGH PRESSURE TRANSFER HOSE

Tube: Black, oil resistant synthetic rubber. (Nitrile). Reinforcement: One braid of high tensile steel wire. Cover: Black, oil and abrasion resistant synthetic rubber. Max. working pressure 725 psi. Max. temp. 180° F

1¹/₂" I.D. - per foot.....

52-9039

PLICORD® GRAY FOOD TRANSFER HOSE

Construction: White Chemivic® synthetic rubber (FDA/USDA, 3A Sanitary Standard 18-03 complaint). Cover: Spiral-plied synthetic fabric with Galvanized Wire helix. Max. working pressure 150 psi. Max. temp. 180°F

1¹/₂" I.D. - per foot.....

52-9037

DISCHARGE HOSE CLAMP

Malleable iron two bolt clamp. Gripping ridges, reinforced lugs.

Hose size from 1-48/64" to 2-3/64" (44.50 mm to 27 mm).....

52-9038

PUMP HANGER

For DD direct drive pumps constructed of 304SS tubing.



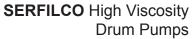
Price Code No. 52-0743



SERFILCO offers a complete product line of pumps for fast, safe and convenient transfer and dispensing of liquids.



SERFILCO Smart Drum Pump Batch and flow control systems.







SERFILCO Series 'DP' Drum Pumps

SERFILCO Barrel and Container Pumps





SERFILCO Series 'HP' Hand Dispensing Pump