

HVDP Series

HIGH VISCOSITY DRUM/BARREL PUMPS

High Reduction (HR) Model - 20,000 cP max.



HVDP-HR Tube with
800W Motor

Features

- Progressive cavity design
- Up to 20,000 cP
- Heavy duty 316SS tube construction
- 3 stator materials - Buna-N, Viton™, PTFE
- 16:1 gear reducer
- Use with 800 watt universal variable speed motor
- Mechanical seal or packing design
- 27", 40", or 48" (69, 102, 122cm) tube lengths
- Quick disassembly for cleaning ease using unique camlock feature

Performance

- Up to 8-1/2 gpm (32 lpm)
- Up to 300 ft. hd. (91 m)
- 120 psi (8 bar) maximum working pressure
- Maximum temperature 180°F (82°C)

Typical Applications

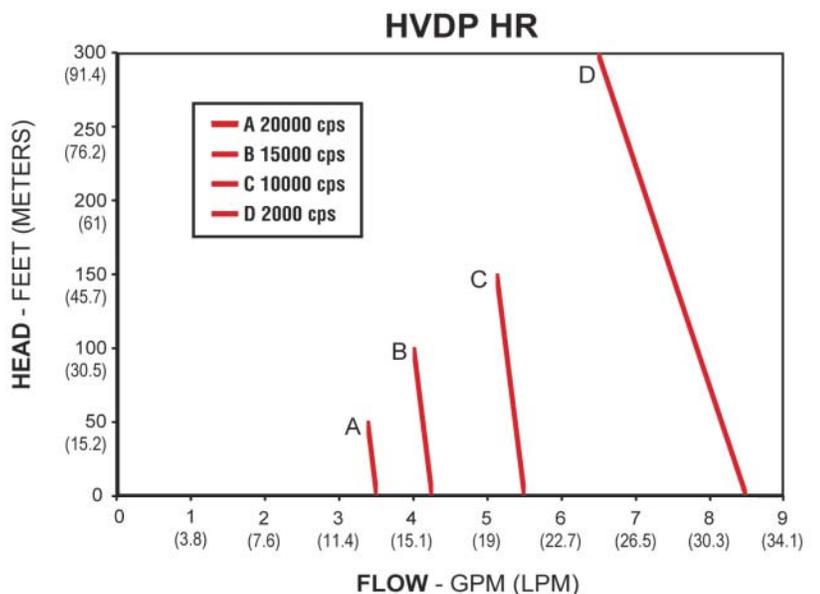
Chemical: Adhesives, viscous fluids/pastes, oils, greases

Cosmetics: Soaps, pastes, shampoos, creams

Food: Honey, syrups, spreads, ketchup

Coatings: Paints, lacquers, waxes

Performance Curves



Camlock Feature

Exclusive camlock feature allows the pump to be disassembled quickly and easily without the need for tools. Simply, lift up on the camlock levers to disengage.



FINISH THOMPSON INC.

Low Reduction (LR) Model - 100,000 cP max.



HVDP-LR Tube with Induction Motor

Features

- Progressive Cavity design
- 100,000+ cP
- Heavy duty 316SS tube construction
- 3 stator materials - Buna-N, Viton™, PTFE
- 5:1 or 4:1 gear reducers enables wide selection of motors
- AC induction or air motors
- Mechanical seal or packing design
- 27", 40", or 48" (69, 102, 122 cm) tube lengths
- Quick disassembly for cleaning ease using unique camlock feature

Performance

- Up to 7 gpm (26 lpm)
- Up to 300 ft. hd. (91 m)
- 120 psi (8 bar) maximum working pressure
- Up to 1.8 SG
- Maximum temperature 180°F (82°C)
- Gear reducer enables speed reduction to 700 rpm

Typical Applications

Chemical: Adhesives, viscous fluids/pastes, oils, greases

Cosmetics: Soaps, pastes, shampoos, creams

Food: Honey, syrups, spreads, ketchup

Coatings: Paints, lacquers, waxes

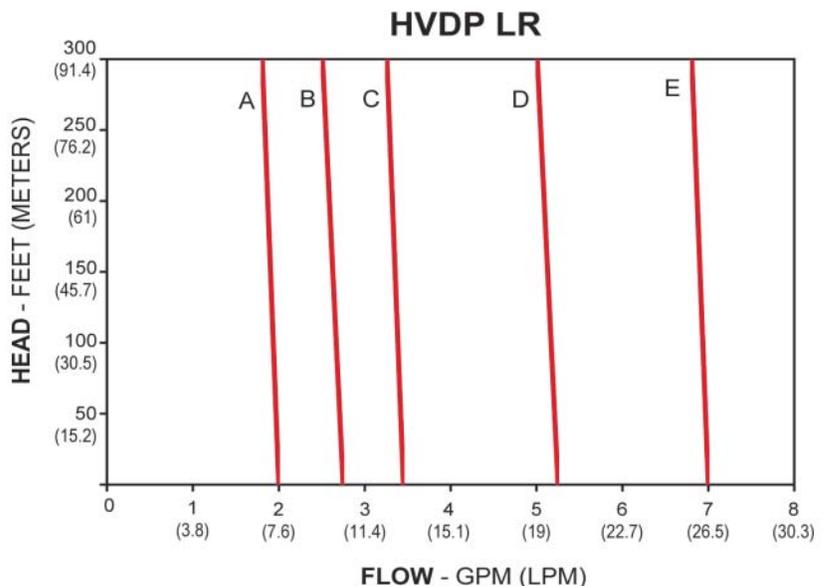


Camlock Feature

Exclusive camlock feature allows the pump to be disassembled quickly and easily without the need for tools. Simply, lift up on the camlock levers to disengage.

- A 30000 cps
- B 25000 cps
- C 15000 cps
- D 10000 cps
- E 2000 cps

Performance Curves



HVDP Tube Specifications



Models	Tube			Seal	Shaft	Rotor	Stator	Hose Size Required
	Material	Dia.	Length					
		In (cm)	In cm					
HVDP27	SS	2 (5.1)	27 69	carbon ceramic Viton	SS	SS	Buna-N Viton PTFE	1-1/2" or 2"
HVDP40	SS	2 (5.1)	40 102	carbon ceramic Viton	SS	SS	Buna-N Viton PTFE	1-1/2" or 2"
HVDP48	SS	2 (5.1)	48 122	carbon ceramic Viton	SS	SS	Buna-N Viton PTFE	1-1/2" or 2"

Note: Additional seal materials available.

Motor Specifications



Universal 800W



Induction

Electric motors supplied with 12 ft (3.5m) heavy duty cord, circuit breaker with manual reset (universal motor only), internal cooling fan and built-in on/off switch. Rated continuous duty.

Additional motor offerings include wash down duty, explosionproof and 50Hz.

Adapters are available to permit installation of customer supplied NEMA or IEC motors.

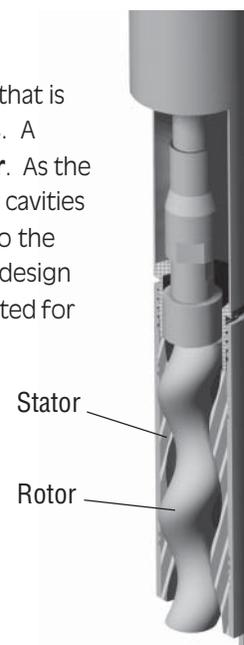


Air motors include regulator valve and muffler. Motors are rated 25-70 cfm.

Model	Type	Certifications	Operating Requirements	HP	Motor Class
M58H (HR tubes)	TEFC	NRTL	115VAC/50/60Hz/1	1	Universal - 800W
M59H (HR tubes)	TEFC	CE IP54	230VAC/50/60Hz/1	1	Universal - 800W
M60 (LR tubes)	TEFC	CSA, UL	115/230/60Hz/1	1	Induction
M61 (LR tubes)	TEFC	CSA, UL	115/230/60Hz/1	1-1/2	Induction
M62 (LR tubes)	TEFC	CSA, UL	115/230V/60Hz/1	2	Induction
M63 (LR tubes)	TEFC	CSA, UL	230/460V/60Hz/3	1	Induction
M64 (LR tubes)	TEFC	CSA, UL	230/460V/60Hz/3	2	Induction
M65 (LR tubes)		CSA	Air, 100 psi at 25 cfm	3/4	Air
M66 (LR tubes)		CSA	Air, 100 psi at 70 cfm	1-1/2	Air

HVDP Progressive Cavity Design ►

HVDP Series pumps feature a progressive cavity design that is ideally suited for the transfer of high viscosity materials. A single helical **rotor** rotates inside a double helical **stator**. As the rotor turns eccentrically in the stator, a series of sealed cavities form 180 degrees apart and progress from the intake to the discharge end of the stator. This positive displacement design produces a smooth, non-pulsating flow and is ideally suited for the gentle transfer of viscous fluids.



Stator

Rotor

◀ HVDP Speed Regulator

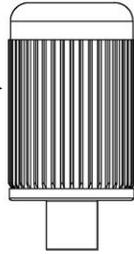
The electronic, variable speed control allows the precise adjustment of motor speed to control the flow of the fluid. Turning the knob on the side of the motor easily controls motor rpm.



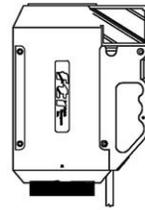
HVDP (LR) Model

HVDP (HR) Model

Use standard induction or air motors



Use with M58H or M59H 800-watt universal motor



Speed Reducer
5:1 – use with 60 Hz induction motors
4:1 – use with 50 Hz induction or air



Mechanical seal

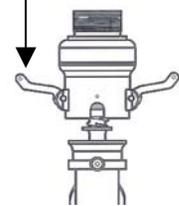
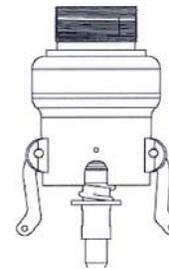
Speed Reducer
16:1 – use with M58H or M59H 800-watt motor



Camlock Feature
Allows pump to be quickly disassembled without tools

Stainless steel shaft

Three stainless steel rotor sizes



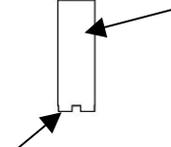
1 1/2" (38 mm) or 2" (50 mm) discharge with hose barb connection
Use 1 1/2" (38 mm) connection for simple transfer applications over short distances
Use 2" (50 mm) connection for longer distances.



2" (5.1 cm) diameter stainless steel tube available in
27" (69 cm)
40" (102 cm)
48" (122 cm) lengths to fit a variety of container types



Flat bottom tube design
Allows pump to be used in containers lined with bags



Stator

- White Buna - ideal for neutral, abrasive and fluids containing solids
- Viton - used for more aggressive liquids and ones containing abrasives/solids
- PTFE (Teflon) - used for aggressive liquids that do not contain abrasives or solids