

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

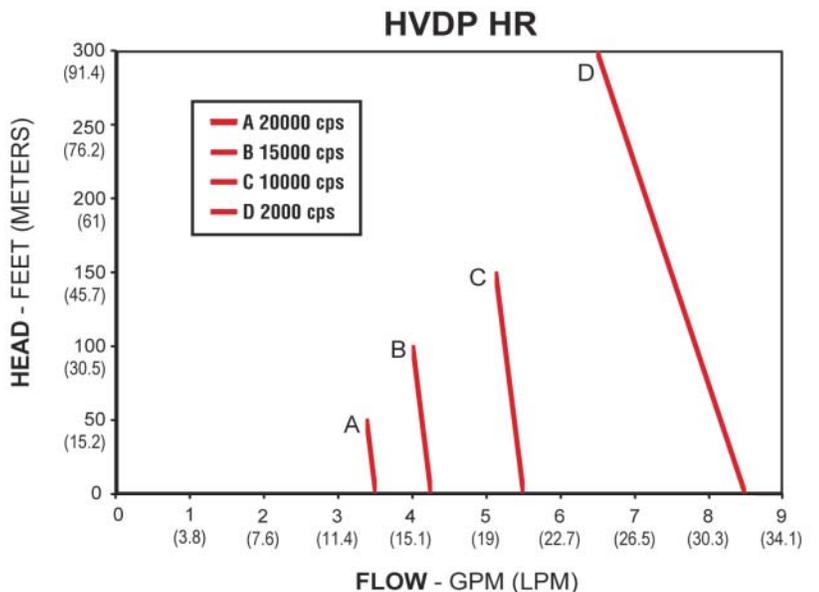
Coatings: Paints, lacquers, waxes

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

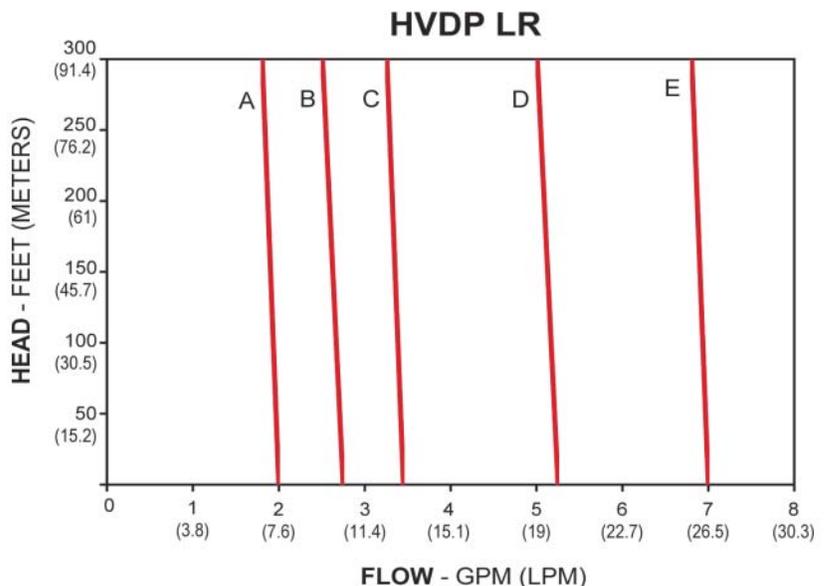


Camlock Feature

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.M

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.

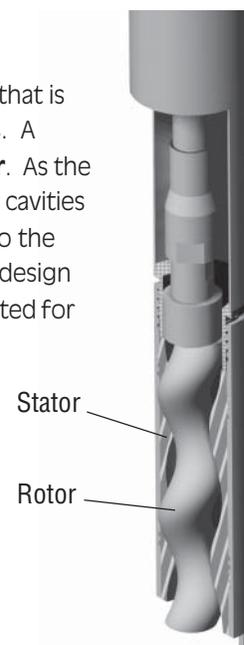


Air motors include regulator valve and muffler. Motors are rated 25-70 cfm.

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

◀ M58H/M59H 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 Series Application Specification Form

To ensure that you receive the best fit HVDP Series high viscosity drum pump, please fill out this form and fax or mail it to our sales department (fax number 814-455-8518) or to return by e-mail, fill out the pdf version on our website (www.finishthompson.com) and return it to sales@finishthompson.com. If you have any questions, please contact the sales department.

Company Information

Company name _____
Address _____
City _____ State _____ Zip code _____ Country _____
Telephone _____ Fax _____ E-mail _____
Contact name _____
Industry type _____

Fluid Information

Fluid description _____
Concentration _____ Specific gravity _____
Viscosity at temperature at which liquid will be pumped: _____ cP or _____ mPas at _____ °F _____ °C
Maximum liquid temperature: _____ °F _____ °C
Percentage solids in suspension _____% Are solids: Hard Soft
Size of solids _____ inches or _____ mm
Does the liquid crystallize? Yes No If yes, at what temperature? _____ °F _____ °C
Is fluid: Newtonian _____ Dilatant _____ Thixotropic _____
Seal preference: carbon/ceramic silicon carbide/silicon carbide

Which materials of construction have previous experience shown to be acceptable? _____

Any other information we should know concerning the fluid? _____

Pump Performance Information

Desired flow rate _____ gallons per minute _____ liters per minute
Desired head (TDH) _____ feet _____ meters
Desired pump tube length _____ 27" (69 mm) _____ 40" (102 mm) _____ 48" (122 mm)
Anticipated operating time per day _____ hours
Number of times the pump will be started per day _____
Container type: Open top Closed top If closed top, list maximum bung size _____ inches _____ mm

Motor Information

Desired motor type: ___ Electric ___ Air If air what is available air pressure? _____ psi _____ bar
Electric motor specifics:
Single phase universal type _____ Single phase induction _____ Three phase induction _____
Operating voltage: _____ Frequency: _____ 50 Hz _____ 60 Hz Does motor need to be explosionproof? Yes ___ No ___

Additional comments concerning application:



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