

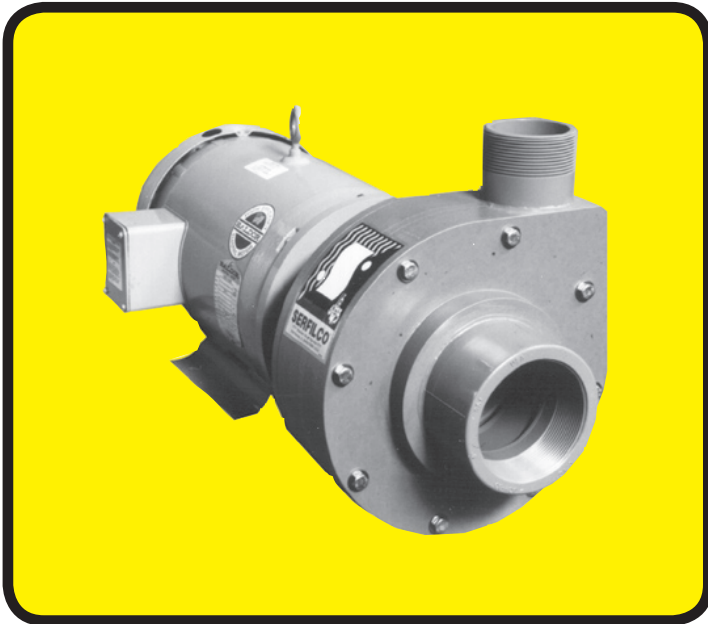


# SERFILCO®

## SERIES 'H' HORIZONTAL PUMP

BULLETIN  
P-202P  
JULY 2002

### HEAVY-DUTY CONSTRUCTION FOR: WASTE TREATMENT / PLATING / ACIDS SCRUBBING / ETCHING / PETROCHEMICAL



- **High flow rates**  
Over 1200 U.S. GPM, or 149 ft. TDH @ 60 Hz  
(3800 l/min or 31.5m @ 50 Hz)
- **Excellent chemical resistance**  
Machined from solid CPVC  
(See a chemical resistance chart)
- **Single or double mechanical seal**  
Silicon carbide  
EPDM or Viton® elastomers
- **Quiet, vibration free**  
Centrifugal, high efficiency enclosed impeller
- **Flanged or NPT ports:**
- **Long or close-coupled**  
Back pull-out design. Optional long-coupled kit available
- **Standard chemical duty motors (3 - 30 HP)**  
Sealed oversized bearings, cast iron end bells, shaft slinger washer, corrosion resistant two-part epoxy finish, stainless steel nameplate.

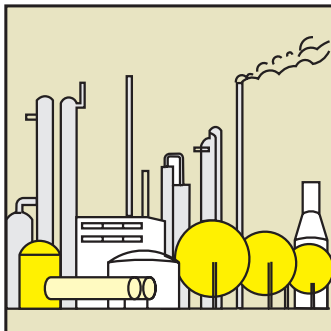
The Series 'H' pump is a heavy-duty centrifugal pump machined from solid CPVC. It provides a high level of resistance to aggressive chemicals. An external mechanical seal and sleeved shaft\* provide excellent corrosion resistance. The new Series 'H' 6" x 4" pump features a titanium or Hastelloy® C shaft.

The Series 'H' pump serves as an economical alternative to ANSI style process pumps. The high flow rates, chemical resistance and durability of this pump make it the perfect workhorse for waste treatment, chemical

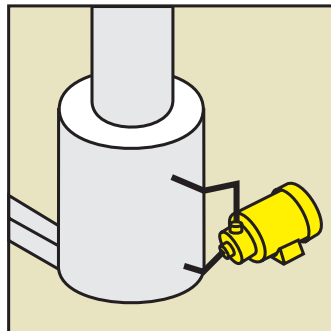
processing, transfer and filter pumping. Pumps are available for long-coupling in the field to user supplied standard motors.

Double seals are available and recommended for flushing the seal faces when abrasives are present or positive product containment is required. Optional coupling arrangements, mechanical seals, fittings and flange connections ensure adaptability to custom applications.

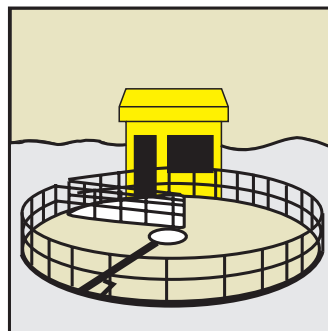
\* Sleeved shaft not available on 6" x 4" pump.



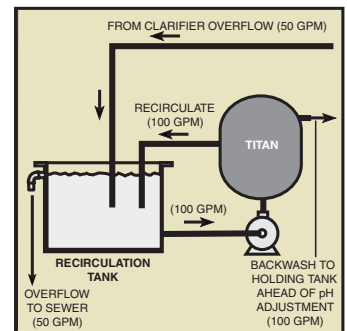
PETROCHEMICAL



FUME SCRUBBING  
& SPRAYING



WASTE TREATMENT



FILTER SYSTEM

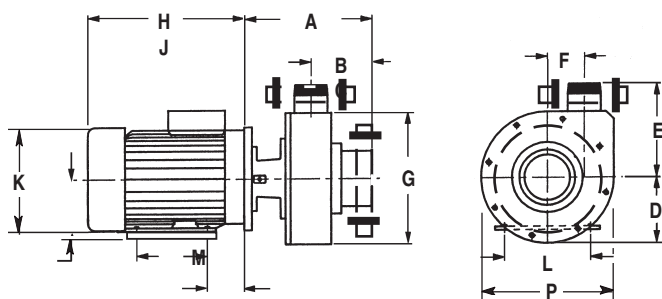
Pumps are machined from solid CPVC, with CPVC sleeved shaft \*. Elastomers are Viton® or EPDM. All models have enclosed impeller. Type 21 mechanical seal with silicon carbide faces is externally mounted with stainless steel components not in solution contact. Double mechanical seal is recommended for solutions containing abrasives, high temperatures or other critical service applications. Motor is painted with two-part epoxy paint. Pump Model No. indicates suction (FNPT) x discharge (MNPT) x impeller diameter (measurements in inches). All pumps are wet tested for flow and pressure certification.

\* 6" x 4" pumps not available with sleeved shafts. These pumps feature standard titanium or optional Hastelloy C shafts. These pumps also include ANSI 150lb. flange connections, suction and discharge. They are mounted on 36" x 15" steel bases.

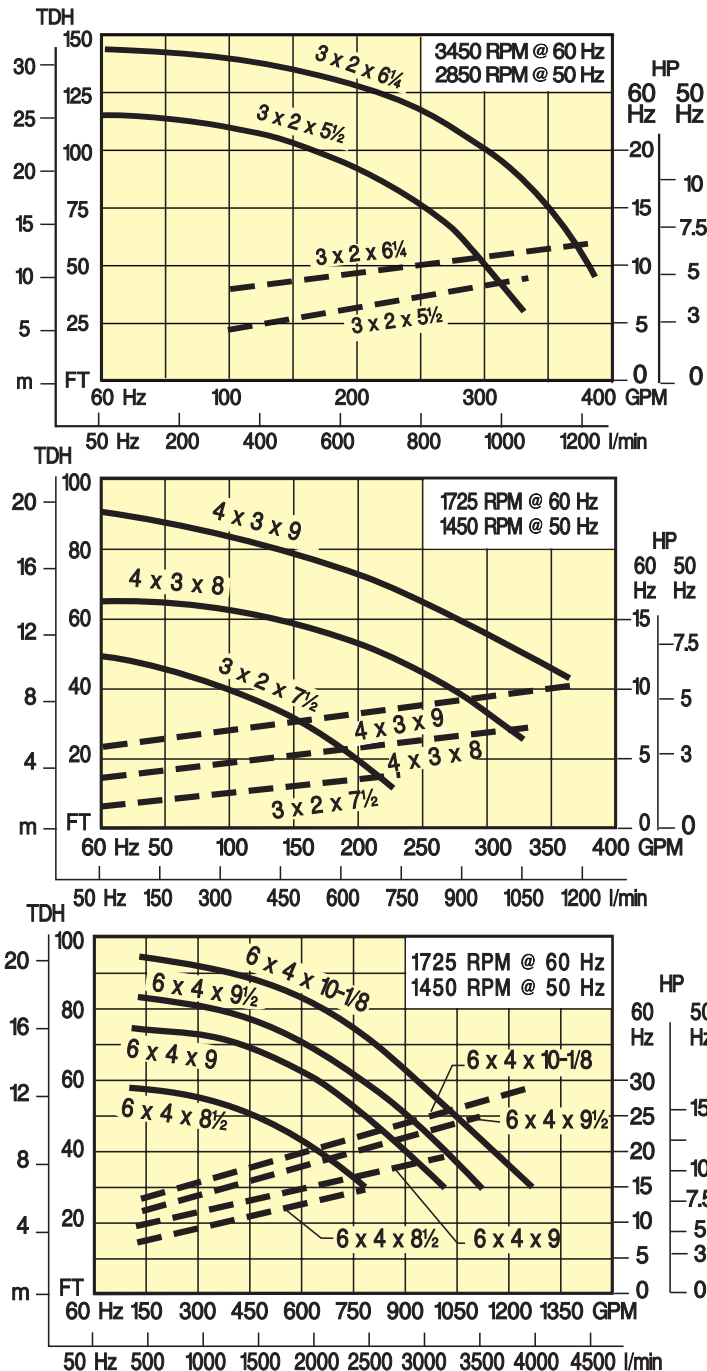
Determine the size of the Series 'H' pump required by using the flow curves to the right and the dimensional information on this page. Select the various elements necessary to order the proper pump from the tables on the next page. Note that the performance curves reflect pump operations at either 1750 RPM or 3450 RPM @ 60 Hz (1450 RPM or 2850 RPM @ 50 Hz).

FLOW CURVES ———  
MOTOR HP - - - - -

**DIMENSIONS**



**NOTE:** Flange connections are standard on 6" x 4" models.



MODEL	MOTOR FRAME	HP	DIMENSIONS												
			A	B	C	D	E	F	G	H	J	K	L	M	P
3 x 2 x 5 1/2	213TC 215TC	7.5 10.0	10.8 (274)	4.6 (117)	4.6 (117)	7.6 (193)	3.6 (91)	12.0 (305)	14.6 (371)	10.3 (262)	8.5 (216)	5.5 (140) 7.0 (178)	3.5 (89)	5.3 (135)	12 (305)
3 x 2 x 6 1/4	215TC	10.0 15.0	10.8 (274)	4.6 (117)	4.6 (117)	7.6 (193)	3.6 (91)	12.0 (305)	14.6 (371) 15.7 (399)	10.3 (262)	8.5 (216)	7.0 (178)	3.5 (89)	5.3 (135)	12 (305)
3 x 2 x 7 1/2	182TC 184TC	3.0 5.0	10.8 (274)	4.6 (117)	4.6 (117)	7.6 (193)	3.6 (91)	12.0 (305)	12.3 (312) 14.0 (356)	8.7 (221)	7.5 (191)	4.5 (114) 5.5 (140)	2.8 (71)	4.5 (114)	12 (305)
4 x 3 x 8	213TC 215TC	7.5 10.0	12.4 (315)	6.0 (152)	6.0 (152)	8.8 (224)	3.2 (81)	12.1 (307)	14.6 (371) 15.7 (399)	10.3 (262) 10.3 (262)	8.5 (216) 8.5 (216)	5.5 (140) 7.0 (178)	3.5 (89) 3.5 (89)	5.3 (135) 5.3 (135)	12.13 (308)
4 x 3 x 9	215TC 254TC	10.0 15.0	12.4 (315)	6.0 (152)	6.0 (152)	9.3 (236)	3.7 (94)	13.1 (333)	15.7 (399) 19.2 (488)	10.3 (262) 12.9 (328)	8.5 (216) 10.0 (254)	7.0 (178) 8.3 (211)	3.5 (89) 4.3 (109)	5.3 (135) 6.3 (160)	13.13 (334)
6 x 4	256TC 284TC 286TC	20 25 30	**	**	8 (203)	**	5.2 (132)	14.8 (376)	19.2 (488) 23.1 (587) 23.1 (587)	12.9 (328) 14.6 (371) 14.6 (371)	10 (254) 11 (279) 11 (279)	10 (254) 9.5 (241) 11 (279)	4.3 (109) 4.75 (121) 4.75 (121)	6.25 (159) 7.0 (178) 7.0 (178)	15.13 (384)

\*\* Dimension to flange face on 6" x 4" pump

**TO ORDER, use Price Code Number**

**TABLE I**

**STANDARD MODELS**

To order standard pump-motor combination, select model from Table I.

MODEL (with CPVC sleeved shaft, Viton elastomers, single mechanical seal.)	MAXIMUM FLOW RATE	MAXIMUM TDH (Ft.)	PRICE CODE NO. 60 Hz
3 x 2 x 5 1/2 CV(M8) -D10.0	325	120	47-1417 P
3 x 2 x 6 1/4 CV(M8) -D15.0	380	149	47-1517 L
3 x 2 x 7 1/2 CV(M8) -H5.0	230	50	47-1617 F
4 x 3 x 8 CV(M8) -H7.5	300	65	47-0417 G
4 x 3 x 9 CV(M8) -H10.0	380	90	47-1717 H
6 x 4F x 8 1/2 CTV(M8) -H15.0	800	60	47-3127 S
6 x 4F x 9 CTV(M8) -H20.0	950	75	47-3227 V
6 x 4F x 9 1/2 CTV(M8) -H25.0	1100	84	47-3327 W
6 x 4F x 10 CTV(M8) -H30.0	1250	95	47-3427 X

**TABLE II**

**OTHER MODELS**

To determine pump model for a specified GPM, TDH, material and specific gravity, select performance point on curve. Determine required HP by moving vertically to corresponding number dotted line. Read the required HP at right ordinate and multiply by S.G. Select pump, "O"-ring and seal, and motor to complete Model Number. Add corresponding number designations together to create Price Code Number.

**EXAMPLE:**

<b>PUMP</b>	+	<b>"O"-RING &amp; MECHANICAL SEAL</b>	+	<b>MOTOR</b>	=	<b>PRICE CODE NUMBER</b>
3 x 2 x 7 1/2 C		V(M8)		-H5.0		47-1617 F

**PUMP**

**"O"-RING & MECHANICAL SEAL (TYPE 21)**

**MOTOR, TEFC "C" FACE**

MODEL	PRICE CODE NO.
3 x 2 x 5 1/2 C	47-141
3 x 2 x 6 1/4 C	47-151
3 x 2 x 7 1/2 C	47-161
4 x 3 x 8 C	47-041
4 x 3 x 9 C	47-171
6 x 4F x 8 1/2 CT	47-312
6 x 4F x 9 CT	47-322
6 x 4F x 9 1/2 CT	47-332
6 x 4F x 10 CT	47-342

"O"-RING & MECHANICAL SEAL MATERIAL (SOLUTION CONTACT)	ADDTO ...	
	MODEL NUMBER	PRICE CODE NO.
SINGLE MECHANICAL SEAL	L(M8) V(M8)	1 7
EPDM, silicon carbide Viton, silicon carbide		
DOUBLE MECHANICAL SEAL <sup>1</sup>	V(M8XM1)	4 8
EPDM, silicon carbide Viton, silicon carbide		

<sup>1</sup> DRI-STOP 2R is recommended when a double mechanical seal is used. DRI-STOP switch prevents damage to pump due to dry operation. Consult Bulletin A-105.

RPM	VOLTAGE	HP	ADDTO ...		PUMP-MOTOR SHIP. WT.		
			MODEL NUMBER	PRICE CODE NO.			
1450 or 1725	208-230-460/3/50-60  (190-380-415/3/50)	3.0	-H3.0	K	130		
		5.0	-H5.0	F	155		
		7.5	-H7.5	G	190		
		10.0	-H10.0	H	200		
		15.0	-H15.0	S	300		
		20.0	-H20.0	V	400		
		25.0	-H25.0	W	480		
		30.0	-H30.0	X	500		
		2850 or 3450		5.0	-D5.0	J	155
				7.5	-D7.5	T	175
10.0	-D10.0			P	195		
15.0	-D15.0			L	210		
20.0	-D20.0			M	335		

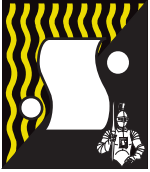
**OPTIONS**

DESCRIPTION	PRICE CODE NO.	
Trimmed impeller to meet specified flow	47-0084	
Flange connections (ANSI 150 lbs)	For models 3 x 2	47-0061
	4 x 3	47-0073
Hastelloy C shaft	6 x 4	Change T to H in Model No. & change 5th digit from 2 to 3 in Price Code No.

<sup>2</sup> Long Coupling Kit includes cast iron bearing pedestal frame, FRP channel, flexible coupling, guard. (Order pump separately)

LONG COUPLING KITS <sup>2</sup>		
FOR MODELS	FOR MOTOR FRAME	PRICE CODE NO.
3 x 2 x 7 1/2 4 x 3 x 8	143/145T	42-0500
	182/184T	42-0501
	213/215T	42-0502
Motor mounting and alignment (For motors 10 H.P. and smaller)		42-0504

For explosion-proof motors, motor starters, dolly mounting, etc., consult Application Engineering Department.



# PUMPS SERFILCO<sup>®</sup>, LTD.<sup>®</sup>

... for transferring, recirculating, spraying, cleaning or filtering

## DRUM PUMP HEADQUARTERS



Electric or air driven pumps for acids or alkalis

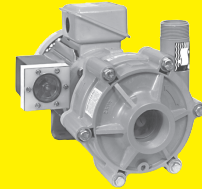
## CANTILEVER SHAFT



In-tank or out-of-tank mounting, dry run capability, 1/8 - 15 HP

## MECHANICAL SEAL

Non-metallic solution contact, centrifugal pumps



... some horizontal, vertical or self-priming centrifugal... some magnetic seal-less

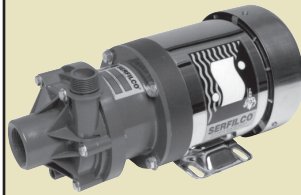
## SELF-PRIMING

Lifts to 25 ft.



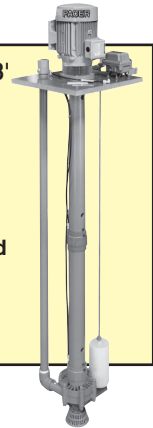
## SEAL-LESS MAGNETIC DRIVE

New SERIES 'M' features extended dry run capability



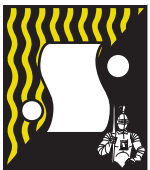
## SERIES 'B' & 'HB' DEEP SUMP PUMPS

Available in a wide variety of lengths and horsepower ratings



... others metering, diaphragm or hand operated —

**THERE'S A RIGHT SERFILCO PUMP FOR YOU!**



# SERFILCO<sup>®</sup>, LTD.

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