BULLETIN P-202_P 10/23/2020 Page 1 of 4

SERIES 'H' | HORIZONTAL PUMP

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.



PETROCHEMICAL



FUME SCRUBBING & SPRAYING * Sleeved shaft not available on 6" x 4" pump.



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 150 lb.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	ΗP													
MODEL	FRAME		Α	В	С	D	E	F	G	н	J	к	L	м	Р
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	** 14.5 (368)	** 6.8 (173)	8 (203)	** 12 (305)	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	MODEL (with CPVC sleeved shaft, Viton elastomers, single mechanical seal.)	MAXIMUM FLOW RATE	MAXIMUM TDH (Ft.)	PRICE CODE NO. 60 Hz	
STANDARD MODELS	3 x 2 x 5 ¹ / ₂ CV(M8) -D10.0 3 x 2 x 6 ¹ / ₄ CV(M8) -D15.0	325 380	120 149	47-1417 P 47-1517 L	
combination, select model from Table I.	3 x 2 x 7 ¹ / ₂ CV(M8) -H5.0 4 x 3 x 8 CV(M8) -H7.5 4 x 3 x 9 CV(M8) -H10.0	230 300 380	50 65 90	47-1617 F 47-0417 G 47-1717 H	
	6 x 4F x 8 ¹ / ₂ CTV(M8) -H15.0 6 x 4F x 9 CTV(M8) -H20.0	800 950	60 75	47-3127 S 47-3227 V	
	6 x 4F x 9'/2 CTV(M8) -H25.0 6 x 4F x 10 CTV(M8) -H30.0	1100	84 95	47-3327 W 47-3427 X	

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:			"O"-RING &						
	PUMP +		MECHANICAL SEAL		+ MOTOR		PRICE CODE NUMBER		
	3 x 2 x 71/2C	+	V(M8)	+	-H5.0	=	47-1617 F		

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

MOTOR, TEFC "C" FACE

	PRICE	"O"-RING & MECHANICAL	ADD TO						ADD TO	0	PUMP-
MODEL	CODE NO.	SEAL MATERIAL (SOLUTION CONTACT)	MODEL	PRICE	RP	м	VOLTAGE	HP		PRICE CODE	Motor Ship.
3 x 2 x 5 ¹ / ₂ C	47-141			NO					NUNDER	NO.	WT.
3 x 2 x 6 ¹ / ₄ C	47-151			NU.				3.0	-H3.0	K	130
3 x 2 x 7 ¹ / ₂ C	47-161	SINGLE MECHANICAL SEAL		1 7				5.0	-H5.0	F	155
4 x 3 x 8C	47-041		L(M8) V(M8)		1/15		208-230-460/3/50-60 (190-380-415/3/50)	7.5	-H7.5	G	190
4 x 3 x 9C	47-171	EPDM, silicon carbide			140	. 1		10.0	-H10.0	н	200
6 x 4F x 8 ¹ / ₂ CT 6 x 4F x 9CT 6 x 4F x 9 ¹ / ₂ CT	47-312 47-322	Viton, silicon carbide			1725	5		15.0	-H15.0	S	300
			V(M8XM1)	4 8	1725	5		20.0	-H20.0	V	400
	47-332	DOUBLE MECHANICAL SEAL						25.0	-H25.0	W	480
6 x 4F x 10CT	47-342	EPDM silicon carbide						30.0	-H30.0	Х	500
		Viton silicon carbide						5.0	-D5.0	J	155
		vitori, silicori carbide			2850	50		7.5	-D7.5	Т	175
		¹ DRI-STOP 2R is recommended when a double						10.0	-D10.0	Р	195
		mechanical seal is used. DRI-STOP sw	tch prevents		345	50		15.0	-D15.0	L	210
damage to pump due to dry operation. Consult								20.0	-D20.0	M	335

damage to pump due to dry operation. Consult Bulletin A-105.

OPTIONS

DESCRIP		PRICE		LONG COUPLING KITS ²				
DESCRIP	TION	CODE NO.	² Long Coupling Kit includes cast		FOR MOTOR	PRICE		
Trimmed impell	ler to meet	47-0084	iron bearing pedestal frame, FRP	FOR MODELS	FRAME	CODE NO.		
specified	flow		(Order pump concretely)		143/145T	42-0500		
	For models	47.0061	(Order pump separately)	3 x 2 x 71/2 4 x 3 x 8				
(ANSI 150 lbc)	3 x 2	47-0001			182/184T	42-0501		
(ANSI 150 IDS)	4 x 3	47-0073			213/215T	42-0502		
Hastelloy C shaft	6 x 4	Change T to H ir change 5th digit	n Model No. & from 2 to 3 in Price Code No.	Motor mounting	42-0504			

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



BULLETIN P-202_P 02/20/20 Page 4 of 4

Proudly Made in the USA, SERFILCO Offers the Widest Range of Chemical Pumps Anywhere.

'EH' Vertical Pump

- Can Run Dry
- Extended Column to 10'
- Flows to 185 gpm, 145 ft. TDH

'HE' Horizontal Pump

- Single or Double Mech. Seal
- Variety of Material Types
- Flows to 175 gpm, 140 ft. TDH

'ME' Magnetic Coupled Pump

- Seal-less Magnetic Coupled
- Polypropylene or PVDF
- Flows to 95 gpm, 54 ft. TDH



'EF' Vertical Pump

- Can Run Dry
- Suction Extension to 3'
- Flows to 400 gpm, 170 ft. TDH



'HF' Horizontal Pump

- Single or Double Mech. Seal
- Variety of Material Types
- Flows to 400 gpm, 160 ft. TDH

'HA' Horizontal Pump

Single or Double Mech. Seal

• Flows to 1200 gpm, 115 ft. TDH

Machined from Solid CPVC



'FE' Magnetic Coupled Pump

- Seal-less Magnetic Coupled
- Polypropylene or PVDF
- Flows to 130 gpm, 97 ft. TDH



'EHM' Vertical Pump

- Can Run Dry
- Suction Extension to 3'
- Flows to 650 gpm, 115 ft. TDH







'FES' Magnetic Coupled Pump

- Seal-less Magnetic Coupled
- · Polypropylene or PVDF
- Flows to 250 gpm, 175 ft. TDH

