



# SERFILCO®

Chemical resistant pumps & filters engineered for industry

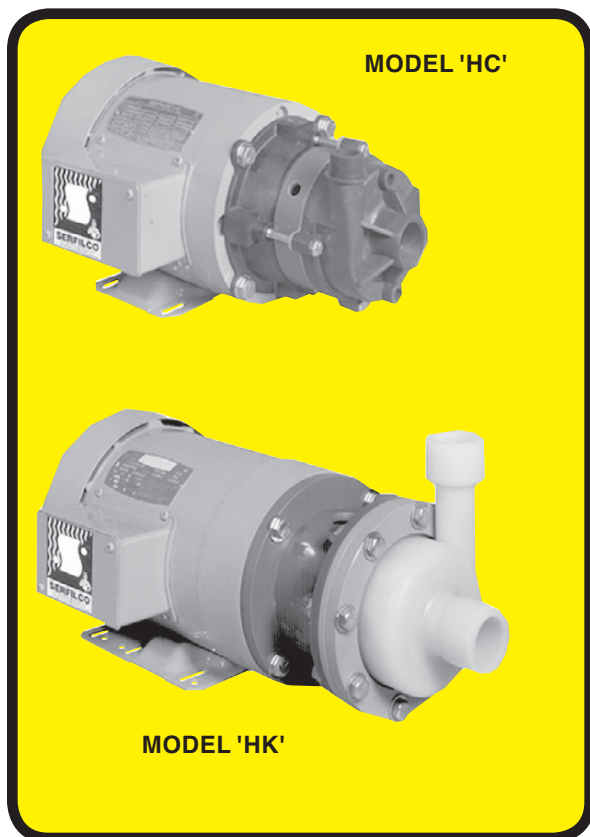
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P-203\_M  
11/01/2020  
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## SERIES 'HC' & 'HK' HORIZONTAL PUMPS

**HIGH EFFICIENCY AND LOW  
ENERGY USAGE FOR:**

**WASTES / ACIDS / PLATING  
CHEMICALS / PHOTOGRAPHIC  
ETCHING / SCRUBBING**

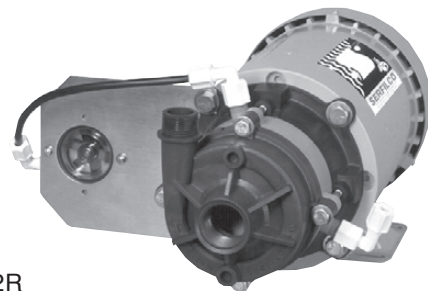
- Flows to 78 U.S. GPM or 53 FT. TDH @ 60 Hz (246 LPM or 11m @ 50 Hz)
- Non-metallic solution contact  
- CPVC or 100% PVDF  
(See a chemical resistance chart)
- Single or double mechanical seal  
Carbon/ceramic or silicon carbide  
EPDM or Viton® elastomers
- Centrifugal — quiet, vibration-free
- Standard models provide non-overloading full flow with liquids to 1.2 S.G.
- Chemical duty motor (1/3 - 1-1/2 HP)  
Sealed oversized bearings, cast iron end bells  
Corrosion resistant two-part epoxy enamel finish,  
stainless steel name plate  
1.15 service factor at 50 and 60 Hz



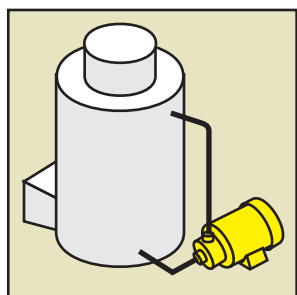
**Series 'HC' & 'HK' Horizontal Pumps** feature "total" chemical resistance with non-metallic construction of all wetted components. The molded, semi-enclosed impellers are designed to provide maximum pumping efficiency. These pumps feature external single seal or double water-flushed mechanical seal with choice of EPDM or Viton elastomer materials.

Available close-coupled to minimize size or long-coupled with bearing pedestal base plate and motor. All close-coupled pumps are driven by chemical duty motors suitable for continuous duty in corrosive environments.

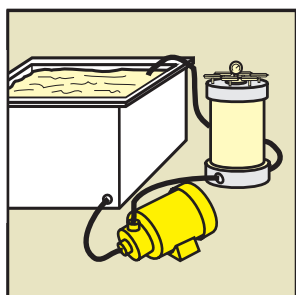
Pumps are ideal for transferring and recirculating industrial solutions, plating solutions, process chemicals and other fluid handling applications.



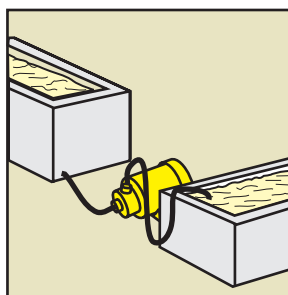
**MODEL HC1 x 3/4 w/**  
double mechanical  
water-flush seal and  
available DRI-STOP 2R



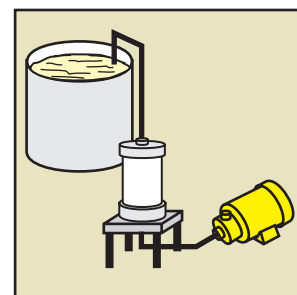
FUME SCRUBBING



CLEANING & DESCALING

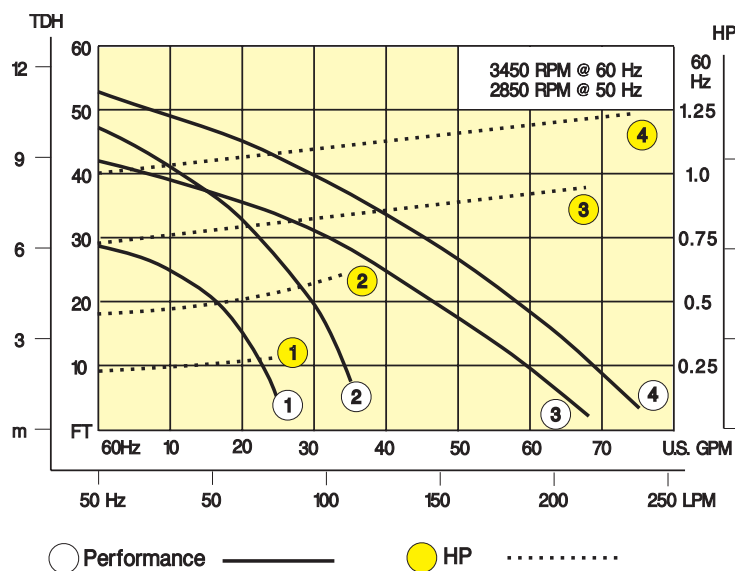


WASTE TREATMENT



SOLUTION TRANSFER  
w/PRIMING CHAMBER

## SERIES 'HC' & 'HK' Flow Curves & Dimensions



Series 'HC' pumps have 1" FNPT suction x 3/4" MNPT discharge and are available in CPVC or 100% PVDF. Series 'HK' pumps have 1 1/2" MNPT suction x 1 1/2" MNPT discharge and are available in CPVC with PVDF suction casing or 100% PVDF. Standard elastomers are Viton, EPDM is available.

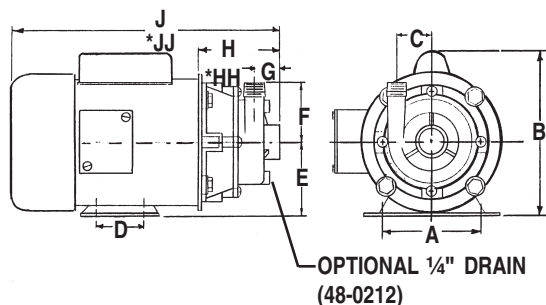
All models utilize a molded, semi-enclosed impeller. Mechanical seal is Type 21, externally mounted with stainless steel components not in solution contact. Double mechanical seal is designed for flushing the seal chamber with water and is recommended for applications where abrasives or salts are present, or for conditions where metal deposition will occur. In addition, double water flush sealed pumps will permit dry run operation.

Standard mechanical seal faces are silica-free ceramic/carbon (M1) and (M2). Silicon carbide seal faces (M8) are available and recommended for critical applications.

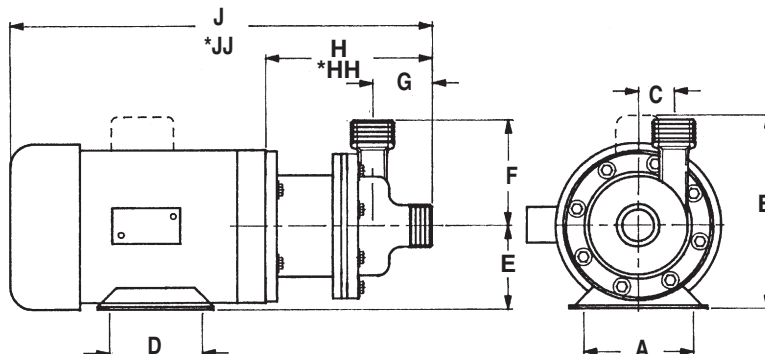
Motors are chemical duty with sealed oversize bearings, cast iron end bells, two-part epoxy finish, and stainless steel tag. Motors are rated with 1.15 service factor at 50 or 60 Hz.

### DIMENSIONS

MODEL HC1 x 3/4



MODEL HK1-1/2 x 1-1/2

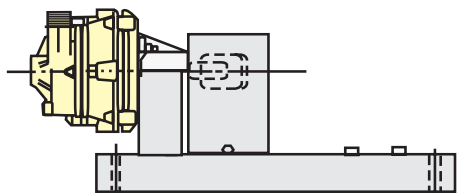


MODEL	DIMENSIONS										MAX.	MAX.
		A	B	C	D	E	F	G	H	* HH	J	* JJ
HC1 x 3/4	Inches (mm)	4-7/8 (124)	9 (229)	1-11/16 (43)	3 (76)	3-1/2 (89)	2-3/4 (70)	1-13/32 (36)	4-5/16 (110)	5-7/32 (133)	13-1/16 (332)	14 (356)
HK1-1/2 x 1-1/2	Inches (mm)	5-1/2 (140)	9 (229)	1-1/2 (38)	4 (102)	3-1/2 (89)	5 (127)	2-9/16 (65)	7-1/4 (184)	7-1/4 (184)	18-1/4 (464)	18-1/4 (464)

### LONG-COUPLED KIT

Long-Coupled Kit includes bearing pedestal frame (plastic for HC and cast iron for HK), fiberglass reinforced channel (23.5" x 10" x 2.75"), flexible coupling and guard, and stainless steel fasteners. To order unit assembled with motor, add

\* HH and JJ are double seal dimensions.



TO ORDER LONG COUPLED KIT	ADD TO MODEL NO.	PRICE CODE NO.
For 56 frame (HC1 x 3/4 pump) For 143T & 145T frame (HK1-1/2 x 1-1/2 pump)	- LCK-1 - LCK-2	42-0210 42-0217A
Assembled with motor		42-0204

## SERIES 'HC' & 'HK' Specifications

### ORDERING INFORMATION

**TABLE I**

Select flow curve with desired performance. Select CPVC or PVDF. All models have carbon/SF<sup>1</sup> ceramic seal, Viton elastomers, and single or three phase motor. Motor HP is non-overloading for full flow at 1.2 S.G.

MAX. FLOW*	CURVE	CPVC SINGLE SEAL		CPVC DOUBLE SEAL	
		MODEL	PRICE CODE NO.	MODEL	PRICE CODE NO.
25	1	HC1 x ¾C1V(M2) C.3	47-0612 A	HC1 x ¾C1V(M2 x M1) C.3	47-0615 A
35	2	HC1 x ¾C2V(M2) C.75	47-0622 C	HC1 x ¾C2V(M2 X M1) C.75	47-0625 C
67	3	HK1½ x 1½CK3V(M2) D1.0	47-0832 F	HK1½ x 1½CK3V(M2 X M1) D1.0	47-0835 F
75	4	HK1½ x 1½CK4V(M2) D1.5	47-0842 H	HK1½ x 1½CK4V(M2 x M1) D1.5	47-0845 H
		PVDF SINGLE SEAL		PVDF DOUBLE SEAL	
		MODEL	PRICE CODE NO.	MODEL	PRICE CODE NO.
25	1	HC1 x ¾K1V(M2) C.3	47-0712 A	HC1 x ¾K1V(M2 x M1) C.3	47-0715 A
35	2	HC1 x ¾K2V(M2) C.75	47-0722 C	HC1 x ¾K2V(M2 x M1) C.75	47-0725 C
67	3	HK1½ x 1½K3V(M2) D1.0	47-0932 F	HK1½ x 1½K3V(M2 x M1) D1.0	47-0935 F
75	4	HK1½ x 1½K4V(M2) D1.5	47-0942 H	HK1½ x 1½K4V(M2 x M1) D1.5	47-0945 H

\* US GPM @ 60 Hz

**TABLE II**

To construct model/price code number for pump with EPDM elastomers, SiC seal, three phase motor or increased horsepower, see chart below. Use price code number to order.

PUMP		
MATERIAL	MODEL	PRICE CODE NO.
CPVC	HC1 x 3/4C	47-06
100% PVDF	HC1 x 3/4K	47-07
CPVC / PVDF	HK1-1/2 x 1-1/2CK	47-08
100% PVDF	HK1-1/2 x 1-1/2K	47-09

IMPELLER	
FLOW CURVE	ADD TO MODEL & PCN
1	1
2	2
3	3
4	4

"O"-RING & TYPE 21 MECHANICAL SEAL		
MATERIAL (SOLUTION CONTACT)	ADD TO. . .	
	MODEL	PCN
SINGLE SEAL		
EPDM, carbon SF <sup>1</sup> ceramic	L(M1)	1
EPDM, silicon, carbide	L(M8)	0
Viton, carbon SF <sup>1</sup> ceramic	V(M2)	2
Viton, silicon carbide	V(M8)	7
DOUBLE SEAL		
EPDM, carbon SF <sup>1</sup> ceramic	L(M1xM1)	4
EPDM, silicon, carbide	L(M8xM1)	9
Viton, carbon SF <sup>1</sup> ceramic	V(M2xM1)	5
Viton, silicon carbide	V(M8xM1)	8

MOTOR, TEFC, "C" FACE				PUMP & MOTOR SHIP. WT. (Lbs.)	
FLOW CURVE	VOLTAGE DESIGNATION	HP	ADD TO . . .		
			MODEL		PCN
1-2	- C Single phase 115-190-230V/1/50-60	1/3	-C.3	A	25
			-D.3	B	25
3/4		-C.75	C	30	
		-D.75	D	25	
3-4	- D Three phase 230-460V/3/50-60 or 380-415V/3/50	1	-C1.0	E	40
			-D1.0	F	30
		1-1/2	-C1.5	G	45
			-D1.5	H	35

<sup>1</sup> SF= Silica-free ceramic.

<sup>1</sup> SF= Silica-free ceramic.

**EXAMPLE:**

PUMP + IMPELLER + ELASTOMER & MECHANICAL SEAL + MOTOR = PRICE CODE NO.  
HK1½ x 1½K + 3 + V(M8 x M1) + D1.5 = 47-0938 H

Registered trademarks: Noryl - General Electric; Viton - DuPont Dow Elastomers.



# PERFECT PUMPS FOR CHEMICALS

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**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



## **'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



## **'HA' Horizontal Pump**

- Single or Double Mech. Seal
- Machined from Solid CPVC
- Flows to 1200 gpm, 115 ft. TDH



## **'FES' Magnetic Coupled Pump**

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

