

SERFILCO®
INTERNATIONAL

SERIES HF HORIZONTAL PUMP

BULLETIN
P-208
Jan 2010



The series 'HF' Horizontal Pump represents the next generation of moulded pumps from SERFILCO. The 'HF' retains a robust design and non-metallic solution contact to meet the most demanding applications while providing the choice of materials of construction and economy found in all of our moulded pumps.

The 'HF' is offered in a choice of SERFILCO exclusive high temperature polypropylene or CPVC construction and is ANSI dimensional with the optional flanged connections.

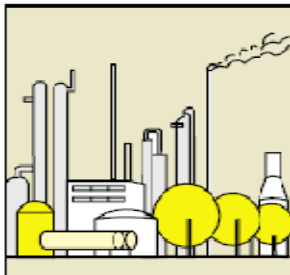
**HIGH FLOW, HIGH TDH
ANSI DIMENSIONAL
HIGH EFFICIENCY / LOW ENERGY USAGE**

- **Flows to 400 U.S GPM or 170 ft. TDH @ 60 Hz**
(1250 L/min or 42 m @ 50 Hz)
- **Non-metallic solution contact**
High temperature polypropylene or CPVC
(Refer to a chemical resistance chart)
- **Centrifugal – quiet, vibration free**
- **Choice of single or double mechanical seal**
With EPDM or Viton® elastomers
- **Choice of long or close-coupled**
- **Chemical Duty motor – Standard**
Sealed oversized bearings, cast iron end bells,
corrosion resistant two part epoxy coating,
stainless steel nameplate
- **ANSI dimensional – with optional flanged**

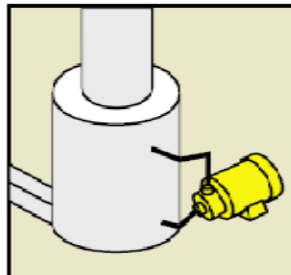
The totally enclosed impeller is moulded to close tolerances which allows peak horsepower efficiency across a broad range of operational flow and head requirements.

The external mechanical seal and impeller sleeve design isolates metal components to provide non-metallic solution contact with the pumped liquid. The standard (M8) seal assembly has silicon carbide seal faces and is the most durable and longest lasting mechanical seal available. Double mechanical seal models require water lubrication of the seal faces and allow the pump to be used for solutions containing abrasives, high salt concentrations and for electroless plating solutions.

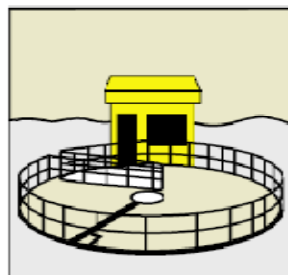
TYPICAL APPLICATIONS



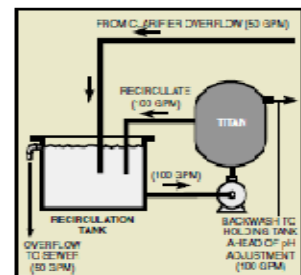
PETROCHEMICAL



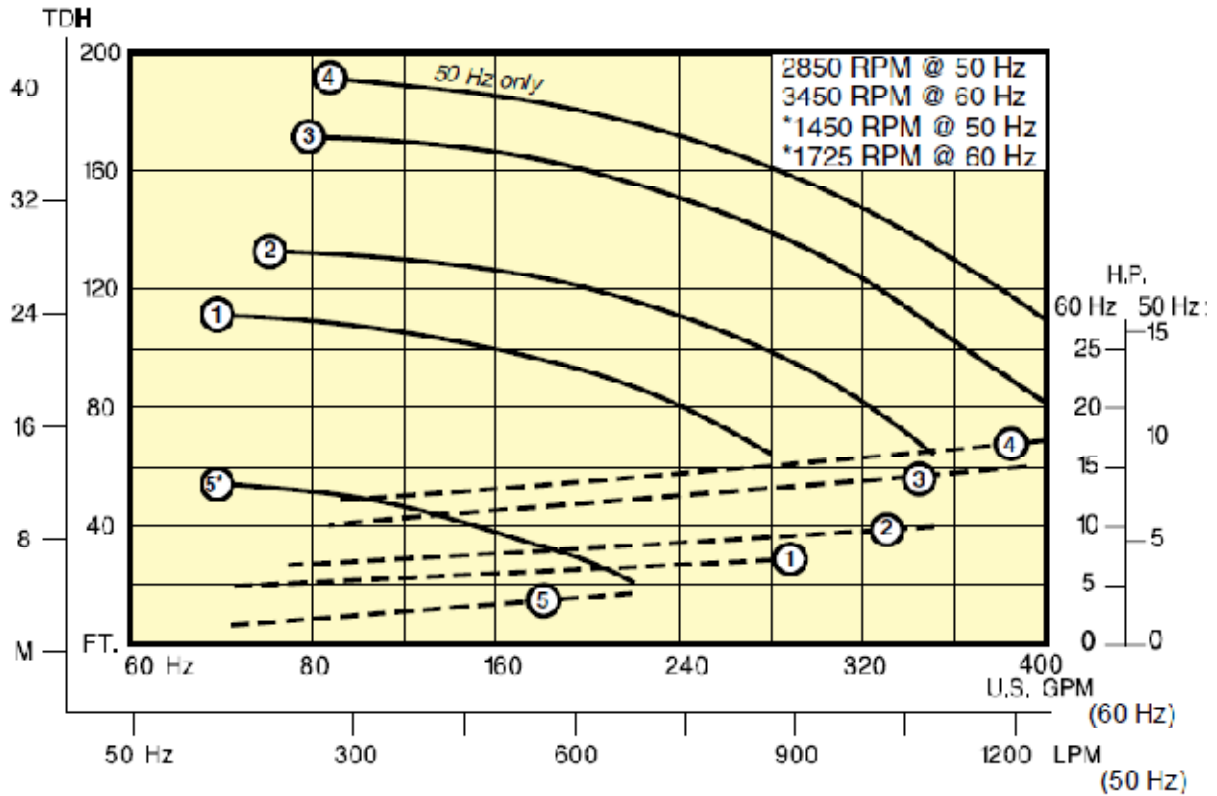
FUME SCRUBBER



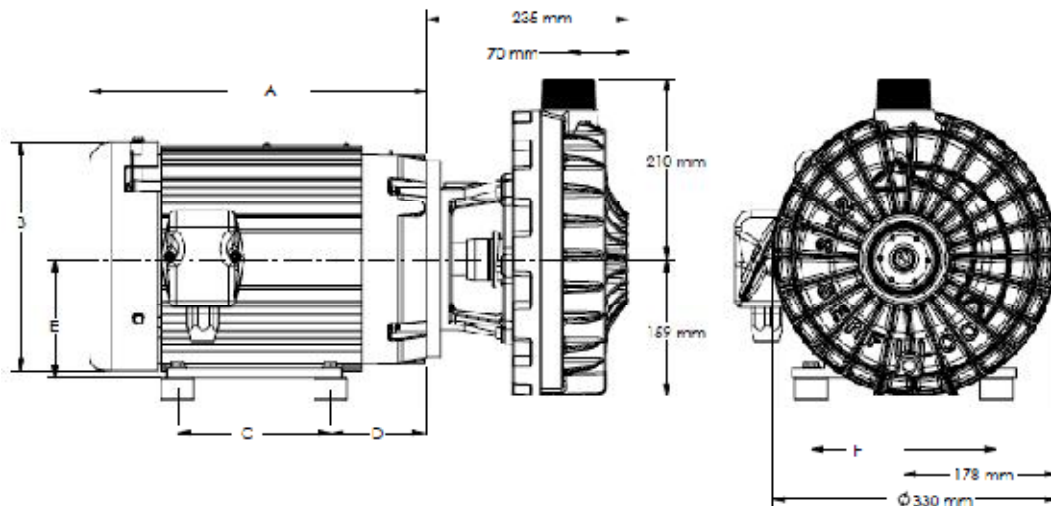
WASTE TREATMENT



FILTER SYSTEMS



DIMENSIONS



MOTOR DIMENSIONS IN MM - DIMENSIONS MAY VARY WITH MOTOR MANUFACTURER

kW	A	B	C	D	E	F
2.2(1450 rpm)	312	221	114	71	114	191
4.0(2850 rpm)	356	221	140	71	114	191
5.5(2850 rpm)	371	262	140	89	135	216
7.5(2850 rpm)	374	288	170	89	135	216



Pumps are moulded of SERFILCO exclusive high temperature polypropylene or CPVC and have sleeved stainless steel shafts for non-metallic solution contact. All models have an enclosed impeller and externally mounted Type 21 mechanical seal with silicon carbide deal faces. ANSI 150 lb. Flange connections are optional. Standard O-rings are EPDM (ethylene propylene).

External hardware not in liquid contact is stainless steel. Motor is coated with two-part epoxy.

A double mechanical seal is recommended for solutions containing abrasives, high temperature and other critical service.

TO ORDER use Price Code Number

**FOR STANDARD PUMP MOTOR COMBINATION, SELECT MODEL FROM TABLE 1.
FOR CUSTOM PUMP MOTOR COMBINATION, SELECT FROM TABLE 2 ON PAGE 4.**

TABLE 1

STANDARD MODELS

For performance curves graph, select flow curve number providing the desired performance. Then match to Model Number listed below. Standard models include silicon carbide single mechanical seal and EPDM (ethylene propylene) elastomers. Motor HP is non-overloading at full capacity.

50 Hz Models with Metric Motors and single mechanical seal (silicon carbide)					
FLOW CURVE	MODEL NUMBER	PRICE CODE NO.	FLOW CURVE	MODEL NUMBER	PRICE CODE NO.
	POLYPROPYLENE/EPDM			CPVC/Viton	
1	HF3 x 2-PM-1L(M8)-DM5.0	47-5111-DM	1	HF3 x 2-CM-1V(M8)-DM5.0	47-5017-DM
2	HF3 x 2-PM-2L(M8)-DM7.5	47-5121-EM	2	HF3 x 2-CM-2V(M8)-DM7.5	47-5027-EM
3	HF3 x 2-PM-3L(M8)-DM10.0	47-5131-FM	3	HF3 x 2-CM-3V(M8)-DM10.0	47-5037-FM
4	HF3 x 2-PM-4L(M8)-DM10.0	47-5141-FM	4	HF3 x 2-CM-4V(M8)-DM10.0	47-5047-FM
5	HF3 x 2-PM-5L(M8)-HM3.0	47-5151-CM	5	HF3 x 2-CM-5V(M8)-DM3.0	47-5057-CM

50 Hz Models with Metric Motors and double mechanical seals (silicon carbide/ceramic)					
FLOW CURVE	MODEL NUMBER	PRICE CODE NO.	FLOW CURVE	MODEL NUMBER	PRICE CODE NO.
	POLYPROPYLENE/EPDM			CPVC/Viton	
1	HF3 x 2-PM-1L(M8xM1)-DM5.0	47-5114-DM	1	HF3 x 2-CM-1V(M8xM1)-DM5.0	47-5018-DM
2	HF3 x 2-PM-2L(M8xM1)-DM7.5	47-5124-EM	2	HF3 x 2-CM-2V(M8xM1)-DM7.5	47-5028-EM
3	HF3 x 2-PM-3L(M8xM1)-DM10.0	47-5134-FM	3	HF3 x 2-CM-3V(M8xM1)-DM10.0	47-5038-FM
4	HF3 x 2-PM-4L(M8xM1)-DM10.0	47-5144-FM	4	HF3 x 2-CM-4V(M8xM1)-DM10.0	47-5048-FM
5	HF3 x 2-PM-5L(M8xM1)-HM3.0	47-5154-CM	5	HF3 x 2-CM-5V(M8xM1)-HM3.0	47-5058-CM

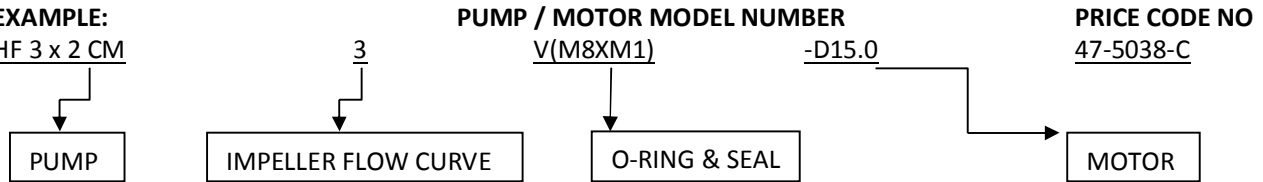


TABLE 2

CUSTOM MODELS

To determine pump model for a specified gpm, TDH, material and specific gravity (SG), 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 SG Select pump, O-ring, mechanical seal, and motor to construct Model and Price Code No.

EXAMPLE:
HF 3 x 2 CM



PUMP	PRICE CODE NO.
CPVC HF 3X2CM	47-50
HIGH TEMP PP HF 3X2PM	47-51

FLOW CURVE NO.	ADD TOδ	
	MODEL NO.	PRICE CODE NO.
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5

O-RING & MECHANICAL SEAL MATERIAL (SOLUTION CONTACT)	ADD TOδ	
	MODEL NUMBER	PRICE CODE NO.
SINGLE MECHANICAL SEAL		
EPDM SILICON CARBIDE	L(M8)	1
VITON SILICON CARBIDE	V(M8)	7
DOUBLE MECHANICAL SEAL		
EPDM SILICON CARBIDE	L(M8XM1)	4
VITON SILICON CARBIDE	V(M8XM1)	8

FREQ RPM	METRIC MOTORS	
	ADD TOδ .	
	HP MODEL NUMBER	PRICE CODE NO.
50 Hz	DM5.0	DM
2850	DM7.5	EM
	DM10.0	FM
50Hz	HM3.0	CM
1450		

OPTIONS

DESCRIPTION	ADD TO MODEL	PRICE CODE NO
Trimmed impeller to meet specified flow	-	47-0084
Hastelloy C shaft	-HC	HC
Flange connections ANSI dimensional	-F	X

LONG COUPLING KIT ³		
FOR MODEL	FOR MOTOR FRAME	PRICE CODE NO
HF 3 x 2	182/184T	42-0501
	213/215T	42-0502
Motor mounting		42-0504

³ LONG COUPLING KIT INCLUDES CAST IRON BEARING PEDESTAL FRAME, FRP CHANNEL, FLEXIBLE COUPLING, GUARD



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