



SERFILCO®
INTERNATIONAL

SERIES 'EH' VERTICAL PUMPS

BULLETIN
P-301
Jan 2010



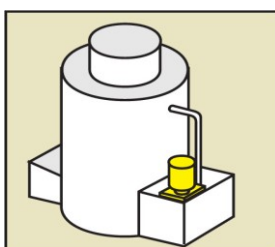
**HIGH EFFICIENCY AND LOW ENERGY
USAGE FOR:**

**PLATING / WET PROCESSING / ACIDS
CHEMICALS / FUME SCRUBBERS and
CLEANING SOLUTIONS**

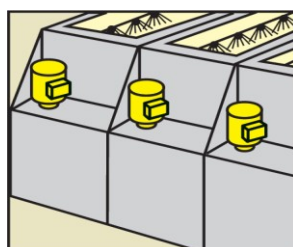
- **Flows to 580 LPM or 31m @ 50 Hz, 185 U.S GPM or 145 FT. TDH @ 60 Hz**
- **Non-metallic solution contact**
-PPP high temperature polypropylene construction, CPVC, PVDF or ECTFE-T
- **Shaft vapour seal protects motor bearing**
- **Runs dry – no bearings**
- **Chemical duty motor (1.0 – 7.5 HP)**
- **Centrifugal – quiet, vibration-free**
- **In or Out-of-tank installation**
- **Choice of 12" or 18" column**
- **NPT or BSP connections**

The series 'EH' Sump Pump features cantilevered, sleeved, stainless steel shaft with vapour seal between the rotating shaft and the support column to further protect the motor. The cantilevered shaft eliminates bearings and conventional pump seals resulting in a pump that can run dry without damage. A compound impeller prevents liquid from rising in the column, even at maximum TDH, while the fully – enclosed bottom impeller provides high hydraulic efficiency at low horsepower.

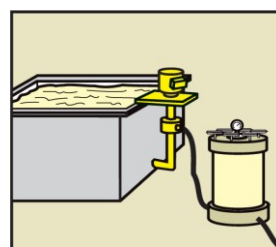
A unique characteristic of all Series 'EH' pumps is their ability to lift solution with an optional suction extension pipe installed. With the motor energised, the pump will self-prime when liquid is at impeller level. The solution level will then be pumped down to the end of the suction extension to a maximum depth of 9 ft. (2.7m). The pump will lose prime, then automatically re-prime when liquid again reaches the impeller.



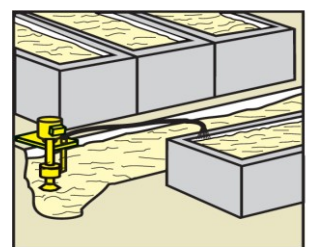
FUME SCRUBBING



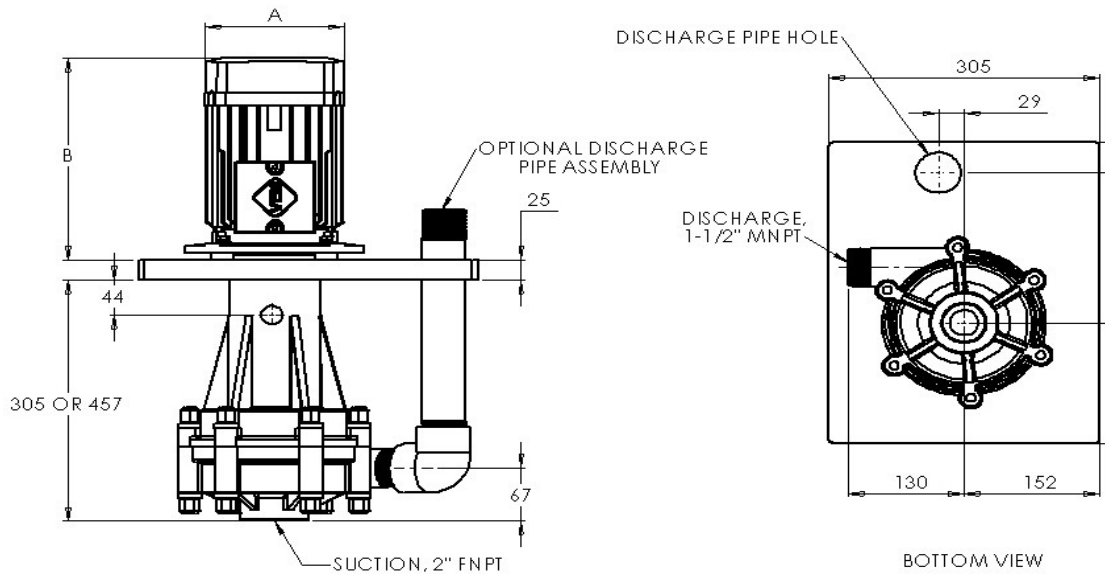
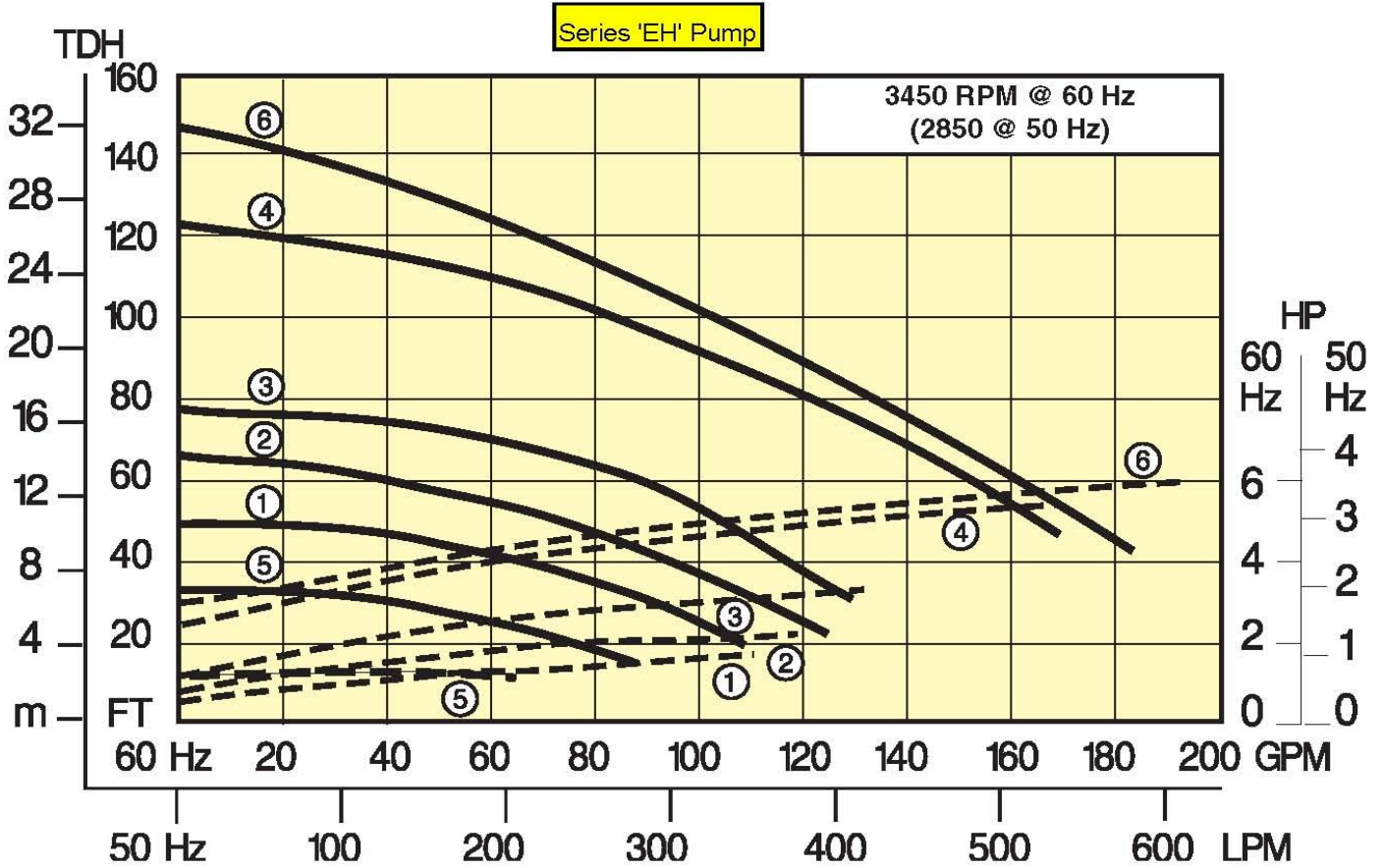
PCB WET PROCESSING



OUT-OF-TANK PUMPING



SUMP DRAINING and
WASTE TREATMENT



THIS SHOWS A STANDARD CPVC OR PP PUMP, PVDF PUMPS ARE FITTED WITH A 298 x 298 MOUNTING PLATE
 BSP CONNECTIONS ARE AVAILABLE, CONTACT SALES FOR DETAILS



Pump models are constructed of CPVC, Polypropylene, PVDF, or ECTFE-T with sleeved stainless steel shaft. Mounting plate is 1" (25mm) thick and includes PTFE vapour seal. Standard "O"-rings are EPDM (ethylenepropylene) on CPVC, PP and Halar® pumps, and Viton® on PVDF pumps. Impeller is fully enclosed for maximum efficiency, compound design with pressure plate.

Assembly offers non-metallic solution contact. Chemical duty motors are 1 or 3 phase, TEFC, 50 or 60 Hz, 2850 or 3450 or 1450 or 1750 RPM, IP55, Efficiency 2 painted with two-part epoxy enamel. May be used with up to a 9 ft. (2.7m) suction extension under certain conditions. The pump discharge orientation can be relocated in increments of 60°.

For standard CPVC, PP, and PVDF pump-motor combination, select model from TABLE I.

For other pump-motor combinations, select from components in TABLE II.

TO ORDER, use Price Code Number

TABLE I

Select flow curve number providing the desired performance. Then match to Model Numbers listed below. Motor HP is non-overloading at full capacity.

50 Hz Models with Metric Motors - EH PUMPS WITH 305MM(12") COLUMN LENGTH						
FLOW CURVE	MODEL NUMBER	PRICE CODE NO.	MODEL NUMBER	PRICE CODE NO.	MODEL NUMBER	PRICE CODE NO.
	POLYPROPYLENE		CPVC		PVDF	
1	EHP 11/2 -1SC-DM1.0-B	45-0611-MB	EH 11/2 -1SC-DM1.0-B	45-0111-MB	EHK 11/2 -1SC-DM1.0	45-0711-M
2	EHP 11/2 -2SC-DM1.5-B	45-0622-MB	EH 11/2 -2SC-DM1.5-B	45-0122-MB	EHK 11/2 -2SC-DM1.5	45-0722-M
3	EHP 11/2 -3SC-DM2.0-B	45-0633-MB	EH 11/2 -3SC-DM2.0-B	45-0133-MB	EHK 11/2 -3SC-DM2.0	45-0733-M
4	EHP 11/2 -4SC-DM3.0-B	45-0644-MB	EH 11/2 -4SC-DM3.0-B	45-0144-MB	EHK 11/2 -4SC-DM3.0	45-0744-M
5	EHP 11/2 -5SC-HM1.0-B	45-0651-HMB	EH 11/2 -5SC-HM1.0-B	45-0151-HMB	EHK 11/2 -5SC-HM1.0	45-0751-HM
6	EHP 11/2 -5SC-DM4.0-B	45-0655-MB	EH 11/2 -5SC-DM4.0-B	45-0155-MB	EHK 11/2 -5SC-DM4.0	45-0755-M

50 Hz Models with Metric Motors - EHLX PUMPS WITH 457MM(18") COLUMN LENGTH						
FLOW CURVE	MODEL NUMBER	PRICE CODE NO.	MODEL NUMBER	PRICE CODE NO.	MODEL NUMBER	PRICE CODE NO.
	POLYPROPYLENE		CPVC		PVDF	
1	EHPLX 11/2 -1SC-DM1.0-B	45-1311-MB	EHLX 11/2 -1SC-DM1.0-B	45-0911-MB	EHLX 11/2 -1SC-DM1.0	45-1411-M
2	EHPLX 11/2 -2SC-DM1.5-B	45-1322-MB	EHLX 11/2 -2SC-DM1.5-B	45-0922-MB	EHLX 11/2 -2SC-DM1.5	45-1422-M
3	EHPLX 11/2 -3SC-DM2.0-B	45-1333-MB	EHLX 11/2 -3SC-DM2.0-B	45-0933-MB	EHLX 11/2 -3SC-DM2.0	45-1433-M
4	EHPLX 11/2 -4SC-DM3.0-B	45-1344-MB	EHLX 11/2 -4SC-DM3.0-B	45-0944-MB	EHLX 11/2 -4SC-DM3.0	45-1444-M
5	EHPLX 11/2 -5SC-HM1.0-B	45-1351-HMB	EHLX 11/2 -5SC-HM1.0-B	45-0951-HMB	EHLX 11/2 -5SC-HM1.0	45-1451-HM
6	EHPLX 11/2 -5SC-DM4.0-B	45-1355-MB	EHLX 11/2 -5SC-DM4.0-B	45-0955-MB	EHLX 11/2 -5SC-DM4.0	45-1455-M

STANDARD MOTOR SIZES FOR PUMPS AT 50Hz

Flow Curve	kW	HP	Phase	Speed RPM	Full Load Current @ 380 Volts	Flow Curve	kW	HP	Phase	Speed RPM	Full Load Current @ 380 Volts
1	0.75	1	3	2850	1.95 amps	4	2.2	3	3	2850	5.11 amps
2	1.1	1.5	3	2850	2.75 amps	5	0.75	1	3	1450	1.95 amps
3	1.5	2	3	2850	3.55 amps	6	3	4	3	2850	6.66 amps



TABLE 2

To determine pump model for a specified l/min, TDH, material and specific gravity, select performance point on curve. Determine required HP by moving vertically to corresponding number dotted line. Read required HP at right ordinate and multiply by S.G. Select pump, impeller and motor

PUMP		
MATERIAL	MODEL	PRICE CODE NO.
CPVC	EH 1 1/2	45-01
CPCV - 457mm	EHLX 1 1/2	45-09
PP*	EHP	45-06
PP - 457mm	EHPLX 1 1/2	45-13
PVDF	EHK	45-07
PVDF - 457mm	EHLX 1 1/2	45-14
ECTFE-T	EHH 1 1/2	45-19

IMPELLER		
FLOW CURVE NO.	ADD TO...	
	MODEL	P.C.NO.
1	- 1 SC	- 1
2	- 2 SC	- 2
3	- 3 SC	- 3
4	- 4 SC	- 4
5	- 5 SC	- 5
6	- 5 SC	- 5

MOTOR (METRIC)							
VOLTAGE FREQUENCY SPEED	STD Kw(HP)	ADD TO....		DIMENSIONS			
		MODEL NO.	PRICE CODE NO.	A		B	
				mm	inches	mm	inches
220/380/440 VOLT 3 PHASE 50Hz 2850 RPM	0.75(1.0)	-DM1.0	1-M	130	5.1	181	7.1
	1.1(1.5)	-DM1.5	2-M	139	5.5	218	8.6
	1.5(2.0)	-DM2.0	3-M	157	6.2	234	9.2
	2.2(3.0)	-DM3.0	4-M	157	6.2	256	10.1
	3.0(4.0)	-DM4.0	5-M	177	7.0	400	15.7
	4.0(5.3)	-DM5.0	6-M	177	7.0	400	15.7
220/380/440 VOLT 3 PHASE 50Hz 1450 RPM	0.75(1.0)	-HM1.0	3-HM	130	5.1	181	7.1

PUMP + MOTOR	
SHIPPING WEIGHTS ²	
KG	LBS
26	57
28	62
30	66
32	70
37	81
40	88
26	57

¹ To order pump without motor, use 0 for motor Price Code No.

*PP is glass filled.

² Motor dimensions for references only.

OPTIONAL EQUIPMENT FOR EH PUMPS

Description	Materials	Adder Code	Description	Materials	Adder Code
Suction Strainer	CPVC (PE)	01-8967-C	DPA terminating 50MM Socket Union above Mtng Plate	CPVC	01-8965-C
	PP (PE)	01-8967-PP		PP	01-8965-PP
	PVDF(Halar)	45-0162-HK		PVDF	01-8965-K
*Suction Extension 24"	CPVC	01-8968-C	Viton O Ring	to PP Pump	add -V to Code
	PP	01-8968-PP		to CPVC Pump	add -V to Model
	PVDF	45-0163-K	PVDF IMPELLER	to CPVC Pump	add -K to Code
DPA terminating 1.1/2" MBSP above Mtng Plate	CPVC	01-8966-C-B			add -K to Model
	PP	01-8966-PP-B	ADD - LX FOR OPTIONS ON LX PUMPS		
	PVDF	01-8966-K			

