



SERFILCO®
INTERNATIONAL

SERIES "EF" VERTICAL PUMPS

BULLETIN
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Feb 2012



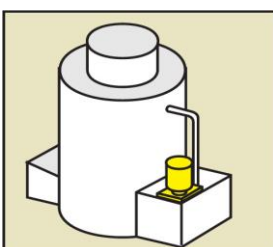
The series 'EF' Sump Pump features cantilevered, sleeved, stainless steel shaft with vapour seal between the rotating shaft and the support column to further protect the motor. The cantilevered shaft eliminates bearings and conventional pump seals resulting in a pump that can run dry without damage. 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.

HIGH EFFICIENCY AND LOW ENERGY USAGE FOR:

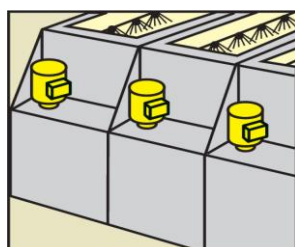
**PLATING / WET PROCESSING / ACIDS
CHEMICALS / FUME SCRUBBERS and
CLEANING SOLUTIONS**

- Flows to 1250 LPM or 42M @ 50 Hz, 400 U.S GPM or 170 FT. TDH @ 60 Hz
- Non-metallic solution contact
-PP high temperature polypropylene construction or CPVC
- Shaft vapour seal protects motor bearing
- Runs dry – no bearings
- Chemical duty motor (4 kW– 10 kW)
- Centrifugal – quiet, vibration-free
- In or Out-of-tank installation
- Choice of 355mm (14") or 432mm (17") column length
- NPT or FLANGE connections

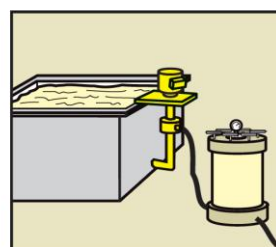
A unique characteristic of all Series 'EH' pumps is their ability to lift solution with an optional suction extension pipe installed. With the motor energised, the pump will self-prime when liquid is at impeller level. The solution level will then be pumped down to the end of the suction extension to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



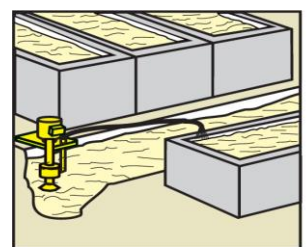
FUME SCRUBBING



PCB WET PROCESSING



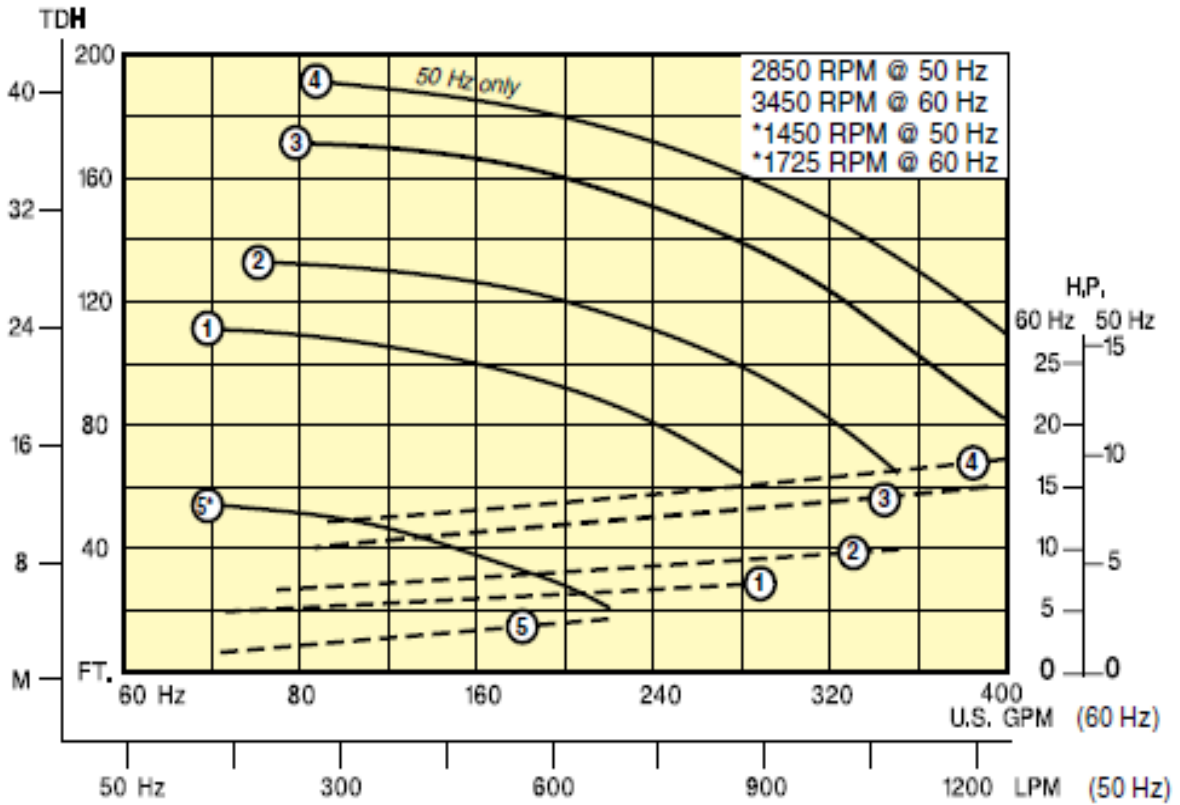
OUT-OF-TANK PUMPING
and FILTRATION



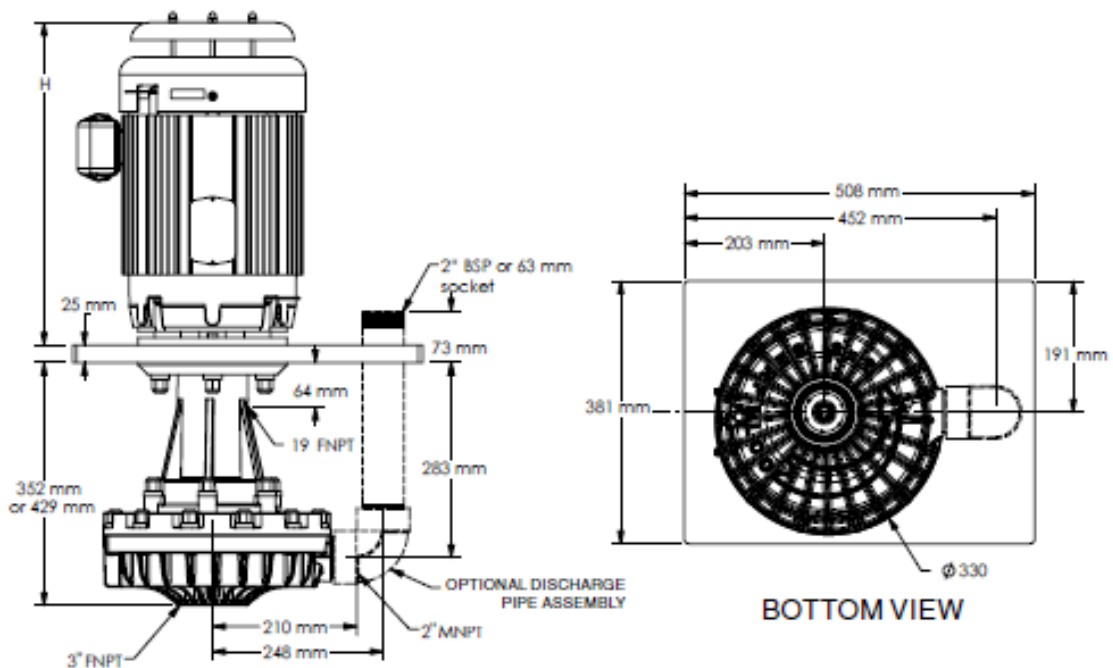
SUMP DRAINING and
WASTE TREATMENT



SERIES EF PUMPS – PERFORMANCE CURVES



DIMENSIONS IN MM





Pump models are moulded in CPVC or SERFILCO exclusive high temperature Polypropylene with sleeved stainless steel shaft for non metallic solution contact. The 25.5mm thick mounting plate is polypropylene or PVC and includes a PTFE vapour seal to protect motor. The compound impeller is fully enclosed for maximum efficiency

The Chemical duty Metric motors are 3 phase, TEFC, 50 or 60 Hz, 2850 or 3450 or 1450 or 1750 RPM, IP55, Efficiency I2 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, 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

STANDARD MODELS

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

EF PUMPS WITH 352mm LENGTH BELOW MOUNTING PLATE AND FITTED WITH 50 HZ METRIC MOTORS					
FLOW CURVE	MODEL NUMBER	PRICE	FLOW CURVE	MODEL NUMBER	PRICE CODE NO.
	POLYPROPYLENE	CODE NO.		CPVC	
1	EFP 3 X 2 -1SC-DM5.0	45-2214M	1	EF 3 X 2 -1SC-DM5.0	45-2014M
2	EFP 3 X 2 -2SC-DM7.5	45-2225M	2	EF 3 X 2 -2SC-DM7.5	45-2025M
3	EFP 3 X 2 -3SC-DM10.0	45-2236M	3	EF 3 X 2 -3SC-DM10.0	45-2036M
4	EFP 3 X 2 -4SC-DM10.0	45-2246M	4	EF 3 X 2 -4SC-DM10.0	45-2046M
5	EFP 3 X 2 -5SC-HM3.0	45-2253M	5	EF 3 X 2 -5SC-HM3.0	45-2053M

EFLX PUMPS WITH 429mm LENGTH BELOW MOUNTING PLATE AND FITTED WITH 50 HZ METRIC MOTORS					
FLOW CURVE	MODEL NUMBER	PRICE	FLOW CURVE	MODEL NUMBER	PRICE CODE NO.
	POLYPROPYLENE	CODE NO.		CPVC	
1	EFPLX 3 X 2 -1SC-DM5.0	45-2314M	1	EFLX3 X 2 -1SC-DM5.0	45-2114M
2	EFPLX 3 X 2 -2SC-DM7.5	45-2325M	2	EFLX 3 X 2 -2SC-DM7.5	45-2125M
3	EFPLX 3 X 2 -3SC-DM10.0	45-2336M	3	EFLX 3 X 2 -3SC-DM10.0	45-2136M
4	EFPLX 3 X 2 -4SC-DM10.0	45-2346M	4	EFLX 3 X 2 -4SC-DM10.0	45-2146M
5	EFPLX 3 X 2 -5SC-HM3.0	45-2353M	5	EFLX 3 X 2 -5SC-HM3.0	45-2153M

TABLE 2 ON NEXT PAGE

CUSTOM MODELS

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 and construct Model and Price Code No.



TABLE 2

EXAMPLE: PUMP + IMPELLER + MOTOR = PRICE CODE NO.
 EF3 X 2 + -2SC + -DM7.5 = 45-2025M

PUMP		
MODEL	MATERIAL & COLUMN LENGTH	PRICE CODE NO.
EF3 X 2	CPVC-355 mm	45-20
EFLX3 X 2	CPVC-432 mm	45-21
EFP3 X 2	PP-355 mm	45-22
EFPLX3 X 2	PP-432 mm	45-23

IMPELLER		
FLOW CURVE NO.	ADD TO:	
	MODEL	PRICE CODE NO.
1	-1SC	1
2	-2SC	2
3	-3SC	3
4	-4SC	4
5	-5SC	5

MOTOR (METRIC)			
VOLTAGE FREQUENCY SPEED	STD KW	ADD TO....	
		MODEL NO.	PRICE CODE NO.
220/380/440 VOLT 3 PHASE 50Hz 2850 RPM	4.0	-DM5.0	4M
	5.5	-DM7.5	5M
	7.5	DM10.0	6M
220/380/440 VOLT 3 PHASE 50Hz 1450 RPM	2.2	-HM3.0	3HM

MOTOR (METRIC)			
DIMENSIONS			
DIAMETER		HEIGHT (H)	
mm	inches	mm	inches
177	7.0	400	15.7
196	7.7	359	14.1
196	7.7	359	14.1
157	6.2	256	10.1

PUMP + MOTOR	
SHIPPING WEIGHTS ²	
KG	LBS
65	143
73	160
89	196
61	134

OPTIONAL EQUIPMENT

EF PUMPS WITH 355mm LENGTH COLUMN	
DESCRIPTION	
Discharge pipe assy terminating with socket union above mounting late	PRICE CODE
Polypropylene - 63mm S/Union	01-8909-PP
CPVC - 63mm S/Union	01-8909-C
Discharge pipe assy terminating with MBSP threads above mounting late	PRICE CODE
Polypropylene -2" MBSP	01-8910-PP
CPVC - 2" MBSP	01-8910-C
For EFLXmodels with 432 mm length add -LX to price code	

EF PUMPS WITH 355mm LENGTH COLUMN	
DESCRIPTION	
Suction Strainer with close 3" nipple	PRICE CODE
Polypropylene	01-8911-PP
CPVC	01-8911-C
Suction Extension 600mm x 3"	PRICE CODE
Polypropylene	01-8912-PP
CPVC	01-8912-C
For EFLX models with 432mm (17") columns Use same price codes as for 355mm models	



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