



SERFILCO®
INTERNATIONAL

SERIES 'HE' HORIZONTAL PUMP

BULLETIN
P-201-1
July 2010

Energy saving centrifugal pumps for:

Wastes / Acids / Plating
Chemicals / Photographic
Etching, scrubbing &
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
- **Single or Double Mechanical Seals with water flush**
- **Pump Casing indexes to six directions of discharge**
- **Chemical duty motor (1.0 – 5 kW)**
- **Centrifugal – quiet, vibration-free**
- **NPT or BSP connections**



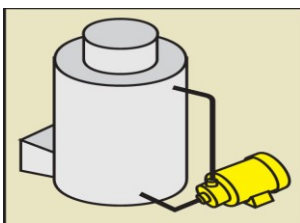
Available with "DRI-STOP" protection, to prevent damage from dry operation

Here is a pump capable of "total" chemical resistance, both internally and externally with its non-metallic construction of all wetted components, choice of seal assembly and elastomer materials. Engineering type plastics (see chemical resistance table) provide application to a variety of chemicals which would be corrosive to other materials of construction.

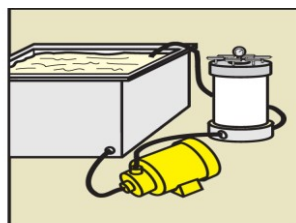
The totally enclosed impeller is moulded to the close tolerances of industrial standards which allows this pump to operate at peak horsepower efficiency across a broad range of operational flow/head requirements.

The external mechanical seal and impeller sleeve assembly eliminates any metal in contact with the solution pumped. Unique design of carbon/ceramic mechanical seal isolates metal components from solution contact. Double mechanical seal model requires water lubrication of seal faces and allows the pump to be used for solutions containing abrasives, high salt concentration and electroless plating solutions. The (M3) seal component is silica-free ceramic which allows the pump to be used for solutions which contain fluorides.

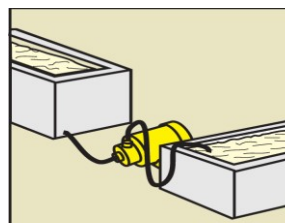
The (M8) seal assembly is Silicone carbide and designed for slurries and abrasive solutions.



PRESSURE
SPRAYING



FILTER
SYSTEM



WASTE
TREATMENT



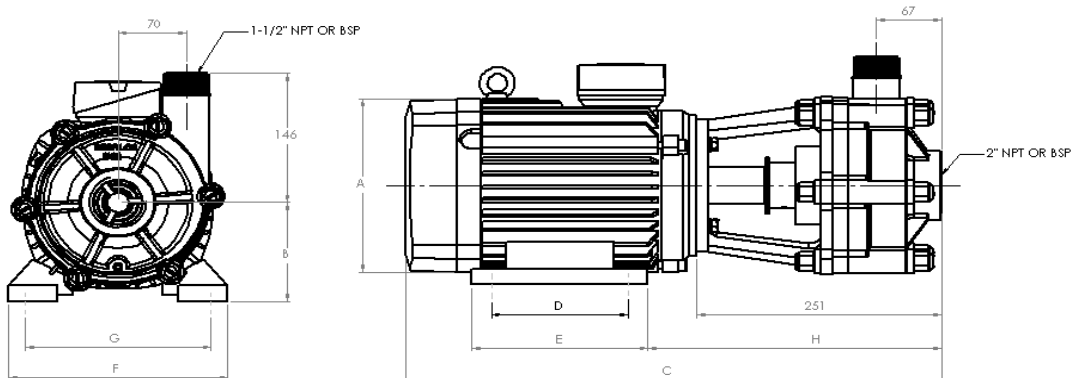
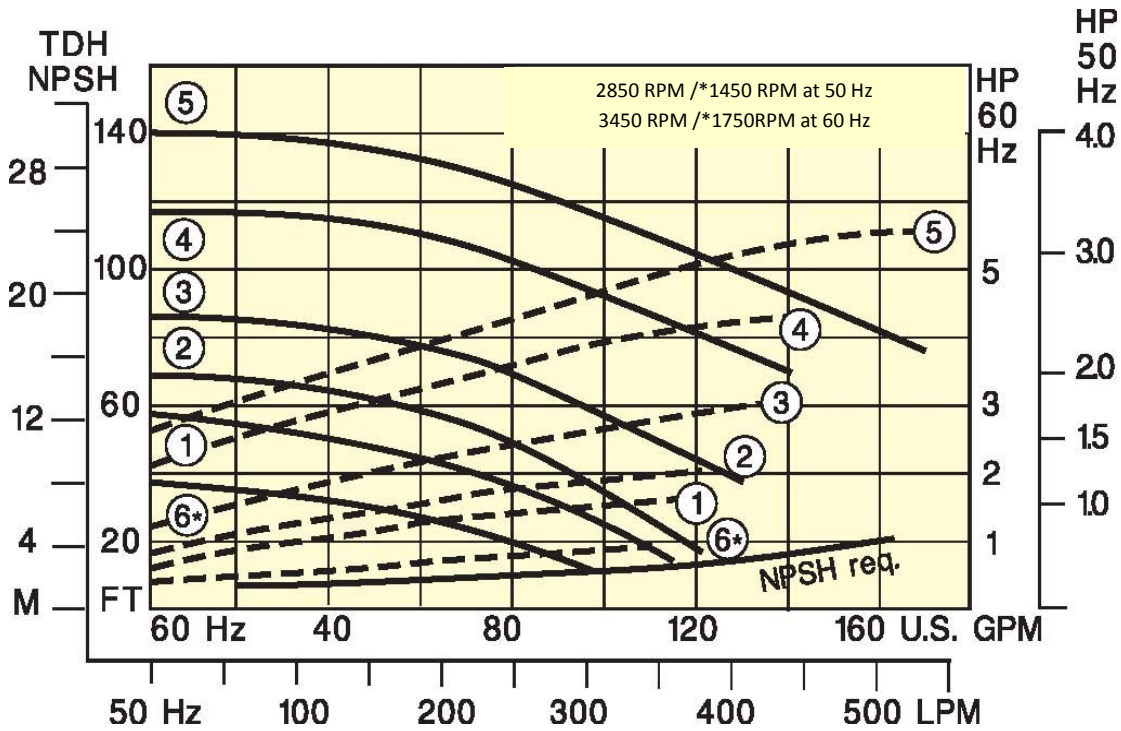
SOLUTION TRANSFER
w/PRIMING CHAMBER



SERIES 'HE' Specifications

Standard models constructed of CPVC, polypropylene or PVDF with threaded connections. Motor shaft is protected by impeller sleeve assembly, elastomers are EPDM or Viton. Impellers are enclosed. Mechanical seal is type 21, externally mounted with stainless steel components not in solution contact.

Double mechanical seal is recommended for solutions containing abrasives, high temperature, or other critical service. Close coupled motors are Metric IP55. The motors can operate on 50 or 60 Hz at full rated horsepower. PP and CPVC pumps are available with BSP or NPT threads.



MOTOR kW	DIMENSIONS (mm)							
	A	B	C	D	E	F	G	H
1.5	157	9	476	100	130	178	140	292
2.2	157	9	476	100	130	178	140	292
3	177	100	522	140	175	192	160	297
4	196	112	549	140	180	224	190	301



TO ORDER FROM TABLE I

From the performance graph select the required flow curve by checking the required flow vs the discharge pressure required then select CPVC/VITON, Polypropylene/EPDM, or PVDF/VITON pump-motor model with either single or double seal. (See Chemical resistant chart)

50HZ MODELS WITH METRIC MOTORS AND SINGLE MECHANICAL SEAL (SILICON CARBIDE)					
CPVC / VITON			PP / EPDM		
Flow Curve	MODEL NUMBER	Price Code	Flow Curve	MODEL NUMBER	Price Code
2	H2X11/2CE2V(M8)-DM2.0-B	42-0128-BMB	2	H2X11/2PE2L(M8)-DM2.0-B	42-0420-BMB
3	H2X11/2CE3V(M8)-DM2.0-B	42-0138-BMB	3	H2X11/2PE3L(M8)-DM2.0-B	42-0430-BMB
4	H2X11/2CE4V(M8)-DM3.0-B	42-0148-CMB	4	H2X11/2PE4L(M8)-DM3.0-B	42-0440-CMB
5	H2X11/2CE5V(M8)-DM4.0-B	42-0158-DMB	5	H2X11/2PE5L(M8)-DM4.0-B	42-0450-DMB

50HZ MODELS WITH METRIC MOTORS AND DOUBLE MECHANICAL SEALS (SILICON CARBIDE / CERAMIC)					
CPVC / VITON			PP / EPDM		
Flow Curve	MODEL NUMBER	Price Code	Flow Curve	MODEL NUMBER	Price Code
2	H2X11/2CE2V(M8XM1)-DM2.0-B	42-0129-BMB	2	H2X11/2PE2L(M8XM1)-DM2.0-B	42-0424-BMB
3	H2X11/2CE3V(M8XM1)-DM2.0-B	42-0139-BMB	3	H2X11/2PE3L(M8XM1)-DM2.0-B	42-0434-BMB
4	H2X11/2CE4V(M8XM1)-DM3.0-B	42-0149-CMB	4	H2X11/2PE4L(M8XM1)-DM3.0-B	42-0444-CMB
5	H2X11/2CE5V(M8XM1)-DM4.0-B	42-0159-DMB	5	H2X11/2PE5L(M8XM1)-DM4.0-B	42-0454-DMB

50Hz MODELS WITH METRIC MOTOR AND (M8) SILICON CARBIDE SEAL			50Hz MODELS WITH METRIC MOTOR AND DOUBLE MECHANICAL SEAL (M8 X M1)		
PVDF / VITON			PVDF / VITON		
Flow Curve	MODEL NUMBER	Price Code	Flow Curve	MODEL NUMBER	Price Code
2	H2X11/2KE2V(M8)-DM2.0	42-0328-BM	2	H2X11/2KE2V(M8XM1)-DM2.0	42-0329-BM
3	H2X11/2KE3V(M8)-DM2.0	42-0338-BM	3	H2X11/2KE3V(M8XM1)-DM2.0	42-0339-BM
4	H2X11/2KE4V(M8)-DM3.0	42-0348-CM	4	H2X11/2KE4V(M8XM1)-DM3.0	42-0349-CM
5	H2X11/2KE5V(M8)-DM4.0	42-0358-DM	5	H2X11/2KE5V(M8XM1)-DM4.0	42-0359-DM



TO ORDER FROM TABLE II

To determine pump-motor for a selected l/min, TDH, and/or specific gravity, select flow/pressure point on curve. Required H.P is determined by moving vertically to corresponding dotted line and then horizontally to H.P scale. Multiply indicated H.P by specific gravity. Select pump materials and mechanical seal(s) and construct Model and price code no.

EXAMPLE:

H2x1.1/2CE

PUMP/MOTOR MODEL NUMBER

3 V(M8XM1) -DM2.0

PRICE CODE NO.

42-0139 BMB*

PUMP

PUMP	PRICE CODE NO.
CPVC H2X1-1/2CE	42-01
PVDF H2X1-11/2K	42-03
POLYPROP H2X1-1/2PE	42-04
ECTFE-T H2X1-1/2HE	42-06

IMPELLER

FLOW CURVE NO.	ADD TO...	
	MODEL NO.	P.C.N.
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

SEAL

"O"-RING & MECHANICAL SEAL MATERIAL (SOLUTION CONTACT)	ADD TO...	
	MODEL NUMBER	PRICE CODE NO.
SINGLE MECHANICAL SEAL		
EPDM CARBON/CERAMIC*	L(M1)	1
EPDM SILICON CARBIDE	L(M8)	0
VITON CARBON/CERAMIC	V(M2)	2
VITON SILICON CARBIDE	V(M8)	8
DOUBLE MECHANICAL SEAL**		
EPDM CARBON/CERAMIC	L(M1XM8)	5
EPDM SILICON CARBIDE	L(M8XM1)	4
VITON CARBON/CERAMIC	V(M2XM1)	6
VITON SILICON CARBIDE	V(M8XM1)	9

MOTOR

TEFC 190/380-415/3/50 or 208-230/460/3/60		
RPM	METRIC MOTORS	
	ADD TO..	
	HP MODEL NUMBER	PRICE CODE NO.
2850 or 3450	DM1.5	AM
	DM2.0	BM
	DM3.0	CM
	DM5.0	DM
1450 or 1725	HM1.0	FM
	HM1.5	GM

*For BSP threads on CPVC and PP models add -B to Model number and suffix B to Price Code

OPTIONAL

DESCRIPTION	PRICE CODE NO.
FLANGE CONNECTIONS	CPVC 42-0200
*ANSI 150lbs. 2" x 1-1/2" (not installed)	PVDF 42-0211
	POLYPRO 42-0218
STAINLESS STEEL SHAFT	42-0230

*For DIN flanges 63mm x 50mm add -M to price code

LONG COUPLED KIT		
MODEL	MOTOR FRAME	P.C.N
LCK-1	182T & 184T	42-0201A
LCK-2	142T & 145T	42-0202A
LCK-3	56	42-0203A
LCK-4	182 & 184	42-0205A
MOTOR MOUNTING & ALIGNMENT		42-0204

Long coupled kit includes cast iron bearing, pedestal frame, fibreglass reinforced channel, flexible coupling and guard and stainless steel shaft and fastners



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