

**4VHA AND 4VHAX** 

# SOLIDS HANDLING WASTEWATER PUMPS



STANDARD (4VHA) AND HAZARDOUS LOCATION (4VHAX) WWW.FEMYERS.COM

## MYERS 4VHA AND 4VHAX TECHNICAL INFORMATION



#### THE RIGHT CHOICE

The high head 4VHA and 4VHAX (hazardous location) submersible solids handling pumps feature heavy duty construction and high operating efficiencies. Myers rounded port, 2-vane, enclosed impellers prevent solids from binding or clogging and offer high operating efficiencies to cut your pumping costs. The 4VHA series constant velocity volute provides smooth operation over an extended portion of the performance curve for longer seal and bearing life. For use in raw water, storm water, effluent and drainage applications. Call your Myers distributor or the Myers sales office at 419-289-1144 for more details.

## HIGH EFFICIENCY HYDRAULIC DESIGN CUTS PUMPING COSTS AND EXTENDS LIFE OF FLUID FND COMPONENTS.

- Two-vane, rounded port, enclosed type impeller operates at high efficiencies.
- Modified constant velocity volute offers quiet operation, low radial loads over extended portion of performance curve.

## DURABLE MOTOR WILL DELIVER MANY YEARS OF RELIABLE SERVICE.

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- Heat sensor thermostats embedded in windings protect motor from overheat conditions.
- Seal leak probes warn of moisture entry; help prevent costly motor burnout.
- Double tandem shaft seals prevent sewage from entering motor.
- Power and control cables are double sealed with epoxy and compression grommet.

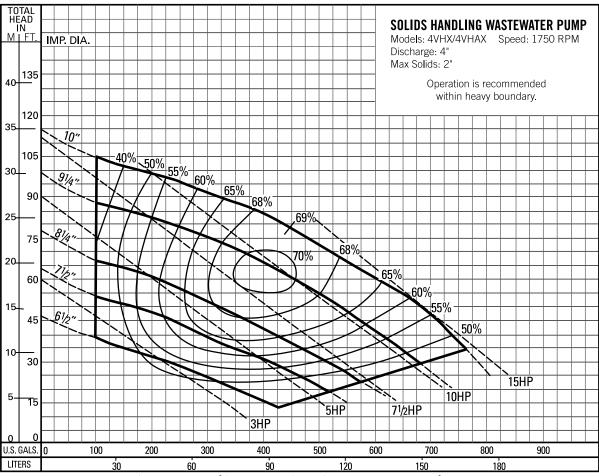
AVAILABLE WITH OPTIONAL FM APPROVAL FOR USE IN CLASS 1, GROUPS C & D HAZARDOUS LOCATION (4VHAX ONLY).

Produ	ct Capabilities					
Capacities To	680 gpm	42.9 l/s				
Heads To	106 ft.	32.3 m 50.8 mm				
Solids Handling Capacity	2 in.					
Liquids Handling		raw water, effluent, storm water				
Intermittent Liquid Temp.	up to 140°F	up to 60°C				
Winding Insulation Temp. (Class H)	356°F	180°C				
Available Motor	1750 RPM 5 – 15 HP 200/230/460/575 volts 3 phase, 60 Hz					
Std. Third Party Approvals Optional Approvals	FM, Class 1, G	CSA FM, Class 1, Groups C & D (4VHAX only)				
Acceptable pH Range	6 -	- 9				
Specific Gravity	.9 – 1.1					
Viscosity	28 - 35 SSU					
Discharge, Horizontal Flanged Centerline	4 in. 125 lb. ANSI	101.6 mm				

NOTE: Consult factory for applications outside these recommendations.

Constr	Construction Materials					
Motor Housing, Seal Housing, Cord Cap and Volute Case	cast iron, Class 30, ASTM A48					
Enclosed 2-vane Impeller	ductile iron, Class 30, ASTM A536					
Power and Control Cord	S00W, W					
Mechanical Seals Standard Optional	double tandem, type 21 carbon and ceramic lower tungsten, carbide					
Pump, Motor Shaft	416 SST					
Fasteners	300 series SST					
Volute Wear Ring	brass					

### 1750 RPM PERFORMANCE CURVE



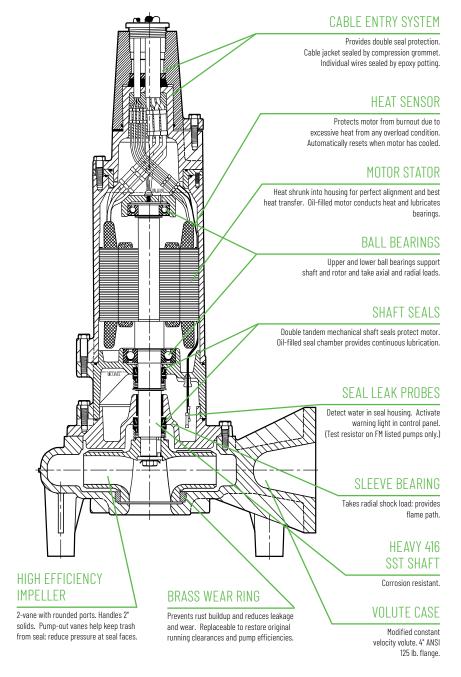
Pump performance is based on clear water (1.0 specific gravity @ 68°F) and pump fluid end (hydraulic) efficiency. Motor data based on 40°C ambient temperature.

Availal	le Models		Motor Electrical Data											
Standard	Hazardous Location	НР	Volts	Phase	Hertz	Start Amps	Run Amps	Service Factor Amps	Run kW	Service Factor kW	Start KVA	Run KVA	NEC Code Letter	Service Factor
4VHA50M4-03	4VHAX50M4-03	5	208	3	60	115	21	25.3	5.7	7.2	30.0	7.2	J	1.2
4VHA50M4-23	4VHAX50M4-23	5	230	3	60	100	18	22	5.7	7.2	39.9	7.2	J	1.2
4VHA50M4-43	4VHAX50M4-43	5	460	3	60	50	9	11	5.7	7.2	39.9	7.2	J	1.2
4VHA50M4-53	4VHAX50M4-53	5	575	3	60	40	7.2	8.8	5.7	7.2	39.9	7.2	J	1.2
4VHA75M4-03	4VHAX75M4-03	7.5	208	3	60	153	30	36.8	8.3	10.4	53.0	10.0	Н	1.2
4VHA75M4-23	4VHAX75M4-23	7.5	230	3	60	133	26	32	8.3	10.4	53.0	10.0	H	1.2
4VHA75M4-43	4VHAX75M4-43	7.5	460	3	60	66	13	16	8.3	10.4	53.0	10.0	Н	1.2
4VHA75M4-53	4VHAX75M4-53	7.5	575	3	60	53	10	12.8	8.3	10.4	53.0	10.0	Н	1.2
4VHA100M4-03	4VHAX100M4-03	10	208	3	60	204	40	48.3	11.3	13.9	70.7	13.9	H	1.2
4VHA100M4-23	4VHAX100M4-23	10	230	3	60	178	35	42	11.3	13.9	70.7	13.9	H	1.2
4VHA100M4-43	4VHAX100M4-43	10	460	3	60	89	17.5	21	11.3	13.9	70.7	13.9	H	1.2
4VHA100M4-53	4VHAX100M4-53	10	575	3	60	71	14	16.8	11.3	13.9	70.7	13.9	H	1.2
4VHA150M4-03	4VHAX150M4-03	15	208	3	60	272	60	72	16.4	20.4	94.0	20.8	G	1.2
4VHA150M4-23	4VHAX150M4-23	15	230	3	60	236	52	60	16.4	20.4	94.0	20.8	G	1.2
4VHA150M4-43	4VHAX150M4-43	15	460	3	60	118	26	30	16.4	20.4	94.0	20.8	G	1.2
4VHA150M4-53	4VHAX150M4-53	15	575	3	60	94	21	25.5	16.4	20.4	94.0	20.8	G	1.2

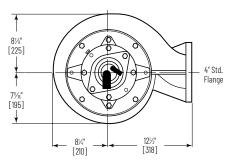
Motor Efficiencies and Power Factor												
		Motor Eff	Power Factor %									
HP	Phase	Service 100% Load		75% Load 50% Load		Service Factor Load	100% Load	75% Load	50% Load			
5	3	72	73	70.5	64	82	80	76	66.5			
7.5	3	78	77	74	67.5	81.5	80	75.5	68			
10	3	80	80	77	70.5	83	81.5	75.5	67			
15	3	78.5	80	79.5	74.5	82	79	72	61			

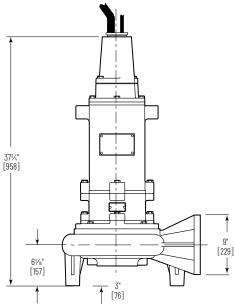
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### ADVANTAGES BY DESIGN



## DIMENSIONS [Dimensions in mm]







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