



MYERS[®]
MODELS 4VH AND 4VHX
SOLIDS HANDLING
WASTEWATER PUMPS

STANDARD (4VH) AND HAZARDOUS LOCATION (4VHX) CONSTRUCTION



MYERS® MODELS 4VH AND 4VHX

Solids Handling Wastewater Pumps

The Right Choice

The 4VH and 4VHX (hazardous location) submersible wastewater pumps are a heavy-duty 4" solids handling series capable of passing a full 3" spherical solid. Myers rounded port, 2-vane, enclosed impellers prevent solids from binding or clogging and offer high operating efficiencies to cut your pumping costs. The 4VH series modified constant velocity volute case provides smooth operation over an extended portion of the performance curve for longer seal and bearing life. For use in municipal lift stations, treatment plants and industrial waste applications. Myers offers a complete line of wastewater pumps, lift-out rail assemblies, controls and accessories to meet your needs. Call your Myers distributor or the Myers sales office at 419-289-1144 for more details.

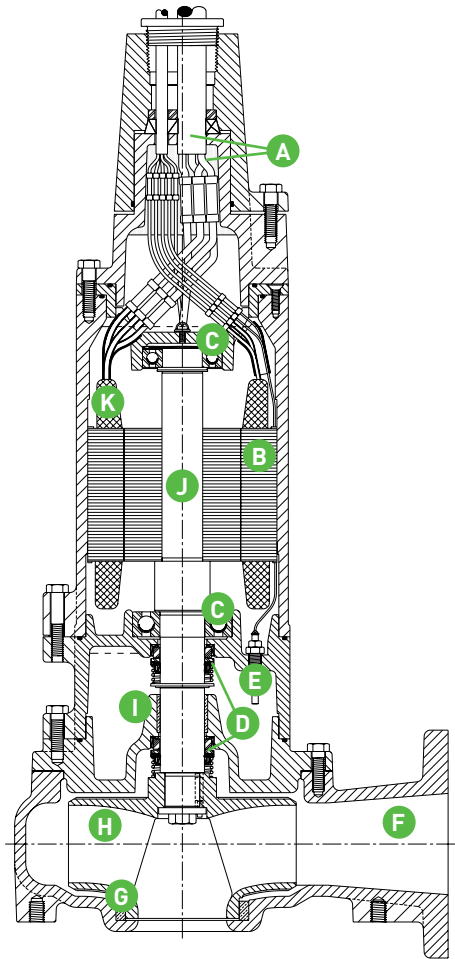


Product Capabilities		
Capacities To	900 gpm	56.7 l/s
Heads To	85 ft.	25.9 m
Solids Handling	3 in.	76 mm
Liquids Handling	raw unscreened sewage, effluent, storm water	
Intermittent Liquid Temp.	up to 140°F	up to 60°C
Winding Insulation Temp. (Class H)	356°F	180°C
Available Motors	1750 RPM, 5–20 HP 220/230/460/575 volts 3Ø, 60 Hz 1150 RPM, 3 and 5 HP 200/230/460/575 volts 3Ø, 60 Hz	
Std. Third Party Approvals	CSA	
Optional Approvals	FM, Class 1, Groups C & D (4VHX 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.

Construction Materials	
Motor Housing, Seal Housing, Cord Cap and Volute Case	cast iron, Class 30, ASTM A48
Enclosed 2-Vane Impeller	ductile iron, Class 65 ASTM A536
Power and Control Cord	S00W, W
Mechanical Seals	double tandem, type 21 carbon and ceramic
Standard	lower tungsten, carbide
Optional	
Pump, Motor Shaft	416 SST
Fasteners	300 Series SST
Volute Wear Ring	brass

Pump Features and Applications



A. Cable Entry System

Provides double seal protection. Cable jacket sealed by compression grommet. Individual wires sealed by epoxy potting.

B. Motor Stator

Heat shrunk into housing for perfect alignment and best heat transfer. Oil-filled motor conducts heat and lubricates bearings.

C. Ball Bearings

Upper and lower ball bearings support shaft and rotor and take axial and radial loads.

D. Shaft Seals

Double tandem mechanical shaft seals protect motor. Oil-filled seal chamber provides continuous lubrication.

E. Seal Leak Probes

Detect water in seal housing. Activate warning light in control panel. (Test resistor on FM Listed models.)

F. Volute Case

Modified constant velocity volute handles 3" solids. 4" ANSI 125 lb. flange.

G. Brass Wear Ring

Prevents rust buildup and reduces leakage and wear. Replaceable to restore original running clearances and pump efficiencies.

H. High Efficiency Impeller

2-vane with rounded ports. (Optional single vane) Handles 3" solids. Pump-out vanes help keep trash from seal; reduce pressure at seal faces.

I. Sleeve Bearing

Takes radial shock load; provides flame path.

J. Heavy 416 SST Shaft

Corrosion resistant.

K. Heat Sensor

Protects motor from burnout due to excessive heat from any overload condition. Automatically resets when motor has cooled.

High Efficiency Hydraulic Design Cuts Pumping Costs And Extends Life Of Fluid End Components.

- Two-vane, rounded port, enclosed type impellers handle 3" solids with ease at high operating efficiencies.
- Modified constant velocity volute offers quiet operation and low radial loads over extended portion of performance curve.

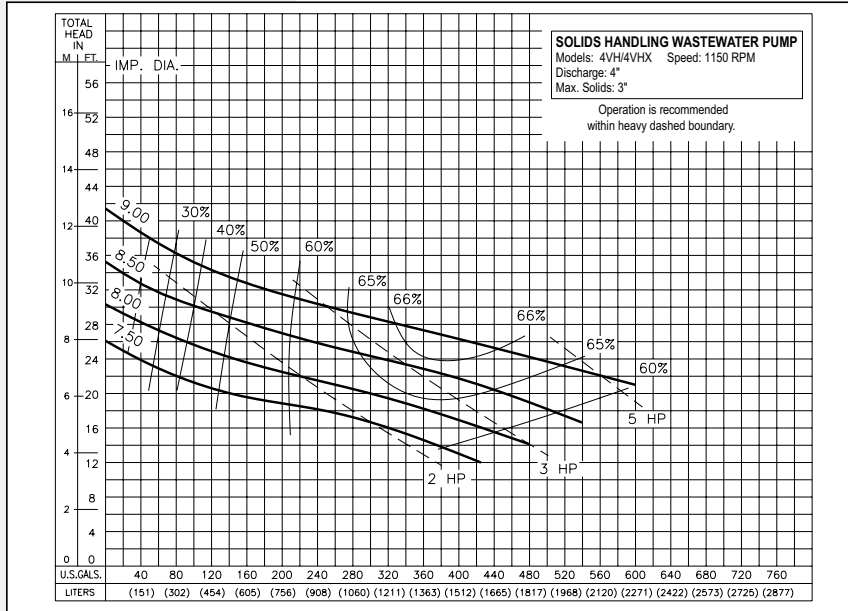
Durable Motor Will Deliver Many Years Of Reliable Service.

- 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 Locations (4VHX Only).

Performance Data

1150 RPM



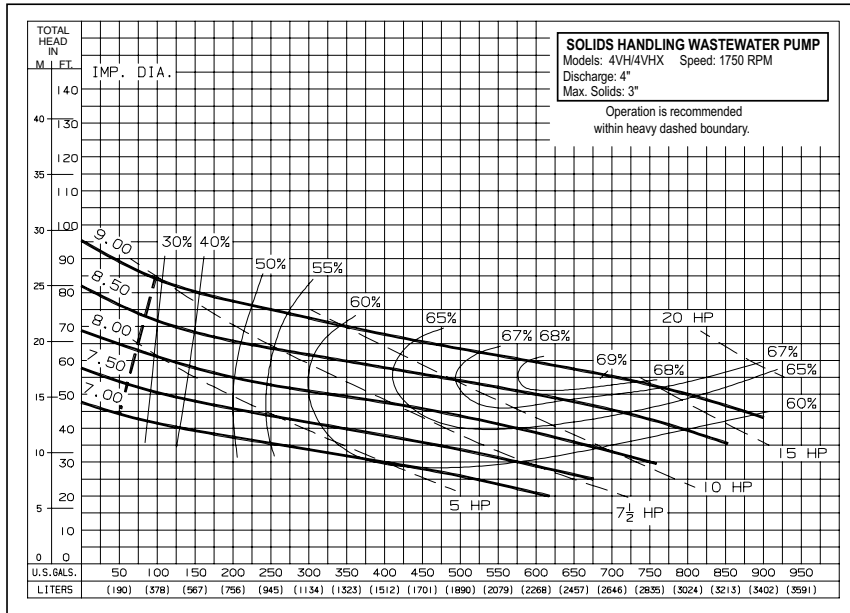
Pump performance is based on clear water (1.0 specific gravity @ 68°F) and pump fluid end (hydraulic) efficiency. Motor data based on 40°C ambient temperature.

Available Models		Motor Electrical Data												
Standard	Hazardous Location	HP	Volts	Phase	Hertz	Start Amps	Run Amps	Service Factor Amps	Run kW	Service Factor kW	Start KVA	Run KVA	NEC Code Letter	Service Factor
4VH30M6-03	4VHX30M6-03	3	208	3	60	77	15.9	19	3.3	4.3	26.7	5.5	K	1.2
4VH30M6-23	4VHX30M6-23	3	230	3	60	67	13.8	16.6	3.3	4.3	26.7	5.5	K	1.2
4VH30M6-43	4VHX30M6-43	3	460	3	60	33	7	8.3	3.3	4.3	26.7	5.5	K	1.2
4VH30M6-53	4VHX30M6-53	3	575	3	60	27	5.5	6.6	3.3	4.3	26.7	5.5	K	1.2
4VH50M6-03	4VHX50M6-03	5	208	3	60	115	24	29	5.4	6.9	39.8	8.3	J	1.2
4VH50M6-23	4VHX50M6-23	5	230	3	60	100	21	25.2	5.4	6.9	39.8	8.3	J	1.2
4VH50M6-43	4VHX50M6-43	5	460	3	60	50	10.5	12.6	5.4	6.9	39.8	8.3	J	1.2
4VH50M6-53	4VHX50M6-53	5	575	3	60	40	8.3	10	5.4	6.9	39.8	8.3	J	1.2

Motor Efficiencies and Power Factor									
Motor Efficiency %					Power Factor %				
HP	Phase	Service Factor Load	100% Load	75% Load	50% Load	Service Factor Load	100% Load	75% Load	50% Load
3	3	73	72	68	58.5	66	61	53.5	44
5	3	74	73	69.5	64	68.5	65	59	48.5

Performance Data

1750 RPM



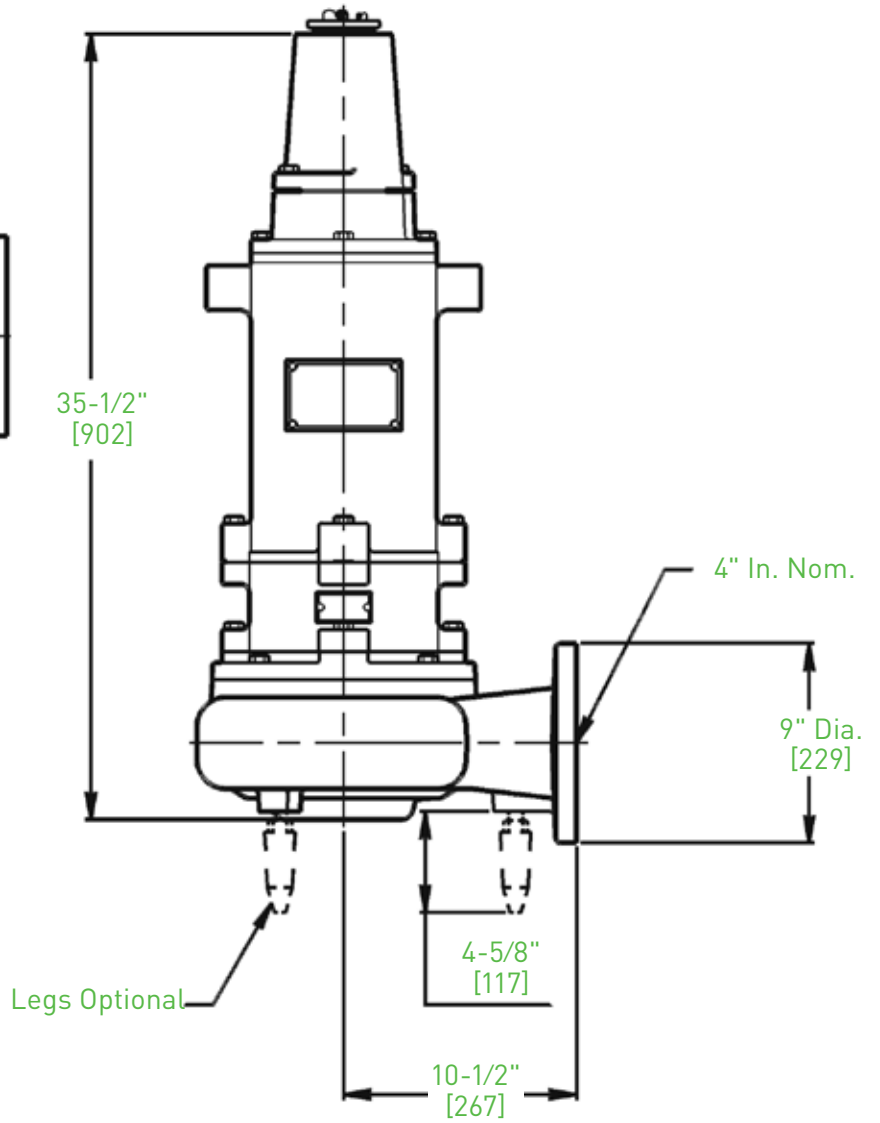
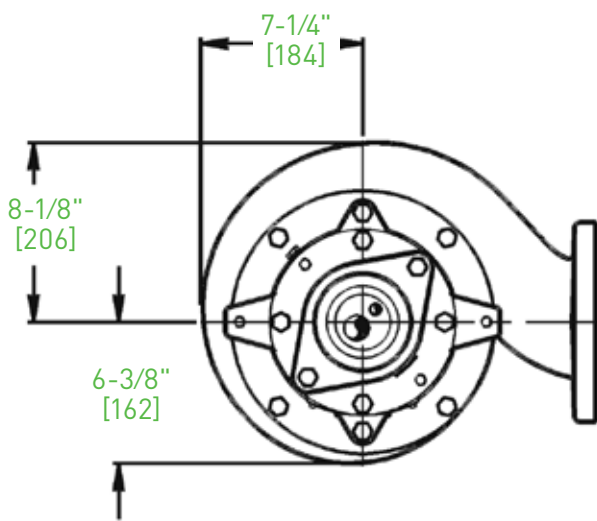
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Standard	Hazardous Location	HP	Volts	Phase	Hertz	Start Amps	Run Amps	Service Factor Amps	Run kW	Service Factor kW	Start KVA	Run KVA	NEC Code Letter	Service Factor
4VH50M4-03	4VHX50M4-03	5	208	3	60	115	21	25.3	5.7	7.2	30.0	7.2	J	1.2
4VH50M4-23	4VHX50M4-23	5	230	3	60	100	18	22	5.7	7.2	39.9	7.2	J	1.2
4VH50M4-43	4VHX50M4-43	5	460	3	60	50	9	11	5.7	7.2	39.9	7.2	J	1.2
4VH50M4-53	4VHX50M4-53	5	575	3	60	40	7.2	8.8	5.7	7.2	39.9	7.2	J	1.2
4VH75M4-03	4VHX75M4-03	7.5	208	3	60	153	30	36.8	8.3	10.4	53.0	10.0	H	1.2
4VH75M4-23	4VHX75M4-23	7.5	230	3	60	133	26	32	8.3	10.4	53.0	10.0	H	1.2
4VH75M4-43	4VHX75M4-43	7.5	460	3	60	66	13	16	8.3	10.4	53.0	10.0	H	1.2
4VH75M4-53	4VHX75M4-53	7.5	575	3	60	53	10	12.8	8.3	10.4	53.0	10.0	H	1.2
4VH100M4-03	4VHX100M4-03	10	208	3	60	204	40	48.3	11.3	13.9	70.7	13.9	H	1.2
4VH100M4-23	4VHX100M4-23	10	230	3	60	178	35	42	11.3	13.9	70.7	13.9	H	1.2
4VH100M4-43	4VHX100M4-43	10	460	3	60	89	17.5	21	11.3	13.9	70.7	13.9	H	1.2
4VH100M4-53	4VHX100M4-53	10	575	3	60	71	14	16.8	11.3	13.9	70.7	13.9	H	1.2
4VH150M4-03	4VHX150M4-03	15	208	3	60	272	60	72	16.4	20.4	94.0	20.8	G	1.2
4VH150M4-23	4VHX150M4-23	15	230	3	60	236	52	60	16.4	20.4	94.0	20.8	G	1.2
4VH150M4-43	4VHX150M4-43	15	460	3	60	118	26	30	16.4	20.4	94.0	20.8	G	1.2
4VH150M4-53	4VHX150M4-53	15	575	3	60	94	21	25.5	16.4	20.4	94.0	20.8	G	1.2
4VH200M4-23		20	230	4	60	236	60	60	20.4	20.4	94.0	25.5	E	1.0
4VH200M4-43		20	460	3	60	118	30	30	20.4	20.4	94.0	25.5	E	1.0
4VH200M4-53		20	575	3	60	94	25.5	25.5	20.4	20.4	94.0	25.5	E	1.0

Motor Efficiencies and Power Factor									
Motor Efficiency %					Power Factor %				
HP	Phase	Service Factor Load	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
20	3	77	77	80	78	82.5	82.5	79	69

Dimensions

Dimensions in inches, [] Dimensions in mm



Contact Myers® For All Of Your Engineered Wastewater Systems



SOLIDS HANDLING PUMPS



GRINDER PUMPS



SELF-PRIMING PUMPS



CUSTOM CONTROLS



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