

# 4VHS and 4VHSX

4" Non-Clog Wastewater Pumps  
Standard (4VHS) and Explosion-Proof (4VHSX) Construction



4VHSX only

**T**HE 4VHS AND 4VHSX (EXPLOSION-PROOF) SUBMERSIBLE WASTEWATER PUMPS ARE A HEAVY-DUTY 4" NON-CLOG SERIES CAPABLE OF PASSING A FULL 3" SPHERICAL SOLID. Myers single vane impeller prevents solids from binding or clogging and offer high operating efficiencies to cut your pumping costs. The 4VHS 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 Ohio sales office at 419-289-1144 for more details.

## ADVANTAGES BY DESIGN

**HIGH EFFICIENCY HYDRAULIC DESIGN CUTS PUMPING COSTS AND EXTENDS LIFE OF FLUID END COMPONENTS.**

- Single vane impeller provides a steeper, non-overloading performance curve and handles 3" solids with ease.
- 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 imbedded in windings protect motor from over heat conditions.
- Seal leak probes warn of moisture entry; helps prevent costly motor burn-out.
- Double tandem shaft seals prevent sewage from entering motor.
- Power and control cables are double sealed with epoxy and compression grommet.

**AVAILABLE WITH OPTIONAL U.L. APPROVAL FOR USE IN CLASS 1, GROUP D HAZARDOUS LOCATIONS (4VHSX ONLY).**

- 4VHSX file number E68118.
- Non-sparking rail system file number E76984N.

## PRODUCT CAPABILITIES

Capacities To	730 gpm	2,763 lpm
Heads To	90 ft.	27 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 F)	311°F	155°C
Available Motors	1750 RPM, 7½ HP 230 volt, 1Ø, 60 Hz 220/230/460/575 volts 3 Ø, 60 Hz 10 HP 200/230/460/575 volts 3Ø, 60 Hz	
Std. Third Party Approvals	CSA	
Optional Approvals	UL Class 1, Group D (4VHSX only) file E68118	
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 of these recommendations.

Construction Materials	
Motor Housing, Seal Housing, Cord Cap and Volute Case	cast iron, Class 30 ASTM A48-76
Single Vane Impeller	ductile iron, Class 65 ASTM A536-80
Power and Control Cord	25 ft. SOW/SOW-A
Mechanical Seals	double tandem, type 21
Standard	carbon and ceramic
Optional	lower tungsten, carbide
Pump, Motor Shaft	416 SST
Fasteners	300 Series SST
Volute Wear Ring	brass

**WHERE INNOVATION MEETS TRADITION**

**Myers®**

Pentair Pump Group

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## POWER & CONTROL CORDS

SOW-A, UL and CSA approved oil-resistant cable.

## CABLE ENTRY SYSTEM

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

## HEAT SENSOR

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

## MOTOR STATOR

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

## BALL BEARINGS

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

## SHAFT SEALS

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

## SEAL LEAK PROBES

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

## SLEEVE BEARING

Takes radial shock load; provides flame path. (UL listed pumps only.)

**HEAVY 416 SST SHAFT**  
Corrosion resistant.

## BRASS WEAR RING

Prevents rust build-up and reduces leakage and wear. Replaceable to restore original running clearances and pump efficiencies.

## HIGH EFFICIENCY IMPELLER

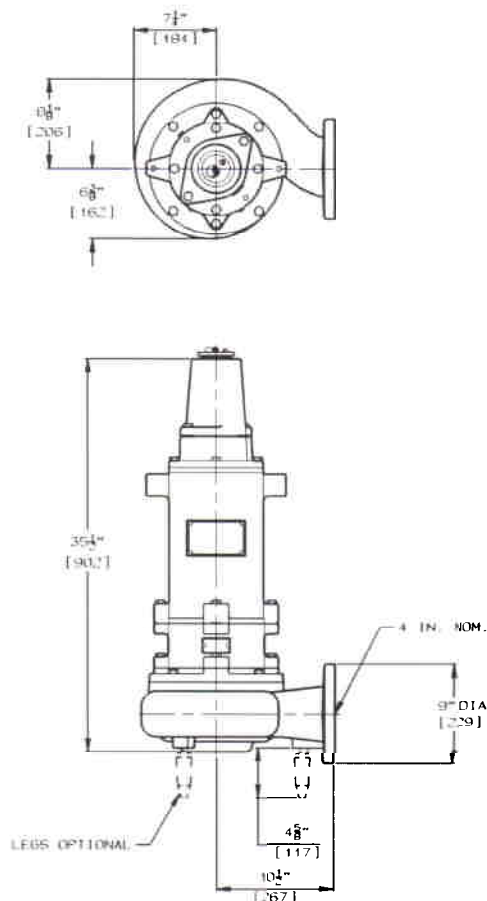
Single vane impeller handles 3" solids. Pump out vanes help keep trash from seal; reduces pressure at seal faces.

## VOLUTE CASE

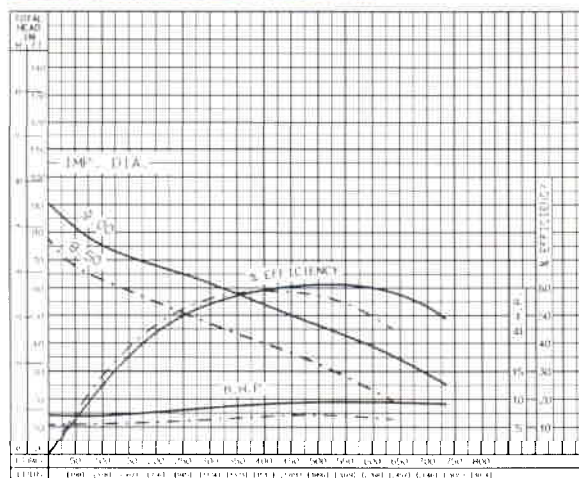
Modified constant velocity volute handles 3" solids. 4" ANSI 125 lb. flange.

## DIMENSIONS

[ ] dimensions in mm



## PERFORMANCE CURVE



K4008 4/01  
Printed in U.S.A.



**Myers**  
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