



MYERS®
MODELS 4V AND 4VX
SOLIDS HANDLING
WASTEWATER PUMPS



STANDARD (4V) AND HAZARDOUS LOCATION (4VX) CONSTRUCTION

# MYERS MODELS 4V AND 4VX Solids Handling Wastewater Pumps

# The Right Choice

The 4V and 4VX (hazardous location) submersible wastewater pumps pass a full 3" spherical solid and are the ideal choice when selecting a pump for your next application. Myers® rounded port, 2-vane, enclosed impellers prevent solids from binding or clogging and offer high operating efficiencies to cut your pumping costs. The 4V 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.

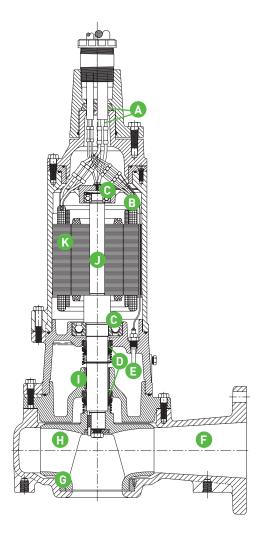
Product Capabilities									
Capacities To	715 gpm	45.1 lps							
Heads To	59 ft.	17.9 m							
Solids Handling (dia.)	3 in.	76 mm							
Liquid Handling		ned sewage, torm water							
Intermittent Liquid Temp.	up to 140°F	up to 60°C							
Winding Insulation Temp. (Class F)	311°F	155°C							
Motor Electrical Data  (Single phase motors are capacitor start type.  Myers control panels or capacitor kits are required for proper operation and warranty.)	1750 RPM 3-5 HP, 230V, 10, 60 Hz 3-10 HP, 208/230/460/575V 30, 60 Hz 1150 RPM 1-2 HP, 208/230V, 10, 60 Hz and 208/230/460/575V 30, 60 Hz								
Std. Third Party Approvals Optional Approvals	CSA CSA & FM Class 1, Group D (4VX only)								
Acceptable pH Range	6 -	- 9							
Specific Gravity	.9 – 1.1								
Viscosity	28 – 3	B5 SSU							
Discharge, Flanged Ceterline (Horizontal)	4 in. 125 lb. ANSI	101.6 mm							





Construc	tion 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 Cord	S00W, W
Control Cord	SOOW
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

# Pump Features and Applications



## Cable Entry System

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

#### Heat Sensor on Motor Winding B.

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

### 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 lubrication.

#### Seal Leak Probe Ε.

Detects water in seal housing. Activates warning light in control panel. (Test resistor on FM listed models.)

### Volute Case

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

### Brass Wear Ring

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

#### High Efficiency Impeller н.

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

#### Sleeve Bearing I.

Takes radial shock load; provides flame path.

#### Heavy 416 SST Shaft J. Corrosion resistant

#### Motor Stator K.

Press fit for optimal alignment and heat transfer. Oil-filled for continuous lubrication of bearings and seals.

# 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, low radial loads over extended portion of performance curve.

# Durable motor will deliver many years of reliable service.

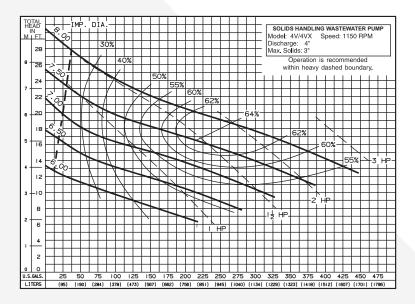
- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- Heat sensor thermostats embedded in windings protect motor from overheat conditions.
- Seal leak probe in seal chamber warns of moisture entry; helps prevent costly motor burnout.
- Double tandem shaft seals prevent sewage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

Available With Optional CSA & FM Approval For Use In Class 1, Group D Hazardous Locations (4VX Only).

WWW.FEMYERS.COM

# Performance Data

# 1150 RPM

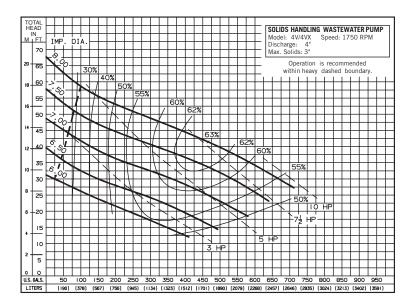


Availal	ole Models		Motor Electrical Data										
								Service					
							Full Load	Factor	Full Load		Full Load	NEC Code	Service
Standard	Hazardous Location	HP	Volts	Phase	Hertz	Start Amps	Amps	Amps	kW	Start KVA	KVA	Letter	Factor
4V10M6-21	4VX10M6-21	1	230	1	60	42	9	10.8	1.4	9.7	2.1	L	1.2
4V10M6-03	4VX10M6-03	1	208	3	60	27	7.4	8.9	2.3	9.7	2.7	L	1.2
4V10M6-23	4VX10M6-23	1	230	3	60	23	6.4	7.8	2.2	9.2	2.5	L	1.2
4V10M6-43	4VX10M6-43	1	460	3	60	11	3.2	3.9	2.2	8.8	2.5	K	1.2
4V10M6-53	4VX10M6-53	1	575	3	60	7	2.6	3.1	2.2	7.0	2.6	Н	1.2
4V15M6-21	4VX15M6-21	1.5	230	1	60	47	11	13.2	1.9	10.8	2.5	J	1.2
4V15M6-03	4VX15M6-03	1.5	208	3	60	30	9.8	11.8	3.1	10.8	3.5	J	1.2
4V15M6-23	4VX15M6-23	1.5	230	3	60	26	8.5	10.2	3.0	10.3	3.4	Н	1.2
4V15M6-43	4VX15M6-43	1.5	460	3	60	13	4.2	5.1	3.0	10.3	3.3	Н	1.2
4V15M6-53	4VX15M6-53	1.5	575	3	60	10	3.3	4	3.1	9.9	3.3	Н	1.2
4V20M6-21	4VX20M6-21	2	230	1	60	71	18	21	3.0	16.3	4.1	K	1.2
4V20M6-03	4VX20M6-03	2	208	3	60	43	12	14.5	3.8	15.5	4.3	J	1.2
4V20M6-23	4VX20M6-23	2	230	3	60	42	10.5	12.6	3.8	16.7	4.4	K	1.2
4V20M6-43	4VX20M6-43	2	460	3	60	21	5.2	6.3	3.8	16.7	4.4	K	1.2
4V20M6-53	4VX20M6-53	2	575	3	60	17	4.2	5	3.8	16.9	4.4	K	1.2
4V30M6-21		3	230	1	60	71	21	21	3.7	16.3	4.8	F	1.0
4V30M6-03		3	208	3	60	43	16.8	16.8	5.3	15.5	6.0	F	1.0
4V30M6-23		3	230	3	60	42	16	16	4.8	16.7	5.6	F	1.0
4V30M6-43		3	460	3	60	21	7	7	4.8	16.7	5.6	F	1.0
4V30M6-53		3	575	3	60	17	5.6	5.6	5.0	16.9	5.6	G	1.0

Motor Efficiencies and Power Factor											
Motor Efficiency %							Power Factor %				
		Service				Service					
HP	Phase	Factor Load	100% Load	75% Load	50% Load	Factor Load	100% Load	75% Load	50% Load		
1	1	62	60	55	47	74	67	60	51		
1	3	64	61.5	55.5	46	75.5	71	62	48.5		
1.5	1	61	63	62	56	80	77	71	61		
1.5	3	68	67	63.5	56	69.5	66	59.5	50		
2	1	61	59	54	45.5	73	68	60	51		
2	3	71	69	64	54	71.5	58.5	51	43		
3	1	60	60	60	54	78	78	71	60		
3	3	73	73	70.5	64	69	69	62	51		

# Performance Data

# 1750 RPM

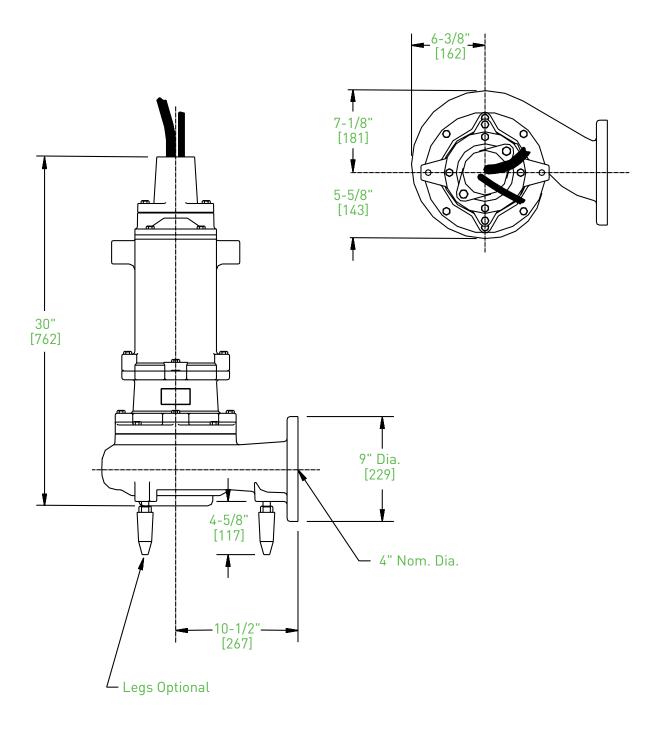


Availabl	e Models						Motor Elec	trical Data					
								Service					
							Full Load	Factor	Full Load		Full Load	NEC Code	Service
Standard	Hazardous Location	HP	Volts	Phase	Hertz	Start Amps	Amps	Amps	kW	Start KVA	KVA	Letter	Factor
4V30M4-21	4VX30M4-21	3	230	1	60	106	17.5	21	4.5	24.4	4.8	K	1.2
4V30M4-03	4VX30M4-03	3	208	3	60	86	15	18	5.0	30.9	5.4	М	1.2
4V30M4-23	4VX30M4-23	3	230	3	60	52	12	14.4	4.6	20.1	4.8	Н	1.2
4V30M4-43	4VX30M4-43	3	460	3	60	26	6	7.2	4.5	20.1	4.8	Н	1.2
4V30M4-53	4VX30M4-53	3	575	3	60	25	5	6	4.6	25.1	5.0	K	1.2
4V50M4-21	4VX50M4-21	5	230	1	60	153	34	41	6.7	35.2	7.8	Н	1.2
4V50M4-03	4VX50M4-03	5	208	3	60	140	21.6	26	8.0	50.4	8.6	М	1.2
4V50M4-23	4VX50M4-23	5	230	3	60	125	18	21.6	7.6	49.7	8.4	L	1.2
4V50M4-43	4VX50M4-43	5	460	3	60	62	9	10.8	7.6	49.3	8.4	L	1.2
4V50M4-53	4VX50M4-53	5	575	3	60	45	7.2	8.6	7.6	44.8	8.4	K	1.2
4V75M4-03	4VX75M4-03	7.5	208	3	60	221	32.2	37	10.2	79.5	11.6	М	1.2
4V75M4-23	4VX75M4-23	7.5	230	3	60	164	28	32	9.7	65.3	11.1	K	1.2
4V75M4-43	4VX75M4-43	7.5	460	3	60	82	14	16	9.7	65.3	11.1	K	1.2
4V75M4-53	4VX75M4-53	7.5	575	3	60	75	11.2	13	7.6	74.6	11.1	L	1.2
4V100M4-03		10	208	3	60	221	37	37	12.7	79.5	13.9	J	1.0
4V100M4-23		10	230	3	60	164	32	32	12.0	65.3	13.0	Н	1.0
4V100M4-43		10	460	3	60	82	16	16	12.0	65.3	13.0	Н	1.0
4V100M4-53		10	575	3	60	75	13	13	11.7	74.6	13.7	J	1.0

	Motor Efficiencies and Power Factor											
Motor Efficiency %						Power Factor %						
НР	Phase	Service Factor Load	100% Load	75% Load	50% Load	Service Factor Load	100% Load	75% Load	50% Load			
3	1	73	73	7070 2000	63	88	85	80	70			
3	3	74	73.5	69.5	61.5	73	70.5	62.5	52			
5	1	67.5	68	65	56	83	81	73	62.5			
5	3	75	76	76	71	86	83	76	65			
7.5	3	75	75	72.5	65	77	72	62	49.5			
10	3	75	75	75	71	79	79	72	58			

WWW.FEMYERS.COM

# Dimensions [Dimensions in inches, [] Dimensions in mm]



Contact Myers® For All of Your Engineered Wastewater Systems







**CUSTOM CONTROLS** 



WWW.FEMYERS.COM



1101 MYERS PARKWAY ASHLAND, OHIO 44805 PH: 855-274-8947 WWW.FEMYERS.COM 490 PINEBUSH ROAD, UNIT 4 CAMBRIDGE, ONTARIO, CANADA N1T 0A5 PH: 800-363-7867 WWW.FEMYERS.COM

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice. K3374  $\,$  05/30/17  $\,$  2017 Pentair plc. All Rights Reserved.