



**FEATURES**

**Impeller:** Cast iron, two vane semi-open, non-clog with pump-out vanes for mechanical seal protection. Dynamically balanced for smooth operation. Silicon bronze impeller available as an option.

**Casing:** Heavy duty gray cast iron, ASTM A48, Class 30. Volute type casing with 4", 125#, flanged, horizontal discharge conforming to ANSI standards. Compatible with A10-40, A10-60 cast iron or A10-40B, A10-60B cast iron and brass (non-sparking) guide rail assembly.

**Dual Mechanical Seals:** Silicon carbide vs. silicon carbide outer seal and ceramic vs. carbon inner seal, stainless steel metal parts, BUNA-N elastomers. Upper and lower tandem mounted shaft seals are positioned independently and are separated by an oil-filled chamber.

**Shaft:** 300 series stainless steel keyed design.

**Fasteners:** 300 series stainless steel.

Capable of running dry temporarily without damage to seals or motor.

 **REDJACKET SERIES**

**4WS**

**SUBMERSIBLE SEWAGE PUMP**

**4" FLANGED DISCHARGE, 3" SOLIDS HANDLING WASTEWATER**

### APPLICATIONS

Used in a variety of residential, commercial and industrial applications such as:

- Sewage systems, Flood and Pollution Control, Dewatering/Effluent, Farms, Hospitals, Trailer Courts, Motels

### SPECIFICATIONS

#### Pump:

- Maximum solid size: 3"
- Discharge size: 4", 125 # ANSI flange
- Maximum capacity: 620 GPM
- Maximum total head: 60 feet
- 300 Series stainless steel fasteners
- 20' Power cord
- Standard silicon carbide/silicon carbide outer (lower) seals

### MOTOR FEATURES

**Maximum ambient temperature:** 104°F (40°C) continuous duty; 140°F (60°C) intermittent duty

Rated for continuous duty when fully submerged

**RPM:** 1750

60 Hertz

Single row ball bearings

300 Series stainless steel keyed shaft

**Oil-filled:** Fully submerged in O-ring sealed, oil-filled chamber. High grade turbine oil surrounds motor for more efficient heat dissipation, permanent lubrication of bearings and mechanical seal for complete protection against outside environment.

### PERFORMANCE RATINGS

Series No.	4WS15DM	4WS15D	4WS20D	4WS30D	4WS50D	4WS75D	
<b>HP</b> ▶	1½	1½	2	3	5	7½	
<b>RPM</b> ▶	1750						
<b>Total Head Feet of Water</b>	10 ▶	300	395				
	15	170	310	370			
	20		225	300	440	520	
	25		115	205	365	440	
	30			100	270	360	490
	35				160	275	415
	40				75	175	330
	45					90	240
	50						150
	55						75

**Single phase:** 1.5 and 2 HP have 14/3 STOW and 3 to 7.5 HP have 10/3 STOW cords. Built-in capacitors and on-winding overload protection.

**Three phase:** Have 14/4 STOW cords except 5 HP 200/230 volt and 7.5 HP 230 volt which have 10/4 STOW cords. Overload protection must be provided in control panel or starter unit.

**Continuous duty design:** Motor is designed for continuous operation when fully submerged.

**Ratings:** Pump ratings are within the motor manufacturer's working limits.

**Bearings:** Upper and lower ball bearing construction to carry all radial and thrust loads.

**Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.

### MOTOR INFORMATION

#### General:

Class "B" insulation

Oil-filled design

#### Single Phase:

Built-in automatic reset overload

208 V - 1.5-3 HP

230 V - 1.5-5 HP

#### Three Phase:

Overloads required in control panel

200 V - 1.5-5 HP

230 V - 1.5-7.5 HP

460 V - 1.5-7.5 HP

575 V - 1.5-7.5 HP

### AGENCY LISTINGS

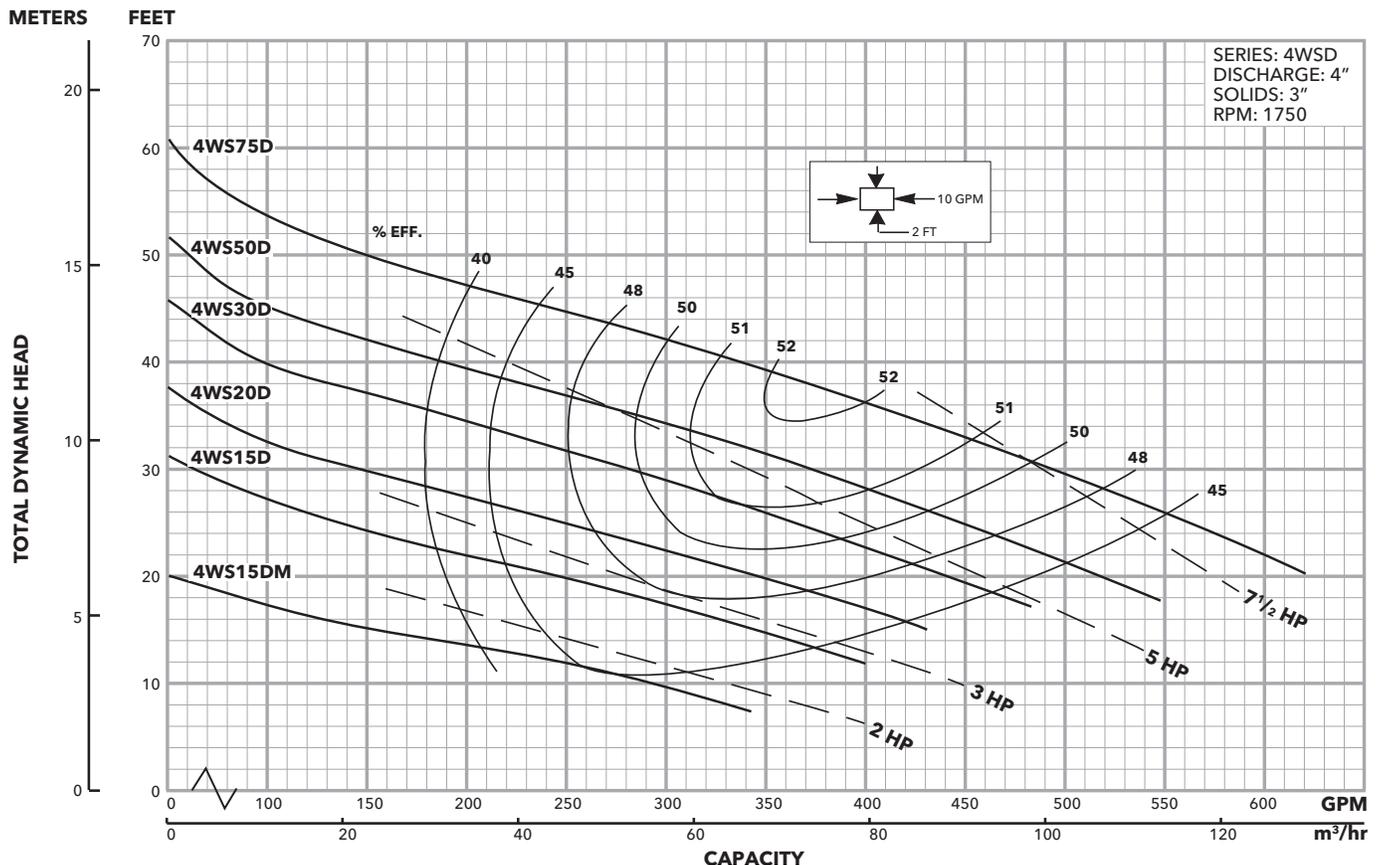


Tested to UL 778 and CSA 22.2 108 Standards  
By Canadian Standards Association  
File #227637

### MODEL AND MOTOR INFORMATION

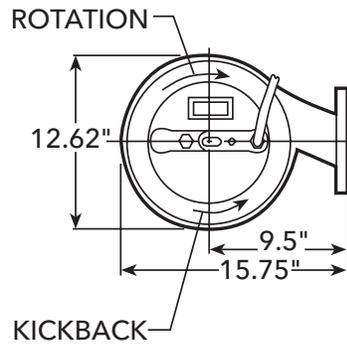
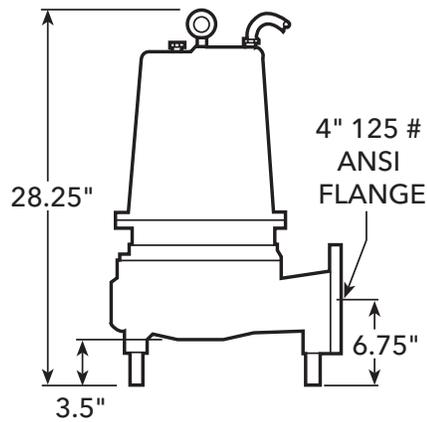
Order Number	HP	Phase	Volts	RPM	Impeller Dia. (in.)	Maximum Amps	L.R. Amps	KVA Code	Power Cable	F.L. Motor Efficiency %	Resistance		Wt. (lbs.)							
											Start	Line-Line								
4WS1518DM*	1.5	1	208	1750	5.63	17.2	50.8	B	14/3	80	1.1	0.9	195							
4WS1512DM*			230			14.7	29.5	E			1.4	1.8								
4WS1538DM*			3			200	11.5	40.9			H	14/4		81	NA	1.7	1.7			
4WS1532DM*						230	10.0	40.0			F					2.3	2.3			
4WS1534DM*						460	5.0	20.0			F					83	9.3			
4WS1537DM*						575	4.0	14.4			H					74	14.8			
4WS1518D		1	208		17.2	50.8	B	14/3	80	1.1	0.9	1.4		1.8						
4WS1512D			230		14.7	29.5	E								70	1.7				
4WS1538D			3		200	11.5	40.9								H	14/4	81	NA	1.7	1.7
4WS1532D					230	10.0	40.0								F				83	2.3
4WS1534D					460	5.0	20.0								F				83	9.3
4WS1537D					575	4.0	14.4								H				74	14.8
4WS2018D	2	1	208	20.3	50.8	B	14/3	80	1.1	0.9	1.4	1.5								
4WS2012D			230	17.3	36.9	D							75	1.7						
4WS2038D			200	13.3	40.9	H							14/4	81	NA	1.7	1.7			
4WS2032D		3	230	11.6	40.0	F	83	2.3												
4WS2034D			460	5.8	20.0	F	83	9.3												
4WS2037D			575	4.6	14.4	H	74	14.8												
4WS3018D	3	1	208	25.5	50.8	B	10/3	80	1.1	0.9	1.0	1.0								
4WS3012D			230	21.5	46.4	C							79	1.3						
4WS3038D			200	16.6	53.8	G							10/4	85	NA	1.9	1.9			
4WS3032D		3	230	14.4	49.5	H	83	7.5												
4WS3034D			460	7.2	24.8	H	83	11.6												
4WS3037D			575	5.8	17.3	G	78	11.6												
4WS5012D	5	1	230	26.5	57.7	A	10/3	80	1.0	0.8	0.9	0.9								
4WS5038D			200	19.1	73.9	F							10/4	84	NA	1.2	1.2			
4WS5032D			3	230	16.6	63.6										E	85	4.8		
4WS5034D		460		8.3	31.8	E	14/4	85	7.4											
4WS5037D		575		6.6	22.8	E				80	7.4									
4WS7532D		7.5	3	230	23.0	105.0	G	10/4	83	NA	0.7	2.8	2.8							
4WS7534D	460			11.5	52.5	G	83							4.4						
4WS7537D	575			9.2	42.0	E	84							4.4						

\* M denotes a minimum trim impeller.



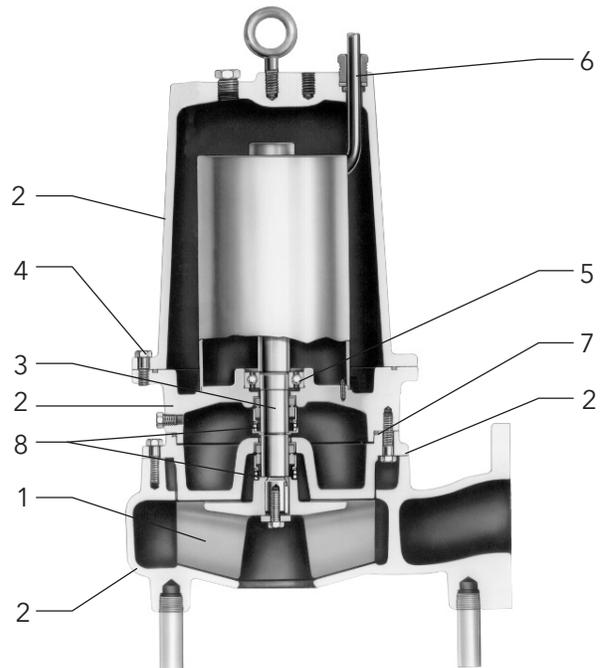
## DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



## MATERIALS OF CONSTRUCTION

Item No.	Part Name		Material			
			Standard		Optional	
1	Impeller, non-clog		1003		1179	
2	Casing		1003			
3	Shaft-keyed		300 Series SS			
4	Fasteners		300 Series SS			
5	Ball bearings		Steel			
6	Power cable		STOW, 20 feet		Additional lengths	
7	O-ring		BUNA-N			
8	Outer Mech. Seal	Service	Rotary	Stationary	Elastomers	Metal Parts
	OPT	Heavy duty	Silicon Carbide	Tungsten Carbide	BUNA-N	300 Series SS
	STD	Mild abrasives	Silicon carbide		BUNA-N	300 Series SS
<b>Material Code</b>		<b>Engineering Standard</b>				
1003		Cast iron – ASTM A48 Class 30				
1179		Silicon bronze – ASTM C87600				



**xylem**  
Let's Solve Water

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