The Myers® WHR series sewage pumps feature all cast iron construction to withstand the most extreme conditions. Available in single seal, and double seal models for additional protection against water leakage. The enclosed two-vane impeller provides highefficiency pumping and will handle stringy, trashy 2" solids without clogging. Designed for sewage and effluent and can be used for applications requiring high heads.



Domestic wastewater and septic systems

#### SPECIFICATIONS

Capacities – 178 GPM (673.8 LPM) Shut-off Head – 33' (10.1 m) Solids Handling – 2" (50.8 mm) Liquids Handling – Drain water and domestic sewage

Intermittent Liquid Temperature – Up to 140°F (60°C)

**Motor/Electrical Data** – 1/2 HP, 115V, 1Ø, 60Hz, permanent split capacitor type; 1/2, 3/4, 1 HP, 230V, 1Ø, 60 Hz, permanent split capacitor type; 208/230/460/575V, 3Ø, 60Hz

Acceptable pH Range - 5-9 Discharge, NPT - 2" (50.8 mm);

3" (76.2 mm)

Housing - Cast iron

Power Cord - WHR-SJOW/SJOW-A 20',

16/3, 10; 20', 16/4, 30;

**WHR-DS** – 20', 14/4, 1Ø; 20', 14/3, 1Ø, L/D;

20', 16/4, 3Ø, L/D

Impeller - Cast iron, vortex

Volute Case – Cast iron

**Shaft Seal** – Single type 21, carbon/ceramic, double tandem carbon/ceramic

Minimum Sump Diameter -

Simplex: 24" (61 cm); Duplex: 30" (76 cm)



#### **FEATURES**

#### **Versatile Applications**

Ideal for residential and commercial sewage, domestic wastewater and septic systems

#### Non-clog Design

Recessed impeller provides maximum efficiency and eliminates jamming between volute case – cast iron construction

#### **Leak Detection**

Optional leak probe senses water leakage past seal (dual seal motors only)

#### Cool Running

Durable, oil-filled motor for continuous bearing lubrication and maximum heat dissipation

#### **Powerful Starts**

High-torque, permanent split capacitor (PSC) motor; no starting switches or relays to wear out

#### **Thermal Protection**

Heat sensor overload protection with automatic reset when motor cools to a safe operating temperature

#### **High-capacity Handling**

Passes full 2" solids



ORDERING IN	NFORMATION							
Catalog Number	НР	Volts	Phas Cycl	,	Discharge Size	Switch Type	Cord Length	Approx. Wt. Lbs.
WHR SERIES (Si	ngle Seal)	-						
WHR5-11C	1/2	115	1/60	0	2"	Manual	20'	75
WHR5-21C	1/2	230	1/60	0	2"	Manual	20'	75
WHR5P-1*	1/2	115	1/60	0	2"	Automatic*	20'	76
WHR5P-2*	1/2	230	1/60	0	2"	Automatic*	20'	76
WHR5-03	1/2	200	3/60	0	2"	Manual	20'	75
WHR5-23	1/2	230	3/60	0	2"	Manual	20'	75
WHR5-43	1/2	460	3/60	0	2"	Manual	20'	75
WHR5-53	1/2	575	3/60	0	2"	Manual	20'	75
WHR7-21C	3/4	230	1/60	0	2"	Manual	20'	79
WHR7P-2*	3/4	230	1/60	0	2"	Automatic*	20'	80
WHR7-03	3/4	200	3/60	0	2"	Manual	20'	79
WHR7-23	3/4	230	3/60	0	2"	Manual	20'	79
WHR7-43	3/4	460	3/60	0	2"	Manual	20'	79
WHR7-53	3/4	575	3/60	)	2"	Manual	20'	79
WHR10-21C	1	230	1/60	)	2"	Manual	20'	85
WHR10P-2*	1	230	1/60	)	2"	Automatic*	20'	86
WHR10-03	1	200	3/60	)	2"	Manual	20'	85
WHR10-23	1	230	3/60	)	2"	Manual	20'	85
WHR10-43	1	460	3/60	)	2"	Manual	20'	85
WHR10-53	1	575	3/60	0	2"	Manual	20'	85
Catalog Number	НР	Volts	Phase/ Cycles	Wire Size	Discharg Size	e Switch Type	Cord Length	Approx. Wt. Lbs.
WHR SERIES (Do	ouble Seal)	· ·	•					•
WUDE 11 DC	1/2	115	1	1///	2"	Manual	20'	00

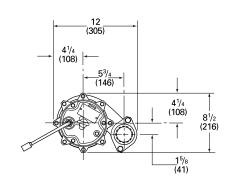
Catalog Number	НР	Volts	Phase/ Cycles	Wire Size	Discharge Size	Switch Type	Cord Length	Approx. Wt. Lbs.
WHR SERIES (Double S	eal)			•				•
WHR5-11-DS	1/2	115	1	14/4	2"	Manual	20'	80
WHR5-01-DS	1/2	208	1	14/4	2"	Manual	20'	80
WHR5-21-DS	1/2	230	1	14/4	2"	Manual	20'	80
WHR5-11-DS-L/D	1/2	115	1	16/3	2"	Manual	20'	80
WHR5-01-DS-L/D	1/2	208	1	16/3	2"	Manual	20'	80
WHR5-21-DS-L/D	1/2	230	1	16/4	2"	Manual	20'	80
WHR5-03-DS-L/D	1/2	208	3	16/4	2"	Manual	20'	80
WHR5-23-DS-L/D	1/2	230	3	16/4	2"	Manual	20'	80
WHR5-43-DS-L/D	1/2	460	3	16/4	2"	Manual	20'	80
WHR5-53-DS-L/D	1/2	575	3	16/4	2"	Manual	20'	80
WHR7-21-DS	3/4	230	1	14/4	2"	Manual	20'	85
WHR7-21-DS-L/D	3/4	230	1	16/3	2"	Manual	20'	85
WHR7-03-DS-L/D	3/4	208	3	16/4	2"	Manual	20'	85
WHR7-23-DS-L/D	3/4	230	3	16/4	2"	Manual	20'	85
WHR7-43-DS-L/D	3/4	460	3	16/4	2"	Manual	20'	85
WHR7-53-DS-L/D	3/4	575	3	16/4	2"	Manual	20'	85
WHR10-21-DS	1	230	1	14/4	2"	Manual	20'	90
WHR10-21-DS-L/D	1	230	1	16/3	2"	Manual	20'	90
WHR10-03-DS-L/D	1	208	3	18/4	2"	Manual	20'	90
WHR10-23-DS-L/D	1	230	3	18/4	2"	Manual	20'	90
WHR10-43-DS-L/D	1	460	3	18/4	2"	Manual	20'	90
WHR10-53-DS-L/D	1	575	3	18/4	2"	Manual	20'	90

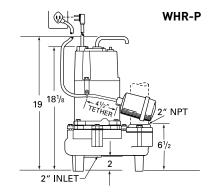
<sup>\*</sup>Piggyback

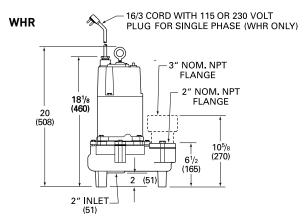


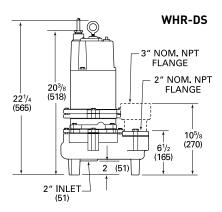
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#### DIMENSIONS









#### PUMP PERFORMANCE

# Capacity liters per minute 10 100 200 300 400 500 600 700 33 35 400 400 500 600 700 40 40 500 600 700 40 500 600 700 40 500 600 700 40 500 600 700 40 500 600 700 40 500 600 700 40 500 600 700 40 60 700 40 60 700 40 700



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#### **SPECIFICATIONS**

**Operating Conditions** – Each pump shall have a capacity of \_\_\_\_ GPM at a total head of \_\_\_\_ feet and motor size shall be \_\_\_\_ horsepower, \_\_\_\_ phase 60 Hz for operation at \_\_\_\_volts and complete performance as shown on curve sheet.

**Pump –** The sewage pump shall be WHR series as manufactured by F. E. Myers, Ashland, Ohio or equal. Pump shall be of the submersible type with recessed impeller to give complete unobstructed volute opening for passing of solids. Pump shall pass 2" diameter solids.

Discharge of pump shall be provided with bolt on 2" NPT flange or optional 3" NPT flange so that 2" or 3" pipe size may be used.

**Motor** – Pump motor shall be of the submersible type rated 1/2, 3/4, or 1 horsepower as required. Motor shall operate at 1750 RPM and shall be for 208 or 230 volts single phase or 200, 230, 460, or 575 volts three phase. Single phase motors shall be of the permanent split capacitor type with no relays or starting switches.

Stator winding shall be of the open type with Class A (105°C) insulation for operating in clean dielectric oil that lubricates bearings and seals and cools the winding. Stator shall be pressed into housing for the best alignment and heat transfer.

Common motor pump shaft shall be of 416 stainless steel and shall be heat shrunk into the die cast motor rotor. Rotor shaft shall be supported by a lower ball bearing to take thrust and radial loads and by an upper bronze sleeve bearing to take radial load only.

Single phase motor shall have an overload element embedded in the winding to protect the motor against over current and overheating conditions. Overload element shall automatically reset when motor cools.

Three phase motor shall be protected by 3 leg overload element in control box. Overload shall be of the quick trip ambient compensated type and shall have a manual reset button.

Motor to be a completely assembled unit with end plate for mounting in volute case. Complete motor and pump impeller to be removable as a unit from the volute casing.

**Corrosion Protection** – All iron castings shall be pretreated with phosphate and chromic rinse and shall be painted with a high quality, lead free, alkyd enamel air dry paint. All fasteners to be 302 stainless steel.

**Shaft Seals (Single Seal)** – Motor shall be protected by a rotating mechanical seal. Seal face shall be carbon and ceramic and lapped to a flatness of one light band.

**Shaft Seals (Double Seal) –** Motor shall be protected by two mechanical seals mounted in tandem with a seal chamber between the seals. Seal chamber shall be oil filled to lubricate seal face and to transmit heat from shaft to outer shell. Seal face shall be carbon and ceramic and lapped to a flatness of one light band.

An optional electrode (1 phase only) shall be mounted in the seal chamber to detect any water entering the chamber through the lower seal. Water in the chamber shall cause a red light to turn on at the control box. This signal shall not stop the motor, but shall act as a warning only, indicating service is required.

**Impeller –** Shall be cast iron and of the recess type. Pump-out vane shall be used on back shroud. Impeller shall be dynamically balanced. Impeller to be threaded on shaft and held in position with locknut. Impeller and motor shall have top lift-out of case so that the assembly can be removed without disturbing any piping.

Pump Case - The volute case shall be of cast iron and shall be provided with bolt-on flange so the 2" pipe size may be used.

**Cord Seal –** The cord shall be potted into a steel connector with polyurethane resin for leak proof seal. A cord nut and rubber grommet shall clamp the cord into the bushing. Cords shall withstand a pull of 100 pounds.

