

# HYDROMATIC®

## OSP50AB

### SUBMERSIBLE SUMP/EFFLUENT

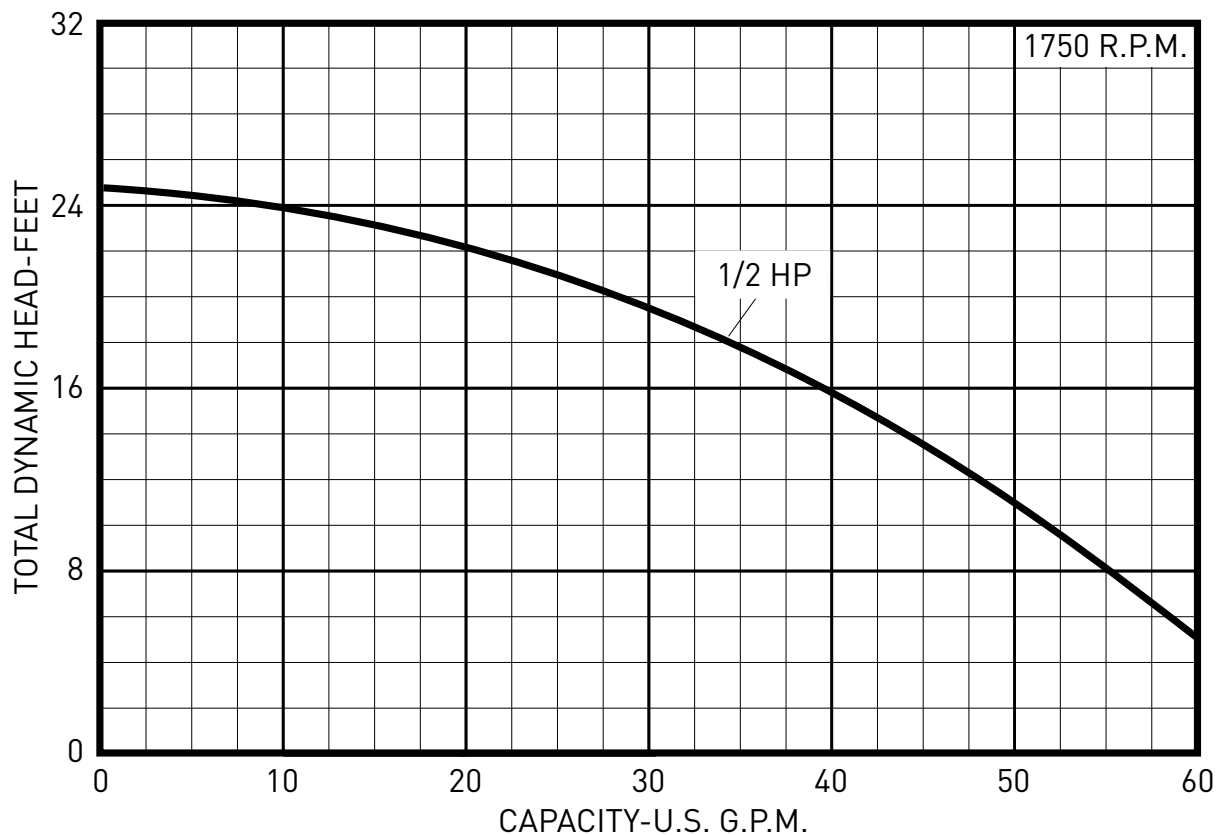
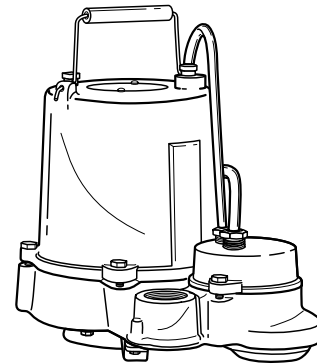
#### PERFORMANCE DATA

Wholesale Products Page: 6230-1

Dated: April 2002

Supersedes: January 2001

RPM: 1750 Discharge: 1 1/4" Solids: 5/8"



The curves reflect maximum performance characteristics without exceeding full load (Nameplate) horsepower. All pumps have a service factor of 1.2. Operation is recommended in the bounded area with operational point within the curve limit. Performance curves are based on actual tests with clear water at 70° F. and 1280 feet site elevation.

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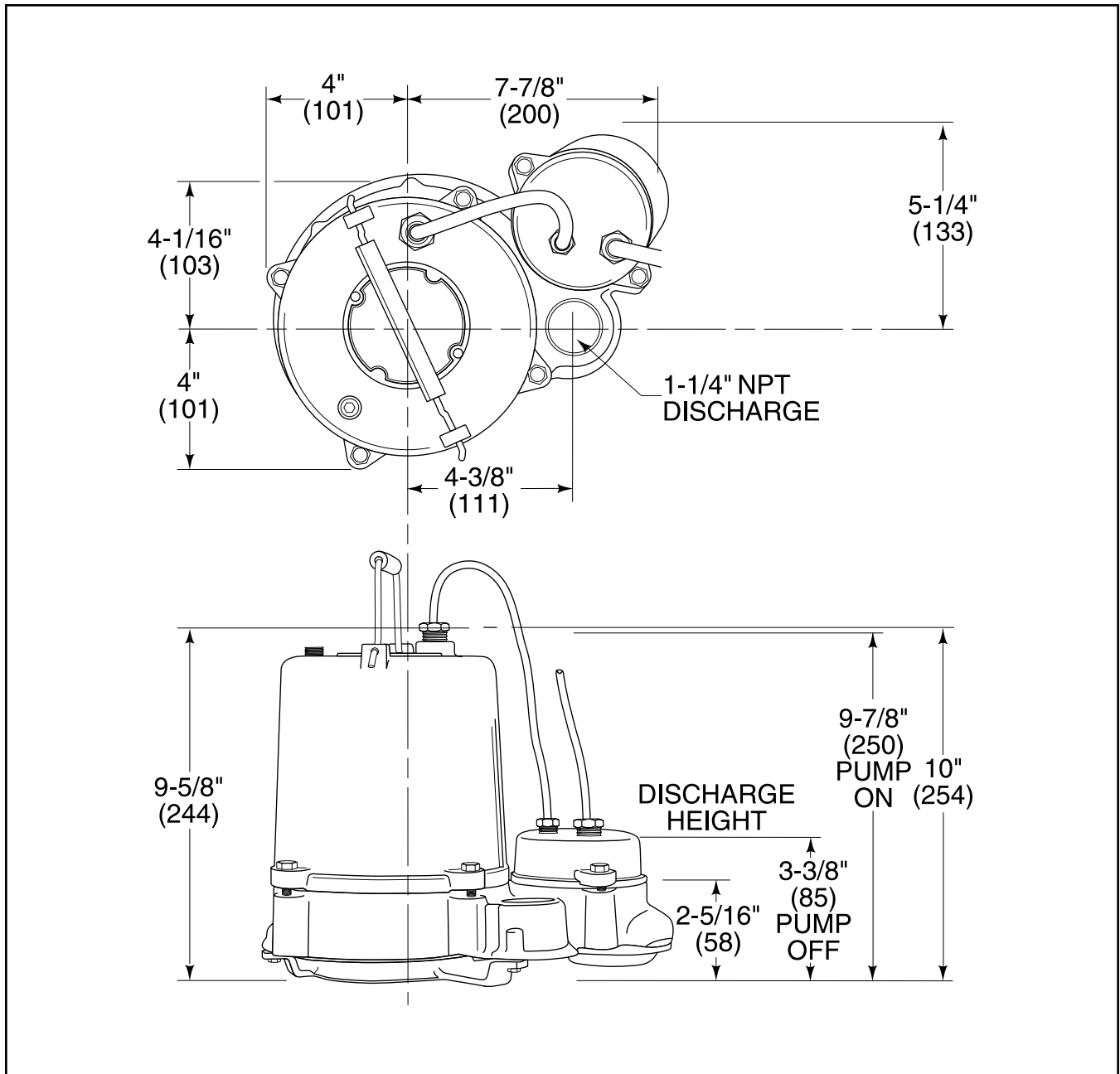
### SUBMERSIBLE SUMP/EFFLUENT

#### DIMENSIONAL DATA

Wholesale Products Page: 6230-2

Dated: April 2002

Supersedes: January 2001



All dimensions in inches. Metric for international use. Component dimensions may vary  $\pm 1/8$  inch. Dimensional data not for construction purpose unless certified. Dimensions and weights are approximate. On/Off level adjustable. We reserve the right to make revisions to our product (s) and the product (s) specifications without notice.

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### SUBMERSIBLE SUMP/EFFLUENT

#### ELECTRICAL DATA

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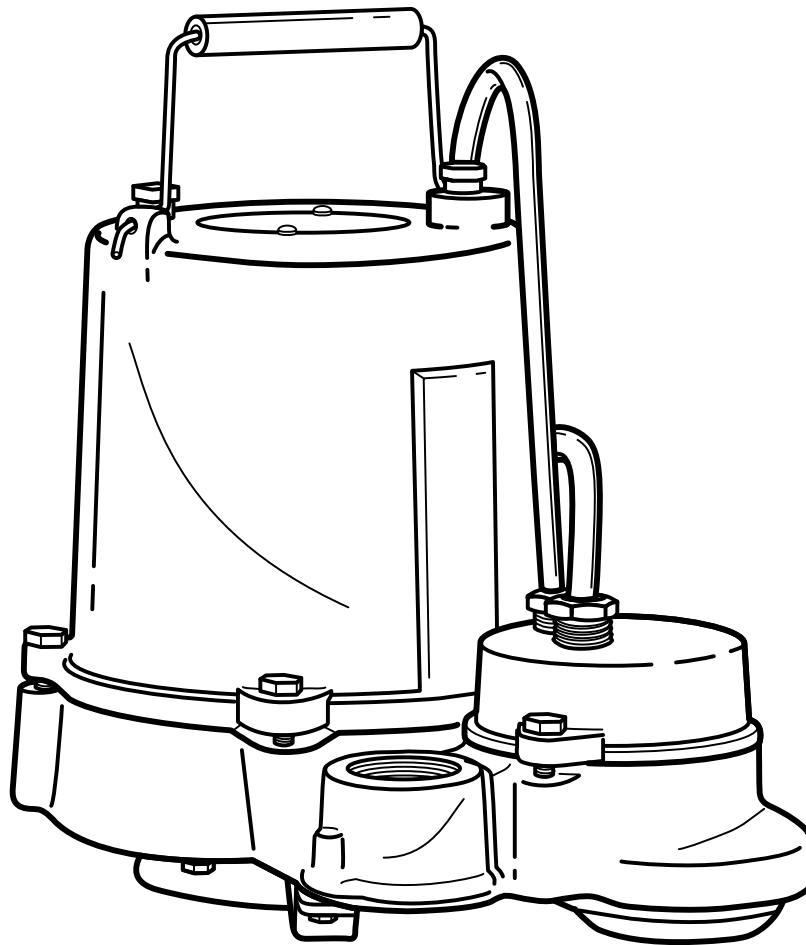
Dated: July 2008

Supersedes: April 2002

#### MODEL: OSP50AB

R.P.M.	1750
MOTOR TYPE	OIL FILLED WITH AUTOMATIC RESET, SPLIT PHASE
GENERAL INSULATION CLASS	A
MOTOR PROTECTION	AUTOMATIC RESET / THERMAL OVERLOAD

HP	VOLTAGE	PHASE	NEC CODE	SERVICE FACTOR	FULL LOAD AMPS
1/2	115	1	-	1	9.5



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## TECHNICAL DATA

# OSP50AB

## SUBMERSIBLE SUMP/EFFLUENT

Wholesale Products Page: 6230-4

Dated: April 2002

Supersedes: January 2001

### MODEL: OSP50AB

#### Physical Data

DISCHARGE SIZE	1 1/4" NPT
SOLIDS SIZE	5/8"
IMPELLER TYPE	OPEN VANE
CABLE LENGTH	20' STANDARD
PAINT	PAINTED AFTER ASSEMBLY, DARK GREEN, WATER REDUCIBLE ENAMEL, ONE COAT, AIR DRIED.

#### Temperature

MAXIMUM LIQUID	140°F
MAXIMUM STATOR	-
OIL FLASH POINT	-

#### Technical Data

POWER CORD TYPE	STW-A	
MATERIALS OF CONSTRUCTION	MOTOR HOUSING	BRONZE
	CASING	BRONZE
	IMPELLER	BRONZE
	MOTOR SHAFT	STEEL
	HARDWARE	STAINLESS STEEL
	"O" RINGS	BUNA-N
MECHANICAL SEALS Standard:	CARBON / CERAMIC	
UPPER BEARING	SINGLE ROW-BALL	
LOWER BEARING	SINGLE ROW-BALL	

# OSP50AB

# SUBMERSIBLE SUMP/EFFLUENT

Wholesale Products Page: 6230-5

Dated: April 2002

Supersedes: January 2001

## MODEL: OSP50AB

### 1.01 GENERAL

Contractor shall furnish all labor, materials, equipment and incidentals required to provide \_\_\_\_\_ (Qty.) submersible centrifugal sump/effluent pump(s) as specified herein. The pump model covered in this specification is the OSP50AB. The pump furnished for this application shall be MODEL \_\_\_\_\_ as manufactured by Hydromatic Pumps.

### 2.01 DESIGN CONDITIONS

Each pump shall be rated \_\_\_\_\_ H.P., \_\_\_\_\_ volts, \_\_\_\_\_ phase, \_\_\_\_\_ hertz and operate at \_\_\_\_\_ RPM.

### 3.01 OPERATING CONDITIONS

The pump shall deliver \_\_\_\_\_ U.S. GPM/LPS at feet/meters TDH, and handle a \_\_\_\_\_ inch solid. The curve submitted for approval shall state, in addition to head and capacity performance, solid handling capability, amp rating, and design impeller diameter.

### 4.01 CONSTRUCTION

Each pump shall be of the sealed submersible type, incorporating features normally found in pumps furnished for the residential market.

These features include:

1. The castings for the OSP50AB shall be Naval Bronze ASTM B-584.
2. The pump inlet shall be open and clear, without screening to provide access for effluent and septic tank solids.
3. All external mating parts shall be machined and Buna N, O-Ring sealed.
4. All fasteners exposed to the pumped liquid shall be 300 series stainless steel.
5. All power cords shall be water resistant UL or CSA approved, with double insulation, and sized as a function of Amp. draw.

### 5.01 MOTOR AND SHAFT

The stator, rotor and bearings shall be mounted in a sealed submersible type housing. Single phase motors shall be Split phase with centrifugal switch. Full Load and Locked Rotor Amps as well as Start and Run winding resistance shall be tabulated for each pump.

### 6.01 BEARINGS, SHAFT AND MECHANICAL SEAL

An upper radial and lower thrust bearing shall be required. These shall be heavy duty single row ball bearings which are both permanently and continuously lubricated and cooled by the dielectric oil which fills the motor housing. The motor shaft shall be corrosion resistant steel and sealed from the pumped liquid with a carbon ceramic mechanical seal.

## OSP50AB

## SUBMERSIBLE SUMP/EFFLUENT

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**Dated:** April 2002

**Supersedes:** January 2001

### 7.01 **IMPELLER**

The Impeller shall be Naval Bronze ASTM B-584 six vane, open design.

### 8.01 **AUTOMATIC CONTROL**

All pumps should be capable of automatic operation.

### 9.01 **PRESSURE SWITCH**

The OSP50AB Single Phase pump is furnished with a pressure diaphragm switch that is UL listed for water and sewage and CSA certified. The diaphragm switch shall be fitted with a piggy-back plug that allows the pump to be operated manually without removal from the sump.

### 10.01 **TESTING**

All pumps shall be individually tested to include the following:

1. The pump and power cord shall be visually inspected for imperfections, cuts or nicks.
2. The pump shall have a ground continuity check and the motor chamber shall be Hi-potted to test for moisture content and/or insulation defects.
3. The motor and volute housing shall be pressurized and a 10 second air leak decay test run.
4. A specific amount of oil is now added. The pump is run in a fully automated, sequenced, control console, which monitors voltage, current and watts visually and electronically. The tester listens for any noise or malfunction.



USA  
293 WRIGHT STREET, DELAVAN, WI 53115 WWW.HYDROMATIC.COM  
PH: 888-957-8677 ORDERS FAX: 800-426-9446

CANADA  
269 TRILLIUM DRIVE, KITCHENER, ONTARIO, CANADA N2G 4W5  
PH: 519-896-2163 ORDERS FAX: 519-896-6337

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.