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## **Oil Sentinel**<sup>®</sup>

# OIL SENTINEL BC200 SERIES

**60HZ-ANSI** 

2" FULL FREE PASSAGE SUBMERSIBLE SEWAGE PUMP



BOESCH PUMPS LLC Art Chibli achibli@boeschpumps.com

14031 SW 143rd Court Miami, FL 33186

# **MBOESCH**

## 60HZ BC SERIES

#### **MOTOR / PUMP SPECIFICATIONS**

	ITEM	DESCRIPTION				
LIMITS	Liquid Temp	0~40°C				
LIMITS	Application	Commercial / Industrial / Municipal use				
	Frequency	60Hz				
	Motor	2P (3450RPM) Dry Motor				
	Insulation	Class B				
	Start Method	Direct On Line				
TYPE	Protection	IP 68				
	Protector	Auto-Cut				
	Bearing	Ball Type				
	Mech. Seal	Dual. Mechanical Seal				
	Impeller	Vortex Impeller				
	Motor Cover	0.5~1HP:PA66+30GF; 1.5~2HP: ASTM A48 Class 30				
	Motor Housing+Stator	AISI 304				
	Shaft with Rotor	AISI 410				
MATERIAL	Mech. Seal	Upper: CA/CE; Lower: SIC/SIC				
	Pump Casing	ASTM A48 Class 30				
	Impeller	ASTM A48 Class 30				
	Cable	H07RN-F / SJTOW / STOW				



#### **MOTOR / PUMP DATA CHART**

MODEL	OUTPUT		DISCHARGE	PHASE	1Ø			FREE PASSAGE	WEIGHT W/O CABLE
	HP	KW	INCHES	VOLTAGE	115V	208V	230V	INCHES	LBS
BC50/1	0.5	0.37	2		9A	5A	4.5A	2	29
BC75/1	0.75	0.55	2	FULL	11A	6A	5.5A	2	31
BC100/1	1	0.75	2	LOAD AMPS	14A	7.7A	7A	2	34
BC150/1	1.5	1.1	2		18.6A	10.3A	9.3A	2	53
BC200/1	2	1.5	2		-	11.6	10.5A	2	55
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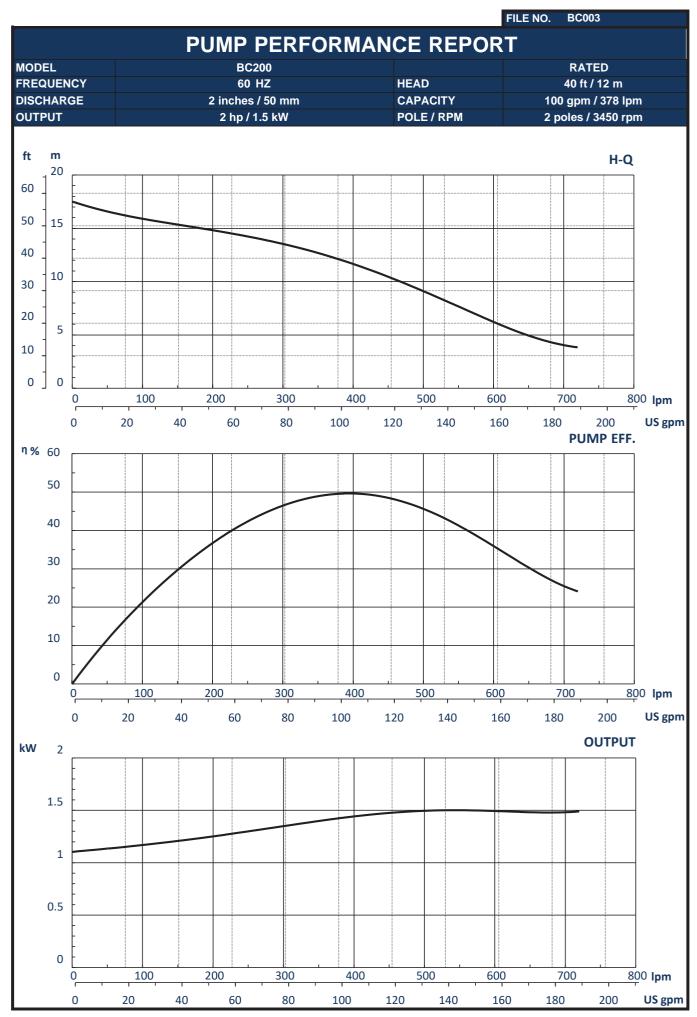
MODEL	OUTPUT DISCHARGE		PHASE		FREE PASSAGE	WEIGHT W/O CABLE			
	HP	KW	INCHES	VOLTAGE	208V	230V	460V	INCHES	LBS
BC50/3	0.5	0.37	2		3.3A	ЗA	1.5A	2	29
BC75/3	0.75	0.55	2	FULL LOAD	4A	3.6A	1.8A	2	31
BC100/3	1	0.75	2	AMPS	5.6A	5A	2.5A	2	34
BC150/3	1.5	1.1	2		6.9A	6.2A	3.1A	2	53
BC200/3	2	1.5	2		7.7A	7A	3.5A	2	55

#### **MOTOR / PUMP CONSTRUCTION MATERIAL**

PART	MATERIAL
Cable	H07RN-F/STJOW/STOW
Handle	Nylon 6
Motor Cover	PA66+30GF (0.5~1HP)
Motor Cover	ASTM A48 Class 30 (1.5~2HP)
Bracket	ASTM A48 Class 30
Motor Housing + Stator	AISI 304
Shaft with Rotor	AISI 410
Oil Chamber	ASTM A48 Class 30

PART	MATERIAL
Mechanical Seal	Upper: CA / CE
Mechanical Seal	Lower: SIC / SIC
Seal Housing	ASTM A48 Class 30
Lip Seal	BUNA N
Impeller	ASTM A48 Class 30
Pump Casing	ASTM A48 Class 30
Upper Bearing	NTN/TPI

## **MBOESCH** BC200

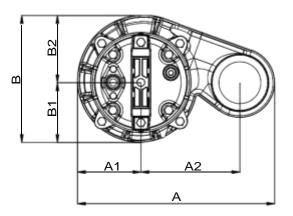


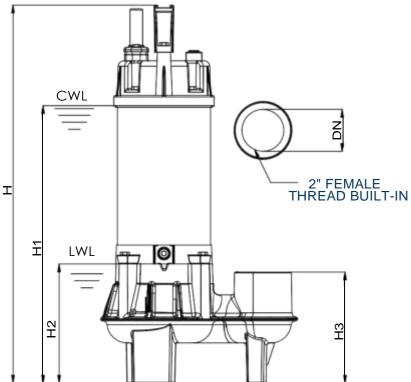


## 60HZ BC SERIES

#### DIMENSIONAL DRAWING

#### MODELS: BC50 - BC200 (0.5 - 2HP) THREADED DISCHARGE





## DIMENSIONS: INCHES WEIGHT: LBS PIPE CONNECTION TYPE: NPT

MODEL	Α	A1	A2	В	B1	B2	DN	Н	H1	H2	H3	WT
BC50	10.24	3.50	4.92	6.70	3.54	3.15	2	18.35	13.23	5.94	5.55	28.40
BC75	10.24	3.50	4.92	6.70	3.54	3.15	2	18.98	13.86	5.94	5.55	30.60
BC100	10.24	3.50	4.92	6.70	3.54	3.15	2	19.53	14.41	5.94	5.55	34.00
BC150	10.71	3.66	5.12	7.36	3.43	3.94	2	19.92	14.80	5.94	5.63	53.24
BC200	10.71	3.66	5.12	7.36	3.43	3.94	2	20.47	15.59	5.94	5.63	55.44

CWL: CONTINOUS RUNNING WATER LEVEL LWL: LOWEST RUNNING WATER LEVEL WT: WEIGHT WITHOUT CABLE

## **BOESCH OIL SENTINEL**



The Boesch Oil Sentinel is used in elevator sump pits to remove water while retaining oil and other hydrocarbons. The Boesch Oil Sentinel is a UL listed system.







**Control Panel** 

Remote Alarm

Preset Level Sensor

### **KEY FEATURES**

#### ONE SENSOR

One preset level sensor for easy installation.

#### **REMOTE ALARM**

A remote alarm is included with the Oil Sentinel. Includes auxiliary contacts for High Oil, High Water and Pump Overload (on overload models).

#### MULTIPLE INDICATOR LIGHTS

Power On, Pump Run, High Water, High Oil and Pump Overload (on overload models).

#### ASME A17.1 COMPLIANT WORKS WITH AUTO DIALERS OR BAS

(Building Automation Systems)

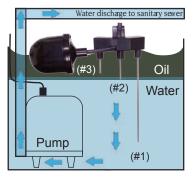


**OPERATION OF DISCHARGE** 

Water and oil fill the elevator sump pit. As the sump is filling, the oil will float on top of the water. This layer of oil will not be pumped from the tank. The water underneath the oil will be pumped out through the discharge pipe to the sewer or other proper disposal area.

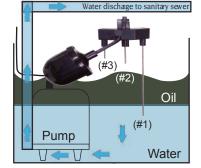
#### **1. WATER RISES & PUMP TURNS ON**

When the water reaches probe (#2) the system will turn on and pump the water out of the sump.



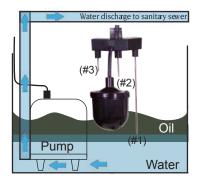
#### 2. WATER IS REMOVED/OIL CONTAINED

As the water is being pumped from the sump pit, the oil will remain floating on top of the water. **THE OIL WILL NOT BE PUMPED INTO THE SANITARY SEWER** 



3. PUMP TURNS OFF

When the water is pumped below probe (#1) the pump will turn off.



## PRESET LEVEL SENSOR AND CONTROL PANEL OPERATION



- ▶ When water touches probes (#1) and (#2) the pump will turn on.
- If the pump can not keep up, loses power or fails the water will reach probe (#3). The "High Water" light will illuminate on the control panel and the remote alarm will activate.
- If the water continues to rise the float switch will activate. If the float switch is activated and probe (#3) is touching water the "High Water" alarm will remain on. If OIL is touching probe (#3) and the float switch is activated, the "High Oil" light will illuminate and the remote alarm will activate.



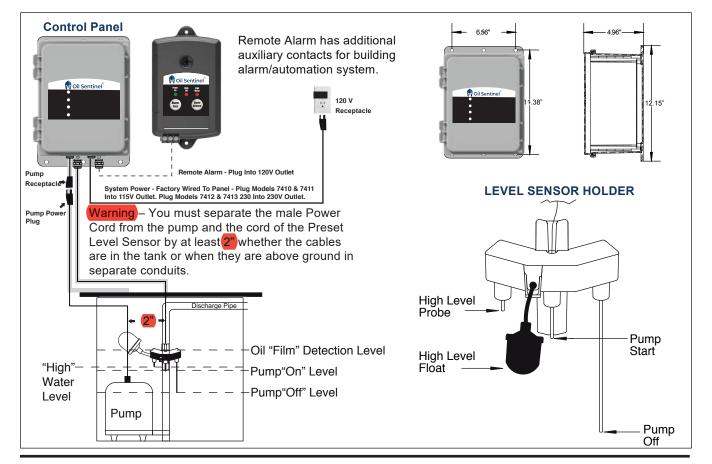
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## OIL SENTINEL CONTROL / ALARM SYSTEM



## **DESCRIPTION OF OPERATION**

On liquid rise, level reaches pump "Start" probe to start the pump. The pump will remain on until level is below "Off" probe. The "Off" probe senses air or oil and turns the pump off so the oil layer will not be pumped out of the tank. If the level reaches high level probe and high level float, the system will differentiate between water and oil and activate the remote alarm.



## **SPECIFICATIONS**

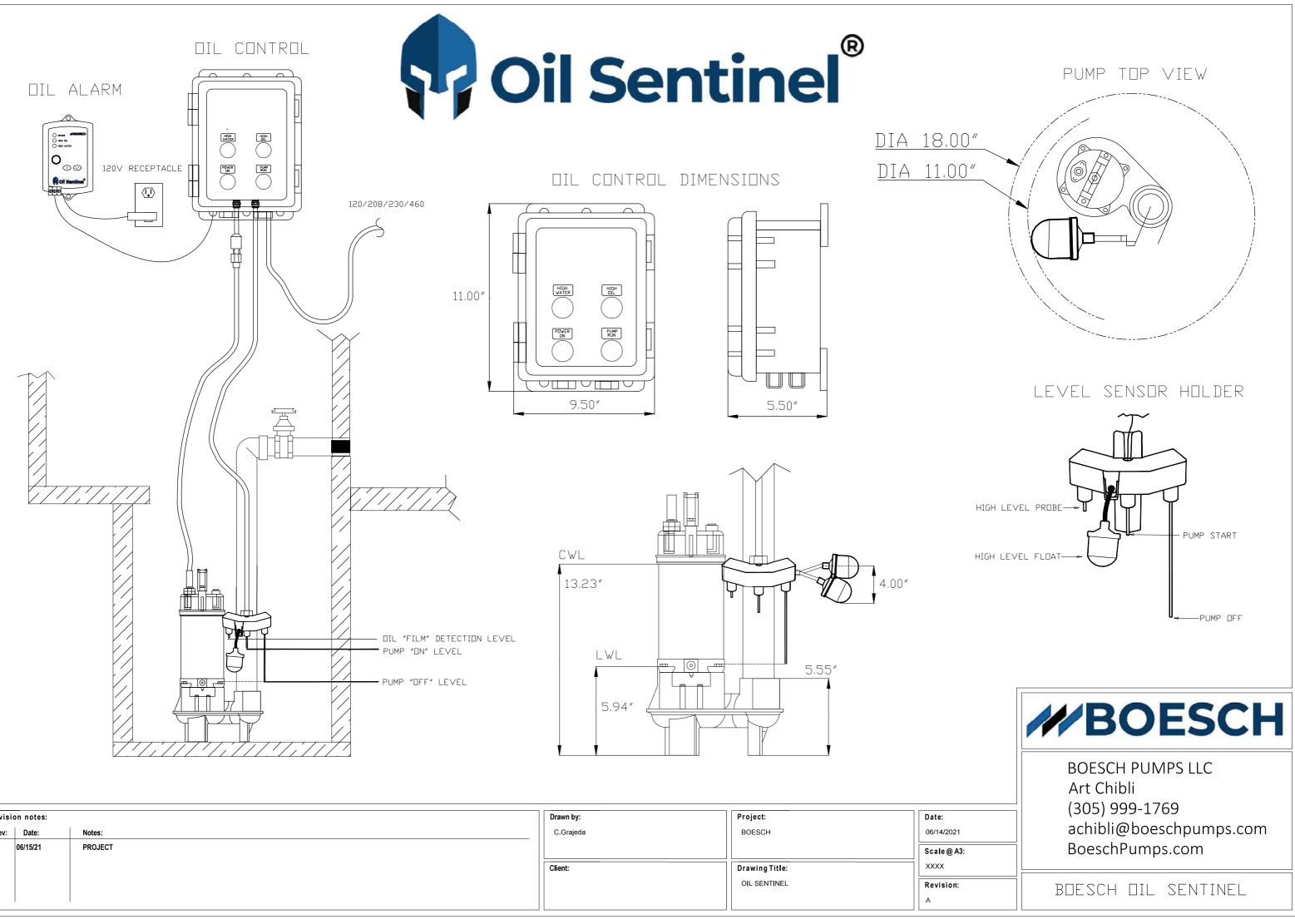
#### Sensor

### **Control Panel**

- Housing: ABS
   Probe: Stainless Steel
- Float: PVC
- Enclosure: Type 1
  Power Cord: 6' SJT,
- 120 VAC
- Receptacle: 6" SJT, 120 VAC, 15 Amp

#### **Alarm Panel**

- Enclosure: Type 1
   Power Cord: Plug in transformer, 120 VAC
   Backup Power: 9 VDC battery backup
- LED Alarm Indicators
- Audible Alarm: 103 db buzzer, auto/test rest
- Auxiliary Contact: High Water, High Oil, Optional Pump Fail



Revisio	on notes:		Drawn by:	Project:	Date:
Rev:	Date:	Notes:	C.Grajeda	BOESCH	06/14/2021
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