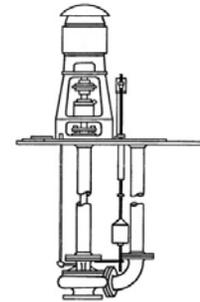




## PRODUCT BULLETIN MODEL SOSM SUMP PUMPS

American-Marsh Model SOSM Sump Pumps are used in a variety of industries. These rugged and efficient centrifugal pumps are designed for long life and low operational costs. American-Marsh has been building pumps for over 130 years. This long experience is responsible for the superior performance of the Model SOSM Sump Pumps.



### Material Specifications

PART	CONSTRUCTION				
	CAST STEEL CAST STEEL	CAST STEEL 316 SS	ALL 316 SS	ALL CD4MCU	ALL ALLOY 20
Casing	CAST STEEL	CAST STEEL	316 SS	CD4MCU	ALLOY 20
Impeller	CAST STEEL	316 SS	316 SS	CD4MCU	ALLOY 20
Shaft	STEEL	316 SS	316 SS	ZC20	ZC20
Inboard Head	CAST STEEL	CAST STEEL	316 SS	CD4MCU	ALLOY 20
Bolts, Studs & Nuts	STEEL	STEEL	316 SS	316 SS	316 SS
Support & Discharge Pipe	STEEL	STEEL	316 SS	316 SS	316 SS

### MODEL SOSM SPECIFICATIONS

**Casing:** The casing is constructed of high tensile cast steel or other specified material. It is of the volute type, carefully and accurately proportioned to permit smooth flow and to convert high velocity energy of the fluid as it leaves the impeller into pressure. Suction and discharge nozzles are flanged and are cast integral with the volute. The casing has cast integral feet standard and the discharge port is of the vertical centerline type. The casing assembly fully meets ANSI B73.1 dimensional requirements. Necessary vent and drain openings can be provided upon request.

**Impeller:** The impeller is of the reverse vane, end suction type, casted in one piece of cast steel or other specified material. Running clearances need to only be adjusted between the back of the impeller and the casing adapter. This design allows for repeatable factory tolerances, all of which can be adjusted on the bench, not just in the field. All impellers are hydraulically and dynamically balanced prior to assembly. Front semi-open impellers can be supplied upon request. All models meets the stringent performance requirements of ANSI B73.1. AMP also offers 4 Low-Flow models to meet difficult low-flow/high-head process applications.

**Case Wear Ring:** Standard enclosed impellers are designed with integral case wear rings accurately turned to provide close running fits in casing. The diameters of these rings are such as to reduce end thrust to a minimum. On larger models a rear case wear ring is provided for additional wear resistance.

**Inboard Head:** The inboard head is constructed of cast iron or other specified material. The inboard head connects the fluid end to the support pipe and contains the inboard head bushing.

**Shaft:** The shaft is of 416 stainless steel, polished and of large diameter to prevent vibration. Lineshaft bearings are spaced to minimize shaft deflection. The shaft is supported by the thrust bearing housing, located at the surface plate, which has integral lateral adjustment.

**Support & Discharge Pipe:** The support pipe is of black iron, one end flanged to the inboard head and the other end flanges to the sump cover. Intermediate bearings will be flanged between multiple pieces of support column and spaced accordingly. The discharge pipe is flanged, one end connected to the discharge elbow and the other to the system piping.

**Discharge Elbow:** The discharge elbow is of high tensile cast iron or of other specified material and of the long radius type flanged to the discharge of the casing and to the discharge pipe assembly.

**Sump Cover:** The sump cover is of carbon steel, teardrop or of other shape as desired. The sump cover supports the entire weight of the complete pump assembly.

INDUSTRIAL

Spill Containment, Processing,  
Leachate Recovery, Bilge

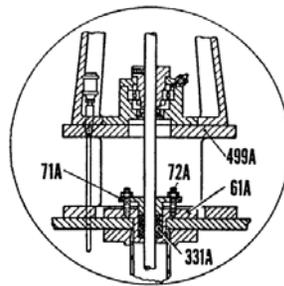
COMMERCIAL

Condensate Recovery, Breweries,  
Drainage, Contact Water

MUNICIPAL

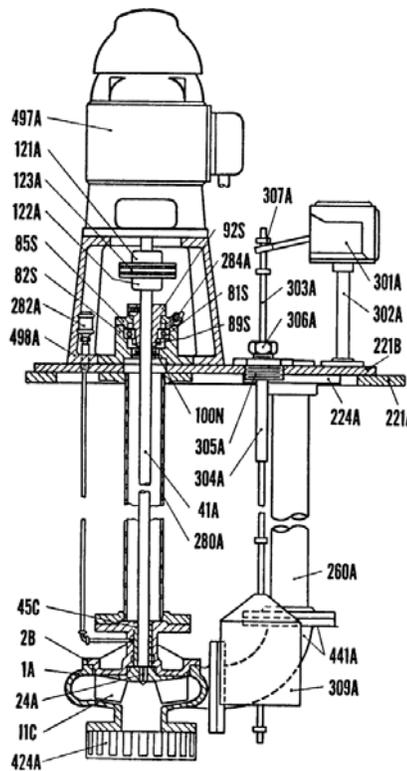
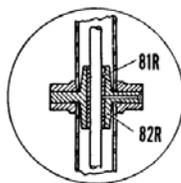
Sump, Lift Stations, Transfer,  
Filter Backwash, Supply Water

PRODUCT BULLETIN  
MODEL SOSM SUMP



Construction with Stuffing Box at Coverplate

Intermediate Sleeve Bearing Construction used on Pit Depths Over Six Feet



SOSM Sectional Drawing

Item Number	Item Description	Num. Req.
1A	Casing	1
2B	Head, Upper Casing	1
11C	Impeller	1
24A	Key, Impeller	1
41A	Shaft, Pump	1
45C	Bearing, Casing Head	1
61A	Box, Stuffing	1
71A	Gland, Stuffing Box	1
72A	Stud, Gland, with Nut	2
81R	Bearing, Intermediate	Varies
81S	Bearing, Ball Thrust	1
82R	Housing, Intermediate Bearing	Varies
82S	Housing, Ball Bearing	1
85S	Cap, Bearing Housing	1
89S	Locknut, Ball Bearing	1
91S*	Lockwasher, Ball Bearing	1
92S	Adapter, Ball Bearing	1
100N	Ring, Lube Seal	1
121A	Coupling, Motor	1
122A	Coupling, Pump	1
123A	Disc, Coupling	1
221A	Plate, Sump Cover	1

Item Number	Item Description	Num. Req.
221B	Plate, Sump Mounting	1
224A	Flange, Upper Discharge	1
260A	Pipe, Discharge, Assembly	Varies
280A	Pipe, Support, Assembly	Varies
282A	Oiler	Varies
284A	Fitting, Zerk Grease	1
301A**	Switch, Float	1
302A	Bracket, Float Switch	1
303A	Rod, Float	1
304A	Guide, Float Rod	1
305A	Box, Float Rod Stuffing	1
306A	Gland Nut, Float Rod Box	1
307A	Stop, Float Rod	4
309A	Float	1
331A	Packing, Stuffing Box	1 set
332A*	Packing, Float Rod Box	1 set
424A	Strainer, Suction	1
441A	Elbow, Discharge	1
497A**	Motor	1
498A	Pedestal, Motor	1
499A	Pedestal, Extension	1

\* Not Shown in sectional

\*\* Not supplied as standard but can be ordered as an option.

Recommended spare parts are in BOLD.