

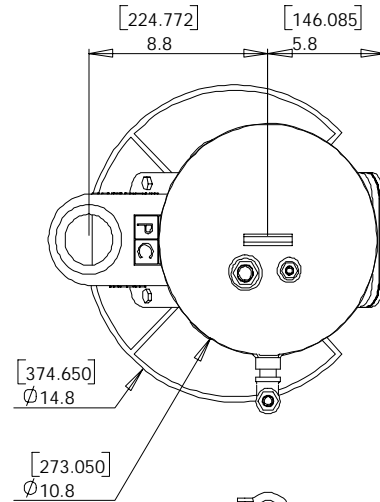
PITBULL MODELS S2C & S2S 2" SUBMERSIBLE PUMPS

The models S2C (steel) and S2S (316SS) are outstanding, low flow sump pumps. They will operate reliably in difficult sump environments and feature the fully automatic, AP200 pneumatic control panel.

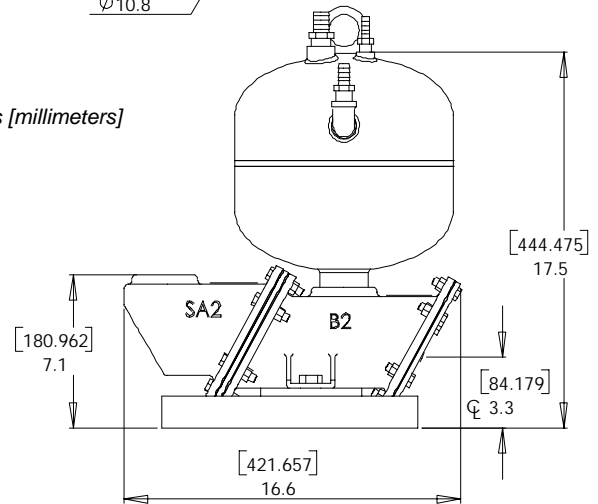
Solids capacity on these units is a full 2" diameter, which allows them to easily handle sump debris, whether stringy and fibrous or hard and abrasive. The S2 can pump them all, even at low flow rates and/or high heads.

Foundry sumps, machining centers, unloading areas, coal tunnels, corrosive sumps, washdown sumps, tank farm sumps, truck docks, chemical sumps, oil/water separators, hazardous and remote locations are among the many types of service suitable for these units.

They are also available with suction capabilities to help pull in viscous liquids, or bridging solids. This is a very useful option for solids-settling sumps.



Dimensions in inches [millimeters]



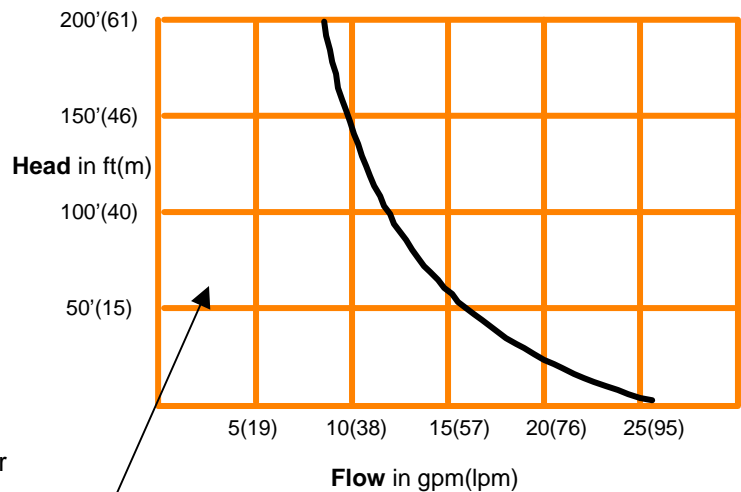
SPECIFICATIONS

- } Weight: 54 lbs/24kg
- } Piping: 2 inch NPT
- } Control panel: AP200 (all-pneumatic)
- } Volume: 2.6 gal/9.8 liters
- } Maximum discharge head: 100 psi/6.9 Bar
- } Maximum solid: 2 inch/51mm diameter
- } Lowest submerged operating level
 - 12 inches/305mm (liquid depth) w/o flow inducement.
- } Maximum suction force (optional)
 - 18 inches/457mm Hg

REQUIREMENTS

- } Compressed air or dry gas, >40 psi/2.8 Bar
- } 1/2" npt air supply inlet

MAXIMUM FLOW CURVE

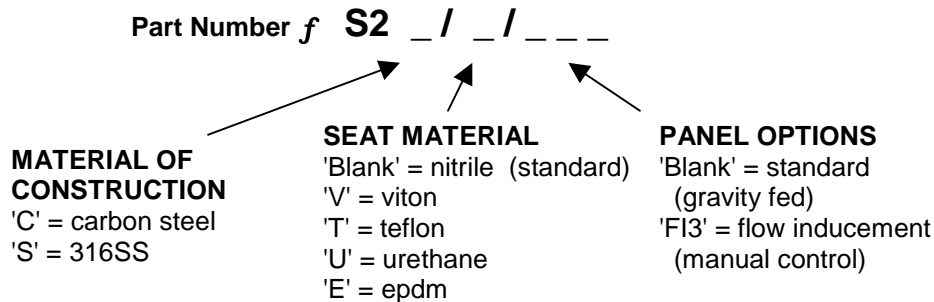


Pump can operate anywhere left of the curve.

See reverse side for air consumption, ordering information and installation recommendations.
CIPC BULLETIN #S204

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Model and options selection:



Standard units:

- #S2C = a steel submersible pump with steel checks and nitrile seats.
- #S2S = a 316SS submersible pump with 316SS checks and nitrile seats.

Optional examples:

- #S2C/U/FI3 = a steel submersible pump with urethane seats and flow inducement option.
- #S2S/V = a 316SS submersible pump with viton seats.

A complete pump contains: pump, inlet and discharge check valves, an AP200 control panel and 15' of nitrile/polyester braided airlines (3). Optional panels are EP250 electropneumatic and AP250 all-pneumatic; both are designed for low level, vacuum filled (continuous) operation.

Description of options:

'FI3' flow inducement. This is an air powered, vacuum generator mounted to the exhaust valve of the control panel. It is operated by a manual ball valve: 'open' generates full suction force; with the valve 'closed' the pump runs as a standard, gravity fed unit

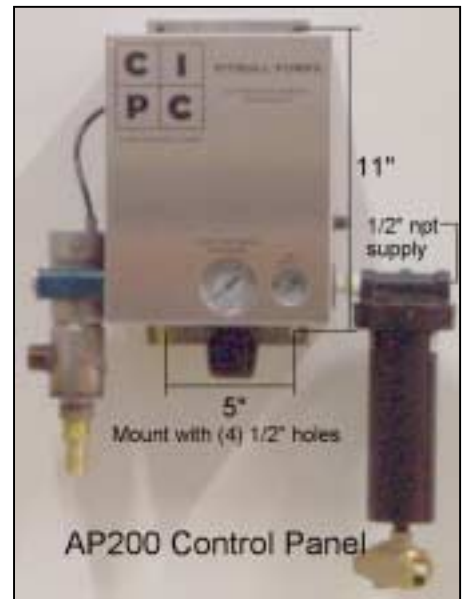
Valve seat selection:

- Nitrile** - good all-purpose elastomer. Medium chemical, oil and solvent resistance, good strength, use to 170°F.
- Viton** - excellent resistance to oxidizers and solvents. Medium strength, use to 250°F.
- Teflon** - best chemical resistance of all. Inert to acids, bases and solvents. Lower cycle life, non-elastomeric, use to 300°F.
- Urethane** - best resistance to abrasion. Toughest of the elastomers, with mild chemical resistance, use to 150°F.
- EPDM** - good heat and acid/base resistance. Tougher than viton but poor solvent resistance, use to 300°F.

AIR CONSUMPTION in SCFM

Head Flow	10 ft	20 ft	40 ft	60 ft	80 ft	100 ft	140 ft	180 ft	220 ft
10 gpm	2	2.4	3.2	4.1	4.9	5.8	7.5	9.3	11
20 gpm	3.8	4.7	6.4	8.1	9.9	11.6	15.1	18.5	22
30 gpm	5.7	7	9.6	12.2	14.8	17.4	22.6	27.8	33
40 gpm	7.6	9.4	12.8	16.3	19.7	23.2	30.1	37.1	44
60 gpm	11.4	14	19.2	24.4	29.6	34.8	45.2	55.6	66
80 gpm	15.2	18.7	25.6	32.6	39.5	46.4	60.3	74.1	88
100 gpm	19	23.4	32	40.7	49.4	58	75.3	92.7	110
140 gpm	26.6	32.7	44.8	57	69.1	81.2	105.5	129.7	154

Example: 20 gpm @ 20 ft TDH requires 4.7 SCFM



COMMONLY ASKED INSTALLATION/APPLICATION QUESTIONS

How much air will it actually use?

The PITBULL® matches your incoming flow rate. So when the inflow drops to half, the air consumption is cut in half too. Actual air consumption is usually much less than shown unless inflow is constant.

Can the airlines be hard-piped?

Yes they can, but the ID's of our standard lines must be matched.

Where is the control panel mounted?

Place within the 15' radius of the airlines, above the pump. Up to 20' extra lines can be ordered (consult CIPC if more is required).

Can the piping be reduced?

Smaller piping causes higher head and velocity, and the pump may pass things the piping can't. Try to avoid dropping more than one pipe size.