The PITBULL®

CHICAGO INDUSTRIAL PUMP COMPANY

TOUGH SUMPS MADE EASY

Alternate Pumping Technology

CIPC®

PITBULL® PUMPS will handle any

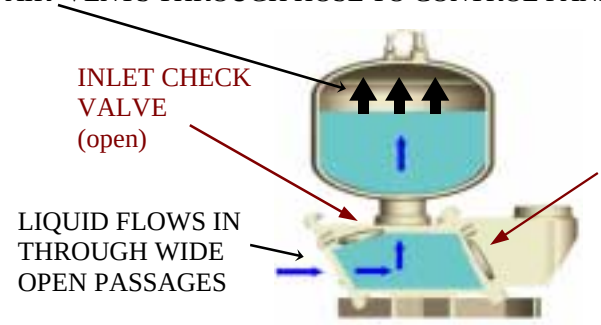
PUMPS LARGE SOLIDS, EVEN AT LOW FLOWS AND HIGH HEADS

Capable of pumping any combination of fines up to 10” solids
0 to 2000 gpm 0-250 feet tdh

SIMPLE TO APPLY

- Just pick a model large enough to handle your flow rate or largest solid.
- No NPSH requirement *(just enough sump depth to submerge the pump).*
- Any model can pump up to 250’ tdh with full solids capacity.
- Solids % can vary from high to low; if the fluid flows by gravity, it will be pumped
- Cycling is automatic, no level control needed.
- No electricity required when using the all pneumatic control panel
- Temperature limit: 200F with standard hoses, 400F with EPDM hoses or hard-pipe.

HOW IT WORKS ….. THE PIT
PRINC



FILL STROKE

TWO CHECK VALVES ARE THE

The AP200 control panel uses a stainless steel enclosure and is located at operator level adjacent to the pump.

A filter with auto-drain is provided along with 15’ air lines.

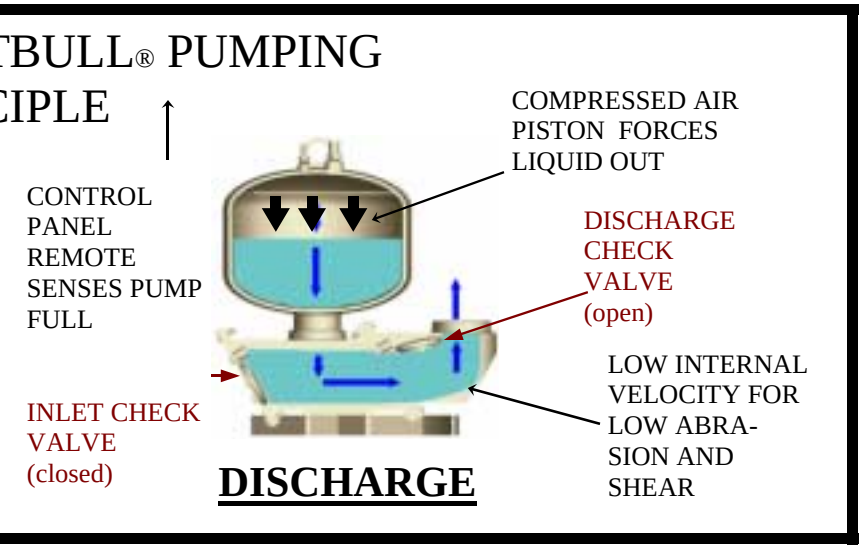
Unlubricated compressed air is required.

The PITBULL® has none of the components that typically fail in other pumps.

NO IMPELLERS
NO PACKING
NO FLOATS
NO LEVEL CONTROLS
NO DIAPHRAGMS
NO SHAFTS
NO MOTORS
NO BEARINGS
NO MECHANICAL SEALS

combination of abrasives, corrosives and trash

WHY THE PITBULL® CAN SOLVE YOUR TOUGH SUMP APPLICATIONS…



ONLY WETTED MOVING PARTS!

PREVENTING SOLIDS BUILD-UP IN SUMPS

The Problem: Sumps act as clarifiers! Conventional pumps sit idle while the sump fills to a high level 'on' point and solids sink in the 'quiet' water (the lower the flow, the more solids that settle). Blinded pumps and filled-in sumps are the result.

The Solution:
Use the pump that automatically matches the incoming flow!

- PITBULLs® match the incoming flow rate as it comes in. *A gallon goes in…a gallon gets pumped out.*
- PITBULLs® don't wait for a high sump level to begin pumping while the solids settle out.
- Any size PITBULL® will automatically pump at low flows.
- Low internal velocity and big passages reduce wear in heavy abrasives.
- No need for high chrome or rubber lining.
- Clinkers and large chunks will pass even at low flows and/or high heads

Excellent for pumping: bottom ash, mill scale, coal and fines, lime slurry, sand, mud, fly ash, grinding swarf, etc..

CIPC is the technology leader of rugged, air-operated submersible pumps, with thousands of PITBULLs® in tough industrial applications, worldwide.

PUMPING TRASH AND DEBRIS

- The PITBULL® has full, pipe-sized passages.
- Full port check valves open wide to pass debris ranging from long and stringy to large and hard.
- The PITBULL's® pumping action cycles the check valves, helping large debris to work through the pump instead of plugging it.
- There is no impeller to wrap or bind, no diaphragms to cut with sharp objects or attack with heat, chemicals and wear.
- Absolutely will not run dry; it will not try to cycle without liquid!
- Centrifugals must be large by design to pass large solids, especially with high heads. This makes them oversized and ill-suited for low and medium flow sumps containing debris.

Excellent for pumping: raw sewage, plastic bags, rope, broken glass, wood chips, bark, waste pulp, paper stock, wash down, packing plant waste, offals, mop strings, machining coolant with turnings, chips, fibers, lint, etc.

PUMPING CORROSIVES AND PROBLEM FLUIDS

- The same PITBULL® that pumps trash and abrasives can handle corrosives as well.
- Wetted components are available in corrosion resistant alloys and non-metallic.
- Without seals, shafts or diaphragms, PITBULLs® can eliminate the bulk of corrosive sump maintenance.
- Gentle pumping action prevents emulsifying mixed liquids, like water and hydrocarbons.

Excellent for: oil/water separators tank car unloading sumps, chemical plant sumps, pickling sumps, tank farms, remote locations, hazardous locations (pneumatic operation – no additional control needed!), dike wall sumps, and so much more..

The PITBULL® - *Alternate Pumping Technology*

HOW TO APPLY THE PITBULL®

1. There is only (1) flow curve, the maximum flow curve. Anywhere left of that model's maximum flow curve is acceptable.
2. You do not need level control – that function is built in.
3. In the standard configuration the pump will begin cycling when fully submerged (this is the 'O' gpm flow rate). Output increases as liquid depth increases. Maximum flow occurs with 2 –3' of liquid above the pump. **The addition of the flow inducement option,** *(see add-ons)* **gives the Pitbull the ability to produce maximum flow whenever the intake is submerged for full flow even at low fluid levels.**
4. Solids capacity – see *Dimensions Table.*
5. Air consumption – see *Air Consumption Chart.*
6. Discharge piping requirement – A 50 gpm PITBULL® actually pumps 100 gpm when discharging, and O gpm when refilling, in order to produce a 50 gpm average flow rate. Try to match the PITBULL's® large piping, or at least base your friction calculations on double the average flow rate.
7. Airlines – 15' of hoses are supplied standard with the pump. Optional distances up to 30' are available. Airlines may be hard piped with required instructions.

OPTIONS-Materials

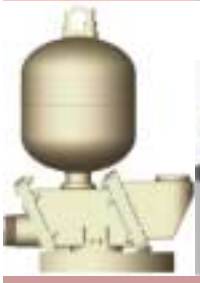
Construction (pump and valves):
Carbon steel and 316SS are standard.
Options include Alloy-20, Hastelloy & vinyl ester.
Check valve seats: Nitrile, epdm, urethane, viton, polyethylene, and teflon for metallic pumps.
Viton and EPDM for non-metallic pumps.
Airlines: Nitrile hose is standard. Options include epdm, or adapters for customer hard piping.

Add-ons

- Air filters
- Flow inducers—provide intake suction force to pull in heavy solids or thick slurries and allows draw down to intake level.
- Polyethylene check valve wear plate available for high abrasion applications.

More than just a submersible pump the Pitbull is also available as a

Transfer	Suction Lift	Non-Metallic	Sludge/Slurry & Filterpress




… and no matter which configuration you choose you get the same rugged reliability of the one and only PITBULL®!

Chicago Industrial Pump Company

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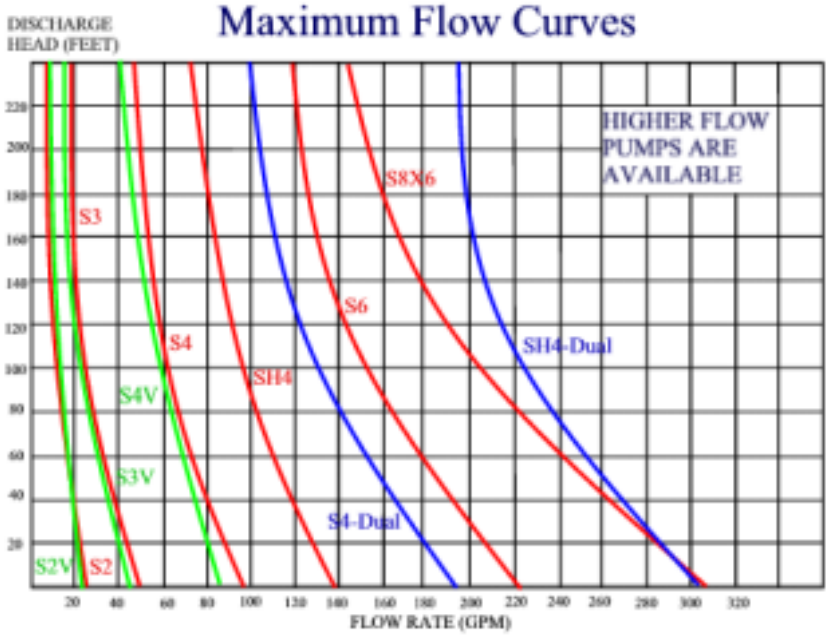
Phone: 847-214-8988 Fax: 847-214-8998
www.pitbullpumps.com

Your local PITBULL® distributor is



Air Consumption Chart (In SCFM)

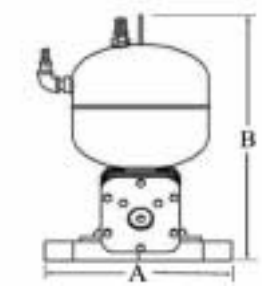
Discharge Head

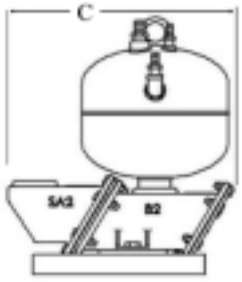
GPM	20 ft	40 ft	60 ft	80 ft	100 ft	140 ft	180 ft	220 ft
10	2.4	3.2	4.1	4.9	5.8	7.5	9.3	11
20	4.7	6.4	8.1	9.9	11.6	15.1	18.5	22
30	7.0	9.6	12.2	14.8	17.4	22.6	27.8	33
60	14.0	19.2	24.4	29.6	34.8	45.2	55.6	66
100	23.4	32.0	40.7	49.4	58.0	75.3	92.7	110
140	32.7	44.8	57.0	69.1	81.2	105.5	129.7	154
220	51.4	70.5	89.5	108.6	127.6	165.7	203.9	242
300	70.1	96.1	122.0	148.0	174.0	226.0	278.0	330
400	93.4	128.1	162.8	197.4	232.1	301.3	370.6	440

Example: 30 GPM pumping into 60 ft TDH requires 12.2 SCFM

PUMP DIMENSIONS

Model	Width: A	Height: B	Length: C	Piping (NPT)	Solids CAP.	Weight (lbs)
S2	14.8"	16"	16.5"	2 "	2 "	54
S3	18"	19"	21"	3 "	3"	78
S4	22"	26.9"	25.7"	4 "	3.75"	148
SH4	22"	41.9"	25.7"	4 "	3.75"	188
S6	33"	32"	46"	6 "	5.5"	390
S8X6	45"	44"	41"	8" x 6 "	5.5"	534
S2V	16"	22.6"	17.9"	2 "	1.25"	54
S3V	19"	28.2"	20.3"	3 "	2"	80
S4V	24"	26.5"	26.3"	4 "	2.5"	110





Outlines of 2-4 inch metallic pumps shown. Actual appearance of 6", 8" and Non-metallic pumps vary from above see spec sheets, cd, or website for appearance and details.

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