MODEL S6C

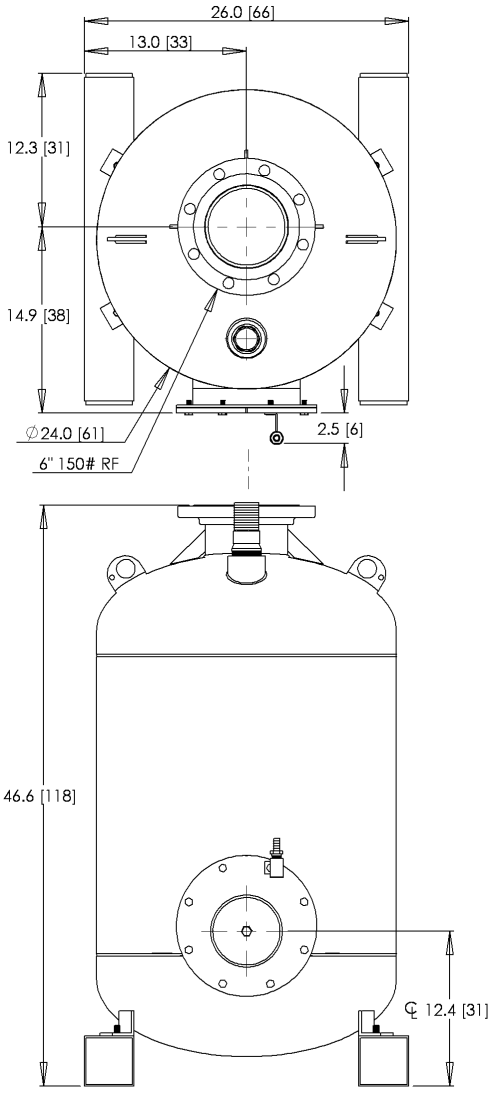
CLASS: Submersed solids handling

CONSTRUCTION: Carbon Steel

CAPACITY: 0-250 gpm [953 lpm]

DISCHARGE PRESSURE: 0-100 psi [6.9 Bar]

MAX SOLID: 5.75” [14.6 cm]



CONFIGURATION OPTIONS

- ALL-PNEUMATIC CONTROL (XP/explosion-proof and remote locations)
- ELECTRO-PNEUMATIC CONTROL (non-XP)
- GRAVITY FILLED
- FLOW INDUCED (vacuum assisted fill)
- HIGH TEMPERATURE (212F/100C)

APPLICATION EXAMPLES

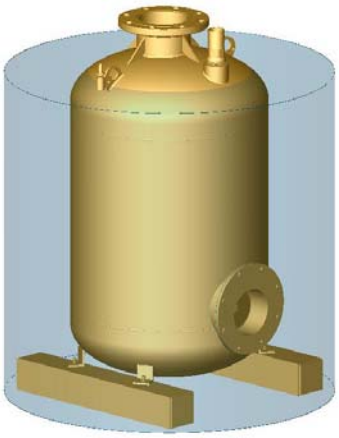
Sumps for: process waste, coal handling and belt conveyor sumps, bottom ash and clinker sumps, muds, wood yard and pulp sumps, foundry sand, packing plant waste, poultry offals, feathers, XP locations, mill scale, raw sewage.

<u>This pump will handle debris ranging from stringy to abrasive up to 5.75” diameter including slurries.</u>

QUICK SPECS

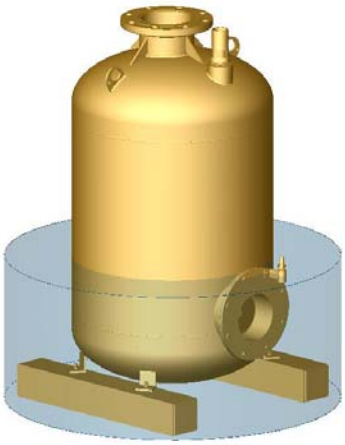
- Weight: 540 lbs [245 kg]
- Stroke Volume: 66 gal [251 l]
- Operating Levels: ‘Flow Induced’ - 20”[51 cm], ‘Gravity’ - 44” [112 cm] *(see reverse side for explanation)*
- Panel Required: either AP300, EP250 or SP310

See reverse side for Specification Details, Flow Curve and Air Consumption



Gravity operation requires an operating level equal to the top of the pump (appr 44") .

No compressed air is required for the fill stroke.



F6 flow inducement uses a compressed air powered, vacuum generator mounted to the exhaust valve of the control panel. It applies vacuum to the pump during the fill stroke to lower the operating level (appr 20").

*see note below chart for additional air consumption

To specify a pump select a control panel (required) and seat option. Nitrile (std) 15 ft airlines are provided.

Part# S6C /_ / _ _ _

SEAT MATERIAL
N = nitrile (standard)
V = viton
T = teflon
UHD = hard urethane
E = epdm
K = kynar

PANEL OPTIONS
AP300G6 = all-pneumatic, gravity fed.
EP250G6 = electro-pneumatic, gravity fed.
AP300F6L = all-pneumatic, low vacuum flow induced.
EP250F6L = electro-pneumatic, low vacuum flow induced
SP310G6 = single probe, gravity fed
SP310F6 = single probe, high vacuum flow induced

Example:
S6C/N/SP310F6 = 6" steel submersible pump with nitrile seats, SP310F6 control panel.

Panel Requirements: Compressed air or dry gas, unlubricated, recommended 80 psi delivered through 1-1/2" pipe or equal (applies to all panels).

EP250 and SP310 panels also require 110 vac (<1 A).

Valve seat selection:

- Nitrile - good all-purpose elastomer. Medium chemical, oil and solvent resistance, used up to 150°F.
- Viton - excellent resistance to oxidizers and solvents. Medium strength, used up to 250°F.
- Teflon - excellent chemical resistance to acids, bases and solvents. Lower cycle life, non-elastomeric, used up to 300°F.
- Hard Urethane - high durometer with good abrasion resistance with mild chemical resistance, used up to 150°F.
- EPDM - good heat and acid/base resistance but poor hydrocarbon resistance, used up to 300°F.
- PVDF (kynar) - excellent chemical resistance, toughness and resistance to cold flow (thermoplastic). Good cycle life and can be used up to 250°F.

MAXIMUM FLOW CURVE

with air consumption in SCFM (gravity mode)

HEAD meters	GPM 25	50	75	100	125	150	175	200	225	250	275	300
	lpm 95	189	284	379	473	568	662	757	852	946	1041	1136
220 ft 67.1	27	55	82	110	137	165	192	220	247			
200 ft 61.0	25	51	76	101	127	152	177	203	228			
180 ft 54.9	23	46	69	93	116	139	162	185	208			
160 ft 48.8	21	42	63	84	105	126	147	168	189			
140 ft 42.7	19	38	56	75	94	113	132	151	169			
120 ft 36.6	17	33	50	67	83	100	117	133	150			
100 ft 30.5	14	29	43	58	72	87	101	116	130			
80 ft 24.4	12	25	37	49	62	74	86	99	111	123	136	148
60 ft 18.3	10	20	31	41	51	61	71	81	92	102	112	122
40 ft 12.2	8	16	24	32	40	48	56	64	72	80	88	96
20ft 6.1	6	12	18	23	29	35	41	47	53	58	64	70
10 ft 3.0	5	10	14	19	24	29	33	38	43	48	52	57

Operating Flow Capacity: ***anywhere*** *in shaded area.*

Air consumption: *pick closest cell to your flow & pressure*

SP310F6 Panel

Example 1 (gravity fill): 225 gpm @ 20 ft TDH requires 53 scfm

*Note for flow inducement: add 0.13 x gpm to the air consumption (F6).

Example 2 (flow induced): 225 gpm @ 20 ft. Since 225 gpm @ 20 ft uses 53 scfm, then add 0.13 scfm per gpm to that air consumption; in this case 225 x 0.13 scfm or 29 scfm. The total consumption is 53 + 29 = 82 scfm.