MODEL S6X4C

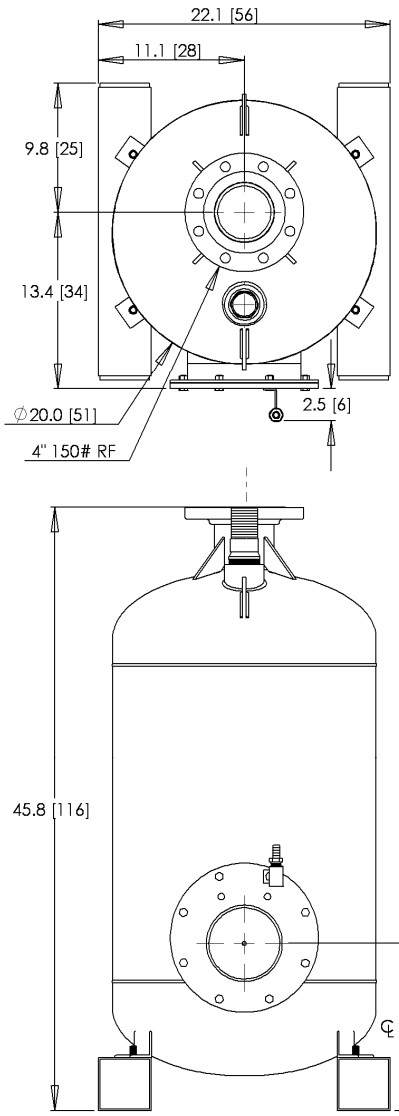
CLASS: Submersed solids handling

CONSTRUCTION: Carbon Steel

CAPACITY: 0-205 gpm [781 lpm]

DISCHARGE PRESSURE: 0-100 psi [6.9 Bar]

MAX SOLID: 3.75” [9.5 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

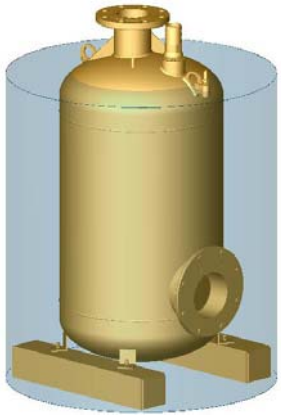
Sumps for: coal handling and belt conveyor sumps, bottom ash and clinker sumps, muds, wood yard and pulp sumps, chemical wastes, machining chips, packing plant waste, poultry offals, XP locations, mill scale, raw sewage.

<u>This pump will handle debris ranging from stringy to abrasive up to 3.75” diameter including slurries.</u>

QUICK SPECS

- Weight: 394 lbs [1779kg]
- Stroke Volume: 43 gal [163 l]
- Operating Levels: ‘Flow Induced’ - 15”[38 cm], ‘Gravity’ - 41” [104 cm] *(see reverse side for explanation)*
- Panel Required: either AP300, EP250 or SP310

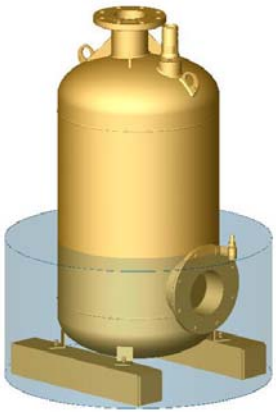
See reverse side for Specification Details, Flow Curve and Air Consumption



Gravity operation requires an operating level equal to the top of the pump

(appr 41") .

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 15").

*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# S6X4C /_ / _ _ _

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 = electro-pneumatic, single probe, gravity fed
SP310F6 = electro-pneumatic, single probe, high vacuum flow induced

Example:
S6X4C/N/SP310F6 = 6X4" steel submersible pump with nitrile seats, SP310F6 control panel.

Panel Requirements: Compressed air or dry gas, unlubricated, recommended 80 psi delivered through 1.25" 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 20	40	60	80	100	120	140	160	180	200	220	240
	lpm	76	151	227	303	379	454	530	606	681	757	833	908
220	67.1	22	44	66	88	110	132	154					
200	61.0	20	41	61	81	101	122	142					
180	54.9	19	37	56	74	93	111	130					
160	48.8	17	34	50	67	84	101	118					
140	42.7	15	30	45	60	75	90	105	120	136	151	166	181
120	36.6	13	27	40	53	67	80	93	107	120	133	147	160
100	30.5	12	23	35	46	58	70	81	93	104	116	128	139
80	24.4	10	20	30	39	49	59	69	79	89	99	109	118
60	18.3	8	16	24	33	41	49	57	65	73	81	89	98
40	12.2	6	13	19	26	32	38	45	51	58	64	70	77
20	6.1	5	9	14	19	23	28	33	37	42	47	51	56
10	3.0	4	8	11	15	19	23	27	30	34	38	42	46

Operating Flow Capacity: ***anywhere*** *in shaded area.*
Air consumption: *pick closest cell to your flow & pressure*

SP310F6 Panel

Example 1 (gravity fill): 180 gpm @ 20 ft TDH requires 42 scfm

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

Example 2 (flow induced): 180 gpm @ 20 ft. Since 180 gpm @ 20 ft uses 42 scfm, then add 0.13 scfm per gpm to that air consumption; in this case 180 x 0.13 scfm or 23.4 scfm. The total consumption is 42 + 23.4 = 65.4 scfm.