MODEL S8S

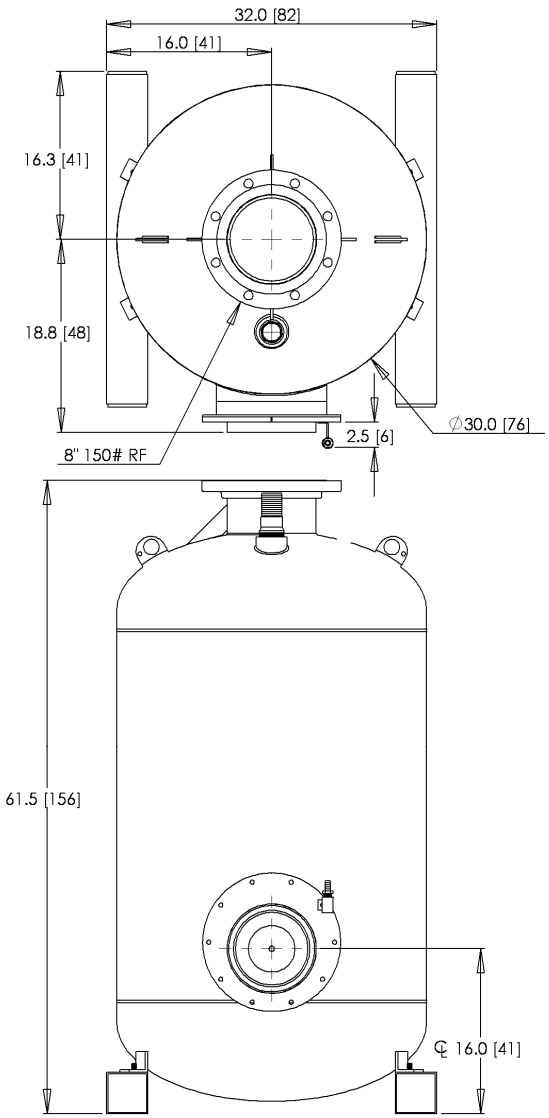
CLASS: Submersed solids handling

CONSTRUCTION: 304 Stainless Steel

CAPACITY: 0-375 gpm [1420 lpm]

DISCHARGE PRESSURE: 0-100 psi [6.9 Bar]

MAX SOLID: 7” [18 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

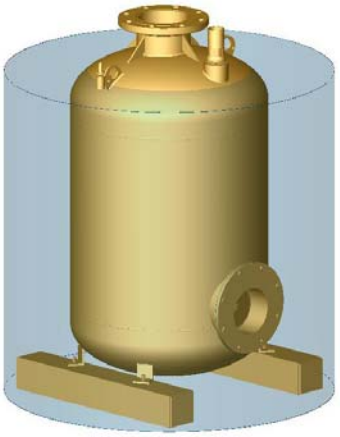
Sumps for: process waste, coal handling and belt conveyor sumps, bottom ash and clinker sumps, muds, wood yard and pulp sumps, foundry sand, packing plant waste, poultry offals, feathers, XP locations, fruit/vegetable waste, mill scale, raw sewage.

<u>This pump will handle debris ranging from stringy to abrasive up to 7” diameter including slurries.</u>

QUICK SPECS

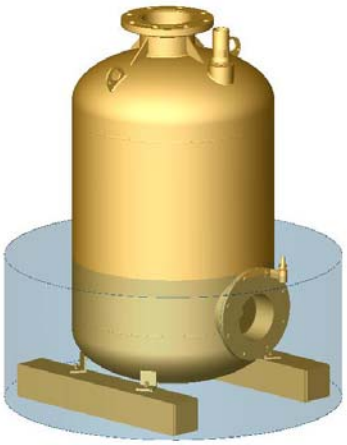
- Weight: 415 lbs [188 kg]
- Stroke Volume: 66 gal [9.8 l]
- Operating Levels: ‘Flow Induced’ - 21”[53 cm], ‘Gravity’ - 55” [140 cm] *(see reverse side for explanation)*
- Panel Required: either AP300, EP250 or SP310

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 55").

No compressed air is required for the fill stroke.



F8L flow inducement uses (2) compressed air powered, vacuum generator mounted to the exhaust valve of the control panel. They apply vacuum to the pump during the fill stroke to lower the operating level (to appr 21").

*see note below chart for additional air consumption

Part# S8S /_ /_ _ _

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

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

PANEL OPTIONS
AP300G8 = all-pneumatic, gravity fed
EP250G8 = electro-pneumatic, gravity fed
AP300F8L = all-pneumatic, low vacuum flow induced
EP250F8L = electro-pneumatic, low vacuum flow induced
SP310G8 = single probe, gravity fed
SP310F8 = single probe, high vacuum flow induced

Example:
S8S/N/AP300G8 = 8" 304SS submersible pump with nitrile seats, AP300G8 control panel.

Panel Requirements: Compressed air or dry gas, unlubricated, recommended 80 psi delivered through 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	40 GPM	80 GPM	120 GPM	160 GPM	200 GPM	240 GPM	280 GPM	320 GPM	360 GPM	400 GPM	440 GPM	480 GPM
	lpm	151	303	454	606	757	908	1060	1211	1363	1514	1665	1817
220 ft	67.1	44	88	132	176	220	264						
200 ft	61.0	41	81	122	162	203	243						
180 ft	54.9	37	74	111	148	185	222						
160 ft	48.8	34	67	101	134	168	202						
140 ft	42.7	30	60	90	120	151	181	211	241	271	301	331	361
120 ft	36.6	27	53	80	107	133	160	187	213	240	267	293	320
100 ft	30.5	23	46	70	93	116	139	162	186	209	232	255	278
80 ft	24.4	20	39	59	79	99	118	138	158	178	197	217	237
60 ft	18.3	16	33	49	65	81	98	114	130	146	163	179	195
40 ft	12.2	13	26	38	51	64	77	90	102	115	128	141	154
20 ft	6.1	9	19	28	37	47	56	65	75	84	93	103	112
10 ft	3.0	8	15	23	30	38	46	53	61	69	76	84	91

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

SP310F6 Panel

Example 1 (gravity fill): 320 gpm @ 20 ft TDH requires 75 scfm

*Note for flow inducement: add 0.18 x gpm to the air consumption (using F8L).

Example 2 (flow induced): 320 gpm @ 20 ft. Since 320 gpm @ 20 ft uses 75 scfm, then add 0.18 scfm per gpm to that air consumption; in this case 320 x 0.18 scfm or 58 scfm. The total consumption is 75 + 58 = 133 scfm.