



MODEL T4S

CLASS: Transfer chemical and solids handling

CONSTRUCTION: 316 Stainless Steel

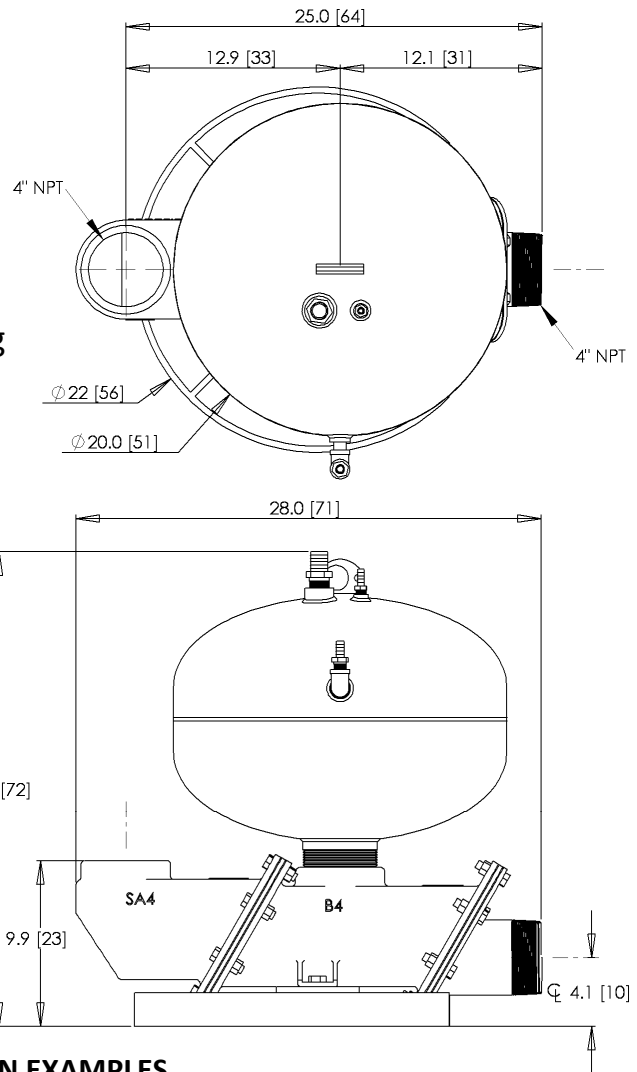
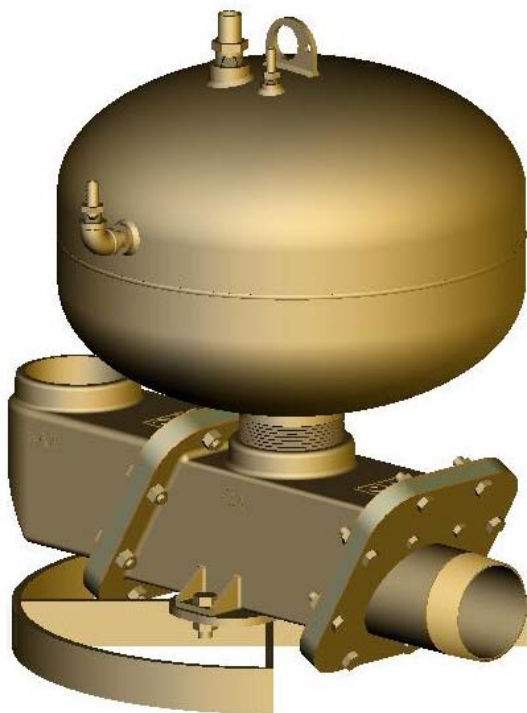
CAPACITY: 0-95 gpm [360 lpm]

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

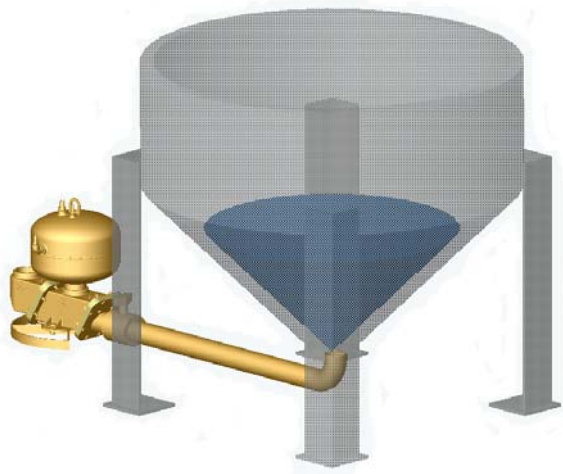
Chemical process and wastewater handling, acid-caustic clarifier sludge, diatomaceous earth slurry, secondary containment, drilling muds, solvents and extraction fluids, chicken offals, spinal cords/brains, knockout pots, packing plant wastes, boiler blow down, DAF sludge, oil/water separators, lapping compound, blood/clots.

This pump will handle debris ranging from stringy to abrasive up to 3.75" diameter including slurries.

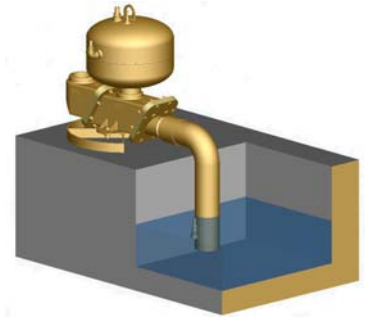
QUICK SPECS

- Weight: 154 lbs [70 kg]
- Stroke Volume: 13.5 gal [51 l]
- Operating Levels: 'Gravity' - 24" [30 cm]
Optional Suction Lift: 'Flow Induced' - 120" [3 m] maximum suction lift
(see reverse side for explanation details)
- Panel Required: either AP212 or SP310

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



Gravity operation (left) requires an operating level equal to or above the top of the pump (appr 24" above grade).
No compressed air is required for the fill stroke.



F4 flow inducement (above right) uses an air powered, vacuum generator on the exhaust valve of the control panel. It applies vacuum to the pump during the fill stroke to pull fluid up into the pump; 10 ft of lift is the recommended maximum.

*see note below chart for additional air consumption

Part# **T4S/ / - - -**

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

Panel Requirements: Compressed air or dry gas, unlubricated, recommended 80 psi delivered through 3/4" pipe or equal (applies to all panels).

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

SEAT MATERIAL

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

PANEL OPTIONS

- AP212G4 = all-pneumatic, gravity fed.
- SP310G4 = single probe, gravity fed.
- AP212F4 = all-pneumatic, flow induced.
- SP310F4-LLC = single probe, flow induced with level control.

Example:

T4C/N/AP212G4 = 4" steel transfer pump with nitrile seats, AP212G4 control panel.

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	11	22	33	44	55	Operating Flow Capacity:				
220 ft 67.1	11	22	33	44	55	<i>anywhere in shaded area.</i>				
200 ft 61.0	10	20	30	41	51	<i>Air consumption: pick</i>				
180 ft 54.9	9	19	28	37	46	<i>closest cell to your flow & pressure</i>				
160 ft 48.8	8	17	25	34	42					
140 ft 42.7	8	15	23	30	38					
120 ft 36.6	7	13	20	27	33	40	47	53	60	67
100 ft 30.5	6	12	17	23	29	35	41	46	52	58
80 ft 24.4	5	10	15	20	25	30	35	39	44	49
60 ft 18.3	4	8	12	16	20	24	28	33	37	41
40 ft 12.2	3	6	10	13	16	19	22	26	29	32
20 ft 6.1	2	5	7	9	12	14	16	19	21	23
10 ft 3.0	2	4	6	8	10	11	13	15	17	19
GPM	10	20	30	40	50	60	70	80	90	100
lpm	38	76	114	151	189	227	265	303	341	379

SP310F3-LLC Panel



Example 1 (gravity fill): 60 gpm @ 20 ft TDH requires 14 scfm

*Note for flow inducement: add 0.37 x gpm to the air consumption.

Example 2 (flow induced): 60 gpm @ 20 ft using suction lift. Since 60 gpm at 20 ft uses 14 scfm (from chart), then add 0.37 scfm per gpm to the consumption; in this case 60 x 0.37 or 22.2 scfm. The total consumption is 14+22.2=36.2 scfm.