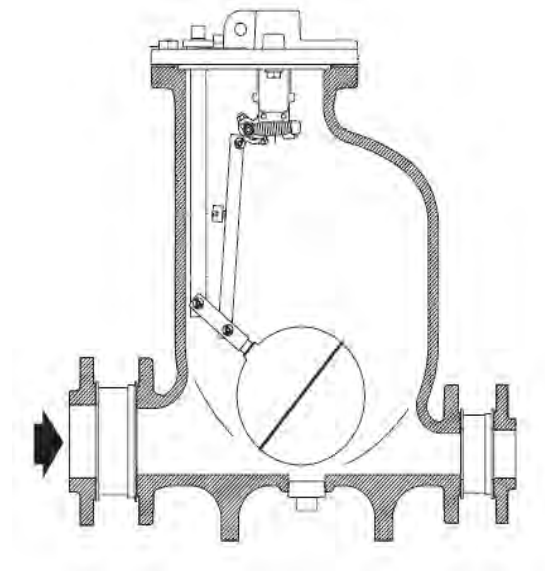


Pumping Traps

PTF Automatic pump



Description

1. Removes condensate under all load conditions, even vacuum, ensuring maximum process efficiency.
2. Requires no electrical power -suitable for hazardous environments.
3. Cavitation problems eliminated reducing maintenance.
4. No mechanical seals or packing glands to leak.
5. Effective design provides high capacity in a rugged, compact package.

Selection of possible applications

Condensate Systems, General Industries, Pharmaceuticals, Power Generation, Primary Processing, Steam Systems

Selection of possible flow media

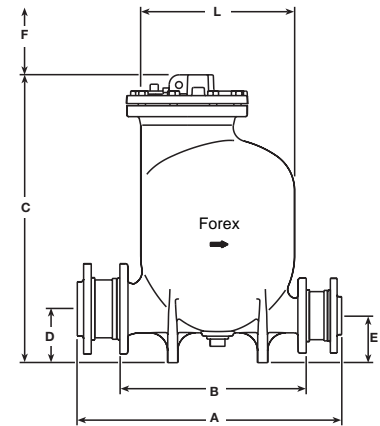
Steam, water

Pumping Traps

PTF Automatic pump

Dimensions and Weights(mm/kg)

Size	A	B	C	D	E	F	L	Weights
DN25	410	305	507	68	68	480	280	51
DN40	440	305	527	81	81	480	180	54
DN50	655	420	637	104	104	580	321	72
DN80×50	655	420	637	104	104	580	342	88



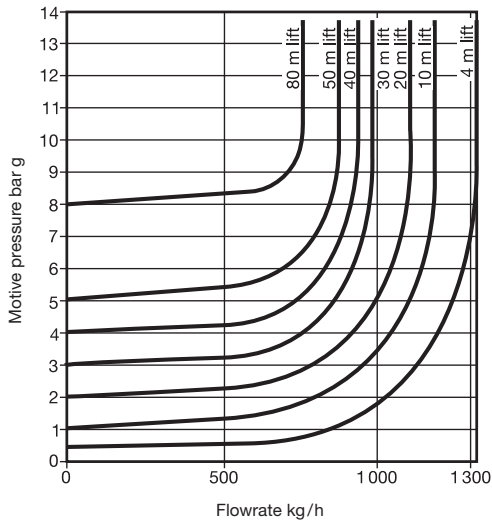
Materials

Material	Ductile iron	Cast steel	Stainless steel
Body design rating	PN16	PN16	PN16
Size	DN25		
	DN40		
	DN50		
	DN80×50		
Inlet/Outlet	PN16 ANSI150	Flanged	Flanged
	BSP	Screwed	Screwed
internal mechanism	Stainless steel	Stainless steel	Stainless steel
Maximum operating pressure	13.8 bar g		
Maximum operating temperature	200°C		

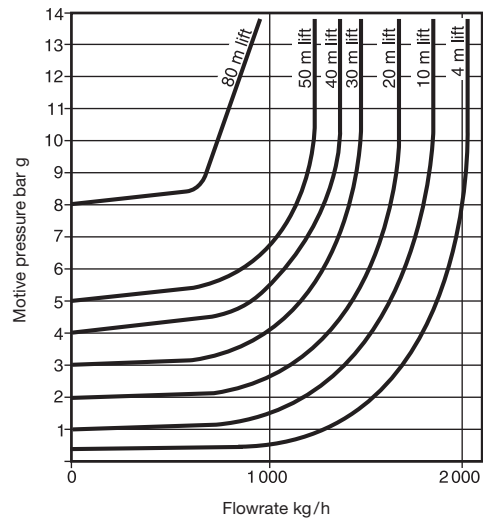
Capacity (8bar operating pressure, 1bar back pressure)

DN25	DN40	DN50	DN80×50
1100kg/h	1800kg/h	3200kg/h	5500kg/h

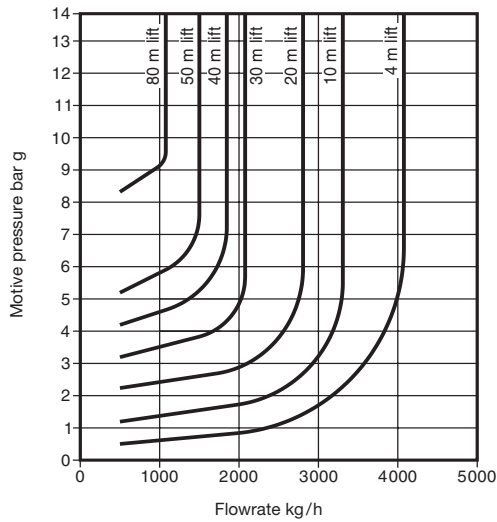
Capacity Charts (based on a filling head of 0.3 meters)



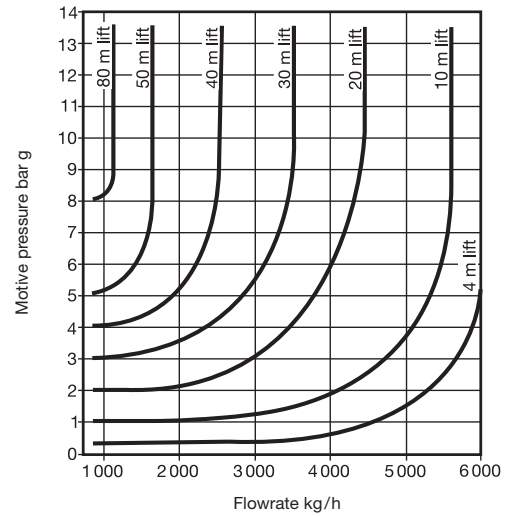
DN25 pump capacities



DN40 pump capacities



DN50 pump capacities

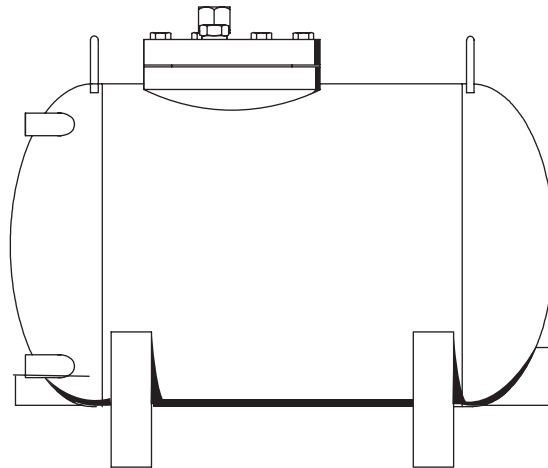


DN80 x DN50 pump capacities

Capacity multiplying factors for other filling heads

Filling head meters (m)	Capacity multiplying factors			
	DN25	DN40	DN50	DN80x50
0.15	0.90	0.75	0.75	0.80
0.30	1.00	1.00	1.00	1.00
0.60	1.15	1.10	1.20	1.05
0.90	1.35	1.25	1.30	1.15

PTF300 Press pumpure Operated Mechanical Pump



Description

1. Economical non-electric operation. Uses inexpensive steam, air or inert gas.
2. Low-maintenance operation. No leaking seals, impeller or motor problems means lower maintenance. No NPSH issues.
3. Space-saving size. Low-profile body fits in tight spaces while allowing minimal fill head.
4. Lower installation costs. Single trade required for installation and maintenance.
5. Safety. The pump can be used in flooded pits without fear of electrocution or circuit breaker defaults.

Selection of possible applications

Condensate Systems, General Industries, Pharmaceuticals, Power Generation, Primary Processing, Steam Systems

Selection of possible flow media

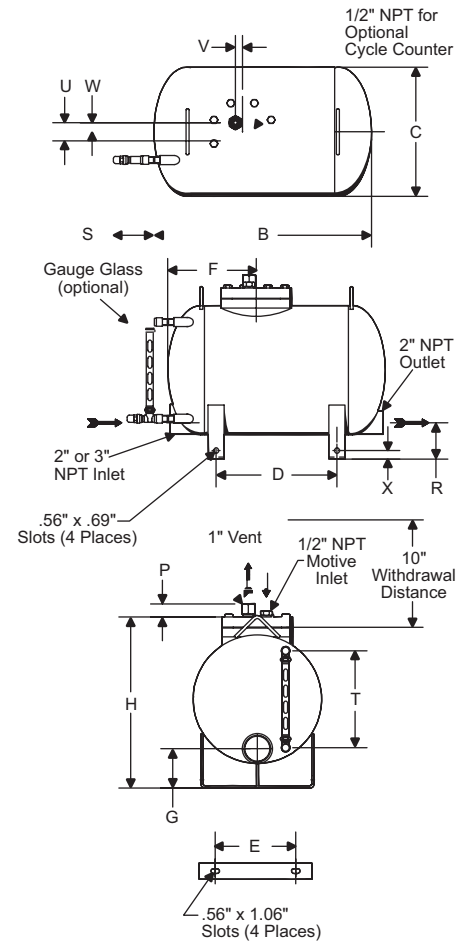
Steam, water

PTF300 Press pumpure Operated Mechanical Pump

Dimensions and Weights(mm/kg)

Model Number	PTF-300	
	in	mm
B	27	686
C	16	406
D	15	381
E	10	254
F	11	279
G	5-7/16	138
H	21-3/16	538
P	1-5/8	41
R	4-13/16	122
S	5-1/32	128
T	12	305
U	2-1/4	57
V	7/8	22
W	1-1/4	32
X	1-1/16	27
Weight lb (kg)	154 (70)	

Maximum Allowable Pressure (Vessel Design): 150 psig @ 650°F (10 bar @ 343°C)
Maximum Operating Pressure: 125 psig (9 bar)
*Tolerance +/- 1/2"



PT-300 Pumping Trap Materials	
Name of Part	Series PTF 300
Body and Cap	Cast steel 150 psi ASME Sec. VIII
Cap Gasket	Graphoil
Bolts	steel
Nuts	None
Inlet Valve Assembly	Stainless steel
Vent Valve Assembly	Stainless steel
Valve Assembly Washers	steel
Plug	Steel
Mechanism Assembly	Stainless steel
Springs	Inconel X-750

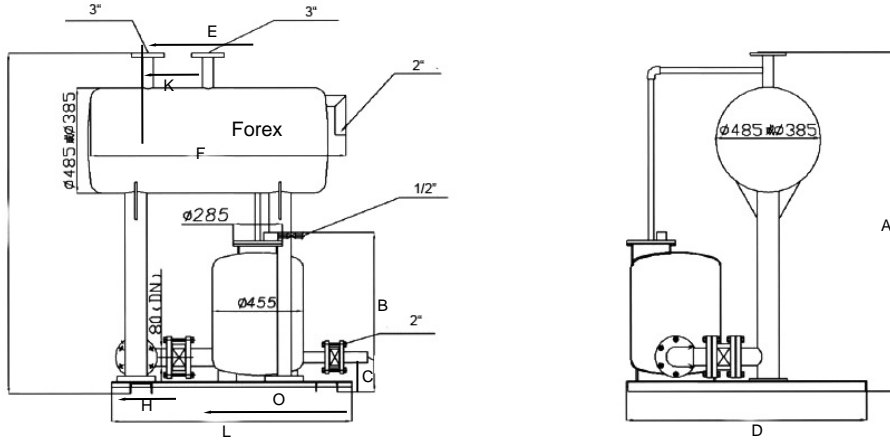
PTF 300 Pumping Trap Connection Sizes					
Model	Horizontal Steel				
	PTF 308		PTF 312		
	in	mm	in	mm	
Inlet Connection	2	50	3	80	
Outlet Connection	2	50	2	50	
Motive Pressure Connection	1/2	15	1/2	15	
Vent Connection	1	25	1	25	
Optional Gauge Glass Connection	1/2	15	1/2	15	

PTF 300 Capacity Conversion Factors for Other Fill Heads										
Fill Head	in		mm		in		mm		in	
	0	0	6	152	12	305	24	610	36	914
	Model	PTF 308	PTF 312	PTF 308	PTF 312	PTF 308	PTF 312	PTF 308	PTF 312	PTF 308
	0.7	0.85	1.0	1.2	1.3					
	0.7	0.85	1.0	1.08	1.2					

PTF300 Press pumpure Operated Mechanical Pump

Motive Pressure		Total Lift or Back Pressure		PTF 308 (12" Fill Head) 2" x 2"				PTF 312 (12" Fill Head) 3" x 2"			
				Steam Motive		Air Motive		Steam Motive		Air Motive	
psig	bar	psig	bar	lb/hr	kg/hr	lb/hr	kg/hr	lb/hr	kg/hr	lb/hr	kg/hr
15	1.0	50.	34	6,900	3,130	9,200	4,173	9,000	4,082	12,300	5,579
25	1.7			10,200	4,622	10,900	4,944	13,200	5,987	14,200	6,441
50	3.5			10,600	4,808	11,100	5,035	15,100	6,849	15,800	7,167
75	5			10,800	4,898	11,300	5,126	15,300	6,940	16,100	7,303
100	7			11,200	5,080	*	*	15,500	7,031	*	*
125	8.5			11,600	5,261	*	*	16,600	7,530	*	*
25	1.7	15	1	7,000	3,175	10,100	4,581	9,000	4,082	11,200	5,080
50	3.5			9,600	4,354	10,900	4,944	12,800	5,806	13,800	6,260
75	5			10,750	4,876	11,100	5,035	14,200	6,441	15,000	6,804
100	7			10,900	4,944	*	*	14,300	6,486	*	*
125	8.5			11,300	5,125	*	*	15,100	6,849	*	*
35	2.5	25	1.5	7,100	3,221	9,200	4,173	8,100	3,674	11,500	5,216
50	3.5			8,300	3,765	10,200	4,627	10,200	4,627	12,750	5,783
75	5			10,100	4,581	11,000	4,989	12,500	5,670	13,500	6,123
100	7			10,200	4,627	*	*	12,700	5,761	*	*
125	8.5			10,300	4,672	*	*	13,000	5,897	*	*
50	3.5	40	3	5,700	2,585	7,600	3,447	6,600	2,994	9,800	4,445
60	4			6,600	2,994	8,800	3,992	8,400	3,810	10,500	4,763
75	5			7,600	3,447	10,100	4,581	9,800	4,445	12,700	5,761
100	7			8,400	3,810	*	*	10,100	4,581	*	*
125	8.5			9,400	4,264	*	*	10,300	4,672	*	*
70	4.5	60	4	4,500	2,041	7,000	3,175	6,000	2,722	10,200	4,627
75	5			4,700	2,132	7,100	3,221	6,400	2,903	10,400	4,717
100	7			6,400	2,903	*	*	7,100	3,221	*	*
125	8.5			6,600	2,994	*	*	7,400	3,357	*	*

PTF-P Condensate recovery



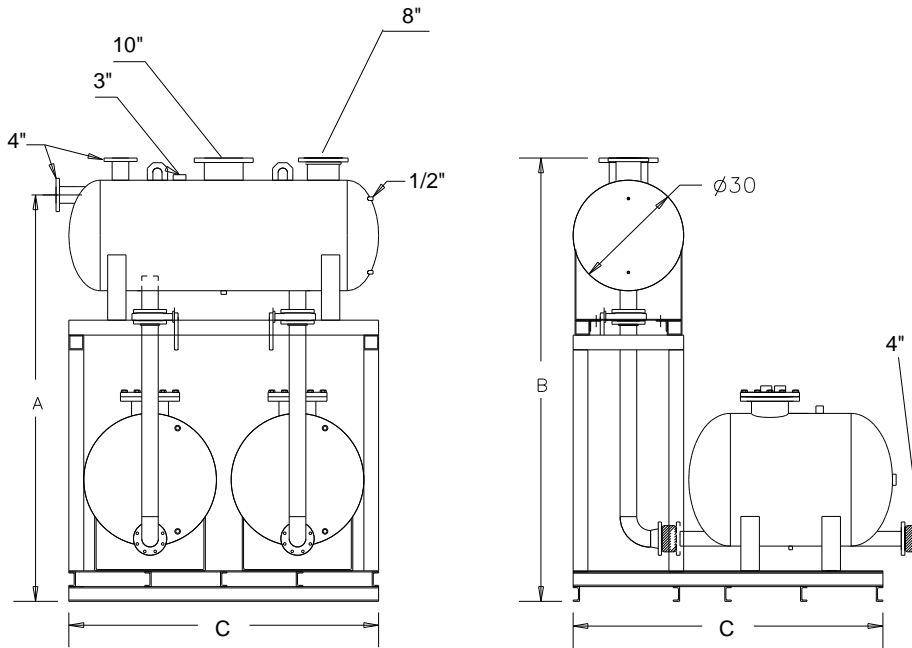
Dimensions (mm)

Type	A	B	C	D	E	F	H	K	L	O
DN25	1150	700	150	1100	550	1100	113	275	1172	655
DN40	1150	700	150	1100	550	1100	113	275	1172	655
DN50	1150	700	150	1100	550	1100	113	275	1172	655
DN80×50	1150	700	150	1100	550	1100	113	275	1172	655

Capacities

Single pump				Double pump
DN25	DN40	DN50	DN80	DN80
1300kg/h	2060 kg/h	4500 kg/h	6000 kg/h	11000 kg/h

PTF-RP Condensate recovery



Capacities

Motive Pressure		Total Lift or Back Pressure		4" x 4" Connections 24" Fill Head			
psig	bar	psig	bar	Steam Motive		Air Motive	
				lb/hr	kg/hr	lb/hr	kg/hr
15	1.0	50.	34	28,962	13,137	57,619	26,136
25	1.7			37,162	16,857	61,911	28,083
35	2.5			42,563	19,307	64,738	29,365
50	3.5			48,288	21,903	67,735	30,725
60	4			51,214	23,231	69,267	31,420
70	4.5			53,688	24,138	70,562	32,007
75	5			54,796	24,855	71,142	32,270
100	7			59,414	26,950	73,559	33,366
125	8.5			62,995	28,575	*	*
150	10.34			65,922	29,902	*	*
25	1.7	15	1	36,720	16,656	50,783	23,035
35	2.5			40,611	18,421	54,293	24,627
50	3.5			45,196	20,501	58,013	26,315
60	4			47,740	21,655	59,915	27,177
70	4.5			50,005	22,682	61,523	27,907
75	5			51,054	23,159	62,243	28,233
100	7			55,675	25,254	65,243	29,594
125	8.5			59,552	27,013	*	*
150	10.34			62,923	28,542	*	*

Motive Pressure		Total Lift or Back Pressure		4" x 4" Connections 24" Fill Head					
psig	bar	psig	bar	Steam Motive		Air Motive			
				lb/hr	kg/hr	lb/hr	kg/hr		
35	2.5	25	1.7	29,212	13,251	46,238	20,973		
50	3.5			33,413	15,156	50,962	23,116		
60	4			35,672	16,181	53,376	24,211		
70	4.5			37,646	17,076	55,418	25,138		
75	5			38,548	17,485	56,313	25,544		
100	7			42,454	19,257	60,141	27,280		
125	8.5			45,649	20,706	*	*		
150	10.34			*	*	*	*		
50	3.5			40	3	26,210	11,889	41,244	18,708
60	4					27,353	12,407	44,028	19,971
70	4.5	28,319	12,846			46,382	21,039		
75	5	28,752	13,042			47,435	21,517		
100	7	30,555	13,860			51,828	24,022		
125	8.5	31,954	14,494			*	*		
150	10.34	33,097	15,013			*	*		
70	4.5	60	4			25,973	11,781	32,026	14,527
75	5					26,373	11,963	33,514	15,202
100	7					28,042	12,720	40,951	18,575
125	8.5			29,336	13,307	*	*		
150	10.34			30,394	13,787	*	*		
100	7			80	5.5	23,892	10,837	34,893	15,827
125	8.5					24,231	10,991	*	*
150	10.34					24,570	11,145	*	*

Dimensions (mm)

Fill head	A	B	C
0"	86	96	84
6"	92	102	84
12"	98	108	84
18"	104	114	84
24"	110	120	84
36"	122	132	84