

### Description

Armstrong's Double Duty-12 steam trap/pump combination offers a unique solution for draining condensate from heat exchangers and coils in various applications.

The Double Duty-12 is an ASME code stamped carbon steel vessel which offers you the versatility of combining a pump mechanism within a steam trap to assist in condensate drainage under all operating conditions.

### Features

- ASME Section VIII "U" stamped vessel
- Inconel X-750 springs for long service life
- All stainless steel internals
- Easy access to the steam trap mechanism without removing cap assembly
- Externally removable vent and motive seats
- Separate pump and trap mechanisms

### Maximum Operating Conditions

Maximum allowable pressure: 200 psig @ 400°F (14 bar @ 204°C)

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(Consult factory for different pressure/temperature ratings)

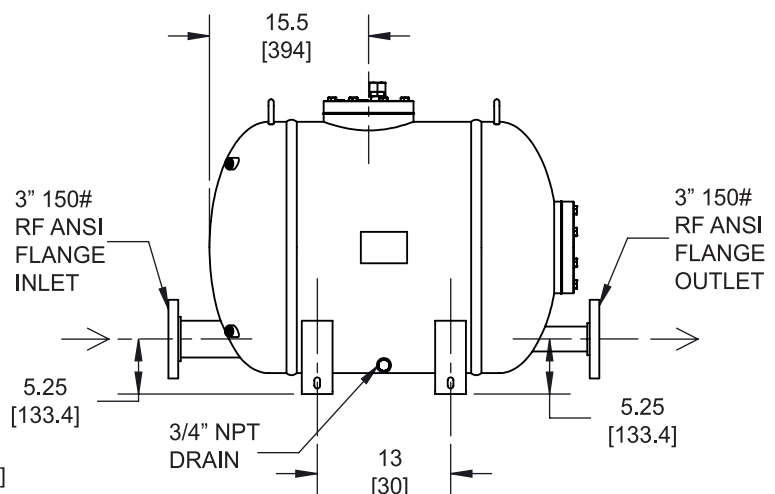
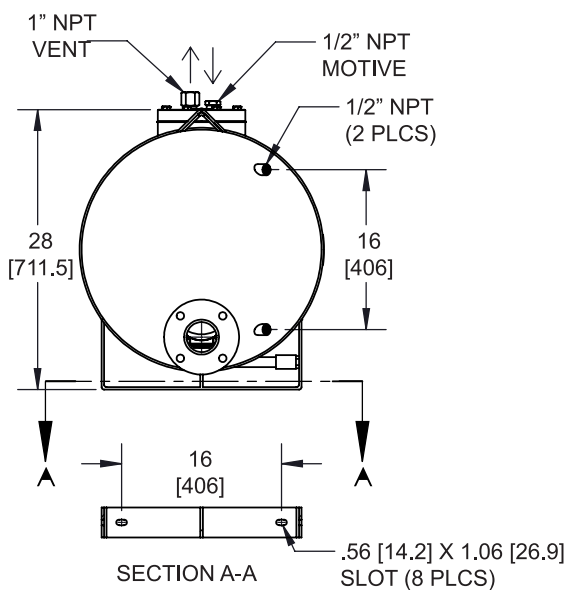
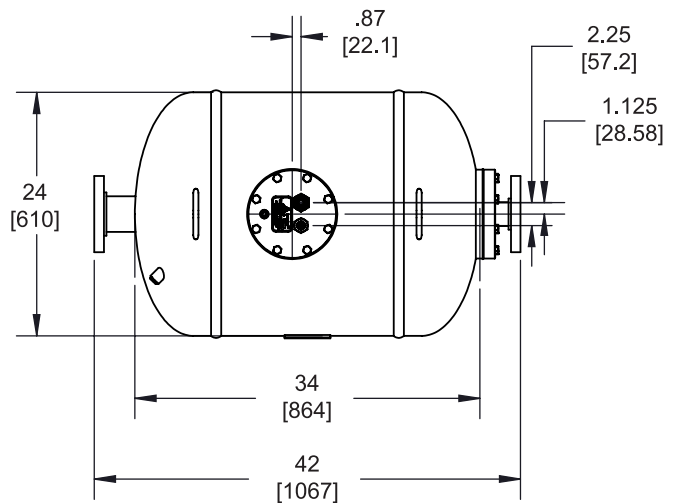
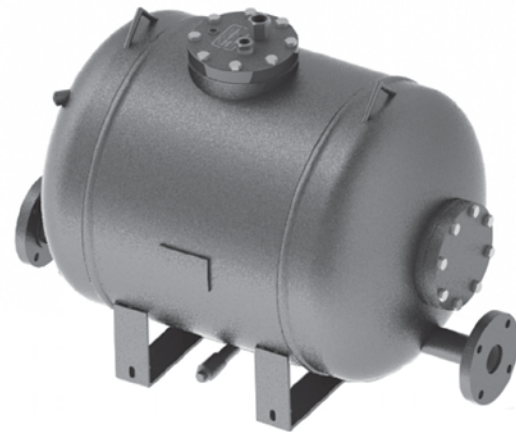
### Materials

Body: ASME code carbon steel

Springs: Inconel X-750

Internals: Stainless steel

For a fully detailed certified drawing, refer to CD-2472.



\*last updated 11/15



# Double Duty® 12

## Steam Trap/Pump Combination

### Double Duty® 6 Pump Capacities

Motive		Back Pressure		Capacity	
psi	bar	psi	bar	lb/hr	kg/hr
15	1	5	0.34	9,800	4,445
25	1.7			12,900	5,581
50	3.5			16,500	7,484
75	5			18,200	8,255
100	7			18,900	8,573
125	8.5			19,300	8,754
150	10.34			19,800	8,981
175	12			19,900	9,026
200	14			19,900	9,026
25	1.7			15	1
50	3.5	12,900	5,851		
75	5	14,800	6,713		
100	7	16,000	7,257		
125	8.5	16,400	7,439		
150	10.34	17,200	7,802		
175	12	17,300	7,847		
200	14	17,300	7,847		
35	2.5	25	1.5	7,200	3,266
50	3.5			10,300	4,672
75	5			12,300	5,579
100	7			13,700	6,214
125	8.5			13,700	6,214
150	10.34			14,700	6,668
175	12			14,800	6,713
200	14	15,000	6,804		
50	3.5	40	2.75	6,700	3,039
75	5			9,500	4,309
100	7			10,600	4,808
125	8.5			10,900	4,944
150	10.34			11,300	5,126
175	12			11,300	5,126
200	14	11,400	5,171		
75	5	60	4	6,900	3,130
100	7			8,300	3,765
125	8.5			8,300	3,765
150	10.34			8,400	3,810
175	12			8,400	3,810
200	14			8,600	3,901
100	7	80	5.5	6,400	2,903
125	8.5			6,400	2,903
150	10.34			7,200	3,266
175	12			7,200	3,266
200	14			7,300	3,311

NOTE: Published capacities are based on the use of external check valves supplied by Armstrong.

### Double Duty® 12 Trap Capacities

Differential Pressure		Capacity	
psi	bar	lb/hr	kg/hr
2	.14	21,500	9,752
5	.34	28,700	13,018
10	.7	35,900	16,284
25	1.5	52,100	23,632
50	3.5	59,600	27,034
75	5.2	72,000	32,659
100	6.9	81,000	36,741
150	10.3	93,000	42,184

### Capacity Conversion Factors for Other Filling Heads

Filling Head					
in	0	6	12	24	* 24 or greater
mm	0	150	305	610	* 620 or greater
Double Duty DD-12	0.7	0.85	1	1.08	* Consult factory

NOTE: Fill head measured from drain to top of cap.  
Weight in lb/kg: 348 (158)

\*last updated 11/15