

Double Duty[®] 12

Armstrong Steam Trap/Pump Combination

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

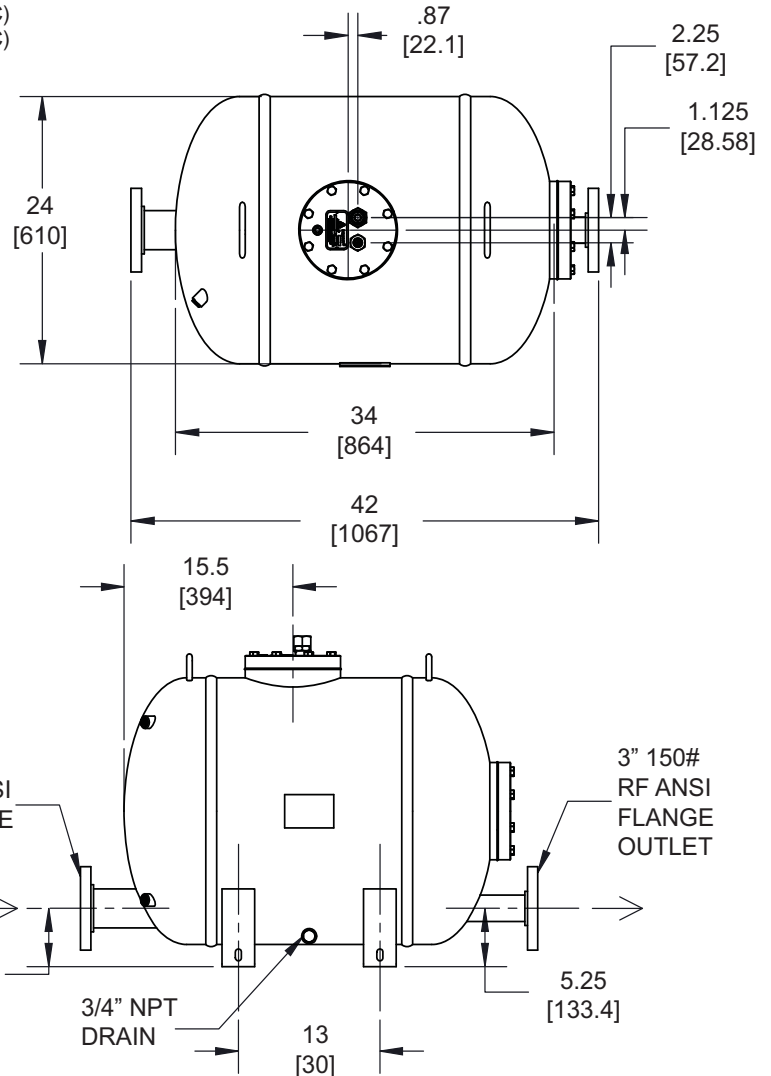
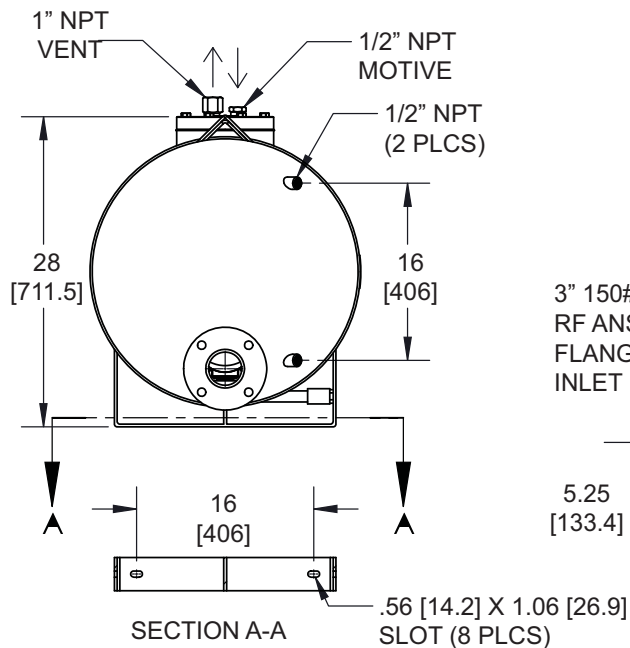
Maximum allowable pressure: 200 psig @ 400°F (14 bar @ 204°C)
 Maximum operating pressure: 200 psig @ 400°F (14 bar @ 204°C)

(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.



All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.

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Double Duty® 12 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	8,500	3,856
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	1.7	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	3	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. Fill head measured from drain point to top of pump cap.

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	.7	.85	1	1.08	* Consult Factory

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	1.7	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

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

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