



Automatic Pump and Steam Trap - APST

Description

The ADCAMAT APST (Automatic Pump and Steam Trap) fabricated in carbon steel or stainless steel is specially recommended where a "stall" condition may occur due to poor steam trap condensate discharge, caused by temporary insufficient differential pressure. The equipment has the features of a float steam trap, combined with a pressure operated pump, in the same unit. Whenever the steam trap function it's not enough to drain the condensate, the pump function is activated (using external steam pressure) before water logging may occur, lifting the condensate to the condensate return system, avoiding water hammer and consequent noise and equipment damage, corrosion, unstable temperature control, etc. Connections are flanged.

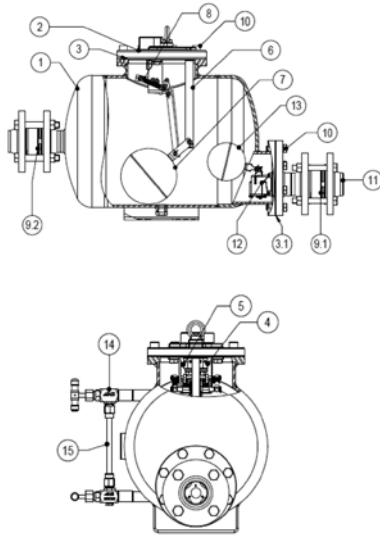
Standard Version - Carbon Steel

Type	Article No.	Size	Price
APST-4.5	483314	40 X 40	£6,061.70
APST-4.5	482904	50 X 50	£7,207.20
APST-10	482852	50 X 50	£7,207.20

Standard Version - Stainless Steel

Type	Article No.	Size	Price
APSTSS-4.5	SPECIAL	40 X 40	£14,473.50
APSTSS-4.5	482905	50 X 50	£15,238.20
APSTSS-10	482798	50 X 50	£15,238.20

Materials



1 Pump Body

- 2 Top Cover
- 3* Cover Gasket
- 3.1* Outlet Cover Gasket
- 4* Inlet Valve / Seat Assy.
- 5* Exhaust Valve / Seat Assy.
- 6 Internal Mechanism
- 7* Pump Float
- 8* Spring Assy. (2PCS)
- 9.1* RD40 Outlet Check Valve
- 9.2* RD40 Inlet Check Valve
- 10 Bolts
- 11** PN16 EN 1092-1 Flanges
- 12* Float Trap Mechanism
- 13* Steam Trap Float
- 14 Level Gauge Cock
- 15 Tube Glass

Material - APST-S

- P265GH / 1.0425;
- P235GH / 1.0345;
- S235JR / 1.0038
- GJS-400-15 / 0.7040
- Non Asbestos
- Non Asbestos
- Stainless Steel
- Stainless Steel
- Stainless Steel
- Stainless Steel
- Inconel
- CF8M / 1.4408
- CF8M / 1.4408
- Steel 8.8
- P250GH / 1.0460
- Stainless Steel
- Stainless Steel
- Bronze / Stainless Steel
- Borosilicate

Material - APST-SS

- AISI316 / 1.4401;
- AISI316L / 1.4406
- CF8M/1.4408
- Non Asbestos
- Non Asbestos
- Stainless Steel
- Stainless Steel
- Stainless Steel
- Stainless Steel
- Inconel
- CF8M / 1.4408
- CF8M / 1.4408
- A2 - 70
- AISI316 / 1.4401
- Stainless Steel
- Stainless Steel
- Bronze / Stainless Steel
- Borosilicate

* Available spare parts ** Welding neck EN1092-1 flanges. Threaded flanges on request.

Limiting Conditions*

	APST-S		APST-SS	
	Pres. bar	Temp °C	Pres. bar	Temp °C
PN16	16	50	16	50
	14	100	16	100
	13	195	13	195
	12	250	12	250
ANSI Cl.150	16	50	16	50
	13	195	13	195

Minimum operating temp.: -10°C; Design code: AD-Merkblatt
* Rating according to EN1092:2007

Capacity Multiplying Factors for other fill heads

Pump Size	Filling Head mm			
	150	300	600	900
All	0.7	1	1.2	1.35

Application Limits

Minimum density	0,80 kg/dm ³
Maximum viscosity	5° Engler
Maximum motive pressure	10 bar
Minimum motive pressure	0,5 bar
Pump discharge per cycle	22l

APST Steam Trap Flow Rate Capacity (Kgs/h)

Model	Size	Differential Pressure (BAR)									
		0.1	0.3	0.5	0.7	1	1.5	2	4.5	7	10
APST-10	40 x 40	900	1500	1900	2300	2700	3100	3600	5000	6900	8100
APST-10	50 x 50	1800	3000	3900	4450	5000	6100	7100	10000	13750	16000
APST-4.5	50 x 50	2400	5900	7550	9050	11000	14000	15500	22500		

Important: motive pressure should not exceed the maximum available differential pressure at any circumstances.
Lower steam trap discharge capacity available on request.

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APST Pump Capacity

Motive Pressure BAR	Total Lift BAR	Flow Rate in Kg/h Installation with 300mm filling head above the pump cover.			
		DN 40 x DN 40	DN 50 x DN 50		
1	0.35	820	2290		
2		1050	3130		
3		1100	3530		
4		1150	3810		
5		1210	3880		
6		1250	3910		
8		1290	3960		
10		1300	3970		
2		1	800	2520	
3			940	2960	
4	1080		3130		
5	1110		3170		
6	1140		3220		
8	1180		3250		
10	1200		3290		
3	2		790	2440	
4			900	2590	
5			1000	2800	
6		1140	2830		
8		1200	2850		
10		1220	2870		
4		3	750	2330	
5			860	2510	
6			910	2530	
8			970	2560	
10	980		2620		
5	4		730	2250	
6			840	2430	
8			920	2470	
10			940	2510	
6			5	710	2050
8		770		2150	
10		880		2190	
7		6		730	1850
8				790	1910
10				880	2120

Based on liquid specific gravity 0.9 - 1.0



SPECIAL EQUIPMENT

Also available as complete packages

Valsteam ADCA offer a complete fabricated Condensate APST Pump Trap Unit, the Unit can be sized based on the flow rate, pressure, total lift and pipe run to ensure that your steam and condensate system runs efficiently.

