



Steel Liquid Drain Trap 3" (DN80) and 4" (DN100) FA450

Description

The float-operated liquid drain trap discharges continuously in direct response to variations in liquid flow rate, assuring thorough drainage of the system.

Model	FA450	
Sizes	3" (DN80)	4" (DN100)
Connections	NPT, SW, Flanged	Flanged
Construction	Carbon steel body Stainless steel internals	

Certification

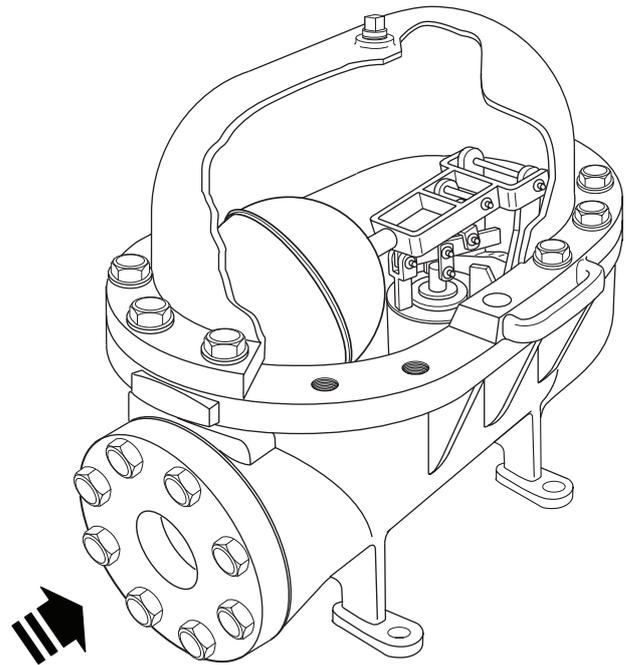
This product is available with certification to EN 10204 3.1. Designed in accordance with ASME VIII DIV 1.

Note: All certification/inspection requirements must be stated at the time of order placement.

Note: The double seated valve may not shut tight under no-load conditions. Normally, the liquid load will always be greater than the small residual leakage.

Typical applications

Draining a liquid from a gas in large process applications.



Limiting operating conditions*

PMO Maximum operating pressure Up to 450 psi g (31 bar g), depending on the specific gravity of the liquid being drained.
 See TI-P102-04-US.

Maximum operating temperature 650 °F (343 °C) at 450 psi g (31 bar g)
 750 °F (400 °C) at operating pressures below 375 psi g (26 bar g)

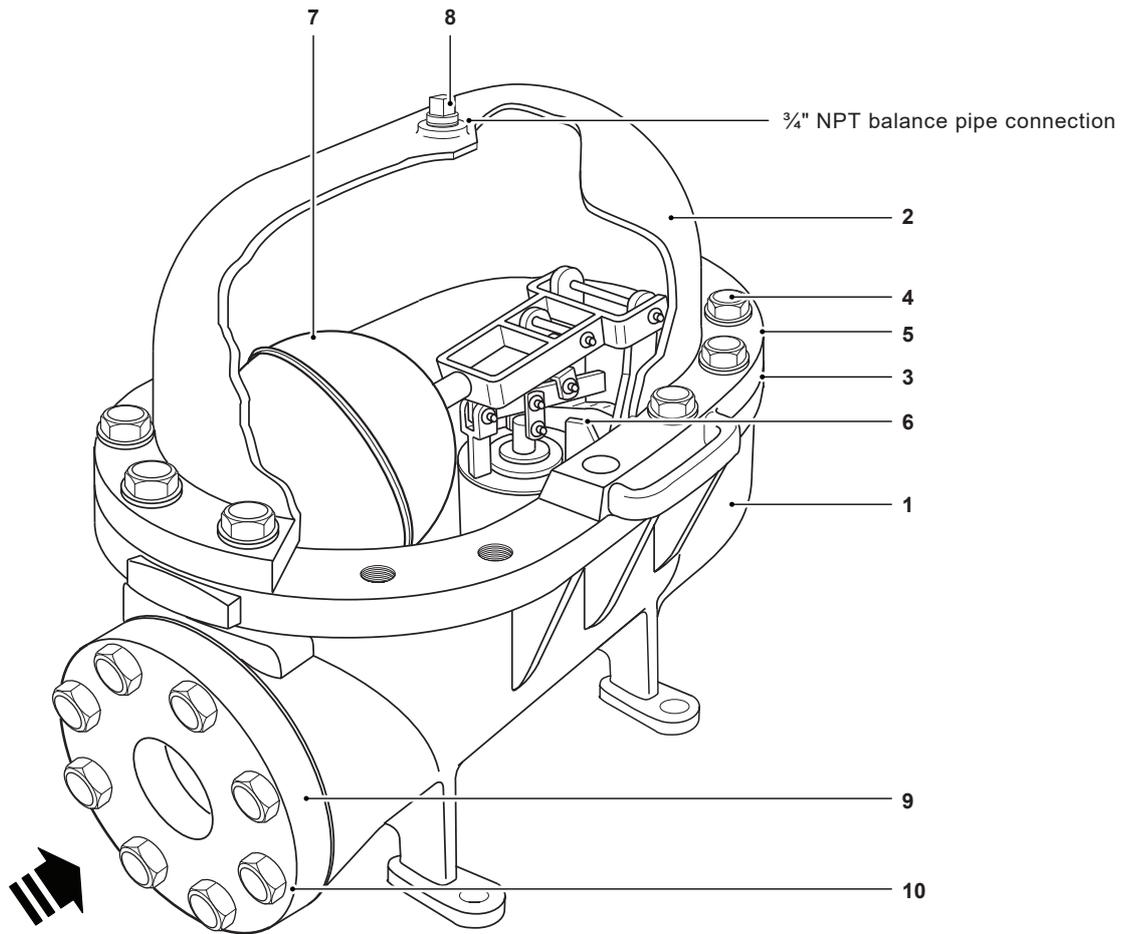
Product is safe for use under full vacuum conditions.

Pressure shell design conditions*

PMA Maximum allowable pressure	450 psi g @ 650 °F	(31 bar g @ 343 °C)
	425 psi g @ 700 °F	(29 bar g @ 371 °C)
TMA Maximum allowable temperature	375 psi g @ 750 °F	(26 bar g @ 400 °C)
	750 °F @ 375 psi g	(400 °C @ 26 bar g)

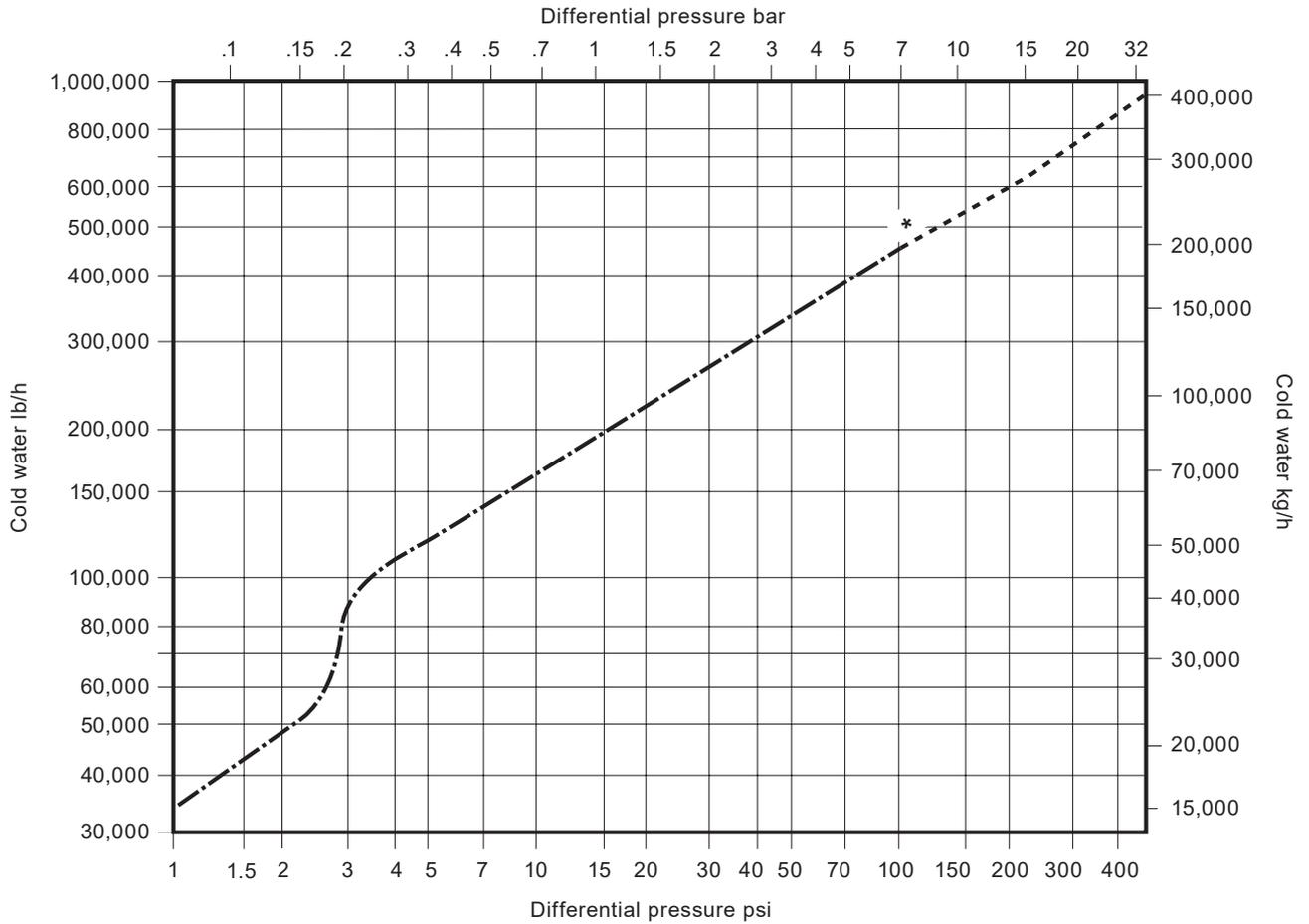
* The limiting operating and design conditions for ANSI 150 flanged units will be limited by the flange rating.

Materials



No.	Part	Material	
1	Body	Cast carbon steel	ASTM A216 WCB
2	Cover	Cast carbon steel	ASTM A216 WCB
3	Cover gasket	Graphite with stainless steel insert	
4	Cover bolts	Steel	ASTM A193 GR B7
5	Lockwashers	Steel	
	Main valve Assembly	Stainless steel	
6	Valve mechanical gasket	Graphite	AISI 300 and hardened head and seat
	Valve mechanical Screws	Stainless steel	
7	Float	Stainless steel	ASTM A240 Type 304
8	Cover plug (3/4" NPT)	Steel	
	Drain plug (3/4" NPT)	Steel	
9	Companion flange	Forged steel	
10	Flange bolts	Steel	ASTM A193 GR B7

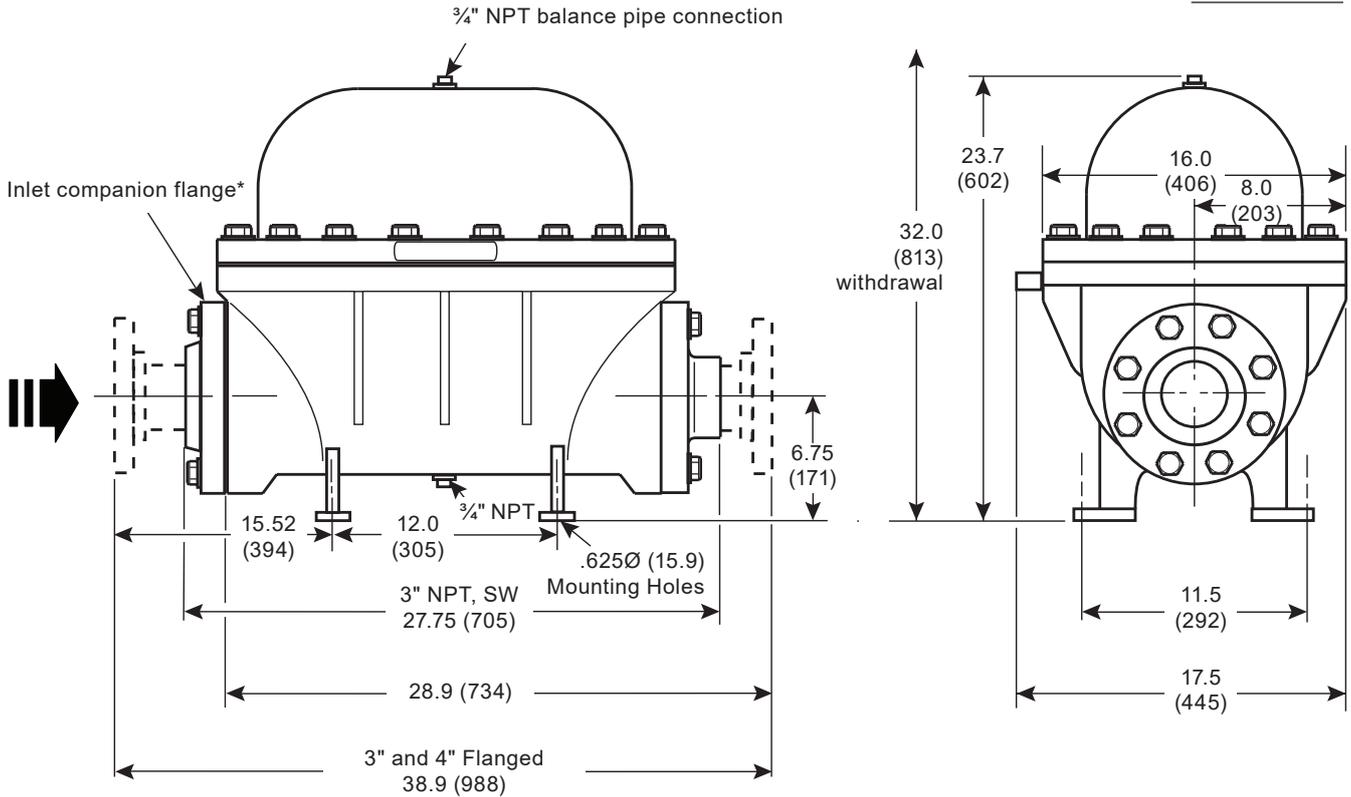
Capacities



* In this region the trap capacity may exceed the flow capacity of the connection piping.

For liquids other than cold water, see TI-P102-04-US.

485 lb.
(220 kg)



* The inlet connection on NPT and SW traps is a standard 4" (DN100) ANSI 300 RF Flange bolted to the trap body. The flange bore is 3" (DN80), NPT or SW to match the outlet connection of the trap.

Sample specification

Liquid drain traps shall be of the mechanical ball float type having steel bodies with stainless steel internal parts. The piping connections shall be horizontal in-line, and the body shall incorporate mounting legs with drilled pads. The trap body shall be horizontally split and all internal parts shall be completely serviceable without disturbing the inlet and outlet piping.

Installation

The trap should be located below and close to the equipment drain point. A pipeline strainer should be installed ahead of the trap, and full-flow isolating valves should be placed to permit servicing. The mounting legs should be bolted to a firm horizontal support. Access above the trap must be provided for servicing. The cover has a plugged 3/4" NPT balance pipe connection. The balance pipe must be connected with a continuous rise between the trap and the equipment being drained.

Complete installation instructions are given in IM-7-3151-US.

Maintenance

This product can be maintained without disturbing the piping connections. Complete isolation from both supply and return line is required before any servicing is performed.

The trap should be disassembled periodically for inspection and cleaning of the valve mechanism.

Complete installation and maintenance instructions are given in IM-7-3151-US, which accompanies the product.

Liquid drain traps can be used to drain most liquids from most gases. However, some applications, particularly those involving hazardous or unusual fluids, may be subject to regulation or may otherwise require special consideration.

Spirax Sarco will endeavor to provide whatever data is necessary to assist in product selection.

Spare parts

Valve Mechanism Kit	D, E, F
Gasket Kit (pkt of 3 each)	B, F
Float Kit	P

