

# spirax/sarco

## Iron Liquid Drain Traps FAI-30, FAI-75, FAI-150, FAI-200

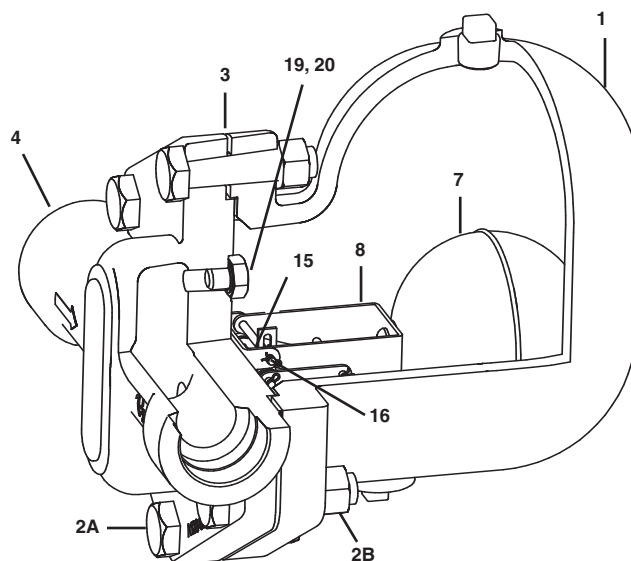
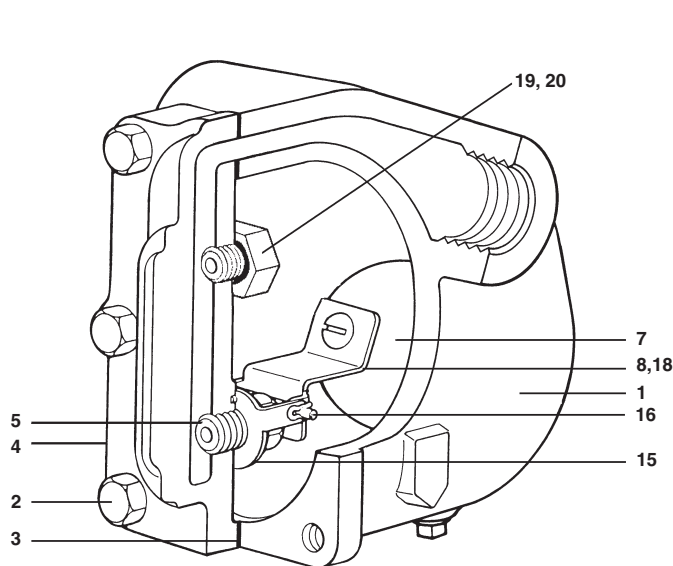
The float-operated liquid drain trap discharges continuously in direct response to variations in liquid flow rate, assuring thorough drainage of the system.

Model ⇄	FAI-30	FAI-75	FAI-150	FAI-200
<b>Sizes</b>	1/2", 3/4", 1", 1-1/2"			
<b>Connections</b>	NPT			
<b>Construction</b>	Cast Iron Body & Cover Stainless Steel Internals			

1-1/2" FAI 30 and FAI 200 only

### TYPICAL APPLICATIONS

Receiver and air line drainage, draining a liquid from its vapor phase



### LIMITING OPERATING CONDITIONS

**Max. Operating Pressure (PMO)** Up to 200 psig. The PMO depends on the model selected and the specific gravity of the liquid being drained. See TIS 7.318.

**Max. Operating Temperature** 450°F (232°C)

### PRESSURE SHELL DESIGN CONDITIONS

**PMA** 200 psig/0-450°F 13.8 barg/0-232°C  
Max. allowable pressure

**TMA** 450°F/0-200 psig 232°C/0-13.8 barg  
Max. allowable temperature

### CONSTRUCTION MATERIALS

No.	Part	Material	
1	Body	Cast Iron	ASTM A126 CL B
2	Cover Screws	Carbon Steel	ASTM A449
2A	Cover Bolts	Alloy Steele	ASTM A 193 B7
2B	Cover Nuts 3/4" & 1"	7/16 - 14 UNC-2A	ASTM A 194 2H
3	Cover Gasket	Graphite	
4	Cover	Cast Iron	ASTM A126 CL B
5	Valve Seat	Stainless Steel	Type 420F
7	Ball Float	Stainless Steel	Type 304
8	Float Arm	Stainless Steel	AISI 301/302/304
15	Seat Bracket	Stainless Steel	AISI 301/302/304
16	Pivot Pin	Stainless Steel	Type 302 or 303
18	Valve Head	Stainless Steel	Type 440 Gr.C
19	Plug	Brass	ASTM B16
20	Plug Gasket	Stainless Steel	ASTM A167

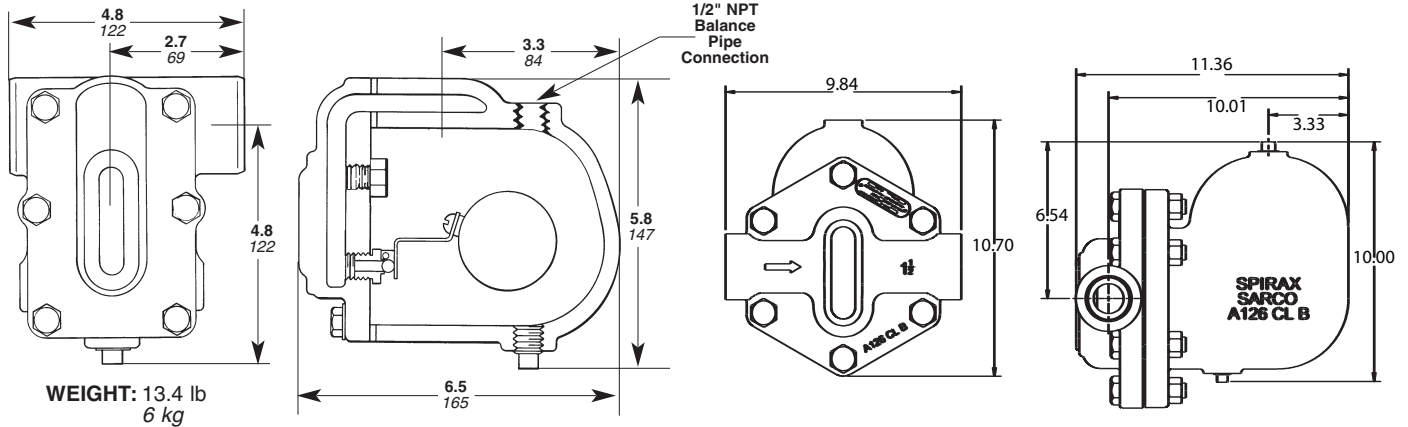
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-7-316-US 10.07

# Iron Liquid Drain Traps

## FAI-30, FAI-75, FAI-150, FAI-200



### CAPACITY

The discharge capacity depends on the differential pressure (inlet pressure minus outlet pressure) and the specific gravity of the liquid being drained. See TIS 7.318.

### SAMPLE SPECIFICATION

The liquid drain trap shall be of the float type with horizontal in-line NPT connections. Valve mechanism and float shall be stainless steel with hardened working surfaces, designed to retain a water seal at all times. A 1/2" NPT tapping shall be provided for a balance pipe. All internals are to be renewable and field serviceable.

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.

### INSTALLATION

The trap must be fitted in a horizontal pipe line with direction of flow as indicated and so that the float mechanism is free to rise and fall in a vertical plane. Full-flow isolating valves should be placed to permit servicing. The high point of the body is provided with a 1/2" NPT tapping for a balance pipe, which is essential for satisfactory operation of this unit. The balance pipe must be connected with a continuous rise between the tapping provided on the body of the trap and the vessel being drained. The trap discharge should be piped to a safe place.

### MAINTENANCE

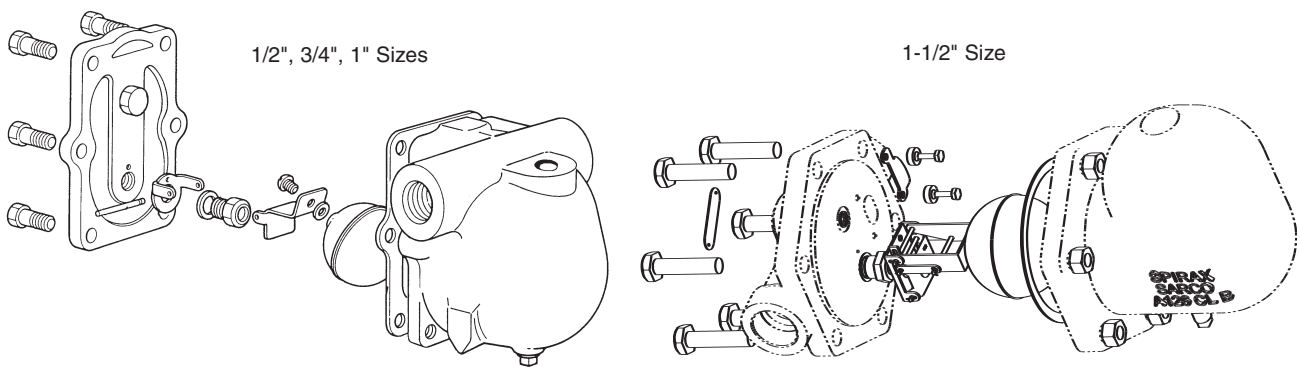
This product can be maintained without disturbing the piping connections. Complete isolation of the trap from both supply and return line is required before any servicing is performed.

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

Worn or damaged parts should be replaced using a complete repair kit.

**Complete installation and maintenance instructions are given in IMI 7.306 which accompanies the product.**

### SPARE PARTS



Gasket Kit (set of 3 Cover and Mechanism Gaskets)	
Complete Valve Mechanism Kit (less float)	
Float Kit	Float, Screw, Washer