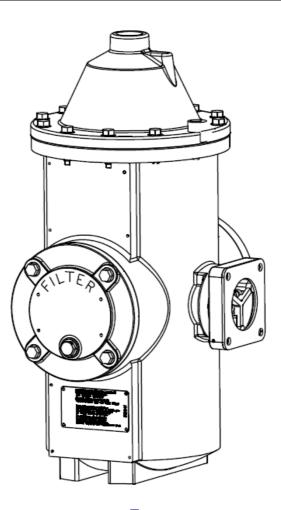


# STRAINER AIR ELIMINATOR TYPE FS 24

Description – Installation

U517278-e - Révision 2 - 26 February 2013



This document consists of **5** pages, including the flyleaf

This document is the property of SATAM and can not be transmitted to third parties without prior authorisation

SATAM may modify this document without prior notice

In conformity with the European directive 94/9/CE-ATEX

SATAM Usine de Falaise – Avenue de Verdun – B.P. 129 – 14700 FALAISE – France Tél. : +33 (0)2 31 41 41 41 Fax : +33 (0)2 31 40 75 61 SIRET 495 233 124 000 17 CODE APE 2813 Z



### **Description :**

The filter air eliminator FS24 is composed of a cylindrical tank with flanges for collector input / output. The reservoir is closed at its top by a head of air separator.

The flow inlet strainer eliminator air is going through a filter cartridge (ref 510748 for a 200  $\mu$  filter and 510748-10 filter for a 450  $\mu$ ) and is placed horizontally to the elimination of any foreign object that may perturb its operation.

The outlet is equipped with a non return valve.

The mechanical air separator head is fitted with a float which goes down in presence of gas. Through the set of rods, it applies traction on the pilot valve which drives the master piston and opens the vent valve. The gas goes out through the evacuation outlet located at the top of the head and can be either directed the supply tank or sent to a collecting tank.

After the complete evacuation of the gas, the air separator fills up again raising up the float and causing the closure of the vent valve. The counting can be resumed.

### **Instructions for mounting :**

Components supplied separately, fitting into a metering unit must comply with an existing approval certificate or be integrated into a measuring unit subject to an authorization for use or installation.

Ensure proper coaxial flange inlet and outlet of the separator which is mounted.

Make sure of the coaxility of the input /output flanges on which the strainer eliminator will be installed.

Make sure of the good positioning and maintaining of the flat gaskets for flanges (provided separately or mounted).

Connect the evacuation outlet of the air separator head onto the supply tank or a collecting tank.

## **Instructions for use :**

The installation must be equipped with pressure relief device to prevent pressure exceeding the recommendations of the equipment SATAM.

The installation and the operation must avoid any pressure hammer and vibrations on the equipment.

It is also necessary that the purge is done gradually when bringing the installation into service. The owner of the installation must be sure that the users know and will respect the conditions of use and security of the material SATAM under current regulations.

The operating pressure must never exceed 10 bar.

### **Instructions for maintenance :**

The installation must be regularly checked and controlled by skilled and qualified staff. The conditions of the current regulations must be respected.

Any intervention which involves the break of a sealing must be made according to the current regulation in legal metrology.



Before any maintenance operation, isolate the gas strainer eliminator with valves installed upstream and downstream of it and then purge the strainer by opening the cork located at the bottom on its body.

Periodically, verify the state of the strainer (every 3 months). As this strainer is in stainless steel, a cleaning is enough.

Every year, verify the state of the non return valve surface 364985. If need be, change these gaskets during the verifications.

Every year, verify the good functioning of the valve mechanism 364178. If need be, change this component during the verifications.

Every year, verify the good state of the float 510758. If need be, change this component during the verifications.

Every year, verify the good state of the valve surface 510888 and the housing 510754. If need be, change these components during the verifications.

Use exclusively screw class 8.8 for the assembly of the air separator head, the cover and the inlet flange.

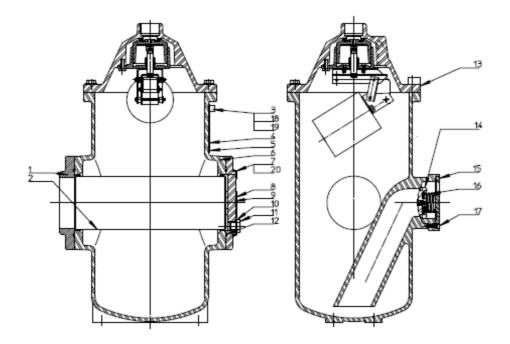
Change the following spare parts every year or during maintenance or verifications :

- ring 362779
- gasket 364479
- valve gasket 510887
- gasket 510880
- head gasket 353609
- square flange gasket 356815

Use exclusively screw size 8.8 for all fixation screws.



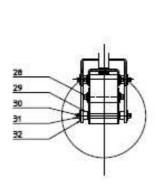
# **STRAINER AIR ELIMINATOR FS 24**

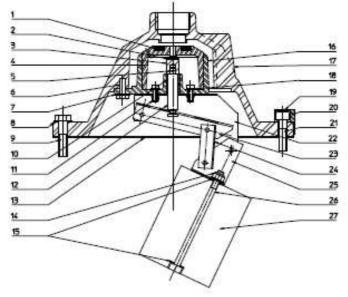


Rep	Reference	Qty	Designation	Matière
1	364309	1	Lid of entrance	S 185
	364353		Lid of entrance	S 185
2	510748	1	Filter	Inox
	510748-10		Filter basket 450 microns	Inox
	510748-20		Filter basket 50 microns	Inox
	510748-30		Filter basket 100 microns	Inox
3	901276	1	Housing for seal Laiton	
4		1	Identification plate not supplied as spare	
5	9680	1	Rivet	Acier zingué
6	364984	1	Body	AS 7G 06
7	900016-008	8	Screw	Acier zingué CI 8.8
8		1	Plate of information not supplied with change	
9	364308	1	Lid of closure	AS 7G 03
10	362779	1	Ring	Viton
11	361643	1	Plug	Laiton
12	364479	2	Gasket	Viton DF801
13	510745	1	Head of filter	
14	516407	1	Assembled valve	Z 10 CNF 18/09
15	364918-11	1	Washer	AS 7G 03
	516403	1	Reinforced Lining Viton DF150	Viton grand froid
	516404	1	Valve lid	Laiton
	516405	1	Spring of the ball	Z 10 CN 18/09
	22003	1	Ball	Acier chromé
16	364322	1	Spring	Z 10 CN 18/09
17	27442	3	Screw	Acier zingué CI 8.8
18	26863	1	Screw	Acier zingué CI 8.8
19	903177-002	1	Lead seal	Plomb
20	903437-001	8	Washer	Acier



# **AIR ELIMINATOR HEAD FS 24**





Rep	Reference	Qty	Designation	Matière
1	510887	1	Joint of piston	Viton
2	510880	1	Joint of the pilot	Viton
3	510886	1	Body of the pilot	Z 10 CNF 18/09
4	510888	1	Piston	EN AW 7075
5	353784	1	Pin	Z 10 CN 18/09
6	27094	3	Screw M 6 - 16	Acier zingué
7	26742	1	Washer	Acier zingué
8	903437-001	11	Washer	Acier zingué
9	21095	11	Screw	Acier zingué CI 8.8
10	27018	2	Bearing	Bronze frité
11	27471	2	Screw CHc M4 - 16	Acier zingué CI 8.8
12	510759	1	Axis of the pilot	Z 10 CNF 18/09
13	353609	1	Gasket	Fibres aramides et nitrile
14	361841	2	Nut nylstop M6	BN 80035
15	20579	2	Washer 6 x 14x 1,2	Acier zingué
16	510754	1	Housing	AS 7 G 03
17	510753	1	Body	AS 7 G 06
18	20514	8	Washer 4,2 x8 x 0,8	Acier zingué
19	903177-002	1	Lead seal	Plomb
20	357047	1	Housing for seal	Z A 4 U 1 G
21	26307	1	Screw	Acier zingué CI 8.8
22	510757	1	Support	Z 8 CNDT 17 - 12
23	510756	1	Lever	Z 8 CNDT 17 - 12
24	510891	1	Arm	Z 8 CNDT 17 - 12
25	510890	1	Support of the ballcock	Z 8 CNDT 17 - 12
26	515734	1	Screw CHC M6 x 100	Acier zingué CI 8.8
27	510758	1	Floater	Divinycell H
28	510881	2	Axis	Z 10 CNF 18/09
29	510883	4	Spacer	Nylon
30	20120	8	Pin V 1,6 - 12	Laiton
31	510882	2	Axis	Z 10 CNF 18/09
32	20514	1	Washer 4,2 x8 x 0,8	Acier zingué