

# PBF-0101/0102 BAG FILTER

## INSTALLATION, OPERATION AND MAINTENANCE

### INSTALLATION:

#### INSPECTION

Upon receipt of the bag filter, inspect it for damage that might have occurred during transit. Report any damage to the carrier immediately.

#### LOCATION AND SUPPORT

The **Eaton** bag filter should be installed not less than 24" down-stream of an **Eaton** strainer. The bag filter must be bolted to the floor to insure proper piping installation. An integral flange on the base of the bag filter will accept 3/4" studs.

#### PIPING INSTALLATION

#### **WARNING: METAL PIPING SHOULD INCLUDE A MINIMUM OF 20" OF PLASTIC PIPE UPSTREAM AND DOWNSTREAM OF THE FILTER VESSEL.**

For installation in metal piping systems it is recommended that the **Eaton** flanged version FLT4202F (PBF-0102) or FLT4201F (PBF-0101) will be installed.

From the **Eaton** strainer, a 2" line is required to the inlet of the bag filter.

Connect 2" line to a valve and then to the upper 2" NPTF (inlet) of the bag filter.

A 2" line must be piped from the bag filter 2" NPTF bottom port (outlet) to a determined suction source (system pump suction).

A 2" valve such as an **Eaton** Diaphragm or Butterfly valve is required on this outlet line.

It is recommended that a 2" drain valve will be installed on the unused bottom 2" NPT port.

The vent fitting must be installed on the top of the unit. **DO NOT FORGET THE O-RING.**

**A 3/8" ID tube should be attached over the barb and secured with a hose clamp on the vent fitting.**

This hose will be used to direct the flow from the vent fitting.

The top of the vent fitting is normally plugged.

This plug can be removed and replaced with a pressure gauge that measures inlet pressure to the bag filter.

It is recommended that a gauge guard will be installed between the filter vent and the gauge.

#### THREADED CONNECTION:

Threaded end connections are manufactured to ASTM specifications D2464-88, F437-88 and ANSI B2.1.

Wrap threads of pipe with Teflon tape of 3 to 3-1/2 mil thickness.

The tape should be wrapped in a clockwise direction starting at the first or second full thread.

Overlap each wrap by 1/2, the width of the tape.

The wrap should be applied with sufficient tension to allow the threads of a single wrapped area to show through without cutting the tape.

The wrap should continue for the full effective length of the thread.

Pipe sizes 2" and greater will not benefit with more than a second wrap, due to the greater thread depth.

To provide a leak proof joint, the pipe should be threaded into the end connection "hand tight".

Using a strap wrench only, (Never use a stillson type wrench) tighten the joint an additional 1/2 to 1 1/2 turns past hand tight.

Tightening beyond this point may induce excessive stress that could cause failure.

#### FLANGED CONNECTION:

Flange bolts should be tighten enough to slightly compress the gasket and make a good seal, without distorting or putting

excessive stress on the flanges.

Suitable washers should be used between the bolt head and flange and the nut and flange.

Bolts should be tightened in alternating sequence.

#### RECOMMENDED FLANGE BOLT TORQUE

FLANGE

SIZE

BOLT

DIAMETER.

TORQUE

FT. LBS.

2 5/8 15-25

**NOTE: USE WELL LUBRICATED METAL BOLTS AND NUTS.  
USE SOFT RUBBER GASKETS.**

**OPERATION:**

**OPERATING INFORMATION**

The **Eaton** polypropylene bag filter is designed as an integral part of the **Eaton** filtration-bag filter system. Installed down-stream of the **Eaton** strainer, the **Eaton** bag filter concentrates the solids, and provides convenient, economical removal of the solids from the process with very low liquid loss.

Large solids are separated from the liquid with the **Eaton** strainer while the bag filter accumulates smaller solids. The bag filter concentrates the solids in a disposable bag, while clean liquid is piped back to the process.

**SYSTEM STARTUP**

Follow the procedure below for changing the bag for initial bag installation.

**WARNING: REMOVE PRESSURE FROM VESSEL BEFORE OPENING OR VENTING.**

THE PIPING SYSTEM SHOULD BE VENTED OF AIR BEFORE FULL PRESSURE IS APPLIED.

1. Close the valve on the outlet of the bag filter.
2. Open the vent located on the top of the bag filter.
3. Slowly and partially open the valve on the inlet of the bag filter.
4. Carefully vent all the air from the bag filter. Close the vent when liquid begins to discharge.
5. Fully open the inlet valve.
6. Fully open the outlet valve.

The system is now in operation. Solids, which are collected in the filter bag, need to be removed periodically. A pressure differential gauge should be used so that the bag is changed when the differential pressure reaches or exceeds 15 PSIG.

**NEVER DISASSEMBLE THE BAG FILTER WHILE THERE IS FLUID IN IT.  
DRAIN ALL PROCESS FLUID BEFORE REMOVING THE COVER.**

**TO CHANGE THE BAG:**

1. Close the inlet valve.
2. Close the outlet valve.
3. Open the drain on the bag filter.
4. Slowly open vent to fully drain the bag filter.
5. Remove bag filter cover.
6. Remove the polypropylene bag retainer and then the bag.
7. Install the new bag, the polypropylene bag retainer and the cover.
8. Repeat steps 3-6 under start-up