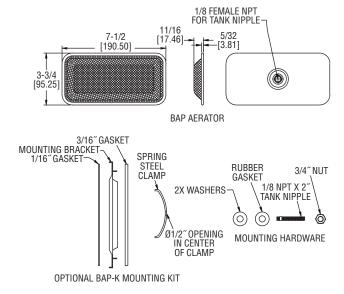


# Specifications - Installation and Operating Instructions





Series BAP Bin Aerator Pad provides positive flow of dry, finely ground materials from any bin using the proven principle of aeration. Low pressure air is introduced into the product, restoring its natural ability to flow. In this way congestion, bridging and ratholing are overcome without resorting to brute force. Almost all flow problems inherent to dry, fine materials are caused by compaction. When low pressure air is introduced to a finely ground material it will flow like water – uniformly and quickly. Series BAP is non-clogging and provides equal distribution and consumption of air. The aerator pads feature simple and quick installation, are inexpensive, and adapt to any bin configuration.

There are many advantages of the Bin Aerator Pad. It provides a positive, uniform, and easily controlled flow with quiet operation. Also, it yields first in/first out flow. Heavy-Duty construction features stiffeners to prevent crushing of air compartment. These stiffeners eliminate the possibility of the Bin Aerator Pad being crushed by a head of material or by a man stepping on it when cleaning bin. The stiffeners do not obstruct the diffusion of air.

Aeration gives the best results on materials with a 60 mesh size or smaller and with a 3% or less moisture content. Specific materials that respond well to aeration content are as follows: Lime, Portland Cement, Carbon Black, Diatomaceous Earth, Flour, Soda Ash, Gypsum, Fly Ash, Pigments, Soap Powders, Bentonite, Bran, Clay, Cereals, Fullers Earth, Detergents and many others.

# SPECIFICATIONS

### Temperature Limit:

BAP-C and BAP-SSC: 180°F (82°C). BAP-F and BAP-SSF: 600°F (316°C). **Supply Pressure:** 3 to 5 psi (0.2 to 0.3 bar).

Air Consumption: See air suppy chart on next page.

**Air Connection:** 1/8° NPT male. **Materials:** See model chart.

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Model Number	Description		
BAP-C	Zinc Plated Steel Body with Galvanized		
	Steel Mesh and Cotton Diffuser		
BAP-SSC	316 Stainless Steel Body with 316SS		
	Mesh and Cotton Diffuser		
BAP-F	Zinc Plated Steel Body with Galvanized		
	Steel Mesh and Fiberglass Diffuser		
BAP-SSF	316 Stainless Steel Body with 316SS		
	Mesh and Fiberglass Diffuser		
BAP-K	Optional External Mounting Kit		

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## **Bin Aerator Pad Selection**

For best results, locate lower bin aerator pads as close to the discharge outlet as possible. If material is held in the bin for long periods and/or compacted in transport, we recommend bin aerator pads be installed on 12° centers.

Bin Aerator Pads Aerators on 12" Centers		Bin Aerator Pads Aerators on 15" Centers	
Length of	Number of Bin	Length of	Number of Bin
Sloping	Aerator Pads	Sloping	Aerator Pads
Bin Wall	Per Row	Bin Wall	Per Row
1′ 8″- 2′ 7″	2	111-31	2
2′ 8″- 3′ 7″	3	3 2 - 4 4	3
3′ 8″- 4′ 7″	4	4′ 5″- 5′ 7″	4
4′ 8″- 5′ 7″	5	5′ 8″- 6′ 10″	5
5′ 8″- 6′ 7″	6	6′ 11″- 8′ 1″	6
6′ 8″- 7′ 7″	7	8 2 - 9 4	7
7′ 8″- 8′ 7″	8	9′ 5″- 10′ 7″	8
8′ 8″- 9′ 7″	9	10′ 8″- 11′ 10″	9
9′ 8″- 10′ 7″	10	11′ 11″- 13′ 1″	10

Generally, four rows of bin aerator pads on 12° or 15° centers are recommended. On conical bins, these rows are spaced equally. On pyramidal bins, rows are spaced equally on sloping sides or in valleys if material tends to hang up in these valleys.

### Air Supply

Air supply must be clean and dry. We recommend positive displacement, low pressure blowers. Plant air can be used, but the pressure must be reduced to 3-5 psi, and a filter or moisture trap used on the low pressure side. The volume of air needed is a limiting factor on the use of plant air.

Manifold Piping Size Guide		Air Consumption Guide Per Bin Aerator Pad	
	Number of	Air Pressure,	Cubic Feet
Piping Size	Aerators	psi (bar)	Per Minute
	in a Row		(lpm)
3/4~	1-5	1 (0.07)	4.2 (118.9)
		2 (0.14)	5.7 (161.4)
1"	6-9	*3 (0.21)	6.5 (184.1)
		4 (0.28)	7.1 (201.0)
1-1/4~	10-12	5 (0.34)	7.6 (215.2)

#### Installation

Drill 7/16 holes through bin wall on predetermined centers (12 or 15 or customer's preference). Insert special tank nipple through hole and lock into place with locknut. Rubber gasket and spacer washers are furnished.

If using BAP-K external mounting kit see bulletin PC-BAP-K.

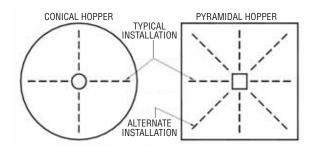


Figure 1: Typical Layouts

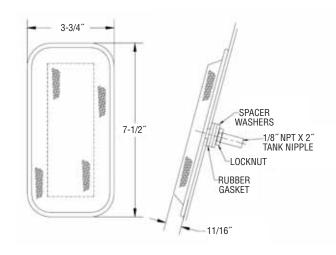


Figure 2: Series BAP Bin Aerator Pad Installed

#### MAINTENANCE

Upon final installation of the Series BAP Bin Aerator Pad, no routine maintenance is required. A periodic check of system calibration is recommended. The Series BAP is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.

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