

AIR GAP DRAINS for installation with: APOLLO RP4A 1/2" THROUGH 2", AND APOLLO RP40 1/4" THROUGH 1" REDUCED PRESSURE PRINCIPLE (RP) BACKFLOW PREVENTERS

DESCRIPTION

The Apollo Air Gap Drain (AGD) is designed to funnel minor relief valve discharges due to line pressure fluctuations and/or minor check valve fouling, into the drainage system.

Drainage piping is easily attached to the threaded portion of the AGD. The Female NPT size is listed in the table under "EXIT PIPING THREADS C". The AGD is ABS plastic and drainage piping may also be glued on with a coupling and the appropriate cement or using a flexible pipe coupling. The OD is listed in the table under "OD OF C".

NOTE: The AGD is designed to hold its own weight and two feet of straight pipe. Additional pipe or the use of bends or elbows which induce any side load or bending requires pipe hangers for support.

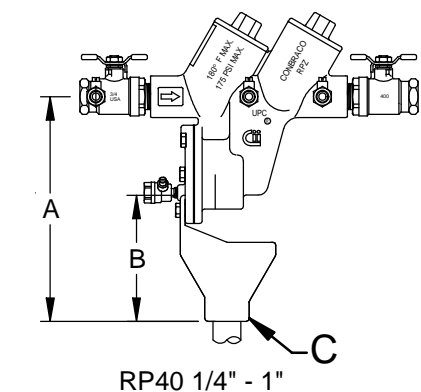
DIMENSIONS (in)

RP4A SIZE	AGD MODEL NO.	A	B	EXIT PIPING THREADS C	OD OF C
1/2"	AGD4A-1	6.5"	3.4"	1" FNPT	1 1/4" PIPE
3/4"	AGD4A-1	6.5"	3.4"	1" FNPT	1 1/4" PIPE
1"	AGD4A-1	6.6"	3.4"	1" FNPT	1 1/4" PIPE
1 1/4" 1 1/2"	AGD4A-112	8.5"	4.1"	1 1/2" FNPT	2" PIPE
2"	AGD4A-2	10.0"	5.3"	2" FNPT	2 1/2" PIPE

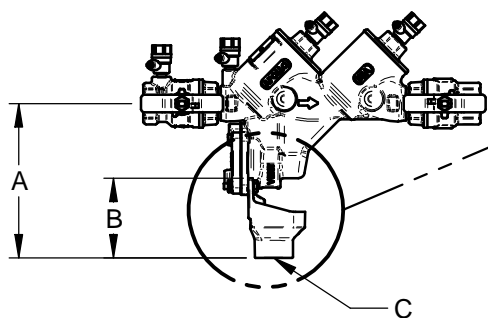
RP40 SIZE	AGD MODEL NO.	A	B	EXIT PIPING THREADS C	OD OF C
1/4" 3/8" 1/2"	AGD4A-1	6.5"	3.4"	1" FNPT	1 1/4" PIPE
3/4" 1"	AGD4A-112	8.3"	4.1"	1 1/2" FNPT	2" PIPE

Note: Kits AGD4A-1 and AGD4A-112 contain extra parts, see notes under the installation instructions on the back of this sheet.

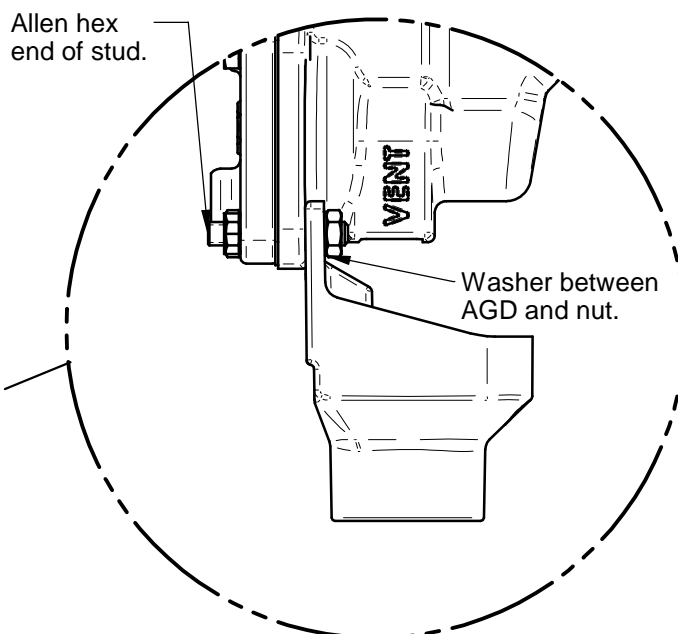
NOTE: The AGD is not designed to collect the full discharge capacity of the relief valve.



RP40 1/4" - 1"



Typical RP4A



INSTALLATION

NOTE: Isolate the RP device from line pressure and relieve internal pressure before installing the Air Gap Drain.

**RP40 sizes 1/4", 3/8" and 1/2": AGD4A-1,
RP40 sizes 3/4" and 1": AGD4A-112**

Tools for AGD4A-1 and AGD4A-112 installation on RP40:

Required AGD4A-1: 7/16" wrench or socket.

Required AGD4A-112: 1/2" wrench or socket

Note: These kits contain two studs, four nuts and threadlocker which are not used for installation of the AGD on these valves.

1. Remove the existing bottom two bolts from the relief valve cover.
2. Position the flange of the AGD over the relief valve cover and line up the two holes with those in the cover.
3. Using the two provided 1 inch bolts and two provided washers, attach the AGD to the assembly and tighten the bolts firmly. **DO NOT OVERTIGHTEN.**
4. Re-establish line pressure within the RP and check for leaks.
5. Hand thread the drainage piping into the AGD. The AGD is ABS plastic and discharge piping has the option of being glued to the outer diameter (OD) of the air gap outlet with a coupling and the appropriate cement or using a flexible pipe coupling if the threaded drainage pipe is not desired. See the table for the appropriate OD.

NOTE: The AGD is designed to support its own weight and two feet of straight pipe. Additional pipe or the use of bends or elbows which induce any side load or bending requires pipe hangers for support.

**RP4A sizes 1/2", 3/4" and 1": AGD4A-1
RP4A sizes 1 1/4" and 1 1/2": AGD4A-112
RP4A size 2": AGD4A-2**

Tools for AGD4A-1 installation on RP4A:

Required: 7/16" open end wrench, 1/8" Allen wrench.
Helpful to have: 7/16" socket.

Tools for AGD4A-112 and AGD4A-2 installation on RP4A:

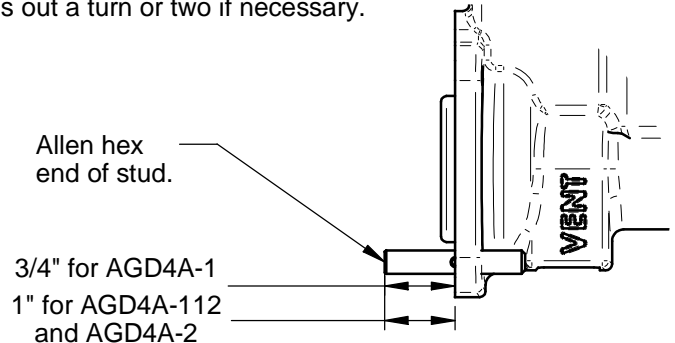
Required: 1/2" open end wrench, 5/32 Allen wrench.
Helpful to have: 1/2" socket.

Note: Kits AGD4A-1 and AGD4A-112 contain two bolts which are not used for installation of the AGD on these valves.

1. Remove the relief valve cover bolts, relief valve cover, and diaphragm.
2. Determine which two threaded holes line up with the AGD mounting holes. Hand thread the provided studs from the machined face side into those two holes about 1/2" deep for AGD4A -1 or 3/4" deep for AGD4A-112 and AGD4A-2. If necessary use an Allen wrench.

RP4A 1/2" through 2" (continued)

3. Apply several drops of the provided thread-locking compound to the studs' threads near the relief valve body.
4. Thread the studs the rest of the way into the body until the studs protrude from the machined face by 3/4" for the AGD4A-1 and 1" for the AGD4A-112 and AGD4A-2. (The stakes on the studs should limit their travel.) Wipe off the excess thread-locking compound. Check that the AGD and nuts will slip between the end of the studs and the vent, back the studs out a turn or two if necessary.



5. Slip the AGD over the studs from the vent side. Place a provided washer and a provided nut on each stud to hold the AGD in place.
6. Allow time for the thread-locking compound to set. Then, tighten the nuts with an open end wrench (7/16" for the AGD4A-1 and 1/2" for the AGD4A-112 and AGD4A-2) until snug. **DO NOT OVERTIGHTEN.**
7. Re-install the diaphragm and relief valve cover. Install the previously removed bolts into the remaining holes and thread provided nuts onto the studs. Tighten all firmly.
8. Re-establish line pressure within the RP and check for leaks.
9. Hand thread the drainage piping into the AGD. The AGD is ABS plastic and discharge piping has the option of being glued to the outer diameter (OD) of the air gap outlet with a coupling and the appropriate cement or using a flexible pipe coupling if the threaded drainage pipe is not desired. See the table for the appropriate OD.

NOTE: The AGD is designed to support its own weight and two feet of straight pipe. Additional pipe or the use of bends or elbows which induce any side load or bending requires pipe hangers for support.

BACKFLOW PRODUCTS DIVISION

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PRINTED IN USA

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