# **X-Series** High Humidity/Dust Applications

X-Series breathers are the perfect solution for high humidity and high dust environments. To extend the desiccant's life in these environments, the X-Series incorporates two check valves.

The intake check valve allows airflow into the breather only when differential pressure between the atmosphere and reservoir exceeds a 0.3 psi threshold, while the exhaust check valve permits air to exit the reservoir when the differential pressure between the reservoir and atmosphere exceeds a 2.1 psi threshold, providing a closed system until air flow is required. The check valves extend the life of the desiccant by allowing the air to flow through the breather only when needed to protect the integrity of the tank.

In addition to having a rugged design, X-Series breathers include a top cap that can be reused when the desiccant is spent. When the color of the silica gel has turned dark green, remove the reusable top cap from the bottom desiccant cartridge, dispose of the spent dark green desiccant cartridge, then use the same top cap with a replacement cartridge.

The X-Series rebuildable design allow for economical replacement of the desiccant cartridge.





Typical applications include: PAPER MILLS WASH DOWN AREAS STEAM CLEANING ROOMS MINE QUARRIES



Model	Height in. (cm)	Diameter in. (cm)	Mounting Connection	Weight Ibs. (kg)	Water Capacity fl.oz (mL)	Maximum Air Flow cfm	Maximum Reservoir Fluid Flow gpm	Type Of Medium
X-100	6.25 (15.9)	3.25 (8.3)	½ inch female NPT	2.5 (1.1)	2.0 (59)	10	75	100% Silica Gel
X-101	7 (17.8)	5 (12.7)	1inch slip fit	3.3 (1.5)	6.2 (183)	35	262	100% Silica Gel
X-102	10 (25.4)	5 (12.7)	1 inch slip fit	4.8 (2.2)	13.9 (411)	35	262	100% Silica Gel
X-121	7 (17.8)	5 (12.7)	1inch male NPT	3.3 (1.5)	6.2 (183)	35	262	100% Silica Gel
X-122	10 (25.4)	5 (12.7)	2 inch male NPT	5 (2.3)	13.9 (411)	35	262	100% Silica Gel

Model	Height in. (cm)	Diameter in. (cm)	Mounting Connection	Weight Ibs. (kg)	Water Capacity fi.oz (mL)	Maximum Air Flow cfm	Maximum Reservoir Fluid Flow gpm	Replacement for Model	Type Of Medium
L-143	5.25 (13.3)	3.25	1/2 inch female NPT	1.2 (.5)	2.0 (59)	10	75	X-100	100% Silica Gel
A-341	5.5 (14.0)	5 (12.7)	1inch slip fit	2.3 (1.0)	6.2 (183)	35	262	X-101	100% Silica Gel
A-342	8.5 (21.6)	5 (12.7)	1inch slip fit	3.6 (1.6)	13.9 (411)	35	262	X-102	100% Silica Gel
A-343	5.5 (14.0)	5 (12.7)	1inch slip fit	2.4 (1.1)	6.2 (183)	35	262	X-121	100% Silica Gel
A-344	8.5 (21.6)	5 (12.7)	2 inch male NPT	3,7 (1.7)	13.9 (411)	35	262	X-122	100% Silica Gel



The solution was to provide two 35 cfm rated X-Series breathers doubling their capacity to 70 cfm. By combining these breathers and enlarging their mounting adapter we were able to exceed the flow rate requirements. Additionally, the check valve features of the X-Series design solved their additional concerns on how frequently they would have to climb up the tank and change the breather. The check valve feature extends the life of the breather by keeping air out until the tank breathes.

X-Series

## Sizing Information

### **Replacement Cartridges**

### CASE STUDY

A manufacturing Company in the Midwestern United States had an application where a fluid storage tank required 58 cfm (equivalent to 435 gpm) air flow capacity. They were also concerned how often they would have to climb up and change the breather due to its location on top of the tall tank.