

# ADVANCED CHECK VALVE TECHNOLOGY & REPLACEABLE CARTRIDGE SOLUTIONS

Air Sentry® sets the gold standard for contamination control breather technology. Air Sentry Desiccant Breathers are designed to protect and prolong the lifespan of your equipment and fluids by significantly reducing particulate and moisture contamination.

Engineered for performance, the innovative X-Series and Guardian-Series breathers feature advanced check valve technology and replaceable desiccant filter cartridges, delivering superior protection while reducing maintenance costs. These breathers are the only ones on the market offered with replaceable cartridges, and their unique design offers up to 90% more desiccant than comparable models. With check valve technology, these breathers last 3 to 5 times longer than standard alternatives.



# **MAXIMUM EFFICIENCY AND DURABILITY**

#### X-SERIES & GUARDIAN®-SERIES DESICCANT BREATHERS

Built for long-lasting performance — for a wide range of industries and applications

- Protects Gearboxes, Hydraulic Systems, and Storage Tanks for Lubricants



### X-SERIES

Ideal solution for: High Humidity/High Dust Applications • Paper Mills • Wash-Down Areas • Steam-Cleaning Rooms • Mine Quarries

This series offers replaceable cartridges. To maximize desiccant life, the X-Series features two check valves within a reusable top cap. These check valves maintain a sealed system until airflow is necessary. The intake check valve allows airflow into the breather only when the differential pressure between the atmosphere and fluid reservoir exceeds a 0.1-psi threshold (the cracking pressure of the check valves). The exhaust check valve enables air to exit the reservoir when the differential pressure exceeds 0.1-psi.

MODEL	CHECK VALVE PSI IN/OUT	HEIGHT Inches (CM)	<b>DIAMETER</b> INCHES (CM)	MOUNTING CONNECTION	SILICA GEL LBS (KG)	MAXIMUM ADSORPTION CAPACITY FL. OUNCES (ML)	MAXIMUM AIR FLOW (FM	MAXIMUM RESERVOIR Fluid Flow GPM	TYPE OF Medium	USES REPLACEMENT CARTRIDGE
X-50	0.3/0.3	5 (12.7)	3 (7.6)	½" FNPT	0.6 (0.27)	3.68 (109)	10	75	Silica Gel	L-50
X-100	0.3/0.3	6.25 (15.9)	3.25 (8.3)	½" FNPT	0.8 (0.4)	4.91 (145)	10	75	Silica Gel	L-143
X-501	0.1/0.1	7 (17.8)	5 (12.7)	1" slip fit	1.4 (0.6)	8.6 (254)	20	150	Silica Gel	A-341
X-502	0.1/0.1	10 (25.4)	5 (12.7)	1" slip fit	2.7 (1.2)	16.56 (489)	20	150	Silica Gel	A-342
X-503	0.1/0.1	7 (17.8)	5 (12.7)	1" MNPT	1.4 (0.6)	8.6 (254)	20	150	Silica Gel	A-345
X-505	0.1/0.1	10 (25.4)	5 (12.7)	1" MNPT	2.7 (1.2)	16.56 (489)	20	150	Silica Gel	A-346
X-521	0.1/0.1	7 (17.8)	5 (12.7)	2" MNPT	1.4 (0.6)	8.6 (254)	20	150	Silica Gel	A-343
X-522	0.1/0.1	10 (25.4)	5 (12.7)	2" MNPT	2.7 (1.2)	16.56 (489)	20	150	Silica Gel	A-344



## **GUARDIAN®-SERIES**

Ideal solution for: Most Applications\*

Guardian, Air Sentry's industry-leading breather series offers replaceable cartridges. To maximize desiccant life, the Guardian-Series features 4 check valves within a reusable top cap. These check valves maintain a sealed system until airflow is necessary. The intake check valve allows airflow into the breather only when the differential pressure between the atmosphere and fluid reservoir exceeds a 0.1-psi threshold (the cracking pressure of the check valves). The exhaust check valve enables air to exit the reservoir when the differential pressure exceeds 0.1-psi. Guardian-Series breathers are constructed with Tritan®, a highly durable, impact- and chemical-resistant material designed to perform across a broad range of operating temperatures.



Models listed below include advanced isolation check valves and NGC models listed below include proprietary compound indicating gauges. Isolation



check valves prevent exhaust air from depleting the desiccant while shielding against volatile fumes and splashing fluids, while compound indicating gauges provide an accurate indicator for filter conditions.

Guardian-Series breathers offer an innovative modular design with optional add-ons, including stackable rings, wash-down caps, and highcapacity air filters to suit your specific application requirements.

MODEL	CHECK VALVE PSI IN/OUT	<b>HEIGHT</b> Inches (CM)	<b>DIAMETER</b> INCHES (CM)	MOUNTING CONNECTION	SILICA GEL LBS (KG)	MAXIMUM ADSORPTION CAPACITY FL. OUNCES (ML)	MAXIMUM AIR FLOW CFM	MAXIMUM RESERVOIR FLUID FLOW GPM	TYPE OF Medium	ISOLATION CHECK VALVE	COMPOUND INDICATING GAUGE	USES REPLACEMENT CARTRIDGE
G5S1NC	0.1/0.1	9 (22.3)	5.125 (13)	1" NPT	1.5 (0.68)	9.2 (272)	25	187	Silica Gel	Yes	No	GRC5SC
G5S1NGC	0.1/0.1	9 (22.3)	5.125 (13)	1" NPT	1.5 (0.68)	9.2 (272)	25	187	Silica Gel	Yes	Yes	GRC5SC
G8S1NC	0.1/0.1	12 (30.5)	5.125 (13)	1" NPT	2.8 (1.27)	17.2 (508.7)	25	187	Silica Gel	Yes	No	GRC8SC
G8S1NGC	0.1/0.1	12 (30.5)	5.125 (13)	1" NPT	2.8 (1.27)	17.2 (508.7)	25	187	Silica Gel	Yes	Yes	GRC8SC
G12S1NC	0.1/0.1	16 (40.6)	5.125 (13)	1" NPT	4.5 (2)	27.6 (816)	25	187	Silica Gel	Yes	No	GRC12SC
G12S1NGC	0.1/0.1	16 (40.6)	5.125 (13)	1" NPT	4.5 (2)	27.6 (816)	25	187	Silica Gel	Yes	Yes	GRC12SC

\*The only desiccant breather series that Air Sentry recommends for diesel fuel applications (not recommended for other fuel applications.) Guardian breathers used on diesel fuel applications must be accompanied with an isolation check valve. See Guardian models ending in NC, NG, NGC. Not available in models ending in N.

#### **MODULAR ADD-ONS**

## HIGH-CAPACITY AIR FILTER - GHCAF

Can be used with a desiccant cartridge or as a standalone particle filter. The High-Capacity Air Filters' 0.3-micron HEPA filter efficiently removes water vapor and 99.9% of particulate contamination down to 2 microns, ensuring superior air quality and maximum equipment protection.



By using the Modular Stackable Ring, you are able to attach GUARDIAN breather cartridges to extend the service life. This stackable ring also allows for the addition of the High-Capacity Air Filter and Activated Carbon Filter.



#### SHIELD WASH-DOWN CAP - GSWDC

The cap provides a barrier in environments where equipment wash down happens frequently and in dusty environments. This prevents any direct spray from opening check valves in the top cap. The Shield Wash-Down Cap is designed for use in food processing, mining, cement, pulp and paper facilities and outdoors.



COMPOUND INDICATING GAUGE - A655 This gauge is an accurate indicator of filter conditions. \*Available as an add-on on models NC.





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# **CONTACT US**

airsentry.com | 972.771.1000 | 800.699.6318





