



DESICCANT BREATHER *Selector*

ENLUSE.COM

Contents

- Application: Gearbox more than 50 Gallon 2
- Application: Gearbox less than 50 Gallon 3
- Application: Hydraulic Systems 4
- Application: Transformers 5
- Application: Diesel Fuel Tanks 6
- Application: Drum and Bulk Tanks 7
- Application: Offshore/Remote Equipment 8
- Severe Dusty Applications 9

Recommended Breather Solutions

Application: Gearbox more than 50 Gallon



Climate exposure	SCFM	GPM	Good	Better	Best	Accessories
Indoors Climate Controlled	5	37	Z135	X100	G5S1N	
Indoors Climate Controlled	20	150	D103	X103	G5S1N	
Indoors Climate Controlled	25	187	G5S1N	G8S1N	G12S1N	
Indoors high dust	5	37	Z135	X100	G5S1N	High Capacity Air Filter
Indoors high dust	20	150	D103	X105	G5S1N	High Capacity Air Filter
Indoors high dust	25	187	G5S1N	G8S1N	G12S1N	High Capacity Air Filter
Indoors high humidity	5	37	X100	X103	G5S1N	
Indoors high humidity	20	150	X103	G5S1N	G5S1N	
Indoors high humidity	25	187	G5S1N	G8S1N	G12S1N	
Indoors wash down	5	37	X100	X103	G5S1N	Wash down cap
Indoors wash down	20	150	X103	G5S1N	G5S1N	Wash down cap
Indoors wash down	25	187	G5S1N	G8S1N	G12S1N	Wash down cap
Outdoors	5	37	Z135	X100	G5S1N	
Outdoors	20	150	D103	X103	G5S1N	
Outdoors	25	187	G5S1N	G5S1N	G5S1N	

During the regular operation of gearboxes, they are subjected to thermal expansion. This continuous expansion and contraction result in minimal airflow in and out of the gearbox. Air Sentry breathers are engineered to accommodate the airflow associated with these thermal changes.

Moreover, the airflow of both air and oil can significantly increase during gearbox drainage and refilling processes. If the gearbox is being drained or filled via gravity methods, you can rest assured, as all Air Sentry breathers are fully equipped to handle the airflow demands of gravity-based operations.

However, when the gearbox filling or draining is facilitated by a pump, it's essential that the breather's airflow capacity aligns with that of the pump to ensure optimal performance.

Recommended Breather Solutions



Application: Gearbox less than 50 Gallon

Climate exposure	Air Flow	Oil Flow	Recommended Breather Solutions			Accessories
	SCFM	GPM	Good	Better	Best	
Indoors Climate Controlled	5	37	Z135	X100	G5S1N	
Indoors Climate Controlled	20	150	D103	X103	G5S1N	
Indoors Climate Controlled	25	187	G5S1N	G8S1N	G12S1N	
Indoors Climate Controlled	35	262	M103	M103	M106	
Indoors Climate Controlled	120	897	M106	M106	M107	
Indoors Climate Controlled	300	2250	M107	M107	M107	
Indoors high dust	5	37	Z135	X100	G5S1N	High Capacity Air Filter
Indoors high dust	20	150	D103	X103	G5S1N	High Capacity Air Filter
Indoors high dust	25	187	G5S1N	G8S1N	G12S1N	High Capacity Air Filter
Indoors high dust	35	262	M103	M103	M106	
Indoors high dust	120	897	M106	M106	M107	
Indoors high dust	300	2250	M107	M107	M107	
Indoors high humidity	5	37	X100	X103	G5S1N	
Indoors high humidity	20	150	X103	G5S1N	G8S1N	
Indoors high humidity	25	187	G5S1N	G8S1N	G12S1N	
Indoors high humidity	35	262	M103	M103	M106	
Indoors high humidity	120	897	M106	M106	M107	
Indoors high humidity	300	2250	M107	M107	M107	
Indoors wash down	5	37	X100	X103	G5S1N	Wash down cap
Indoors wash down	20	150	X103	G5S1N	G8S1N	Wash down cap
Indoors wash down	25	187	G5S1N	G8S1N	G12S1N	Wash down cap
Indoors wash down	35	262	M103	M103	M106	
Indoors wash down	120	897	M106	M106	M107	
Indoors wash down	300	2250	M107	M107	M107	
Outdoors	5	37	X100	X103	G5S1N	
Outdoors	20	150	X103	G5S1N	G12S1N	
Outdoors	25	187	G5S1N	G8S1N	G12S1N	
Outdoors	35	262	M103	M103	M106	
Outdoors	120	897	M106	M107	M107	
Outdoors	300	2250	M107	M107	M107	

During the regular operation of gearboxes, they are subjected to thermal expansion. This continuous expansion and contraction result in minimal airflow in and out of the gearbox. Air Sentry breathers are engineered to accommodate the airflow associated with these thermal changes.

Moreover, the airflow of both air and oil can significantly increase during gearbox drainage and refilling processes. If the gearbox is being drained or filled via gravity methods, you can rest assured, as all Air Sentry breathers are fully equipped to handle the airflow demands of gravity-based operations.

However, when the gearbox filling or draining is facilitated by a pump, it's essential that the breather's airflow capacity aligns with that of the pump to ensure optimal performance.

Recommended Breather Solutions

Application: Hydraulic Systems



Climate exposure	Air Flow	Oil Flow	Recommended Breather Solutions			Accessories
	SCFM	GPM	Good	Better	Best	
Indoors Climate Controlled	5	37	Z135	X100	G5S1N	
Indoors Climate Controlled	20	150	D103	X103	G5S1N	
Indoors Climate Controlled	25	187	G5S1N	G8S1N	G12S1N	
Indoors Climate Controlled	35	262	M103	M103	M106	
Indoors Climate Controlled	120	897	M106	M106	M107	
Indoors Climate Controlled	300	2250	M107	M107	M107	
Indoors high dust	5	37	Z135	X103	G5S1N	High Capacity Air Filter
Indoors high dust	20	150	X103	G5S1N	G8S1N	High Capacity Air Filter
Indoors high dust	25	187	G5S1N	G8S1N	G12S1N	High Capacity Air Filter
Indoors high dust	35	262	M103	M103	M106	
Indoors high dust	120	897	M106	M106	M107	
Indoors high dust	300	2250	M107	M107	M107	
Indoors high humidity	5	37	X100	X103	G5S1N	
Indoors high humidity	20	150	X103	G5S1N	G8S1N	
Indoors high humidity	25	187	G5S1N	G8S1N	G12S1N	
Indoors high humidity	35	262	M103	M103	M106	
Indoors high humidity	120	897	M106	M106	M107	
Indoors high humidity	300	2250	M107	M107	M107	
Indoors wash down	5	37	X100	X103	G5S1N	Wash down cap
Indoors wash down	20	150	X103	G5S1N	G8S1N	Wash down cap
Indoors wash down	25	187	G5S1N	G8S1N	G12S1N	Wash down cap
Indoors wash down	35	262	M103	M103	M106	
Indoors wash down	120	897	M106	M106	M107	
Indoors wash down	300	2250	M107	M107	M107	
Outdoors	5	37	X100	X103	G5S1N	
Outdoors	20	150	X103	G5S1N	G8S1N	
Outdoors	25	187	G5S1N	G8S1N	G12S1N	
Outdoors	35	262	M103	M103	M106	
Outdoors	120	897	M106	M106	M107	
Outdoors	300	2250	M107	M107	M107	

In hydraulic systems, the hydraulic pump is equipped with a GPM (Gallons Per Minute) rating. This GPM rating can be converted into an Air Flow rate (CFM - Cubic Feet per Minute) to ensure the proper sizing of the breather.

Recommended Breather Solutions

Application: Transformers



Climate exposure	Air Flow	Oil Flow	Recommended Breather Solutions			Accessories
	SCFM	GPM	Good	Better	Best	
Indoors Climate Controlled	5	37	Z135	X100	G5S1N	
Indoors Climate Controlled	20	150	D103	X103	G5S1N	
Indoors Climate Controlled	25	187	G5S1N	G8S1N	G12S1N	
Indoors Climate Controlled	35	262	M103	M103	M106	
Indoors Climate Controlled	120	897	M106	M106	M107	
Indoors Climate Controlled	300	2250	M107	M107	M107	
Indoors high dust	5	37	Z135	X100	G5S1N	High Capacity Air Filter
Indoors high dust	20	150	X103	G5S1N	G8S1N	High Capacity Air Filter
Indoors high dust	25	187	G5S1N	G8S1N	G12S1N	High Capacity Air Filter
Indoors high dust	35	262	M103	M103	M106	
Indoors high dust	120	897	M106	M106	M107	
Indoors high dust	300	2250	M107	M107	M107	
Indoors high humidity	5	37	X100	X103	G5S1N	
Indoors high humidity	20	150	X103	G5S1N	G8S1N	
Indoors high humidity	25	187	G5S1N	G8S1N	G12S1N	
Indoors high humidity	35	262	M103	M103	M106	
Indoors high humidity	120	897	M106	M106	M107	
Indoors high humidity	300	2250	M107	M107	M107	
Indoors wash down	5	37	X100	X103	G5S1N	Wash down cap
Indoors wash down	20	150	X103	G5S1N	G8S1N	Wash down cap
Indoors wash down	25	187	G5S1N	G8S1N	G12S1N	Wash down cap
Indoors wash down	35	262	M103	M103	M106	
Indoors wash down	120	897	M106	M106	M107	
Indoors wash down	300	2250	M107	M107	M107	
Outdoors	5	37	Z135	X100	G5S1N	
Outdoors	20	150	X103	G5S1N	G8S1N	
Outdoors	25	187	G5S1N	G8S1N	G12S1N	
Outdoors	35	262	M103	M103	M106	
Outdoors	120	897	M106	M106	M107	
Outdoors	300	2250	M107	M107	M107	

Recommended Breather Solutions

Application: Diesel Fuel Tanks



Climate exposure	Air Flow	Oil Flow	Recommended Breather Solutions			Accessories
	SCFM	GPM	Good	Better	Best	
Indoors Climate Controlled	5	37	G5S1NGC	G8S1NGC	G12S1NGC	
Indoors Climate Controlled	20	150	G5S1NGC	G8S1NGC	G12S1NGC	
Indoors Climate Controlled	25	187	G5S1NGC	G8S1NGC	G12S1NGC	
Indoors high dust	5	37	G5S1NGC	G8S1NGC	G12S1NGC	High Capacity Air Filter
Indoors high dust	20	150	G5S1NGC	G8S1NGC	G12S1NGC	High Capacity Air Filter
Indoors high dust	25	187	G5S1NGC	G8S1NGC	G12S1NGC	High Capacity Air Filter
Indoors high humidity	5	37	G5S1NGC	G8S1NGC	G12S1NGC	
Indoors high humidity	20	150	G5S1NGC	G8S1NGC	G12S1NGC	
Indoors high humidity	25	187	G5S1NGC	G8S1NGC	G12S1NGC	
Indoors wash down	5	37	G5S1NGC	G8S1NGC	G12S1NGC	Wash down cap
Indoors wash down	20	150	G5S1NGC	G8S1NGC	G12S1NGC	Wash down cap
Indoors wash down	25	187	G5S1NGC	G8S1NGC	G12S1NGC	Wash down cap
Outdoors	5	37	G5S1NGC	G8S1NGC	G12S1NGC	
Outdoors	20	150	G5S1NGC	G8S1NGC	G12S1NGC	
Outdoors	25	187	G5S1NGC	G8S1NGC	G12S1NGC	

Fuel Tank Operation: Understanding Flow Rates for Breather Sizing

In the operation of fuel tanks, two crucial flow rates come into play: the fill and dispense rate, typically measured in gallons per minute (GPM). To ensure proper breather sizing for these applications, it's important to convert this oil flow rate (GPM) into an air flow rate (CFM).

We recommend the use of Guardians breathers for fuel tank operations due to their superior performance and reliability. For added safety and efficiency, we typically recommend installing two breathers. This approach incorporates a safety factor, providing enhanced protection for your fuel tank system.

Recommended Breather Solutions

Application: Drum and Bulk Tanks



Climate exposure	Air Flow	Oil Flow	Recommended Breather Solutions			Accessories
	SCFM	GPM	Good	Better	Best	
Indoors Climate Controlled	5	37	Z135	X100	G5S1N	
Indoors Climate Controlled	20	150	D103	X103	G5S1N	
Indoors Climate Controlled	25	187	G5S1N	G8S1N	G12S1N	
Indoors Climate Controlled	35	262	M103	M103	M106	
Indoors Climate Controlled	120	897	M106	M106	M107	
Indoors Climate Controlled	300	2250	M107	M107	M107	
Indoors high dust	5	37	Z135	X100	G5S1N	High Capacity Air Filter
Indoors high dust	20	150	D103	X103	G5S1N	High Capacity Air Filter
Indoors high dust	25	187	G5S1N	G8S1N	G12S1N	High Capacity Air Filter
Indoors high dust	35	262	M103	M103	M106	
Indoors high dust	120	897	M106	M106	M107	
Indoors high dust	300	2250	M107	M107	M107	
Indoors high humidity	5	37	X100	X103	G5S1N	
Indoors high humidity	20	150	X103	G5S1N	G8S1N	
Indoors high humidity	25	187	G5S1N	G8S1N	G12S1N	
Indoors high humidity	35	262	M103	M103	M106	
Indoors high humidity	120	897	M106	M106	M107	
Indoors high humidity	300	2250	M107	M107	M107	
Indoors wash down	5	37	X100	X103	G5S1N	Wash down cap
Indoors wash down	20	150	X103	G5S1N	G8S1N	Wash down cap
Indoors wash down	25	187	G5S1N	G8S1N	G12S1N	Wash down cap
Indoors wash down	35	262	M103	M103	M106	
Indoors wash down	120	897	M106	M106	M107	
Indoors wash down	300	2250	M107	M107	M107	
Outdoors	5	37	X100	X103	G5S1N	
Outdoors	20	150	X103	G5S1N	G8S1N	
Outdoors	25	187	G5S1N	G8S1N	G12S1N	
Outdoors	35	262	M103	M103	M106	
Outdoors	120	897	M106	M106	M107	
Outdoors	300	2250	M107	M107	M107	

Recommended Breather Solutions

Application: Offshore/Remote Equipment



Climate exposure	Air Flow	Oil Flow	Recommended Breather Solutions			Accessories
	SCFM	GPM	Good	Better	Best	
Indoors Climate Controlled	5	37	G5S1N	G8S1N	G12S1N	
Indoors Climate Controlled	20	150	G8S1N	G12S1N	G12S1N	
Indoors Climate Controlled	25	187	G12S1N	G12S1N	G12S1N	
Indoors Climate Controlled	35	262	M103	M103	M106	
Indoors Climate Controlled	120	897	M106	M106	M107	
Indoors Climate Controlled	300	2250	M107	M107	M107	
Indoors high dust	5	37	G5S1N	G8S1N	G12S1N	High Capacity Air Filter
Indoors high dust	20	150	G8S1N	G12S1N	G12S1N	High Capacity Air Filter
Indoors high dust	25	187	G12S1N	G12S1N	G12S1N	High Capacity Air Filter
Indoors high dust	35	262	M103	M103	M106	
Indoors high dust	120	897	M106	M106	M107	
Indoors high dust	300	2250	M107	M107	M107	
Indoors high humidity	5	37	G5S1N	G8S1N	G12S1N	
Indoors high humidity	20	150	G8S1N	G12S1N	G12S1N	
Indoors high humidity	25	187	G12S1N	G12S1N	G12S1N	
Indoors high humidity	35	262	M103	M103	M106	
Indoors high humidity	120	897	M106	M106	M107	
Indoors high humidity	300	2250	M107	M107	M107	
Indoors wash down	5	37	G5S1N	G8S1N	G12S1N	Wash down cap
Indoors wash down	20	150	G8S1N	G12S1N	G12S1N	Wash down cap
Indoors wash down	25	187	G12S1N	G12S1N	G12S1N	Wash down cap
Indoors wash down	35	262	M103	M103	M106	
Indoors wash down	120	897	M106	M106	M107	
Indoors wash down	300	2250	M107	M107	M107	
Outdoors	5	37	G5S1NGC	G8S1NGC	G12S1NGC	
Outdoors	20	150	G8S1NGC	G12S1NGC	G12S1NGC	
Outdoors	25	187	G12S1NGC	G12S1NGC	G12S1NGC	
Outdoors	35	262	M103	M103	M106	
Outdoors	120	897	M106	M106	M107	
Outdoors	300	2250	M107	M107	M107	

Recommended Breather Solutions

Severe Dusty Applications



Climate exposure	Air Flow	Oil Flow	Recommended Breather Solutions			Accessories
	SCFM	GPM	Good	Better	Best	
Indoors Climate Controlled	5	37	G5S1N	G8S1N	G12S1N	
Indoors Climate Controlled	20	150	G5S1N	G8S1N	G12S1N	
Indoors Climate Controlled	25	187	G5S1N	G8S1N	G12S1N	
Indoors Climate Controlled	35	262	M103	M103	M106	
Indoors Climate Controlled	120	897	M106	M106	M107	
Indoors Climate Controlled	300	2250	M107	M107	M107	
Indoors high dust	5	37	G5S1N	G8S1N	G12S1N	High Capacity Air Filter
Indoors high dust	20	150	G8S1N	G12S1N	G12S1N	High Capacity Air Filter
Indoors high dust	25	187	G12S1N	G12S1N	G12S1N	High Capacity Air Filter
Indoors high dust	35	262	M103	M103	M106	
Indoors high dust	120	897	M106	M106	M107	
Indoors high dust	300	2250	M107	M107	M107	
Indoors high humidity	5	37	G5S1N	G8S1N	G12S1N	
Indoors high humidity	20	150	G8S1N	G12S1N	G12S1N	
Indoors high humidity	25	187	G8S1N	G12S1N	G12S1N	
Indoors high humidity	35	262	M103	M103	M106	
Indoors high humidity	120	897	M106	M106	M107	
Indoors high humidity	300	2250	M107	M107	M107	
Indoors wash down	5	37	G5S1N	G8S1N	G12S1N	Wash down cap
Indoors wash down	20	150	G8S1N	G12S1N	G12S1N	Wash down cap
Indoors wash down	25	187	G8S1N	G12S1N	G12S1N	Wash down cap
Indoors wash down	35	262	M103	M103	M106	
Indoors wash down	120	897	M106	M106	M107	
Indoors wash down	300	2250	M107	M107	M107	
Outdoors	5	37	G5S1NGC	G8S1NGC	G12S1NGC	
Outdoors	20	150	G8S1NGC	G12S1NGC	G12S1NGC	
Outdoors	25	187	G12S1NGC	G12S1NGC	G12S1NGC	
Outdoors	35	262	M103	M103	M106	
Outdoors	120	897	M106	M106	M107	
Outdoors	300	2250	M107	M107	M107	

Get in Touch:

We believe in providing the best support for your needs.

If you require additional information or have specific queries, don't hesitate to [reach out to us](#).

Your satisfaction is our priority!

Enluse B.V. – The Netherlands – Tel. +31 76 57 81 280 – www.enluse.com – info@enluse.com