

MOISTURE CONTROL DESICCANT BREATHERS

SAW 115



PASSION  PERFORM



FEATURES & BENEFITS

- ◆ Absorbs harmful water vapour
- ◆ Removes moisture in the headspace of equipment
- ◆ Eliminates rust-forming condensation
- ◆ Prevents sludge deposits and water-contaminated oil
- ◆ Prevents contamination ingress
- ◆ Delivers longer lubricant life
- ◆ Reduces wear and tear and extends the lifespan of machinery
- ◆ Comprehensive system protection

Second polyester filter element

Protects against migration of desiccant dust in the reservoir for maximum efficiency

Air Diffuser

Foam filter captures any oil mist and disperses incoming air evenly over filtration and drying areas.

Air Vents

Individual air intakes are opened based on flow requirements of the system. Plugs protect unit during shipping and storage.

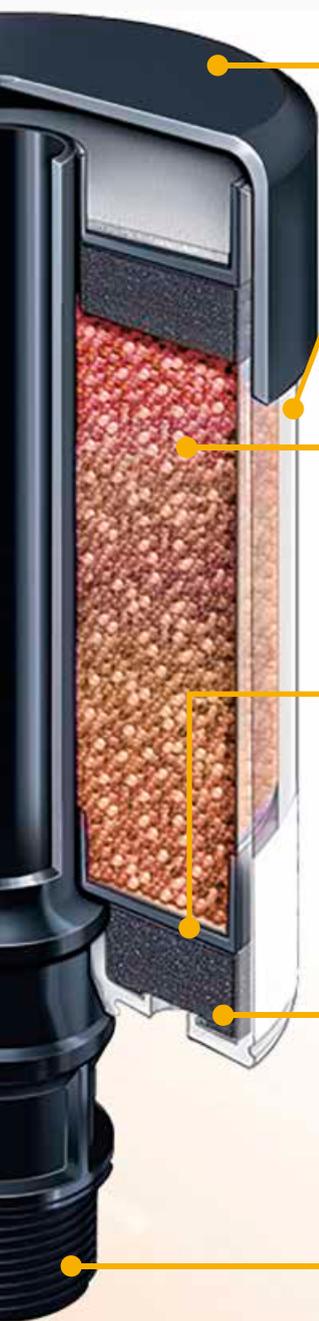
Integrated Standpipe

Excellent vibration resistance, dissipates impact throughout the unit - eliminating weak points, and allows even airflow distribution



SAW 115

Protection from moisture and particulate contamination in lubricant and equipment



Body Shell

Made of resilient polycarbonate material for greater shock-protection. Clear UV protected casing providing reliable service and easy maintenance.

Water Vapor Absorbent

Silica gel adsorbs water from incoming air and can hold up to 40% of its weight.

Polyester filter element

Removes contamination from the incoming air to 3 μm . Unique loops allow particles to release during system exhalation, helping to increase breather life.

Air diffuser

Foam filter disperses the incoming air evenly over filtration and drying section.

Threaded Mounting

Easily replaces standard filler/breather cap with multi-fit connection or through SMG adapter

INTRODUCTION

To ensure greater efficiency and to maximise the lifespan of hydraulic and lubrication systems **the fluids should be kept free from solid and water contamination.**

However most fluid reservoirs must breathe to function, allowing water vapour and solid contaminants to enter. Temperature fluctuations in the reservoir will cause this water vapour to condense which will not only cause oxidation of the oil, but can also lead to considerable mechanical damage.

Standard air breathers remove some of the solid particles, but allow water vapour to pass freely.

WHAT IS A DESSICANT BREATHER?

The desiccant breather is a product that combines the filtration of pollution and absorption of free water contained in the air.

When the air enters the equipment through the breather, the filter layers remove the solid contamination while the desiccant agent holds the moisture.

While in service or during shut-down, the desiccant agent dries the equipment, absorbing moisture from the reservoir.

SAW is a range of desiccant breathers for hydraulic and lubrication systems.

WHAT CONTAMINATION PROBLEMS CAN DESSICANT BREATHERS PREVENT?

Liquid contamination is the cause of hydraulic and lubrication fluid performance issues.

Negative effects include:

- ✗ Increase of fluid acidity
- ✗ Reduction of lubrication performance
- ✗ Reduction of fluid longevity
- ✗ Creation of bacterial colonies
- ✗ Creation of ice at low temperatures

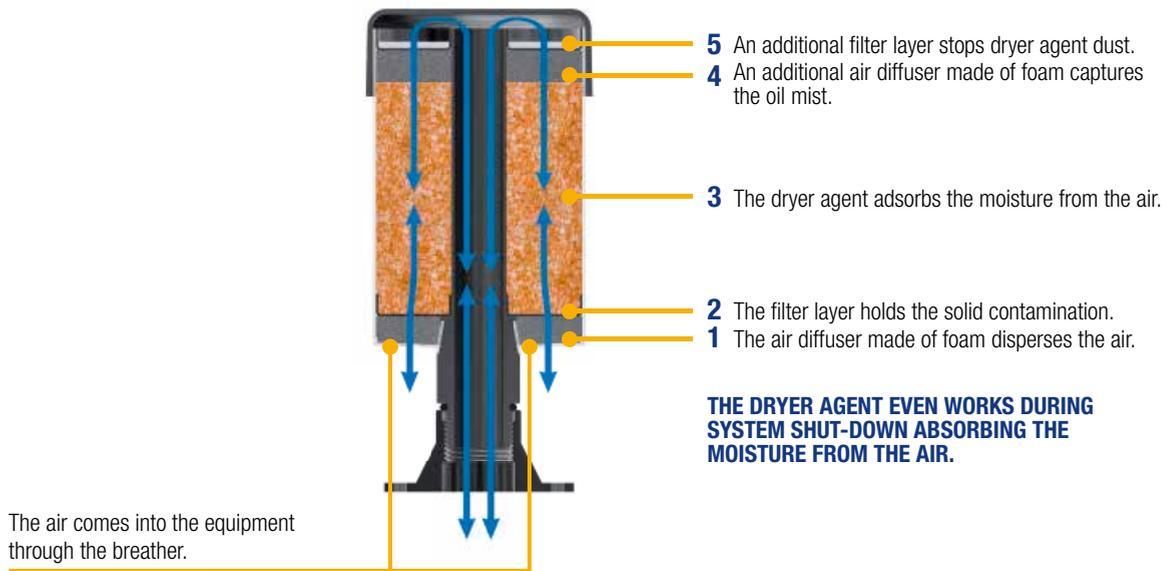
It also causes damage in the hydraulic systems:

- ✗ Creation of rust in the hydraulic tanks
- ✗ Wear and tear on equipment

SAW 115 GENERAL INFORMATION

Focus on

How does SAW Series works



SAW Series Benefits



Applications

Where is SAW series used?

MP Filtri's range of breathers are proven in a wide variety of applications, including: IBC tanks, Transformers, Storage Tanks in Hydraulics, Power Generation, Mining, Aviation, Storage, Manufacturing, and Petrochemical applications.

Where can't SAW series be used?

The SAW series is NOT suitable for the following environments:

- Systems with aggressive fluids (Phosphate esters, Hydrogen sulfide, Sulfuric acid, Highly alkaline cleaners)
- Systems with heavy duty cycles (Vibrations, Risk of impacts, Wide temperature range)
- Large systems

Hydraulic systems



Oil storage



Renewable energy



Gearbox



Transformers



Tanks



SAW 115 GENERAL INFORMATION

Description

Air breathers & Filler plugs

Moisture control desiccant air breathers

Max air flow up to 453 l/min

SAW is a range of desiccant breathers; they are products that combine the filtration of the solid contamination and the absorption of the free water contained into the air.

They are directly fitted on the tank; the filter layers remove the solid contamination while the desiccant agent holds the moisture contained in the air that enters into the tank as result of the tank breathing.

While in service or during shut-down, the desiccant agent dries the equipment, absorbing moisture from the reservoir.

Available features:

- Male threaded connections up to 1", for a maximum flow rate of 453 l/min
- Fine filtration rating, to get a good cleanliness level into the reservoir

Common applications:

Hydraulic systems, oil storage, tanks, transformers, renewable energy, Gearboxes.

Chemical Compatibility

Recommended:	Not Recommended:
- All Gear Oil	- Phosphate Ester
- Most Hydraulic Fluid	- Hydrogen Sulphide
- Mineral and Synthetic Oil	- Sulphuric Acid
	- High Alkaline Cleaner

Technical data

Flow rate Δp 0.02 bar

	Flow rate [l/min]
Filtration rating	03
SAW115	453

Materials

Connection: Polyamide
 Internal Support Pipe: Polyamide
 Screen: Polycarbonate
 Cover: Polyamide
 Dryer Agent: Silica Gel

Filter Efficiency 3 μ m absolute ($B_3 \geq 200$)

Seals NBR

Temperature From -25 °C to +90 °C

Humidity Level Below Ambient Conditions

SAW115G03A00P01: protects 30.000 + cycles
 Deliquescent: Protects 5.000 cycles
 (Testing parameters 23 °C, 30 l/min)

Silica Gel Weight

Length 1	0.32 kg
Length 2	0.56 kg
Length 3	0.84 kg

Total Weight

Length 1	0.60 kg
Length 2	0.90 kg
Length 3	1.20 kg

Air vent holes

Max hydraulic flow rate [l/min (cfm)]	Holes to open
up to 110 (4)	2
from 111 to 220 (4-8)	4
from 221 to 330 (8-12)	6
from 331 to 452 (12-16)	8

IMPORTANT INSTALLATION INFORMATION

- The air vent holes are plugged for any new breather
- The plugs protect the dryer agent during storage and shipment
- The plugs must be taken out during the installation, according to the max hydraulic flow rate



Performances

Series	Length	Max hydraulic flow @ 7 kPa (1 psi) [l/min (cfm)]	Water Absorption Capacity [ml (fl.oz)]	Recommended max volume		Silica gel weight [kg (lb)]	Total weight
				Gearbox / Storage tank [l (gal)]	Hydraulic reservoir [l (gal)]		
SAW115	1	453 (16)	118 (4)	757 (200)	227 (60)	0.32 (0.70)	0.60 (1.32)
SAW115	2	453 (16)	220 (7.45)	1325 (350)	379 (100)	0.56 (1.23)	0.90 (1.98)
SAW115	3	453 (16)	333 (11.3)	1893 (500)	757 (200)	0.84 (1.88)	1.20 (2.64)

SAW 115

Designation & Ordering code

COMPLETE AIR FILTER

Series	Configuration example: SAW115									
SAW115	1	G	03	A	0	0	P01			
Length										
1 2 3										
Connection										
G 1"										
Filtration rating										
03 Inorganic microfiber 3 µm										
Seals										
A NBR										
Valve										
0 Without valve										
Option										
0 Standard										

Execution	
P01	MP Filtri standard
Pxx	Customized

ACCESSORIES

Series	Configuration example: SMG1			
SMG Adapter Flange	S	A	P02	
Connection				
S Without screws				
Seals				
A NBR				

Execution	
P02	MP Filtri standard

Silica gel

Active breather



Depleted breather



Silica gel is the most efficient and economic moisture adsorbent for general applications.

A white breather means the unit has done its job keeping moisture out of your lubricants.

Whenever the colour changes from orange to white it's time to replace the breather with a new one.

All breathers should be changed at least once a year.

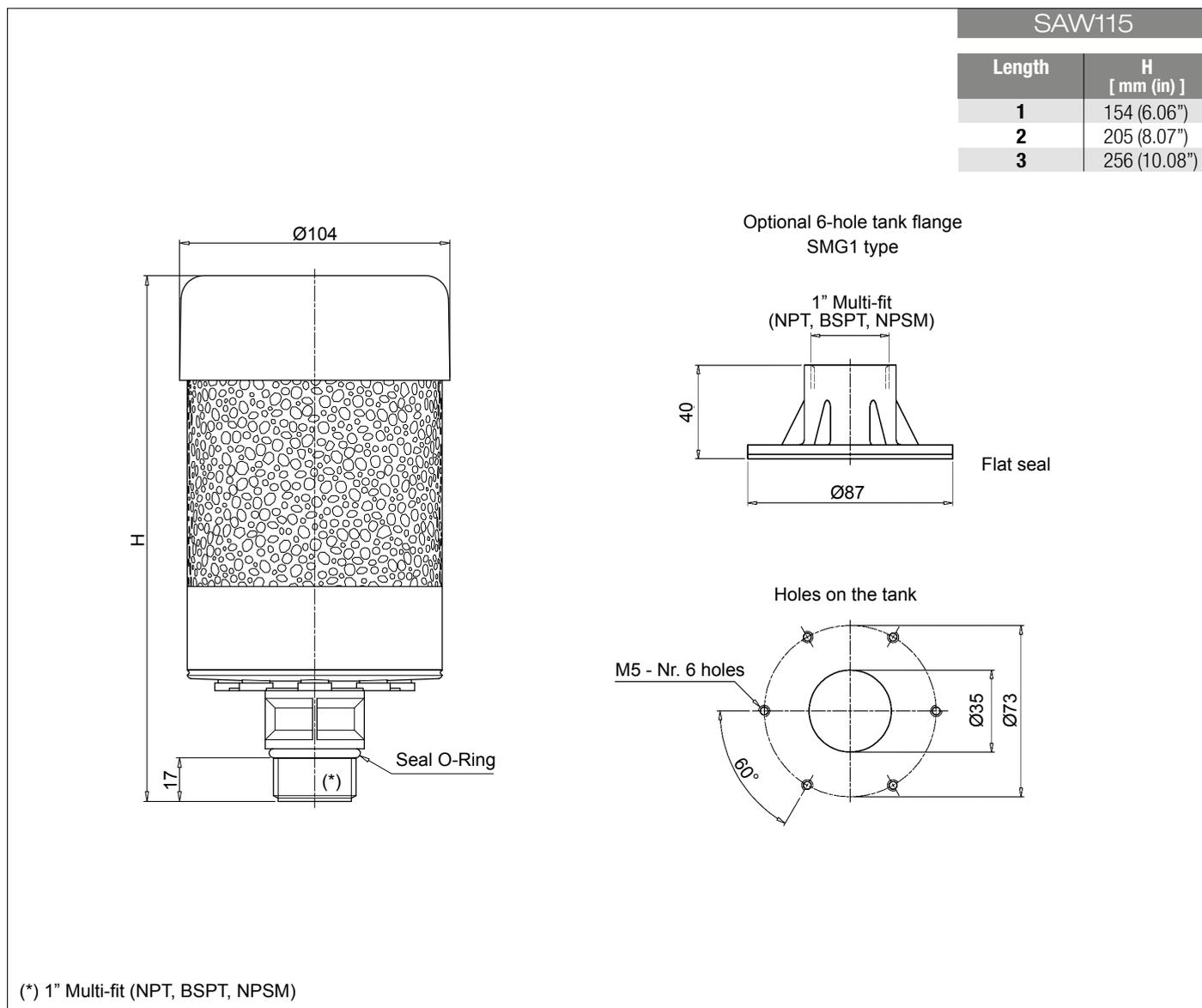
IMPORTANT

Dispose of the exhausted silica gel according to the regulations in force in the country of use.



SAW 115

Dimensions



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