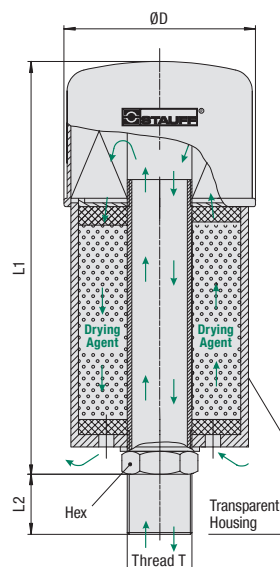


## Desiccant Air Breather Type SDB



### Drying Agent

Capable in changing colours  
with increasing moisture



This product does not contain  
any dangerous substances  
according to EC Council  
directives 99/45/EC and  
2001/60/EC.

## Dimensions and Technical Data

Type	Thread T	Dimensions <small>(mm/in)</small>				Weight <small>(g/lbs)</small>		Volume <small>(cm³/in³)</small>	Max. Water Absorption	Air Filter Elements				
		ØD	L1	L2	Hex	Complete Unit	Drying Agent	Drying Agent	<small>(g/lbs)</small>	Type	Filter Material	Micron Rating	Filter Surface	Max. Air Flow Rate
SDB-093/2	Male G3/4 BSP (ISO 228)	100	160	20	32	1200	225	300	86	SGB-090-03-B	Synthetic Fibre	3µm	752 cm²	0,70 m³/min
		3.94	6.30	.79	1.26	2.65	.50	18.3	.19				115 in²	24.71 cfm
SDB-096/2	Male G3/4 BSP (ISO 228)	100	220	20	32	1500	450	600	172	SGB-090-03-B	Synthetic Fibre	3µm	752 cm²	0,70 m³/min
		3.94	8.66	.79	1.26	3.31	.99	36.6	.38				115 in²	24.71 cfm
SDB-121/2	Male G1-1/4 BSP (ISO 228)	130	256	>25	50	2700	750	1000	288	SGB-120-03-B	Synthetic Fibre	3µm	2095 cm²	1,50 m³/min
		5.12	10.08	>.98	1.98	5.92	1.65	61.0	.63				320 in²	52.97 cfm
SDB-122/2	Male G1-1/4 BSP (ISO 228)	130	366	>25	50	4000	1500	2000	576	SGB-120-03-B	Synthetic Fibre	3µm	2095 cm²	1,50 m³/min
		5.12	14.41	>.98	1.98	8.82	3.31	122.0	1.27				320 in²	52.97 cfm

## Characteristics

### Combination of air breather and water removal filter

When a reservoir or gearbox breathes, air containing water vapor is ingested into the system. Temperature fluctuations will cause this water vapor to condense which can speed up the oxidation of the fluid and lead to damage in the system.

While inhaling, Desiccant Air Breathers SDB first dry the air as it passes through the drying agent. The air then passes through a 3µm air filter element to remove any solid contamination particles.

As moisture is absorbed, the drying agent will gradually change from red to orange. When it is orange, replace the drying agent. If required, an optional visual indicator gives an indication of the status of the air breather. With the moisture absorbed, the oxidation process can be decreased and the lifetime of the oil and the entire machinery will be extended.

Desiccant Air Breathers SDB can also be re-fitted with a layer of active carbon (1/3) and a layer of regular drying agent (2/3) for vapor filtration.

### Features

- Available in 4 different sizes
- Diameter of Ø100 mm / Ø3.94 in or Ø130 mm / Ø5.12 in
- Refillable with drying agent (non-toxic ZR gel grain) or a mix of drying agent and active carbon
- Replaceable air filter element SGB
- Connection: Male BSP thread (ISO 228) on Stainless Steel tube
- Available with adaptor plate to simplify installation and to enable the use of a visual contamination indicator
- Operating temperature range:  
-40 °C ... +90 °C / -40 °F ... +194 °F\*

## Accessories / Spare Parts

### Adaptor plate

- for SDB-093/2 and SDB-096/2:
- for SDB-121/2 and SDB-122/2:

AP-1  
AP-2

### Visual contamination indicator

- for all sizes (in conjunction with adaptor plate only): FM

### Drying agent refilling material (supplied in air tight container)

- for SDB-093/2 (300 cm<sup>3</sup> / 18.3 in<sup>3</sup>): RD-093
- for SDB-096/2 (600 cm<sup>3</sup> / 26.6 in<sup>3</sup>): RD-096
- for SDB-121/2 (1000 cm<sup>3</sup> / 61.0 in<sup>3</sup>): RD-121
- for SDB-122/2 (2000 cm<sup>3</sup> / 122.0 in<sup>3</sup>): RD-122

### Active carbon refilling material (supplied in air tight container)

- for SDB-093/2, SDB-096/2 and SDB-121/2 (300 cm<sup>3</sup> / 18.3 in<sup>3</sup>): RC-093/096/121
- for SDB-122/2 (600 cm<sup>3</sup> / 18.3 in<sup>3</sup>): RC-122

Please note: Use one layer of active carbon (1/3) and one layer of regular drying agent (2/3).

### Replacement air filter element (sealing included)

- for SDB-093/2 and SDB-096/2: SGB-090-03-B
- for SDB-121/2 and SDB-122/2: SGB-120-03-B

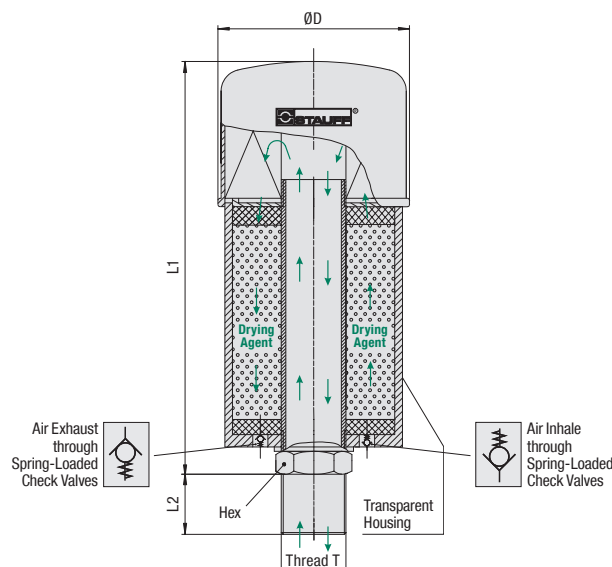
## Order Codes

SDB - 122 - RC - AP - FM / X					
①	②	③	④	⑤	⑥
<b>① Type</b> Desiccant Air Breather SDB					
<b>② Max. Water Absorption and Size</b> 86 g / .19 lbs at Ø100 mm / Ø3.94 in 093 172 g / .38 lbs at Ø100 mm / Ø3.94 in 096 288 g / .63 lbs at Ø130 mm / Ø5.12 in 121 576 g / 1.27 lbs at Ø130 mm / Ø5.12 in 122					
Please see table above for further technical details.					
<b>③ Drying Agent Material</b> Regular drying agent (standard option) - One layer of active carbon (1/3) and one layer of regular drying agent (2/3) for vapor filtration RC					
<b>④ Adaptor Plate</b> Without adaptor plate - With adaptor plate AP					
<b>⑤ Contamination Indicator</b> Without contamination indicator - With visual contamination indicator FM FM (in conjunction with adaptor plate AP only)					
Please see page 47 for details.					
<b>⑥ Design Code</b> Only for information X					

\* Note: The operation of the Desiccant Air Breather may vary at temperatures below 0°C / 32°F due to very low humidity %.



## Desiccant Air Breather with Check Valves Type SDB-CV



### Drying Agent

Capable in changing colours  
with increasing moisture



This product does not contain  
any dangerous substances  
according to EC Council  
directives 99/45/EC and  
2001/60/EC.

## Dimensions and Technical Data

Type	Thread T	Dimensions <small>(mm/in)</small>				Weight <small>(g/lbs)</small>		Volume <small>(cm<sup>3</sup>/in<sup>3</sup>)</small>	Max. Water Absorption	Air Filter Elements				
		ØD	L1	L2	Hex	Complete Unit	Drying Agent	Drying Agent	<small>(g/lbs)</small>	Type	Filter 67	Micron Rating	Filter Surface	Max. Air Flow Rate
SDB-061-CV	Female G3/8	68	143	14	22	350	75	100	29	SGB-060-03-B	Synthetic Fibre	3µm	415 cm <sup>2</sup>	0,05 m <sup>3</sup> /min
	BSP (ISO 228)	2.68	5.63	.55	.87	.77	.17	6.1	.06				63 in <sup>2</sup>	1.77 cfm
SDB-096-CV	Male G3/4	100	220	20	32	1500	450	600	172	SGB-090-03-B	Synthetic Fibre	3µm	752 cm <sup>2</sup>	0,70 m <sup>3</sup> /min
	BSP (ISO 228)	3.94	8.66	.79	1.26	3.31	.99	36.6	.38				115 in <sup>2</sup>	24.71 cfm
SDB-121-CV	Male G1-1/4	130	256	>25	50	2700	750	1000	288	SGB-120-03-B	Synthetic Fibre	3µm	2095 cm <sup>2</sup>	1,50 m <sup>3</sup> /min
	BSP (ISO 228)	5.12	10.08	>.98	1.98	5.92	1.65	61.0	.63				320 in <sup>2</sup>	52.97 cfm
SDB-122-CV	Male G1-1/4	130	366	>25	50	4000	1500	2000	576	SGB-120-03-B	Synthetic Fibre	3µm	2095 cm <sup>2</sup>	1,50 m <sup>3</sup> /min
	BSP (ISO 228)	5.12	14.41	>.98	1.98	8.82	3.31	122.0	1.27				320 in <sup>2</sup>	52.97 cfm

## Characteristics

**Combination of air breather and water removal filter with integrated check valves to increase the lifetime of the desiccant material; particularly suited for gearbox applications**

When a reservoir or gearbox breathes, air containing water vapor is ingested into the system. Temperature fluctuations will cause this water vapor to condense which can speed up the oxidation of the fluid and lead to damage in the system.

While inhaling, Desiccant Air Breathers SDB-CV first dry the air as it passes through the drying agent. The air then passes through a 3µm air filter element to remove any solid contamination particles.

Thanks to the spring-loaded check valves with an opening pressure of 0,01 bar / .15 PSI, the drying agent will be isolated from the atmosphere unless inhaling or exhaling, which increases the lifetime of the Desiccant Air Breather SDB-CV as well.

As moisture is absorbed, the drying agent will gradually change from red to orange. When it is orange, replace the drying agent. If required, an optional visual indicator (not for the SDB-061-CV) gives an indication of the status of the air breather. With the moisture absorbed, the oxidation process can be decreased and the lifetime of the oil and the entire machinery will be extended. Desiccant Air Breathers SDB-CV can also be re-fitted with a layer of active carbon (1/3) and a layer of regular drying agent (2/3) for vapor filtration.

### Features

- Available in 4 different sizes with diameter of Ø68 mm / Ø2.68 in, Ø100 mm / Ø3.94 in or Ø130 mm / Ø5.12 in
- Equipped with spring-loaded check valves in opposing directions with an opening pressure of 0,01 bar / .15 PSI
- Refillable with drying agent (non-toxic ZR gel grain) or a mix of drying agent and active carbon
- Replaceable air filter element SGB
- Connection: BSP thread (ISO 228)
- Operating temperature range:  
-40 °C ... +90 °C / -40 °F ... +194 °F\*

Please note: Using an Desiccant Air Breather with integrated spring-loaded check valves may cause an under or over pressure of 0,01 bar / .15 PSI inside the system, which does not cause any problems for the majority of gearboxes and reservoirs. In case of doubt, please contact your equipment supplier.

## Accessories / Spare Parts

### Adaptor plate

- for SDB-096-CV: **AP-1**
- for SDB-121-CV and SDB-122-CV: **AP-2**

### Visual contamination indicator

- for SDB-096-CV, SDB-121-CV and SDB-122-CV (in conjunction with adaptor plate only): **FM**

### Drying agent refilling material (supplied in air tight container)

- for SDB-061-CV (100 cm<sup>3</sup> / 6.1 in<sup>3</sup>): **RD-061**
- for SDB-096-CV (600 cm<sup>3</sup> / 26.6 in<sup>3</sup>): **RD-096**
- for SDB-121-CV and SDB-122-CV (1000 cm<sup>3</sup> / 61.0 in<sup>3</sup>): **RD-121**
- for SDB-122-CV (2000 cm<sup>3</sup> / 122.0 in<sup>3</sup>): **RD-122**

### Active carbon refilling material (supplied in air tight container)

- for SDB-096-CV and SDB-121-CV (300 cm<sup>3</sup> / 18.3 in<sup>3</sup>): **RC-093/096/121**
- for SDB-122-CV (600 cm<sup>3</sup> / 18.3 in<sup>3</sup>): **RC-122**

Please note: Use one layer of active carbon (1/3) and one layer of regular drying agent (2/3).

### Replacement air filter element (sealing included)

- for SDB-061-CV: **SGB-060-03-B**
- for SDB-096-CV: **SGB-090-03-B**
- for SDB-121-CV and SDB-122-CV: **SGB-120-03-B**

## Order Codes

<b>SDB</b>	<b>-</b>	<b>121</b>	<b>-</b>	<b>CV</b>	<b>-</b>	<b>RC</b>	<b>-</b>	<b>AP</b>	<b>-</b>	<b>FM</b>
①		②		③		④		⑤		⑥

### ① Type

Desiccant Air Breather **SDB**

### ② Max. Water Absorption and Size

29 g / .06 lbs at Ø68 mm / Ø2.68 in	<b>061</b>
172 g / .38 lbs at Ø100 mm / Ø3.94 in	<b>096</b>
288 g / .63 lbs at Ø130 mm / Ø5.12 in	<b>121</b>
576 g / 1.27 lbs at Ø130 mm / Ø5.12 in	<b>122</b>

Please see table above for further technical details.

### ③ Check Valves

With integrated spring-loaded check valves (0,01 bar / .15 PSI) **CV**

### ④ Drying Agent

Regular drying agent (standard option)	-
One layer of active carbon (1/3) and one layer of regular drying agent (2/3) for vapor filtration	<b>RC</b>

### ⑤ Adaptor Plate

Without adaptor	-
With adaptor plate (not for SDB-061-CV)	<b>AP</b>

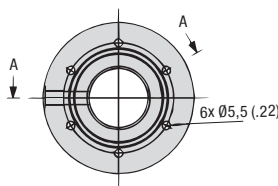
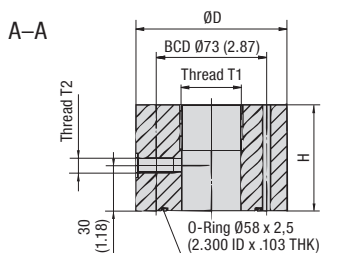
### ⑥ Contamination Indicator

Without contamination indicator	-
With visual contamination indicator FM (in conjunction with adaptor plate AP only)	<b>FM</b>

Please see page 47 for details.

\* Note: The operation of the Desiccant Air Breather may vary at temperatures below 0°C / 32°F due to very low humidity %.





## Adaptor Plate Type AP



Desiccant Air Breather SDB  
with Adaptor Plate AP

### Order Code and Dimensions

Thread T1 (Breather Port)	Thread T2 (Indicator Port)	Dimensions (mm/in)		Socket Cap Screws included	For Use with Desiccant Air Breathers	Order Code
Female G3/4 BSP (ISO 228)	Female G1/8 BSP (ISO 228)	50	88	M5 x 60 - 8.8 (Steel, zinc-plated)	SDB-096/2 SDB-093/2 SVDB-096 SVDB-093 SDB-096-CV	AP-1
		1.98	3.46			
Female G1-1/4 BSP (ISO 228)	Female G1/8 BSP (ISO 228)	70	100	M5 x 80 - 8.8 (Steel, zinc-plated)	SDB-121/2 SDB-122/2 SDB-121-CV SDB-122-CV	AP-2
		2.76	3.94			

### Characteristics

**Designed to simplify the installation of Desiccant Air Breathers and enable the use of a visual contamination indicator**

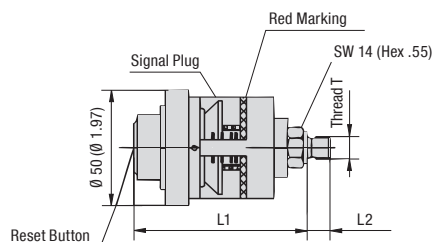
With Adaptor Plates AP, desiccant air breathers can be directly mounted to existing connections with a six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2.

They are also equipped with a female G1/8 BSP thread (ISO 228) to connect with the Visual Contamination Indicator FM.

Adaptor Plates AP are made of Polyamide (PA). A blind plug, O-ring made of NBR (Buna-N®) and 6 socket cap screws (ISO 4762) are supplied with AP as a standard.

Contact STAUFF for other Adaptor Plates.

## Visual Contamination Indicator Type FM



Desiccant Air Breather SDB with  
Adaptor Plate AP and Visual  
Contamination Indicator FM



### Order Code and Dimensions

Thread T	Dimensions (mm/in)		Order Code
	L1	L2	
Male G1/8 BSP (ISO 228)	75	10	FM
	2.54	.39	

#### Materials

- Housing made of Polycarbonate

#### Technical Data

- Operating temperature range:  
-40 °C ... +121 °C (-40 °F ... +250 °F)
- Accuracy: ±10% at red marking

### Characteristics

**Designed to indicate the status of air filter elements**

Visual Contamination Indicators FM – the so-called Filter Minders® – are connected to the female G1/8 BSP thread (ISO 228) of the Adaptor Plate AP and give a visual indication of the contamination level of the air filter element SGB. A red marking indicates when the air filter element has to be replaced.

Visual Contamination Indicators FM can be reset afterwards.

### Order Code and Dimensions

Dimensions (mm/in)		Order Code
Length	Diameter	
140	60	TBA-075-B-OD140
5.51	2.36	
210	60	TBA-075-B-OD210
8.27	2.36	

Dimensional drawings: All dimensions in mm (in).

### Characteristics

**Designed to prevent oil mist from leaving the hydraulic reservoir through air breathers**

#### Features

- Available in 2 different sizes with lengths of 140 mm / 5.51 in or 210 mm / 8.27 in
- Suitable for use with various types of Desiccant Air Breathers including SDB-096/2, SDB-093/2, SVDB-096, SVDB-093 and SDB-096-CV as well as Tank Filler Breathers including SPB-2, SPB-3, SMBT-80 and SPBN

#### Materials

- Housing with cooling ribs made of Aluminum housing with cooling ribs
- Threaded adaptors made of Steel

## Oil Demister Type TBA-OD

