

Kommissionier-Shuttl WALTER II



Giant Air Breathers 42 - 43



Giant Air Breather 42
SGB



Air Breather Adaptor 43
TBA

Desiccant Air Breathers 44 - 47



SDB 44



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Adaptor Plate 47

AP



Visual Contamination Indicator 47

FM



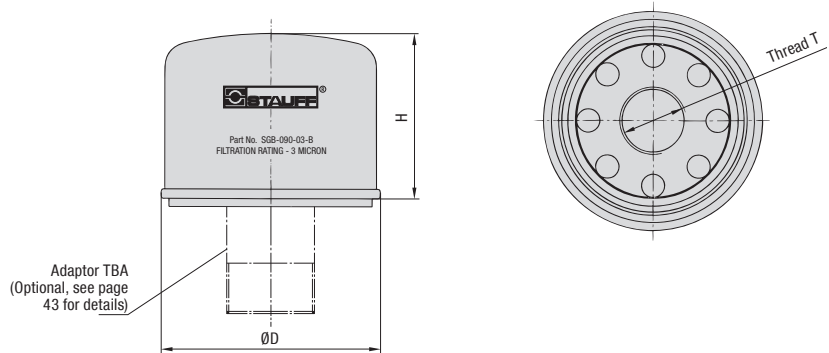
Oil Demister 47

TBA-OD

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Giant Air Breather Type SGB



Characteristics

Originally designed to be used as replaceable air filter elements for STAUFF Desiccant Breathers, they can also be used as separate air filters for hydraulic reservoirs

Features

- Diameter of Ø68 mm / Ø2.68 in (SGB-060), Ø100 mm / Ø3.94 in (SGB-090) or Ø130 mm / Ø5.12 in (SGB-120)
- Equipped with female BSP thread (ISO 228)
- Including sealing made of NBR (Buna-N®)
- Operating temperature range: -32 °C ... +100 °C / -25 °F ... +212 °F

Accessories / Options

- Adaptors (for direct installation on top of hydraulic reservoirs)

Please see page 43 for a selection of adaptors available, and contact STAUFF for further information.

Air Flow

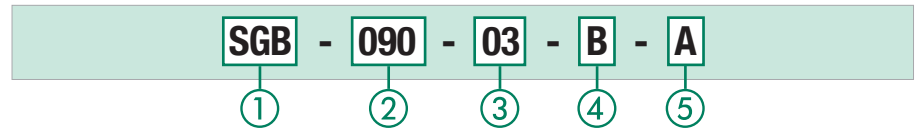
- Maximum air flow rates:
0,05 m³/min / 1.77 cfm for SGB-060,
0,70 m³/min / 24.71 cfm for SGB-090, and
1,50 m³/min / 52.97 cfm for SGB-120

Dimensions and Filter Specifications

Type	Thread T*	Dimensions (mm/in)		Filter Material	Micron Rating	Filter Surface	Max. Air Flow Rate
		ØD	H				
SGB-060-03-B	Female M20 x 1,5 (ISO 13-2)	68	60	Synthetic Fibre	3 µm	415 cm²	0,05 m³/min
		2.68	2.36			63 in²	1.77 cfm
SGB-090-03-B	Female G3/4 BSP (ISO 228)	100	64	Synthetic Fibre	3 µm	752 cm²	0,70 m³/min
		3.94	2.52			115 in²	24.71 cfm
SGB-120-03-B	Female G1-1/4 BSP (ISO 228)	130	100	Synthetic Fibre	3 µm	2095 cm²	1,50 m³/min
		5.12	3.94			320 in²	52.97 cfm

* Use adaptors TBA to change female BSP thread into male BSP or male NPT thread. Please see page 43 for details.

Order Codes



① Type

Giant Air Breather **SGB**

② Size

Diameter of Ø68 mm (Ø2.68 in) **060**
 Diameter of Ø100 mm (Ø3.94 in) **090**
 Diameter of Ø130 mm (Ø5.12 in) **120**

③ Filter Material / Micron Rating

3 µm Synthetic Fibre **03**

Contact STAUFF for alternative materials / micron ratings.

④ Connection Thread

Female BSP thread (according to dimension table) **B**

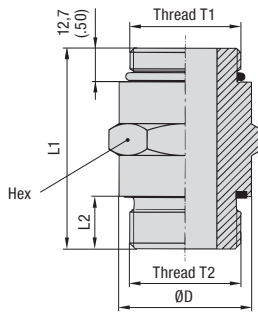
⑤ Adaptor Option

Without adaptor **-**
 With adaptor TBA-075-B (for SGB-090-03-B) or TBA-125-B (for SGB-120-03-B) **A**

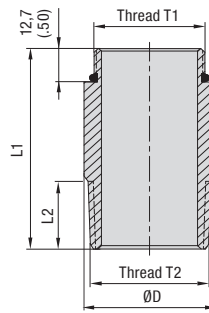
If required, Giant Air Breathers SGB can also be supplied in combination with a wide range of further adaptors. Please see page 43 for a selection of adaptors available, and contact STAUFF for further information.



Breather Adaptor
Type TBA



TBA-038-B
TBA-075-B
TBA-125-B



TBA-075
TBA-120
TBA-125



C

Order Codes and Dimensions

Thread T1	Thread T2	Dimensions (mm/in)				For Use with ...*	Order Code
		L1	L2	ØD	Hex		
Male G3/8 BSP (ISO 228)	Male G3/8 BSP (ISO 228)	43	11	21,9	22	Desiccant Air Breathers SDB-061-CV	TBA-038-B
		1.69	.43	.86	.86		
Male 1-12 UNF (ANSI B1.1)	Male 3/4 NPT (ANSI B1.20.1)	51	20	27	32	Spin-On Series SF-65	TBA-075
		2.00	.79	1.05			
Male G3/4 BSP (ISO 228)	Male G3/4 BSP (ISO 228)	57	16	32	32	Giant Air Breathers SGB-090 Desiccant Air Breathers SVDB-093 Desiccant Air Breathers SVDB-096 Spin-On Series SF-35 Spin-On Series SF-36	TBA-075-B
		2.24	.63	1.26			
Male G1-1/4 BSP (ISO 228)	Male 1-1/4 NPT (ANSI B1.20.1)	76	22	42	32	Giant Air Breathers SGB-120 Spin-On Series SF-57 Spin-On Series SF-58	TBA-120
		3.00	.88	1.65			
Male 1-1/2-16 UN (ANSI B1.1)	Male 1-1/4 NPT (ANSI B1.20.1)	76	26	45	32	Spin-On Series SF-67	TBA-125
		3.00	1.01	1.77			
Male G1-1/4 BSP (ISO 228)	Male G1-1/4 BSP (ISO 228)	76	20	50	50	Giant Air Breathers SGB-120 Spin-On Series SF-57 Spin-On Series SF-58	TBA-125-B
		3.00	.79	1.97			

* Please see Filtration Technology Catalogue for technical details on Spin-On filter elements.

Characteristics

Adopts from female threaded Giant Air Breather or Spin-On Filter Element to a male thread, and thus allows for direct installation on top of hydraulic reservoirs

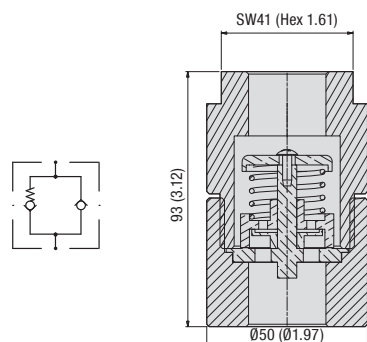
Features

- Several thread combinations available to suit most common Spin-On filter elements
- Versions with male BSP threads on both ends are equipped with hex to simplify installation
- Sealings included in delivery

Materials

- Adaptor made of Steel, zinc-plated
- Sealings made of NBR (Buna-N®)

Contact STAUFF for alternative materials.



Characteristics

Increasing the service life and reducing maintenance intervals of tank filler breathers and desiccant breathers due to less breathing

Features

- Connections: Female G3/4 BSP threads (ISO 228)
- Pressurisation of 0,35 bar / 5 PSI (no air is expelled from the reservoir until the pressurisation level is reached)
- 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 and SMBT-80

Materials

- Housing made of Aluminium

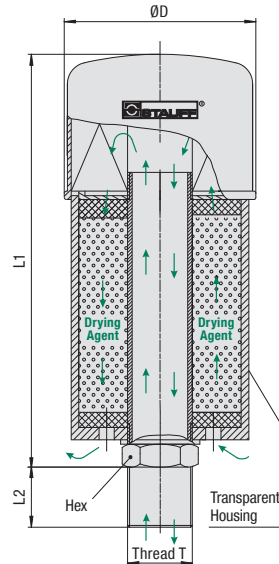
Pressurised Breather Adaptor
Type TBA-075-P2



Dimensional drawings: All dimensions in mm (in).



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 (mm/in)				Weight (g/lbs)		Volume (cm ³ /in ³)	Max. Water Absorption (g/lbs)	Air Filter Elements	Filter Material	Micron Rating	Filter Surface	Max. Air Flow Rate
		ØD	L1	L2	Hex	Complete Unit	Drying Agent							
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 cm ²	0,70 m ³ /min
		3.94	6.30	.79	1.26	2.65	.50	18.3	.19				115 in ²	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 cm ²	0,70 m ³ /min
		3.94	8.66	.79	1.26	3.31	.99	36.6	.38				115 in ²	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 cm ²	1,50 m ³ /min
		5.12	10.08	>.98	1.98	5.92	1.65	61.0	.63				320 in ²	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 cm ²	1,50 m ³ /min
		5.12	14.41	>.98	1.98	8.82	3.31	122.0	1.27				320 in ²	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: AP-1
- for SDB-121/2 and SDB-122/2: 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 cm³ / 18.3 in³): RD-093
- for SDB-096/2 (600 cm³ / 26.6 in³): RD-096
- for SDB-121/2 (1000 cm³ / 61.0 in³): RD-121
- for SDB-122/2 (2000 cm³ / 122.0 in³): RD-122

Active carbon refilling material (supplied in air tight container)

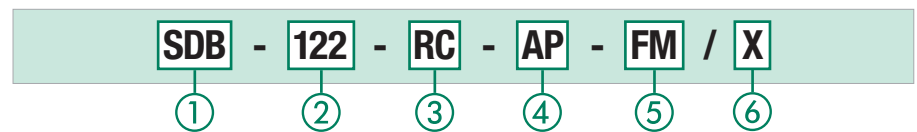
- for SDB-093/2, SDB-096/2 and SDB-121/2 (300 cm³ / 18.3 in³): RC-093/096/121
- for SDB-122/2 (600 cm³ / 18.3 in³): RC-122

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



1 Type

Desiccant Air Breather **SDB**

2 Max. Water Absorption and Size

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.

3 Drying Agent Material

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**

4 Adaptor Plate

Without adaptor plate -
 With adaptor plate **AP**

5 Contamination Indicator

Without contamination indicator -
 With visual contamination indicator FM (in conjunction with adaptor plate AP only) **FM**

Please see page 47 for details.

6 Design Code

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 %.



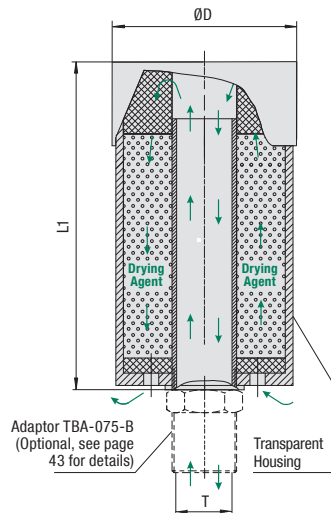
Desiccant Air Breather (Disposable Version) Type SVDB

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.



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Dimensions and Technical Data

Type	Thread T	Dimensions (mm/in)			Weight (g/lbs)		Volume (cm ³ /in ³)	Max. Water Absorption (g/lbs)	Max. Air Flow Rate
		ØD	L1	L2	Complete Unit	Drying Agent	Drying Agent		
SVDB-093	Female G3/4 BSP (ISO 228)	94	109	18	400	225	300	86	0,70 m ³ /min
		3.70	4.68	.71	.88	.50	18.3	.19	24.71 cfm
SVDB-096	Female G3/4 BSP (ISO 228)	94	179	18	700	450	600	172	0,70 m ³ /min
		3.70	7.05	.71	1.54	.99	36.9	.38	24.71 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.

Desiccant Air Breathers SVDB are the light-weight alternative to the proven SDB series, offering an almost identical filtration and absorption performance.

While inhaling, Desiccant Air Breathers SVDB also first dry the air as it passes through the drying agent. The air then passes through a 10 µm coarse filter 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 entire unit. 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.

Accessories / Spare Parts

Connection adaptor (see page 43 for details)

- for all sizes: **TBA-075-B**

Adaptor plate

- for all sizes (in conjunction with adaptor plate only): **AP-1**

Visual contamination indicator

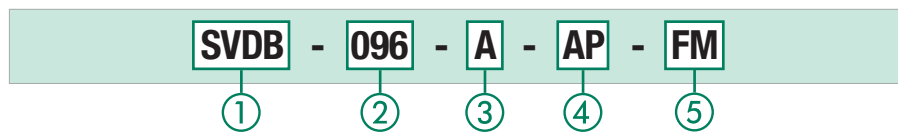
- for all sizes (in conjunction with adaptor plate only): **FM**

Features

- Light-weight alternative to the SDB series
- Available in 2 different sizes
- Diameter of Ø94 mm / Ø3.70 in
- Filled with drying agent (non-toxic ZR gel grain)
- Connection: Female BSP thread (ISO 228) in Plastic housing
- Operating temperature range: -40 °C ... +90 °C / -40 °F ... +194 °F*

Please note that neither the air filter element nor the drying agent can be replaced when saturated.

Order Codes



1 Type

Desiccant Air Breather (Economy Version) **SVDB**

2 Max. Water Absorption and Size

86 g / .19 lbs at Ø94 mm / Ø3.70 **093**
172 g / .38 lbs at Ø94 mm / Ø3.70 **096**

Please see table above for further technical details.

3 Connection Adaptor

Without connection adaptor -
With connection adaptor TBA-075-B **A**

Please see page 43 for details.
Contact STAUFF for alternative adaptors.

4 Adaptor Plate

Without adaptor plate -
With adaptor plate (in conjunction with connection adaptor A only) **AP**

5 Contamination Indicator

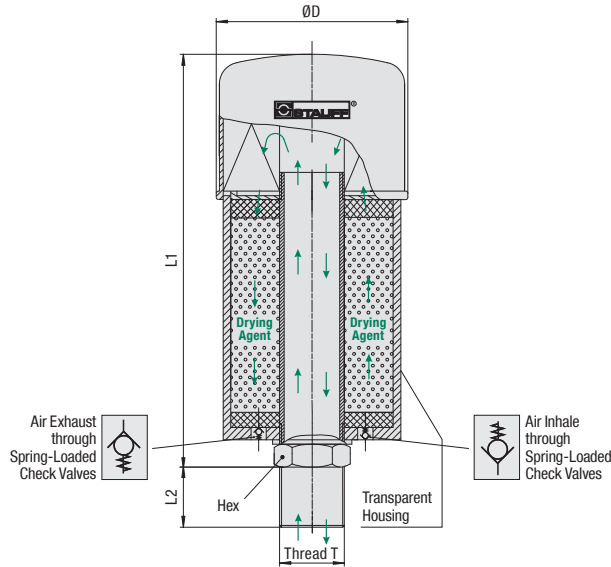
Without contamination indicator -
With visual contamination indicator FM (in conjunction with adaptor plate AP only) **FM**

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 %.



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 (mm/in)				Weight (g/lbs)		Volume (cm ³ /in ³)		Max. Water Absorption (g/lbs)	Air Filter Elements			
		ØD	L1	L2	Hex	Complete Unit	Drying Agent	Drying Agent	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 ²	0,05 m ³ /min
	BSP (ISO 228)	2.68	5.63	.55	.87	.77	.17	6.1	.06				63 in ²	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 ²	0,70 m ³ /min
	BSP (ISO 228)	3.94	8.66	.79	1.26	3.31	.99	36.6	.38				115 in ²	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 ²	1,50 m ³ /min
	BSP (ISO 228)	5.12	10.08	>.98	1.98	5.92	1.65	61.0	.63				320 in ²	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 ²	1,50 m ³ /min
	BSP (ISO 228)	5.12	14.41	>.98	1.98	8.82	3.31	122.0	1.27				320 in ²	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 cm³ / 6.1 in³): **RD-061**
- for SDB-096-CV (600 cm³ / 26.6 in³): **RD-096**
- for SDB-121-CV and SDB-122-CV (1000 cm³ / 61.0 in³): **RD-121**
- for SDB-122-CV (2000 cm³ / 122.0 in³): **RD-122**

Active carbon refilling material (supplied in air tight container)

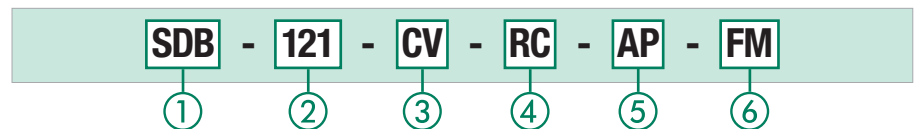
- for SDB-096-CV and SDB-121-CV (300 cm³ / 18.3 in³): **RC-093/096/121**
- for SDB-122-CV (600 cm³ / 18.3 in³): **RC-122**

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



1 Type

Desiccant Air Breather **SDB**

2 Max. Water Absorption and Size

29 g / .06 lbs at Ø68 mm / Ø2.68 in	061
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.

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 **RC**

5 Adaptor Plate

Without adaptor **-**
With adaptor plate (not for SDB-061-CV) **AP**

6 Contamination Indicator

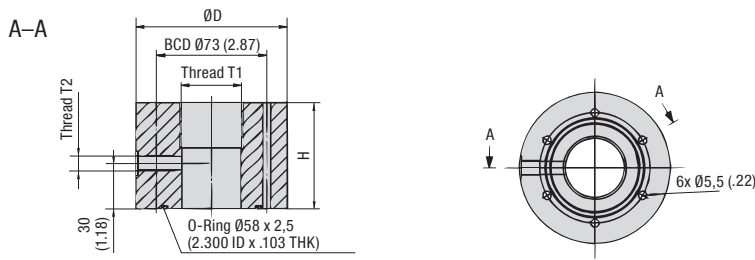
Without contamination indicator **-**
With visual contamination indicator FM (in conjunction with adaptor plate AP only) **FM**

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
		H	ØD			
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

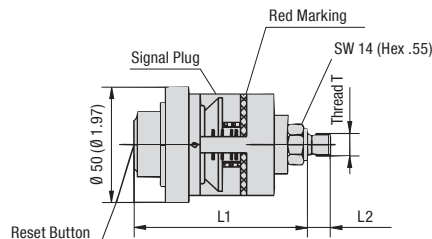
With Adaptor Plates AP, desiccant air breathers can be directly mounted to existing connections with a six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2.

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, SMTB-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

