



# Kommissionier-Shuttle WALTER II



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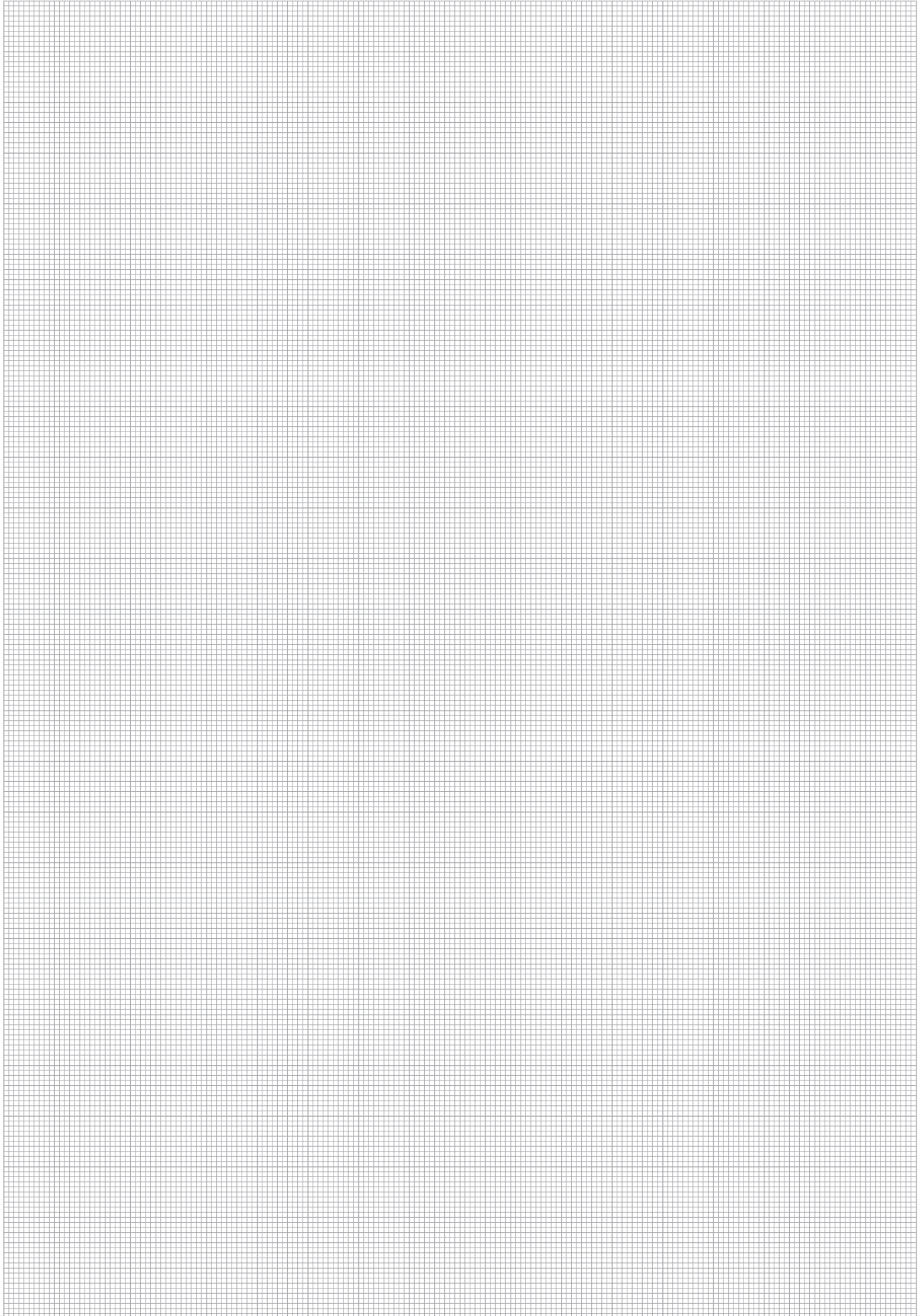
KIT-...-MAINTAIN



#### Particle Breather (Air Breather Element) 44

SGB





## Particle and Desiccant Breathers - Overview

Types		SDB	SDBL	SVDB	HC
					
Characteristics	Version	Robust Design	Compact Design	Simplified Design	High Capacity Design
	Function	Particle and Desiccant Breather	Particle and Desiccant Breather	Desiccant Breather	Particle and Desiccant Breather
	Micron rating of the Air Breather Element	3 µm	3 µm	100 µm	3 µm
	UV-Resistant <sup>1</sup>	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
	Service Life and Ease of Maintenance <sup>1</sup>	● ● ● ○	● ● ● ○	● ● ○ ○	● ● ● ●
Options	Standard Drying Agent	●	●	●	●
	Alternative Drying Agent	○	○	○	○
	Active Carbon (Odour and Oil Mist Separation)	●	●	○	●
	Check Valves (Optimising Service Life)	●	●	○	●
Mounting Options	Standard Mounting Thread	BSP- Male	BSP- Female	BSP- Female	BSP- Male
	Alternative Mounting Thread	NPT- Male	Only with Adaptor (TBA)	Only with Adaptor (TBA)	NPT- Male
	Adaptor Plate (AP)	BSP	Only with Adaptor (TBA)	Only with Adaptor (TBA)	BSP
Spare Parts	Air Breather Element SGB	●	-	-	-
	Refill and Maintenance Kits	●	●	-	●
Adaptors	TBA	-	●	●	-
Valve Units	PSU-P-TF (Reservoir Pressurisation)	●	-	-	●
	PSU-P (Reservoir Pressurisation)	-	●	○	-
	PSU-QE (Bypass Valve)	-	●	○	-
Contamination Indicators	Visual Contamination Indicator FM	Only with Adaptor Plate (AP)	Only with Adaptor Plate (AP) and Adaptor (TBA)	-	Only with Adaptor Plate (AP)
	Visual-Electrical Contamination Indicator FME				
Accessories	TBA-...-OD (Oil Demister)	●	-	-	●
	PSU-OD (Oil Demister Insert)	-	Recommended with Adaptor (TBA)	Recommended with Adaptor (TBA)	-
	PSU-HC (Adaptor Ring for Stacking Assembly)	●	-	-	●
Applications <sup>2</sup> (Indoor and outdoor use)	Mobile Applications	● ● ● ●	● ● ○ ○	● ○ ○ ○	● ○ ○ ○
	Industrial Applications	● ● ● ●	● ● ● ●	● ● ● ○	● ● ● ●
	Marine Applications	● ● ● ●	● ● ○ ○	● ○ ○ ○	● ● ● ●
	Hydraulic Steel Construction	● ● ● ●	● ● ● ○	● ○ ○ ○	● ● ● ●
	Fluid and Lubricant Storage	● ● ● ○	● ● ● ○	● ● ● ○	● ● ● ●
	Gearboxes	● ● ● ●	● ● ● ○	● ○ ○ ○	● ● ● ●
	Further areas of Application	○	○	○	○

● available | ○ on request | - not available | ● ● ● ● ○ 3/4 (Rating<sup>1</sup>, Recommendation<sup>2</sup>)

**Please note:** The information on the selection and sizing of desiccant breathers in this catalogue is intended only as general non-binding guidelines. In addition to the maximum air flow rate and the frequency of breathing, the Type and volume of the reservoir, the medium used and its chemical compatibility as well as specific environmental conditions (e.g. contamination, ambient temperature and especially temperature changes, humidity) can also play a decisive role. Typically, large volume systems and applications with particularly challenging environmental conditions require the most careful analysis. Please contact STAUFF for assistance in the selection and sizing of desiccant Breathers.



## Particle and Desiccant Breather (Robust Design) Type SDB



### Characteristics

#### Function

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

Using SDB series Particle and Desiccant Breathers, the incoming air first passes through a coarse filter, then a drying agent and finally an Air Breather element to filter out any dirt particles in addition to the moisture.

#### Description

The SDB series from STAUFF is robust design that is used in particularly demanding areas in mobile hydraulics (e.g. in the construction, mining and demolition industries).

Available in four different housing lengths between 160 mm and 355 mm (without thread) and has a diameter of 98 mm or 130 mm depending on the selected length.

The UV-resistant plastic housing is designed with an internal stainless steel tube for maximum stability. The Particle and Desiccant Breather can be installed on the system via the external thread at the lower end of the stainless steel tube.

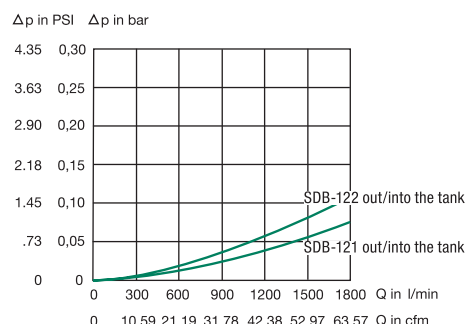
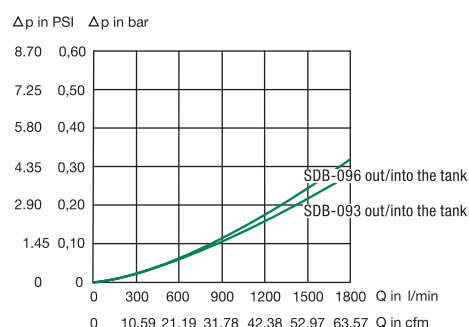
#### Features

- Available in 4 different sizes
- Diameter of 98 mm or 130 mm
- Internal stainless steel tube for maximum stability
- Connection via BSP or NPT male thread on the stainless steel tube
- Available with optional, integrated check valves (Type SDB-CV)
- Replaceable Drying Agent
- Replaceable Air Breather Element (Type SGB)
- Micron rating of the Air Breather Element: 3 µm
- Refill and Maintenance Kits available
- Extensive range of accessories
- Operating temperature range:  
-40°C ... +90 °C / -40 °F ... +194 °F

The optional spring-loaded check valves integrated in the housing isolate the dryer material outside the from the atmosphere and optimise the service life.

A change in the color of the desiccant material indicates that it needs to be replaced (from red to orange in the standard version). Saturated Drying Agent, as well as the screw-on spin-on element, can be easily replaced by the user if necessary. Corresponding refill and maintenance kits are available from STAUFF.

#### Pressure Drop Flow Curves



### Accessories / Spare Parts

#### Adaptor Plate

- for Size 093 and 096:
- for Size 121 and 122:

#### Contamination Indicators (Requires Adaptor Plate)

- Visual Contamination Indicator:
- Visual-Electrical Contamination Indicator:

#### Air Breather Element (with Seal)

- for Size 093 and 096:
- for Size 121 and 122:

#### Refill and Maintenance Kits

- for Size 093 and 096:
- for Size 121 and 122:

**AP-1**  
**AP-2**  
  
**FM**  
**FME**  
  
**SGB-090-03-B**  
**SGB-120-03-B**

**KIT-SDB-090-MAINTAIN**  
**KIT-SDB-120-MAINTAIN**

#### Drying Agent Refill (supplied in air tight container)

- for Size 093:
- for Size 096:
- for Size 121:
- for Size 122:

#### Active Carbon Refill (supplied in air tight container)

- for Size 093, 096 and 121:
- for Size 122:

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

**RD-093**  
**RD-096**  
**RD-121**  
**RD-122**  
  
**RC-093/096/121**  
**RC-122**

#### Oil Demister

- for Size 093 and 096, 121 and 122

#### Adaptor Ring (Only for combination SDB+SDBL)

- for Size SDB-121/122 with SDBL-121/122

Please see page 53 for details.

**TBA-...-OD**

**PSU-HC**

Please see page 53 for details.



## Particle and Desiccant Breather (Robust Design) Type SDB

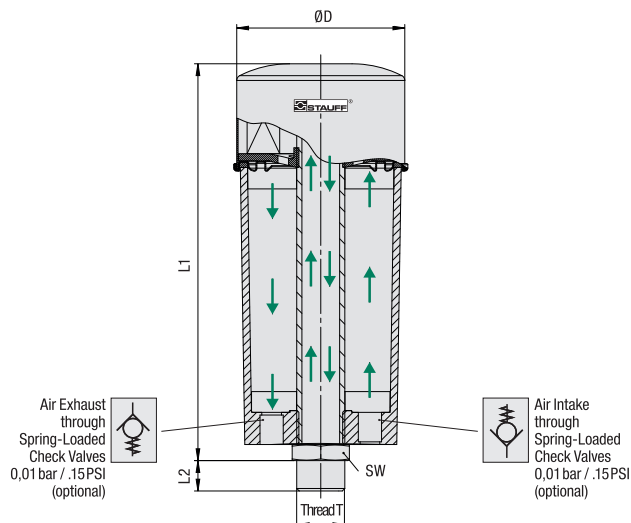
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### Drying Agent

Changes Colour 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) Complete Unit	Max. Water Absorption (g/lbs)	Air Breather Element			
		ØD	L1	L2	Hex			Type	Filter Material	Micron Rating	Max. Air Flow Rate
SDB-093	G3/4 BSP Male (ISO 228)	98	160	18	32	1200	86	SGB-090-03-B	Inorganic Glass Fibre	3µm	0,70 m³/min
		3.86	6.30	.71	1.26	2.65	.19				24.71 cfm
SDB-093N	1 NPT Male (ANSI B1.20.1)	98	160	24	38	1200	86	SGB-090-03-B	Inorganic Glass Fibre	3µm	0,70 m³/min
		3.86	6.30	.94	1.50	2.65	.19				24.71 cfm
SDB-096	G3/4 BSP Male (ISO 228)	98	220	18	32	1500	172	SGB-090-03-B	Inorganic Glass Fibre	3µm	0,70 m³/min
		3.86	8.66	.71	1.26	3.31	.38				24.71 cfm
SDB-096N	1 NPT Male (ANSI B1.20.1)	98	220	24	38	1500	172	SGB-090-03-B	Inorganic Glass Fibre	3µm	0,70 m³/min
		3.86	8.66	.94	1.50	3.31	.38				24.71 cfm
SDB-121	G1-1/4 BSP Male (ISO 228)	130	258	25	50	2700	288	SGB-120-03-B	Inorganic Glass Fibre	3µm	1,50 m³/min
		5.12	10.16	.98	1.98	5.92	.63				52.97 cfm
SDB-121N	1-1/4 NPT Male (ANSI B1.20.1)	130	270	24	50	2700	288	SGB-120-03-B	Inorganic Glass Fibre	3µm	1,50 m³/min
		5.12	10.63	.94	1.98	5.92	.63				52.97 cfm
SDB-122	G1-1/4 BSP Male (ISO 228)	130	355	25	50	4000	576	SGB-120-03-B	Inorganic Glass Fibre	3µm	1,50 m³/min
		5.12	13.98	.98	1.98	8.82	1.27				52.97 cfm
SDB-122N	1-1/4 NPT Male (ANSI B1.20.1)	130	367	24	50	4000	576	SGB-120-03-B	Inorganic Glass Fibre	3µm	1,50 m³/min
		5.12	14.45	.94	1.98	8.82	1.27				52.97 cfm

### Order Codes

**SDB - 122 - CV - RCU - AP - FM / X**

①      ②      ③      ④      ⑤      ⑥      ⑦

#### ① Type

Particle and Desiccant Breather **SDB**

#### ② Size

093 BSP-Thread (Standard option) **093**  
093 NPT-Thread **093N**  
096 BSP-Thread (Standard option) **096**  
096 NPT-Thread **096N**  
121 BSP-Thread (Standard option) **121**  
121 NPT-Thread **121N**  
122 BSP-Thread (Standard option) **122**  
122 NPT-Thread **122N**

#### ③ Check Valves

without Check Valves (Standard option) **-**  
with Check Valves **CV**

#### ④ Drying Agent

Standard Drying Agent (Standard option) **-**  
25% Silica gel + 75% Molecular sieve  
Active Carbon Drying Agent  
1/3 Active Carbon + 2/3 Standard Drying Agent **RCU**  
for binding oil mist (standard)  
Active Carbon Drying Agent  
1/3 Active Carbon + 2/3 Standard Drying Agent **RCL**  
to prevent odours

Alternative Drying Agent on request.

#### ⑤ Adaptor Plate

without Adaptor Plate (Standard option) **-**  
with Adaptor Plate **AP**

Please see page 52 for details.

#### ⑥ Contamination Indicators

without Contamination Indicator (Standard option) **-**  
with Visual Contamination Indicator **FM**  
(Requires Adaptor Plate)  
with Visual-Electrical Contamination Indicator **FME**  
(Requires Adaptor Plate)

Please see page 52 for details.

#### ⑦ Design Code

Only for information **X**





## Particle and Desiccant Breather (Compact Design) Type SDBL



### Characteristics

#### Function

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

Using SDBL series Particle and Desiccant Breathers, the incoming air first passes through a coarse filter, then a dryer agent material and finally an Air Breather element to filter out any dirt particles in addition to the moisture.

#### Description

The SDBL series from STAUFF is a compact and flexible design that are used, for example, in power pack and reservoir manufacturing.

Available in five different housing lengths between 117,5 mm and 322,5 mm and have a diameter of 70 mm, 99 mm or 129 mm depending on the selected length.

The UV-resistant one piece plastic housing is designed with a female BSP thread on the bottom. The Particle and Desiccant Breather can be installed with an adaptor.

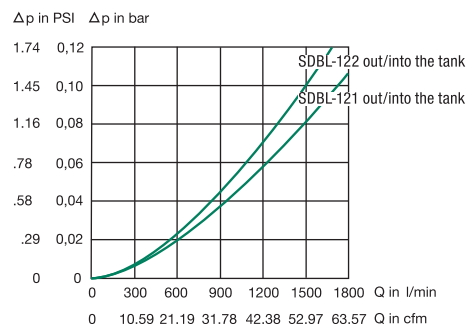
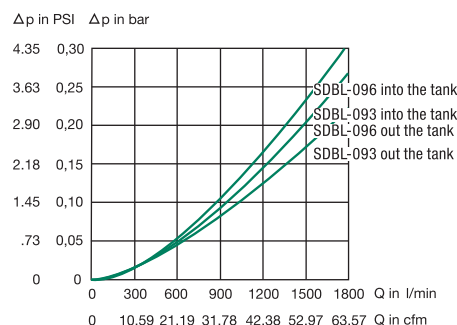
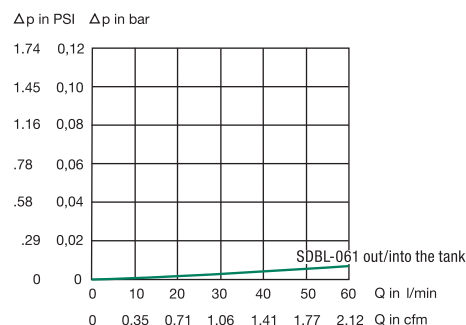
#### Features

- Available in 5 different sizes
- Diameter of 70 mm, 99 mm or 129 mm
- One piece plastic housing
- BSP Female connection thread on plastic housing
- Available with optional, integrated check valves (Type SDBL-CV)
- Replaceable Drying Agent
- Replaceable Air Breather Element under the plastic cap, Micron rating of the Air Breather Element: 3 µm
- Refill and Maintenance Kits available
- Extensive range of accessories
- Operating temperature range:  
-40°C ... +90 °C / -40 °F ... +194 °F

The optional spring-loaded check valves integrated in the housing isolate the dryer material outside the from the atmosphere and optimising the service life.

A change in the color of the desiccant material indicates that it needs to be replaced (from red to orange in the standard version). Saturated dryer agent material, as well as the Air Breather element, which is placed under the plastic cap, can be easily replaced by the user if necessary. Corresponding refill and maintenance kits are available from STAUFF.

#### Pressure Drop Flow Curves



### Accessories / Spare Parts

#### Adaptor Plate

- for Size 093 and 096:
- for Size 121 and 122:

#### Contamination Indicators (Requires Adaptor Plate)

- Visual Contamination Indicator:
- Visual-Electrical Contamination Indicator:

#### Refill and Maintenance Kits

- for Size 060:
- for Size 093 and 096:
- for Size 121 and 122:

Please see page 53 for details.

**KIT-SDBL-060-MAINTAIN**  
**KIT-SDBL-090-MAINTAIN**  
**KIT-SDBL-120-MAINTAIN**

#### Drying Agent Refill (supplied in air tight container)

- AP-1** ▪ for Size 061:  
**AP-2** ▪ for Size 093:  
▪ for Size 096:  
▪ for Size 121:  
**FM** ▪ for Size 122:  
**FME**

#### Active Carbon Refill (supplied in air tight container)

- for Size 093, 096 and 121: **RC-093/096/121**  
▪ for Size 122: **RC-122**

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

- RD-061**  
**RD-093**  
**RD-096**  
**RD-121**  
**RD-122**

#### Valve Unit with Reservoir Pressurisation (0.35 bar)

- for Size 121 and 122:

**PSU-P**

#### Valve Unit with Bypass Valves

- for Size 121 and 122:

**PSU-QE**

#### Oil Demister Insert

- for Size 093 and 096:
- for Size 121 and 122:

**PSU-OD-090**  
**PSU-OD-120**

#### Adaptor Ring (Only for combination SDB+SDBL)

- for Size SDB-121/122 with SDBL-121/122

Please see page 53 for details.

**PSU-HC**



## Particle and Desiccant Breather (Compact Design) Type SDBL

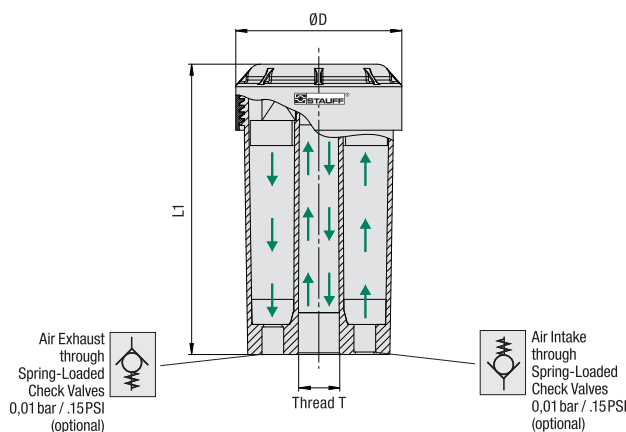
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### Drying Agent

Changes Colour 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) Complete Unit	Max. Water Absorption (g/lbs)	Air Breather Element Type	Filter Material	Micron Rating	Max. Air Flow Rate
		ØD	L1						
SDBL-061	G3/8 BSP Female (ISO 228)	70,5	117,5	250	29	LUF-SDBL-061-E03	Inorganic Glass Fibre	3µm	0,05 m³/min
		2.78	4.63	.55	.06				1.77 cfm
SDBL-093	G3/4 BSP Female (ISO 228)	99	119,5	500	86	LUF-SDBL-093-E03	Inorganic Glass Fibre	3µm	0,70 m³/min
		3.90	4.70	1.10	.19				24.71 cfm
SDBL-096	G3/4 BSP Female (ISO 228)	99	174,5	770	172	LUF-SDBL-096-E03	Inorganic Glass Fibre	3µm	0,70 m³/min
		3.90	5.81	1.70	.38				24.71 cfm
SDBL-121	G 1-1/4 BSP Female (ISO 228)	129	204,5	1380	288	LUF-SDBL-121-E03	Inorganic Glass Fibre	3µm	1,50 m³/min
		5.08	8.05	3.04	.63				52.97 cfm
SDBL-122	G 1-1/4 BSP Female (ISO 228)	129	322,5	2300	576	LUF-SDBL-122-E03	Inorganic Glass Fibre	3µm	1,50 m³/min
		5.08	12.70	5.07	1.27				52.97 cfm

### Order Codes

<b>SDBL</b>	-	<b>122</b>	-	<b>CV</b>	-	<b>RCU</b>	-	<b>AD</b>	-	<b>B16</b>	-	<b>QE</b>	-	<b>OD</b>	-	<b>AP</b>	-	<b>FM</b>	/	<b>X</b>
1		2		3		4		5		6		7		8		9		10		11

#### ① Type

Particle and Desiccant Breather **SDBL**

#### ② Size

061	<b>061</b>
093	<b>093</b>
096	<b>096</b>
121	<b>121</b>
122	<b>122</b>

#### ③ Check Valves

without Check Valves (Standard option) -  
with Check Valves **CV**

#### ④ Drying Agent

Standard Drying Agent (Standard option)	-
25% Silica gel + 75% Molecular sieve	-
Active Carbon Drying Agent	-
1/3 Active Carbon + 2/3 Standard Drying Agent for binding oil mist (standard)	<b>RCU</b>
Active Carbon Drying Agent	-
1/3 Active Carbon + 2/3 Standard Drying Agent to prevent odours	<b>RCL</b>

Alternative Drying Agent on request.

#### ⑤ Adaptors

without Adaptor (Standard option) -  
with Adaptor **AD**

Please see page 50 for details.

#### ⑥ Adaptor Thread

without Adaptor	-
1" BSP Male	<b>B16</b>
1" NPT Male	<b>N16</b>

#### ⑦ Valve Unit (only for Size 120)

without Valve Unit (Standard option)	-
Reservoir Pressurisation (0.35 bar)	<b>P</b>
Check Valve	<b>QE</b>

Please see page 51 for details.

#### ⑧ Oil Demister Insert

without Oil Demister Insert (Standard option)	-
with Oil Demister Insert (only Size 090/120)	<b>OD</b>

Please see page 53 for details.

#### ⑨ Adaptor Plate

without Adaptor Plate (Standard option) -  
with Adaptor Plate **AP**

Please see page 52 for details.

#### ⑩ Contamination Indicators

without Contamination Indicator (Standard option)	-
with Visual Contamination Indicator (Requires Adaptor Plate)	<b>FM</b>
with Visual-Electrical Contamination Indicator (Requires Adaptor Plate)	<b>FME</b>

Please see page 52 for details.

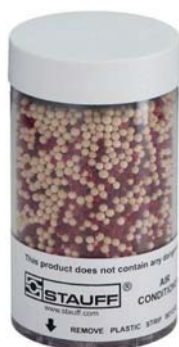
#### ⑪ Design Code

Only for information **X**





## Desiccant Breather (Simplified Design) Type SVDB



### Characteristics

#### Function

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

Using SVDB series Desiccant Breathers, the incoming air first passes through a coarse filter, then a Drying Agent and finally an PU washer to filter out rough dirt particles.

#### Description

The SVDB series from STAUFF is a simplified design for less demanding applications. In contrast to the SDB and SDBL series, Desiccant Breathers of the SVDB series must be replaced when the service life of the Complete Unit is reached.

Available in five different housing lengths between 96,5 mm and 286,5 mm and have a diameter of 63 mm, 91 mm or 121 mm depending on the selected length.

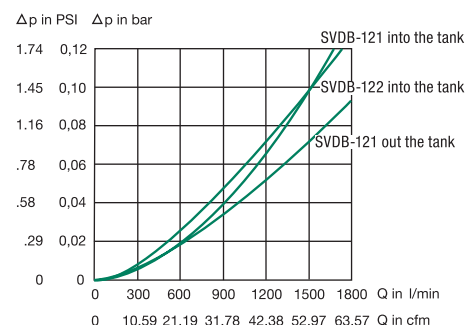
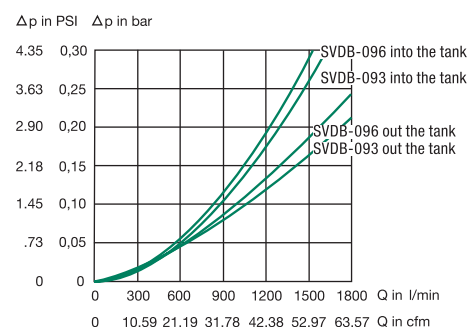
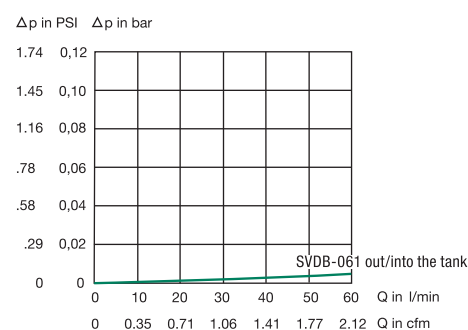
#### Features

- Available in 5 different sizes
- Diameter of 63 mm, 91 mm or 121 mm
- Drying Agent und Air Breather Element is not replaceable
- One piece plastic housing
- BSP Female connection thread on plastic housing
- Filter Fineness of the PUR filter disc: 100 µm
- Operating temperature range:  
-40°C ... +90 °C / -40 °F ... +194 °F

The UV-resistant one piece plastic housing is designed with a female BSP thread on the bottom. The Particle and Desiccant Breather can be installed with a adaptor.

A change in the color of the desiccant material indicates that it needs to be replaced (from red to orange in the standard version). Saturated Drying Agent is not replaceable, so that the entire unit is disposed of when it reaches the end of its service life.

#### Pressure Drop Flow Curves



### Accessories

#### Adaptor Plate

- for Size 093 and 096: **AP-1**
- for Size 121 and 122: **AP-2**

Please see page 52 for details.

#### Adaptors

- Several thread combinations available
- Please see page 50 for details.

#### Valve Unit with Reservoir Pressurisation (0.35 bar)

- for Size 121 and 122: **PSU-P**
- Please see page 51 for details.

#### Valve Unit with Check Valves

- for Size 121 and 122: **PSU-QE**
- Please see page 51 for details.

#### Oil Demister Insert

- for Size 093 and 096: **PSU-OD-090**
- for Size 121 and 122: **PSU-OD-120**

Please see page 53 for details.



## Desiccant Breather (Simplified Design) Type SVDB

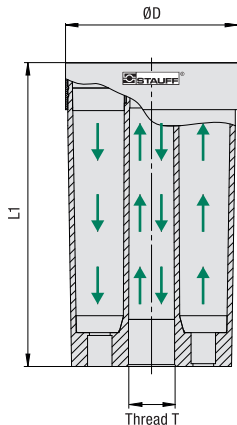
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### Drying Agent

Changes Colour 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) Complete Unit	Max. Water Absorption (g/lbs)	PUR filter disc Filter Material	Max. Air Flow Rate
		ØD	L1				
SVDB-061	G3/8 BSP Female (ISO 228)	63	96,5	182	29	PUR	0,05 m³/min
		2.48	3.80	.40	.06		1.77 cfm
SVDB-093	G3/4 BSP Female (ISO 228)	91	106,5	375	86	PUR	0,70 m³/min
		3.58	4.19	.83	.19		24.71 cfm
SVDB-096	G3/4 BSP Female (ISO 228)	91	161,5	630	172	PUR	0,70 m³/min
		3.58	6.36	1.39	.38		24.71 cfm
SVDB-121	G 1-1/4 BSP Female (ISO 228)	121	168,5	1100	288	PUR	1,50 m³/min
		4.76	6.63	2.43	.63		52.97 cfm
SVDB-122	G 1-1/4 BSP Female (ISO 228)	121	286,5	2035	576	PUR	1,50 m³/min
		4.76	11.28	4.49	1.27		52.97 cfm

### Order Codes

**SVDB - 122 / X**

①

②

③

#### ① Type

Desiccant Breather with  
Standard Drying Agent  
25% Silica gel + 75% Molecular sieve

**SVDB**

#### ② Size

061	<b>061</b>
093	<b>093</b>
096	<b>096</b>
121	<b>121</b>
122	<b>122</b>

#### ③ Design Code

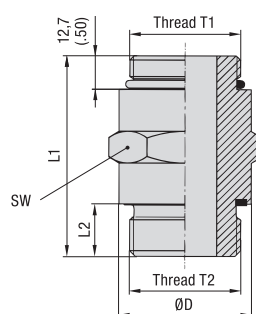
Only for information

**X**

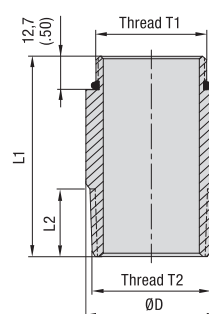
Alternative types on request.



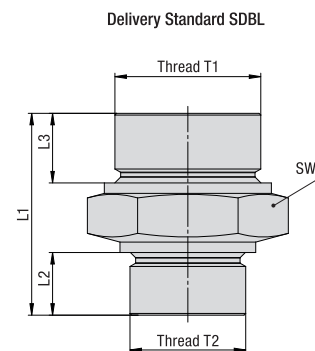
## Adaptors Type TBA



TBA-060-B06-B  
TBA-090-B12-B  
TBA-120-B20-B



TBA-120-N20-B



TBA-090-N16  
TBA-090-B16  
TBA-120-N16  
TBA-120-B16  
TBA-120-B20

Dimensional drawings: All dimensions in mm (in).

## Characteristics

Allows direct installation of Desiccant Breathers and Spin-On Filter Elements with female thread on top of hydraulic reservoirs

### Features

- Several thread combinations available
- TBA-120-N20-B-W32 without hexagon
- Seals included in delivery (Only for type "TBA-...-B")
- Also suits most common Spin-On filter elements

### Materials

- Adaptor made of steel, zinc-plated
- Seals made of NBR (Buna-N®)

Contact STAUFF for alternative materials.

## Order Codes and Dimensions

Thread T1	Thread T2	Dimensions <sup>(mm/in)</sup>					for use with ...	Order Codes
		L1	L2	L3	ØD	SW		
G3/8 BSP Male (ISO 228)	G3/8 BSP Male (ISO 228)	43	11		21,9	22	SDBL-061 / SVDB-061	TBA-060-B06-B-W32
		1.69	.43		.86	.86		
G3/4 BSP Male (ISO 228)	G3/4 BSP Male (ISO 228)	57	16		32	32	SDBL-093 / SVDB-093 SDBL-096 / SVDB-096 Air Breather SGB-090	TBA-090-B12-B-W32
		2.24	.63		1.26	1.26		
G3/4 BSP Male (ISO 228)	G1 BSP Male (ISO 228)	49	20	19,2		41	SDBL-093 / SVDB-093 SDBL-096 / SVDB-096	TBA-090-B16-W32
		1.93	.79	.76		1.61		
G3/4 BSP Male (ISO 228)	1 NPT Male (ANSI B1.20.1)	53,5	23,5	17		38	SDBL-093 / SVDB-093 SDBL-096 / SVDB-096	TBA-090-N16-W32
		2.11	.93	.67		1.50		
G1-1/4 BSP Male (ISO 228)	3/4 NPT Male (ANSI B1.20.1)	60,5	23,5	20		50	SDBL-121 / SVDB-121 SDBL-122 / SVDB-122	TBA-120-N16-W32
		2.38	.93	.79		1.97		
G1-1/4 BSP Male (ISO 228)	G1 BSP Male (ISO 228)	58	18	20		50	SDBL-121 / SVDB-121 SDBL-122 / SVDB-122	TBA-120-B16-W32
		2.28	.71	.79		1.97		
G1-1/4 BSP Male (ISO 228)	G1-1/4 BSP Male (ISO 228)	76	20		50	50	SDBL-121 / SVDB-121 SDBL-122 / SVDB-122 Air Breather SGB-120	TBA-120-B20-B-W32
		3.00	.79		1.97	1.97		
G1-1/4 BSP Male (ISO 228)	G1-1/4 BSP Male (ISO 228)	60	20	20		50	SDBL-121 / SVDB-121 SDBL-122 / SVDB-122	TBA-120-B20-W32
		2.36	.79	.79		1.97		
G1-1/4 BSP Male (ISO 228)	1-1/4 NPT Male (ANSI B1.20.1)	76	22		42		SDBL-121 / SVDB-121 SDBL-122 / SVDB-122 Air Breather SGB-120	TBA-120-N20-B-W32
		3.00	.88		1.65			



## Valve Unit Type PSU-P-TF

### Characteristics

Valve Units type PSU-P-TF increase the service life and reduce maintenance intervals of particle and desiccant breathers and tank filler breathers due to less air movement

#### Features

- Thread: G3/4 BSP Female (ISO 228)
- Reservoir Pressurisation with 0.35 bar / 5 PSI (no air is expelled from the reservoir until the pressurisation level is reached)
- Intended for Particle and Desiccant Breather series SDB, with adaptor also suitable with series SDBL and SVDB and also with breathers SPB and SMBT.

#### Materials

- Adaptor made of Aluminum
- Valves made of plastic
- Seals made of NBR (Buna-N®)
- Operating temperature range: -40 °C ... +120 °C / -40 °F ... +248 °F

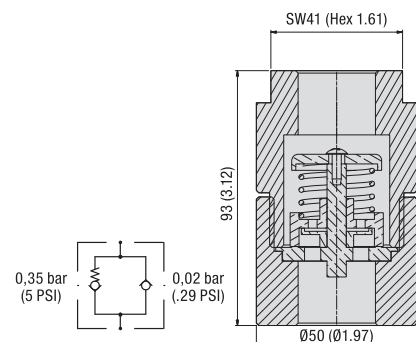


### Order Code

#### Order Code

TBA-090-B12F-B12F-B0.35

C



Dimensional drawings: All dimensions in mm (in).

### Characteristics

Valve Units type PSU-P allows the maintaining of the Reservoir Pressurisation from 0.35 bar / 5 PSI.

Attached to the internal thread of the Desiccant Breather housing (only for type SDBL/SVDB-121 and SDBL/SVDB -122) and designed in such a way that the overall length of the Desiccant Breather is only slightly increased. Due to its installation in the housing, the valve unit cannot be combined with the oil demister insert of type PSU-OD.

#### Features

- Thread: G1-1/4 BSP Male (ISO 228)
- Reservoir Pressurisation with 0.35 bar / 5 PSI (no air is expelled from the reservoir until the pressurisation level is reached)
- Opening Pressure: 0.02 bar / .29 PSI (Air flow into the Tank)

#### Materials

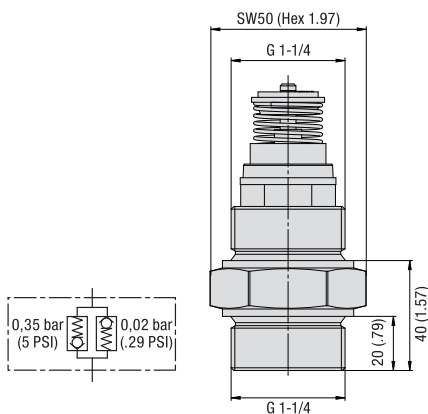
- Adaptor made of steel, zinc-plated
- Valves made of plastic
- Seals made of NBR (Buna-N®)
- Operating temperature range: -40 °C ... +120 °C / -40 °F ... +248 °F



### Order Code

#### Order Code

TBA-SDBL-120-B20-B0.35-P



Dimensional drawings: All dimensions in mm (in).

## Valve Unit Type PSU-QE

### Characteristics

Valve Units type PSU-QE are used to discharge outflowing air (with the 6 valves on the hexagon) past the Drying Agent to extend the service life.

Attached to the internal thread of the Desiccant Breather housing (only for type SDBL/SVDB-121 and SDBL/SVDB -122) and designed in such a way that the overall length of the Desiccant Breather is only slightly increased. Due to installation in the housing, the valve unit cannot be combined with the oil demister insert of type PSU-OD.

#### Features

- Thread: G1-1/4 BSP Male (ISO 228)
- Opening Pressure of the Check Valves: 0.02 bar / .29 PSI (Air flow into and out the Tank)
- Check Valve with 0.35 bar / 5 PSI

#### Materials

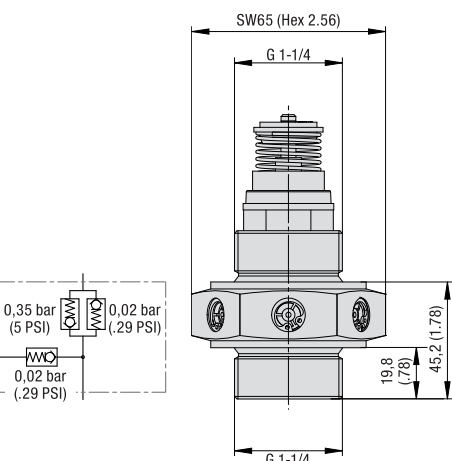
- Adaptor made of steel, zinc-plated
- Valves made of plastic
- Seals made of NBR (Buna-N®)
- Operating temperature range: -40 °C ... +120 °C / -40 °F ... +248 °F



### Order Code

#### Order Code

TBA-SDBL-120-B20-B0.35-QE

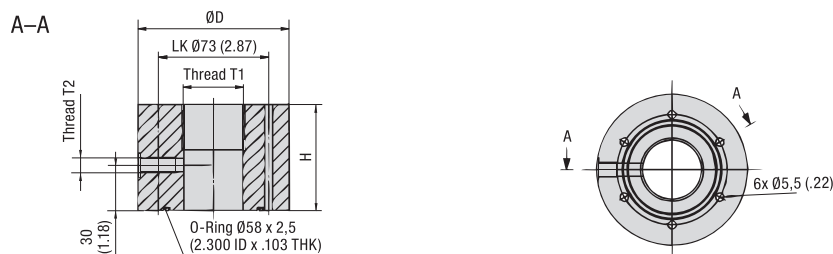


Dimensional drawings: All dimensions in mm (in).



## Adaptor Plate Type AP

Particle and Desiccant  
Breather SDB  
with Adaptor Plate AP



Dimensional drawings: All dimensions in mm (in).

### Characteristics

**Designed to simplify the installation of Desiccant 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/FME.

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.

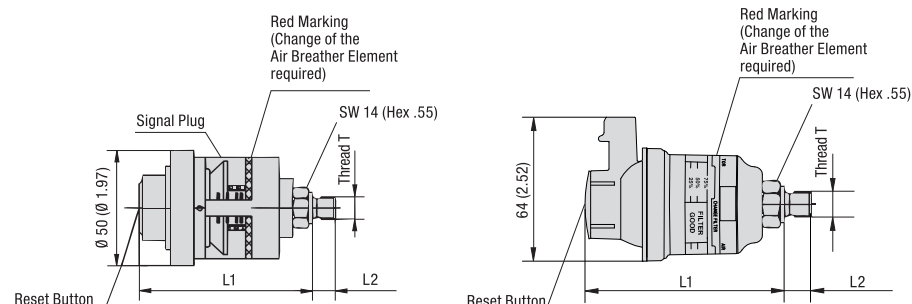
Contact STAUFF for other Adaptor Plates.

### Order Codes and Dimensions

Thread T1	Thread T2	Dimensions (mm/in)		Socket Cap Screws included	for use with...	Order Code
H	ØD					
G3/4 BSP Female (ISO 228)	G1/8 BSP Female (ISO 228)	50	88	M5 x 60 - 8.8 (Steel, zinc-plated)	SDB-093/096 SBDL-093/096 SVDB-093/096	AP-1-B12F
		1.98	3.46			
G1-1/4 BSP Female (ISO 228)	G1/8 BSP Female (ISO 228)	70	100	M5 x 80 - 8.8 (Steel, zinc-plated)	SDB-121/122 SBDL-121/122 SVDB-121/122	AP-2-B20F
		2.76	3.94			

## Contamination Indicators Type FM/FME

Particle and Desiccant  
Breather SDB  
with Adaptor Plate AP  
and Visual Contamination  
Indicator FM or Visual-  
Electrical Contamination  
Indicator FME



Dimensional drawings: All dimensions in mm (in).

### Characteristics

**Designed to indicate the status of Air Breather Elements.**

Filter Minder Contamination Indicators are connected to the female G1/8 BSP thread (ISO 228) of the Adaptor Plate AP and give a indication of the contamination level of the Air Breather Element. A red marking indicates when the Air Breather Element has to be replaced.

Visual Contamination Indicators FM can be reset after each use.

#### Material

- Housing made of Polycarbonate

#### Technical Data

- Operating temperature range:  
-40 °C ... +121 °C (-40 °F ... +250 °F)
- Accuracy: ±10% (red marking)
- Standard Calibration: 2 to 8,7 kPa
- Full Scale (Vacuum): 5,0 kPa (20 IN.)
- Vacuum First Movement: 1,5 kPa (6 IN.)

#### Technical Data (FME)

- Electrical Connection (FME): Metri-Pack 150 plug
- Switching Function Type FME: n/o
- Switching Voltage: 300 VDC Max.
- Voltage Breakdown: 450 VDC Max.
- Switching Current: 1,20 A Max.
- Carrying Current: 0,50 A Max.

### Order Codes and Dimensions

Thread T	Dimensions (mm/in)		Order Code
L1	L2		
G1/8 BSP Male (ISO 228)	75	10	FM
	2.54	.39	
G1/8 BSP Male (ISO 228)	88	10	FME
	3.46	.39	



## Order Codes und Dimensions

Dimensions (mm/in)		Order Code
Length	Diameter	
140	60	TBA-090-B-OD-140
5.51	2.36	
210	60	TBA-090-B-OD-210
8.27	2.36	

Dimensional drawings: All dimensions in mm (in).

## Characteristics

**Designed to prevent oil mist from leaving the hydraulic reservoir through Desiccant Breathers and other breathers**

### Features

- Available in 2 different sizes with lengths of 140mm / 5.51in or 210mm / 8.27in
- Intended for Particle and Desiccant Breather series SDB, with adaptor also suitable with series SDBL and SVDB

### Materials

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

## Oil Demister Type TBA-...-OD

Breather Port:  
Female G3/4 BSP  
(ISO 228)

Reservoir Port:  
Male G3/4 BSP  
(ISO 228)



## Order Codes

for use with...	Order Code
SDBL/SVDB-093/096	PSU-OD-090
SDBL/SVDB-121/122	PSU-OD-120

## Characteristics

**The Oil Demister Insert reduces oil mist from leaving the hydraulic reservoir and is placed inside the Desiccant Breather housing so that the overall length of the Desiccant Breather is not increased.** The use of an adaptor is recommended. Due to its placement in the internal thread of the housing, the oil demister insert cannot be combined with valve units of types PSU-P and PSU-QE.

### Features

- Available in 2 different sizes
- Intended for series SDBL and SVDB (only Size 090/120)

### Material

- Stainless Steel

## Oil Demister Insert Type PSU-OD



## Order Codes

for use with...	Order Code
SDB-121/122 with SDBL-121/122	RING-SDB-120-PSU-HC

## Characteristics

**Creates a safe seal when using the stacking feature of the Particle and Desiccant Breathers**

- Adaptor Ring for Stacking Assembly version SDB+SDBL
- Doubling of the water absorption capacity and Maintenance intervals
- Permanent or temporary mounting (alternative for mounting an additional Particle and Desiccant Breather)
- Type SDB is the basis to ensure the necessary stability (Maximum 2 levels possible)
- Under certain circumstances, additional attachment of the upper level to the SDBL is recommended

## Adaptor Ring for Stacking Assembly Type PSU-HC



Assembled



## Order Codes

for use with...	Order Code
SDB-093/096	KIT-SDB-090-MAINTAIN
SDB-121/122	KIT-SDB-120-MAINTAIN
SDBL-061	KIT-SDBL-060-MAINTAIN
SDBL-093/096	KIT-SDBL-090-MAINTAIN
SDBL-121/122	KIT-SDBL-120-MAINTAIN

## Characteristics

**Saturated Drying Agent and the Air Breather Element can be easily replaced by the user with the Refill and Maintenance Kit.**

### Scope of delivery

- Drying Agent Refill
- Air Breather Element
- PUR Filter discs
- Sealing (only for KIT-SDB-...)
- Thread plugs
- Seal sticker

Individual spare parts are also available separately on request. Please contact STAUFF for further information.

## Refill and Maintenance Kits Type KIT-...-MAINTAIN



KIT-SDB-...-MAINTAIN

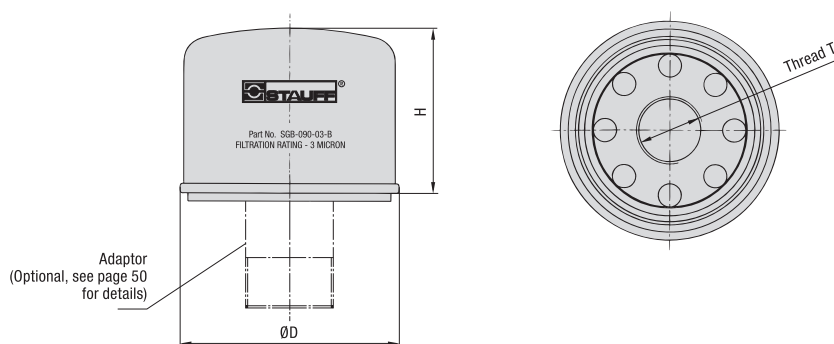


KIT-SDBL-...-MAINTAIN





## Particle Breather (Air Breather Element) Type SGB



### Characteristics

Replaceable Air Breather Elements for STAUFF Particle and Desiccant Breathers.

They can also be used with an Adaptor as separate air filters for hydraulic reservoirs.

#### Characteristics

- Diameter of 68 mm / 2.68 in (SGB-060), 100 mm / 3.94 in (SGB-090) or 130 mm / 5.12 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 50 for a selection of adaptors available.

#### 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  
1,50 m³/min / 52.97 cfm for SGB-120

### Dimensions and Filter Specifications

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

\* Adaptors (BSP/BSP and BSP/NPT) are available. Please see page 50 for details.

### Order Codes

SGB

-

090

-

03

-

B

-

AD

1

2

3

4

5

1

Type

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

3µm Inorganic Glass Fibre

03

Contact STAUFF for alternative materials / micron ratings.

4

Connection Thread

Female BSP thread

(according to dimension table)

5

Adaptors

without Adaptor (Standard option)

with Adaptor

TBA-090-B (for SGB-090-03-B) or

TBA-120-B (for SGB-120-03-B)

Please see page 50 for a selection of adaptors available

and contact STAUFF for further information.

