

Particle and Desiccant Breathers • Overview

Types		SDB	SDBL	SVDB	HC	
		Manager 1 and 1 an				
	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	
Characteristics	Micron rating of the Air Breather Element	3 µm	3 μm	100 µm	3 µm	
	UV-Resistant1	• • •	• • •	• • •	• • •	
	Service Life and Ease of Maintenance ¹	• • • •	• • • 0	• • 0 0	• • •	
	Standard Drying Agent		•		•	
	Alternative Drying Agent	0	0	0	0	
Options	Active Carbon (Odour and Oil Mist Seperation)			0	•	
	Check Valves (Optimising Service Life)	•		0	•	
	Standard Mounting Thread	BSP- Male	BSP- Female	BSP- Female	BSP- Male	
Mounting Options	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	-			-	
	PSU-P-TF (Reservoir Pressurisation)		_	_		
Valve Units	PSU-P (Reservoir Pressurisation)	-		0	_	
	PSU-QE (Bypass Valve)			0	<u>-</u>	
Contamination Indicators	Visual Contamination Indicator FM	Only with Adaptor Plate	Only with Adaptor Plate (AP)	_	Only with Adaptor Plate	
	Visual-Electrical Contamination Indicator FME	(AP)	Adaptor (TBA)		(AP)	
	TBAOD (Oil Demister)	•	-	-		
Accessories	PSU-OD (Oil Demister Insert)	<u>~</u> .	Recommended with Adaptor (TBA)	Recommended with Adaptor (TBA)	_	
	PSU-HC (Adaptor Ring for Stacking Assembly)		-	-		
	Mobile Applications	• • •	• • 0 0	• 0 0 0	• 0 0 0	
	Industrial Applications	• • •	• • •	• • • •	• • •	
	Marine Applications	• • •	• • • •	• 0 0 0	• • •	
Applications ² (Indoor and outdoor use)	Hydraulic Steel Construction	• • •	• • • •	• 0 0 0	• • •	
	Fluid and Lubricant Storage	• • • •	• • • •	• • • •	• • •	
	Gearboxes	• • •	• • • •	• 0 0 0	• • •	
	Further areas of Application	0	0	0	0	

available | ○ on request | - not available | ○ ○ ○ 3/4 (Rating¹, Recommendation²)

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.

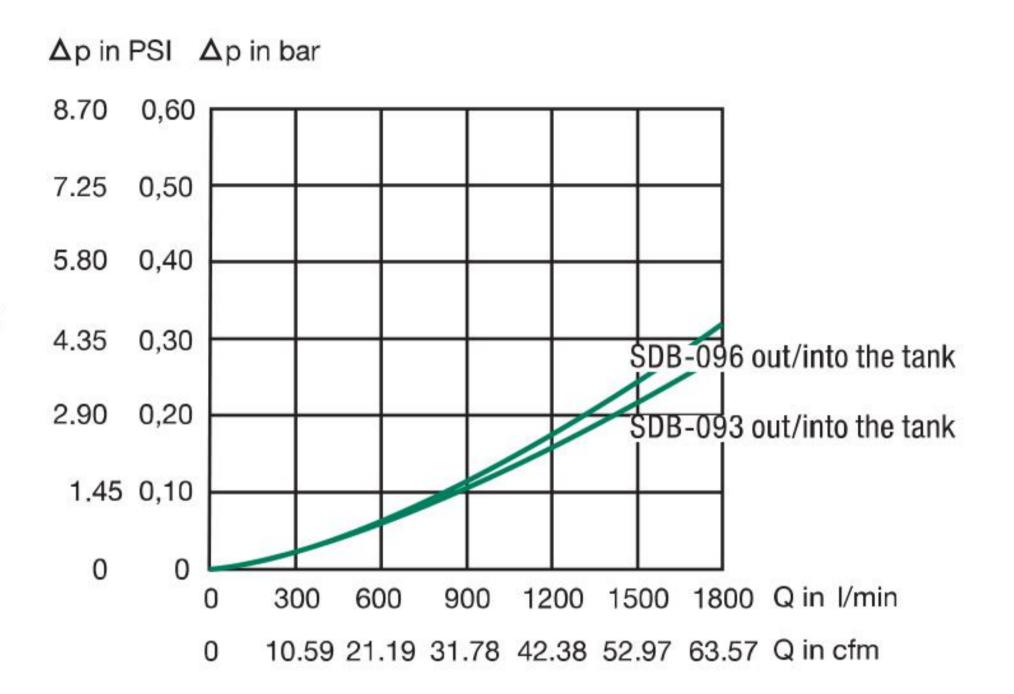
Features

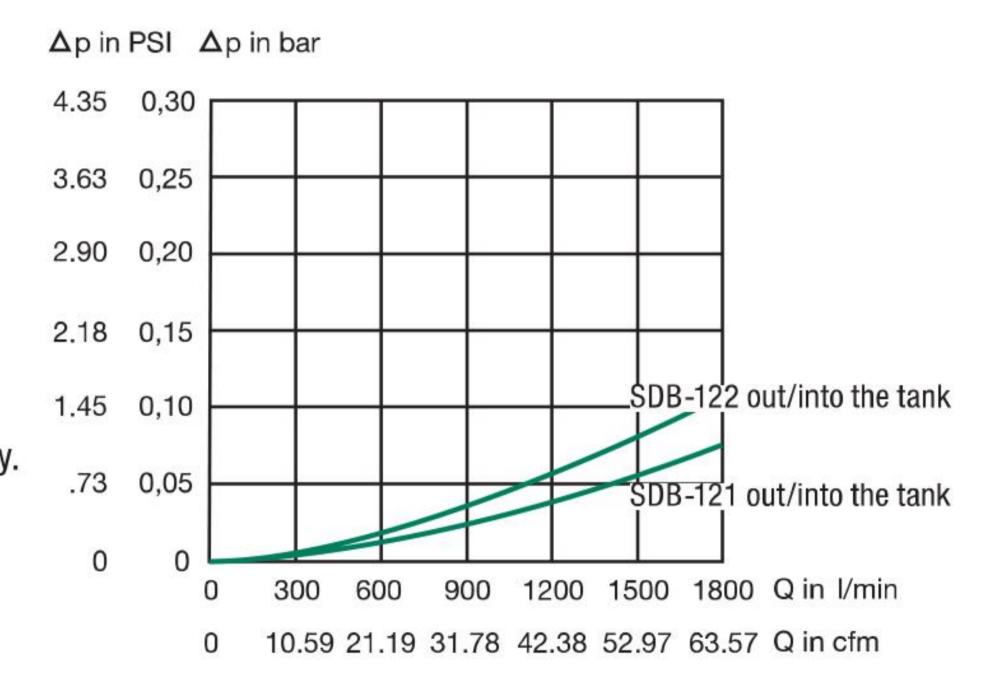
- Available in 4 different sizes
- Diameter of 98 mm or 130 mm
- Internal stainless steel tube for maximum stability
- Connection via BSP or NPT male thread on the stainless steel tube
- Available with optional, integrated check valves (Type SDB-CV)
- Replaceable Drying Agent
- Replaceable Air Breather 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:

AP

Contamination Indicators (Requires Adaptor Plate)

Visual-Electrical Contamination Indicate

Visual-Electrical Contamination Indicator:

Air Breather Element (with Seal)

for Size 093 and 096:
 for Size 121 and 122:
 SGB-090-03-B
 SGB-120-03-B

Refill and Maintenance Kits

for Size 003 and 006:

■ for Size 093 and 096:
 MIT-SDB-090-MAINTAIN
 ■ for Size 121 and 122:
 KIT-SDB-120-MAINTAIN

Please see page 53 for details.

Drying Agent Refill (supplied in air tight container)

AP-1 = for Size 093:
AP-2 = for Size 096:
For Size 121:

RD-093

RD-096

• for Size 122: RD-1

FME Active Carbon Refill (supplied in air tight container)

FM

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

RC-093/096/121
RC-122

SGB-120-03-B Please note: Use one layer of active carbon (1/3) and one layer of regular drying agent (2/3).

Oil Demister

Adaptor Ring (Only for combination SDB+SDBL)

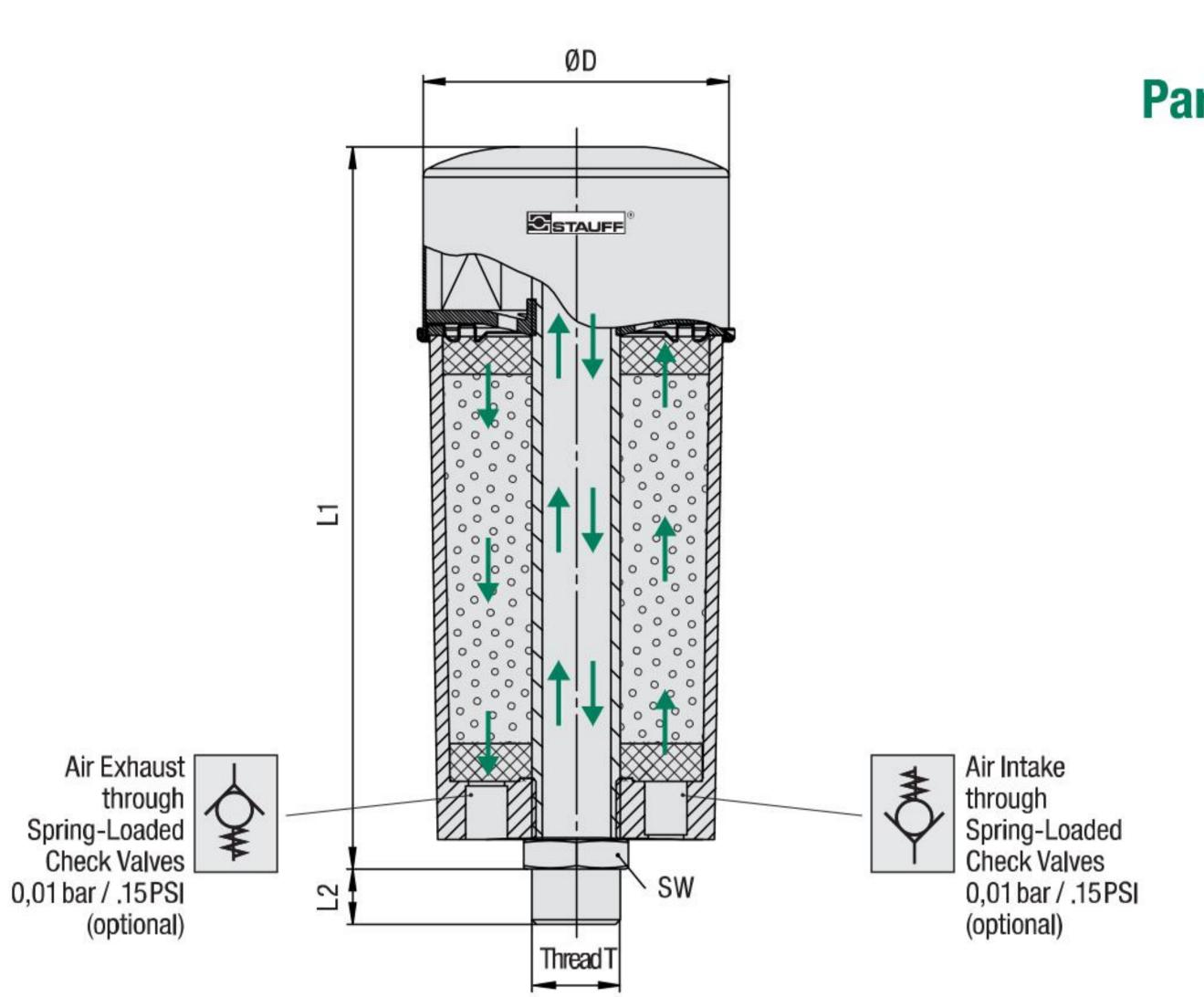
RD-122 • for Size SDB-121/122 with SDBL-121/122 PSU-HC

Please see page 53 for details.

Uilenkade 100, 3336LP, Zwijndrecht, The Netherlands

Drying Agent Changes Colour with increasing moisture ACTIVE REPLACE

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

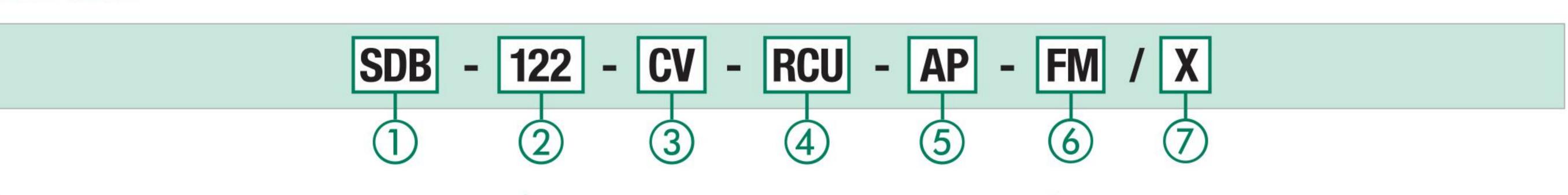


Particle and Desiccant Breather (Robust Design) Type SDB

Dimensions and Technical Data

Type Thread T			Dimensions			Weight	Max. Water	Air Breather Element			
		ØD	L1	L2	Hex	(g/ _{lbs)} Complete Unit	Absorption (g/ _{lbs)}	Туре	Filter Material	Micron Rating	Max. Air Flow Rate
	G3/4 BSP	98	160	18	32	1200	86		Inorganic Glass		0,70 m ³ /min
SDB-093	Male (ISO 228)	3.86	6.30	.71	1.26	2.65	.19	SGB-090-03-B	Fibre	3µm	24.71 cfm
DD 000N	1 NPT	98	160	24	38	1200	86	CCD 000 02 D	Inorganic Glass	2	0,70 m ³ /min
SDB-093N	(ANSI B1.20.1)	3.86	6.30	.94	1.50	2.65	.19	SGB-090-03-B	Fibre	3µm	24.71 cfm
3DD 000	G3/4 BSP	98	220	18	32	1500	172	00D 000 00 D	Inorganic Glass	3µm	0,70 m ³ /min
SDB-096	(ISO 228)	3.86	8.66	.71	1.26	3.31	.38	SGB-090-03-B	Fibre		24.71 cfm
NDD OOCN	1 NPT	98	220	24	38	1500	172	SGB-090-03-B Inorganic Glas	Inorganic Glass	lass 3µm	0,70 m ³ /min
SDB-096N	Male (ANSI B1.20.1)	3.86	8.66	.94	1.50	3.31	.38		Fibre		24.71 cfm
2DD 101	G1-1/4 BSP	130	258	25	50	2700	288	CCD 100 02 D	Inorganic Glass Fibre	2	1,50 m ³ /min
SDB-121	Male (ISO 228)	5.12	10.16	.98	1.98	5.92	.63	SGB-120-03-B		3µm	52.97 cfm
NDD 404N	1-1/4 NPT	130	270	24	50	2700	288	CCD 100 00 D	Inorganic Glass	3μm	1,50 m ³ /min
SDB-121N	Male (ANSI B1.20.1)	5.12	10.63	.94	1.98	5.92	.63	SGB-120-03-B	Fibre		52.97 cfm
`DD 100	G1-1/4 BSP	130	355	25	50	4000	576	CCD 100 00 D	Inorganic Glass		1,50 m ³ /min
SDB-122	(ISO 228)	5.12	13.98	.98	1.98	8.82	1.27	SGB-120-03-B	Fibre	3µm	52.97 cfm
NDD 400N	1-1/4 NPT	130	367	24	50	4000	576	SGB-120-03-B Inorganic Glass Fibre	0	1,50 m ³ /min	
SDB-122N	Male (ANSI B1.20.1)	5.12	14.45	.94	1.98	8.82	1.27		Fibre	3um	52.97 cfm

Order Codes



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

Active Carbon 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)

Active Carbon Drying Agent

1/3 Active Carbon + 2/3 Standard Drying Agent

to prevent odours

Alternative Drying Agent on request.

Adaptor Platewithout 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
 (Requires Adaptor Plate)
 with Visual-Electrical Contamination Indicator
 (Requires Adaptor Plate)

 FME

Please see page 52 for details.

O Design Code

Only for information X

- Oullenkade 100, 3336LP, Zwijndrecht, The Netherlands

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 a adaptor.

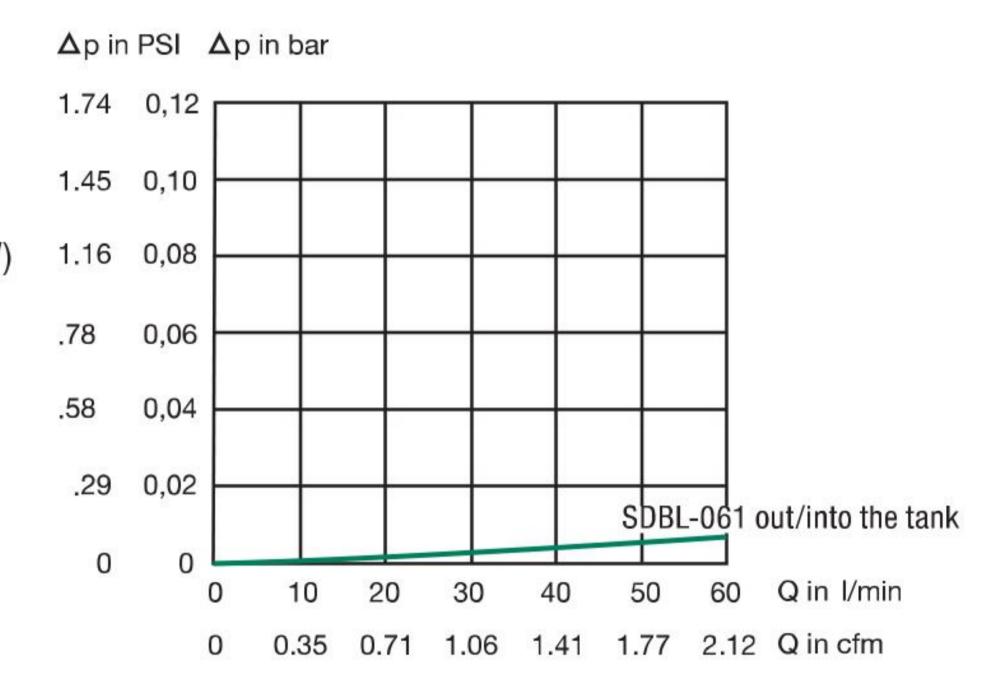
Features

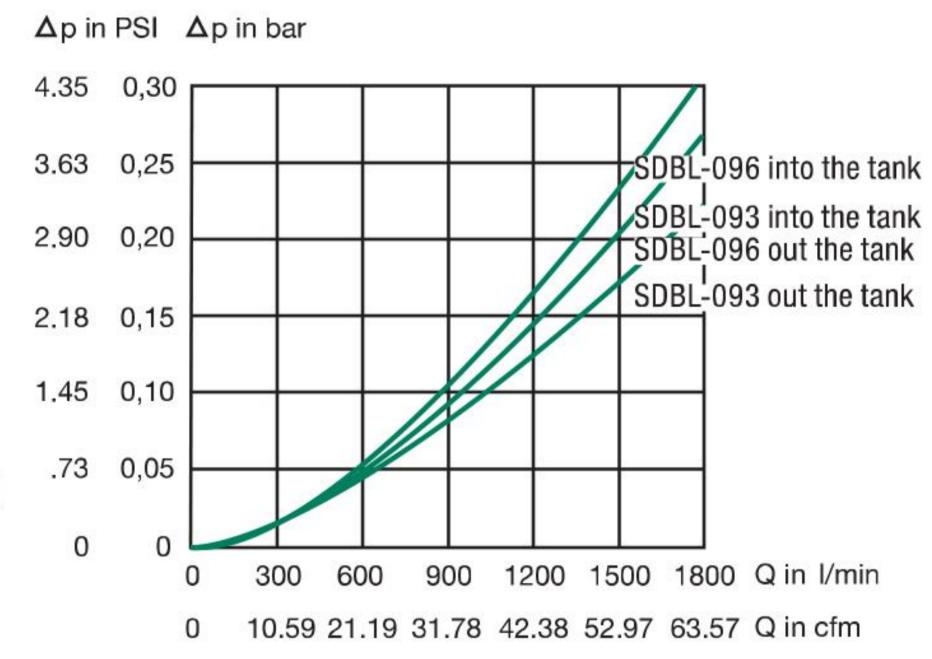
- Available in 5 different sizes
- Diameter of 70 mm, 99 mm or 129 mm
- One piece plastic housing
- BSP Female connection thread on plastic housing
- Available with optional, integrated check valves (Type SDBL-CV)
- Replaceable Drying Agent
- Replaceable Air Breather Element under the plastic cap,
 Micron 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

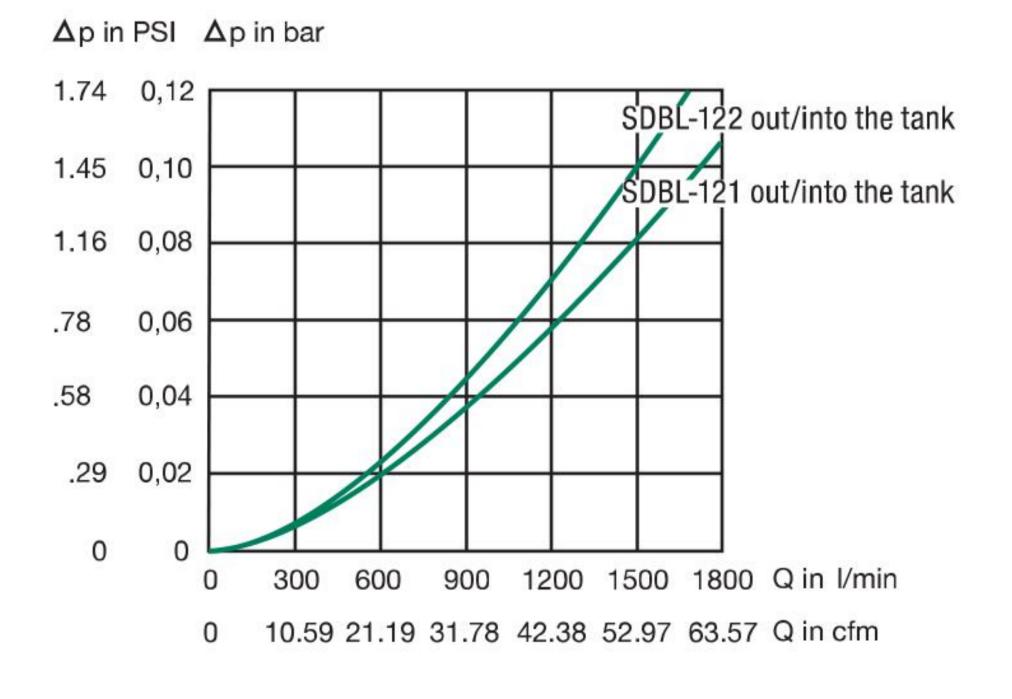
The optional spring-loaded check valves integrated in the housing isolate the dryer material outside the from the atmosphere and optimising the service life.

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

Please see page 53 for details.

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

RD-061

RD-093

RD-096

Active Carbon Refill (supplied in air tight container)

■ for Size 093, 096 and 121: RC-093/096/121

Please note: Use one layer of active carbon (1/3)

and one layer of regular drying agent (2/3).

FM • for Size 122:

for Size 122:

FME

Valve Unit with Reservoir Pressurisation (0.35 bar)

■ for Size 121 and 122: PSU-P

RD-096 Valve Unit with Bypass Valves

■ for Size 121 and 122: PSU-QE

Oil Demister Insert

RD-122

RC-122

for Size 093 and 096:
 for Size 121 and 122:
 PSU-0D-090
 PSU-0D-120

Adaptor Ring (Only for combination SDB+SDBL)

■ for Size SDB-121/122 with SDBL-121/122 PSU-HC Please see page 53 for details.

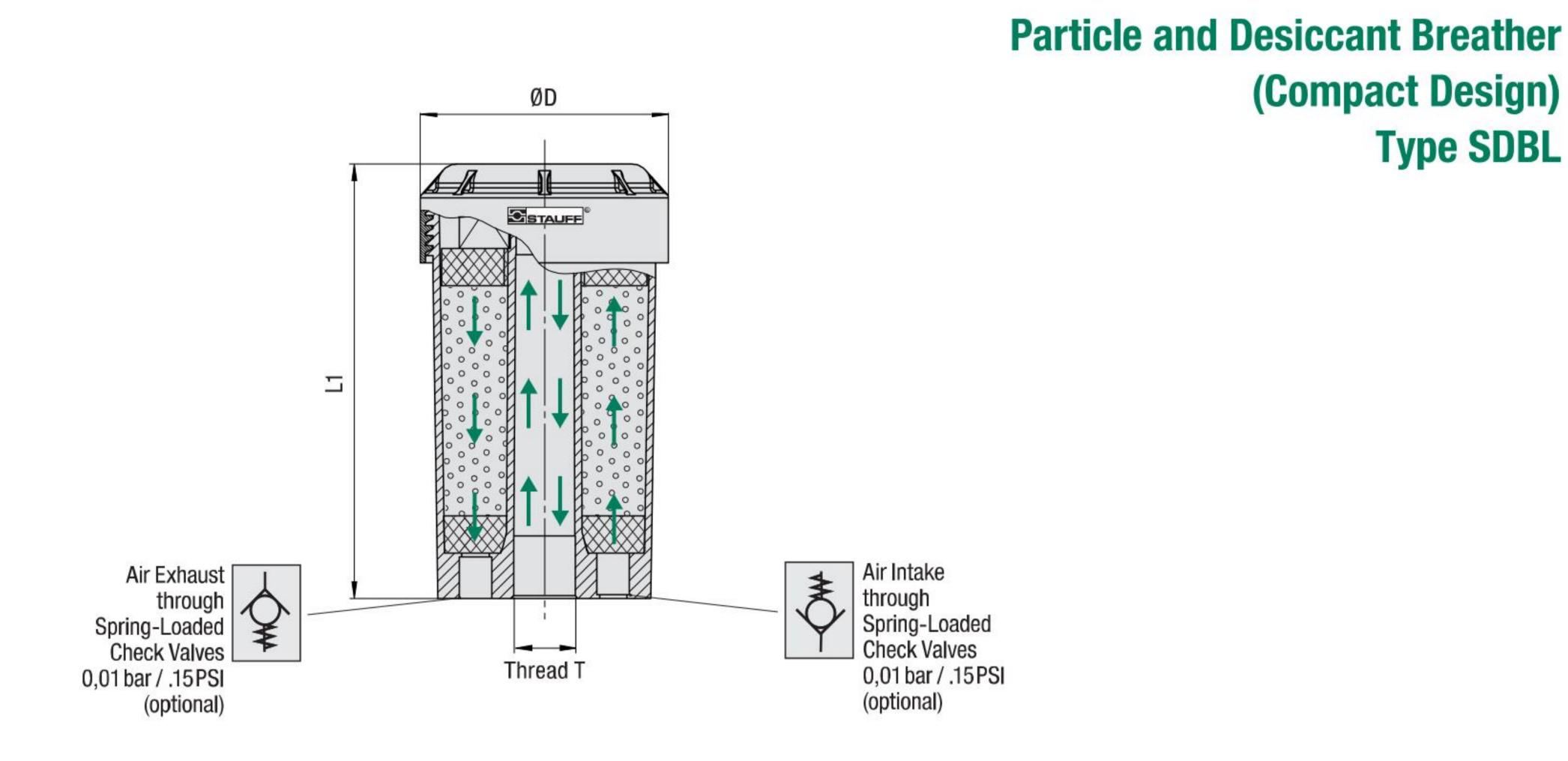
(Compact Design)

Type SDBL

A. Nobel & Zn. FILTRATION & SEPARATION

Drying Agent Changes Colour with increasing moisture

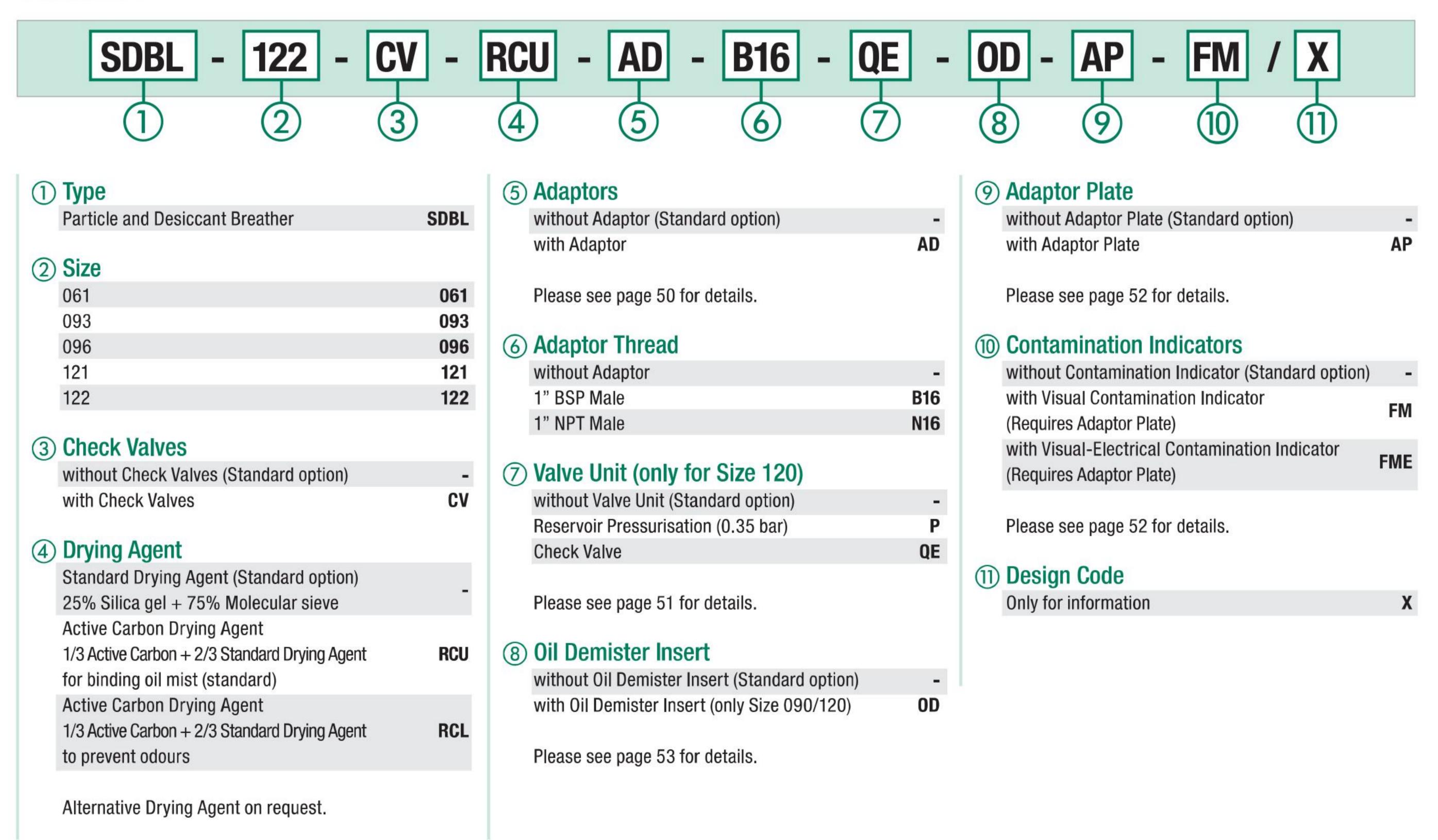
This product does not contain any dangerous substances according to EC Council directives 99/45/EC and 2001/60/EC.



Dimensions and Technical Data

Туре	Thread T	Dimension	S	Weight	Max. Water	Air Breather Element			
		(mm/ _{in)} ØD	L1	(g/ _{lbs)} Complete Unit	Absorption (g/lbs)	Туре	Filter Material	Micron Rating	Max. Air Flow Rate
ODDL OO4	G3/8 BSP	70,5	117,5	250	29	LUE ODDL OO4 FOO	Inorganic Glass	0	0,05 m ³ /min
SDBL-061	Female (ISO 228)	2.78	4.63	.55	.06	LUF-SDBL-061-E03	Fibre	3µm	1.77 cfm
CDDL 000	G3/4 BSP	99	119,5	500	86	LUF-SDBL-093-E03	Inorganic Glass	3µm	0,70 m ³ /min
SDBL-093	Female (ISO 228)	3.90	4.70	1.10	.19		Fibre		24.71 cfm
CDDL OOC	G3/4 BSP	99	174,5	770	172		Inorganic Glass	0	0,70 m ³ /min
SDBL-096	Female (ISO 228)	3.90	5.81	1.70	.38	LUF-SDBL-096-E03	Fibre	3µm	24.71 cfm
ODDL 404	G 1-1/4 BSP	129	204,5	1380	288	LUF-SDBL-121-E03	Inorganic Glass	3µm	1,50 m ³ /min
SDBL-121	Female (ISO 228)	5.08	8.05	3.04	.63		Fibre		52.97 cfm
ODDI 400	G 1-1/4 BSP	129	322,5	2300	576	LUE ODDL 400 E00	Inorganic Glass		1,50 m ³ /min
SDBL-122	(ISO 228)	5.08	12.70	5.07	1.27	LUF-SDBL-122-E03	Fibre	3µm	52.97 cfm

Order Codes



- Uilenkade 100, 3336LP, Zwijndrecht, The Netherlands

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, female BSP thread on the bottom. The Particle and Desiccant 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.

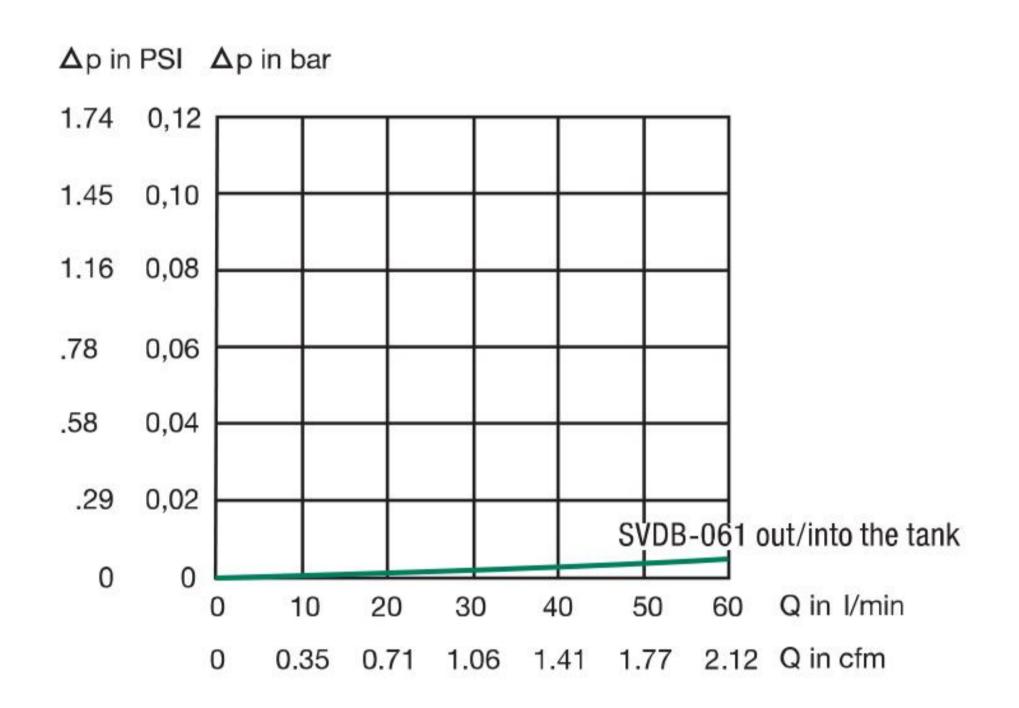
Features

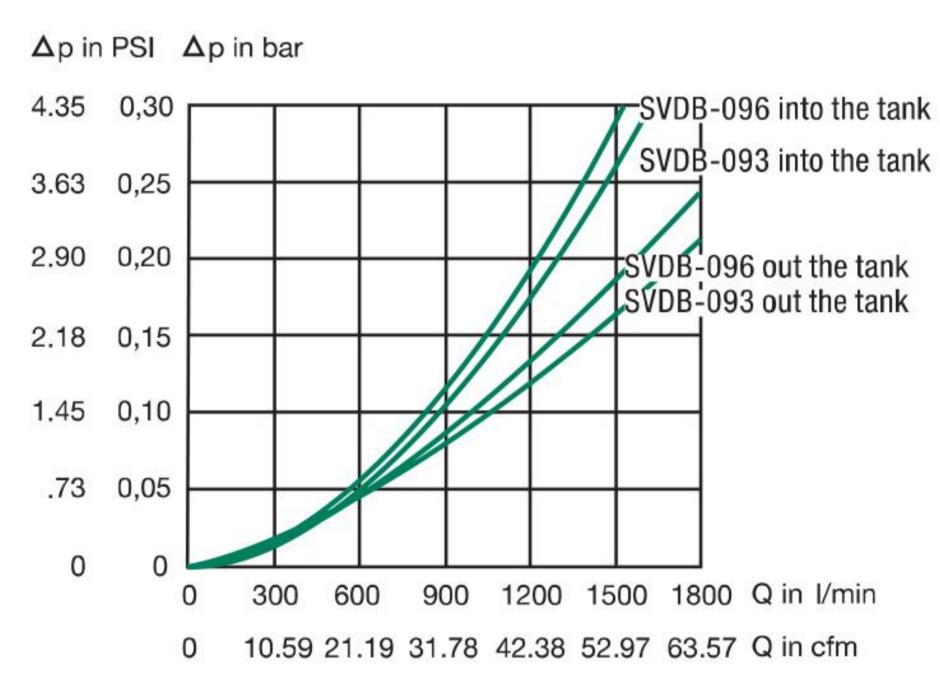
- Available in 5 different sizes
- Diameter of 63 mm, 91 mm or 121 mm
- Drying Agent und Air Breather Element is not replaceable
- One piece plastic housing
- BSP Female connection thread on plastic housing
- Filter Fineness of the PUR filter disc: 100 μm
- Operating temperature range: -40°C ... +90°C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

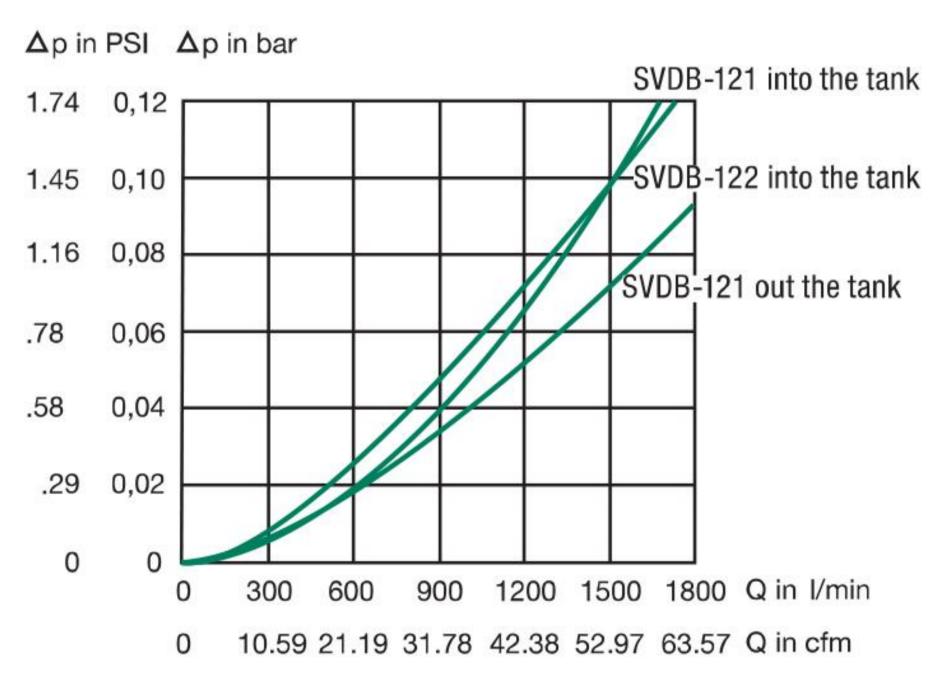
The UV-resistant one piece plastic housing is designed with a Breather can be installed with a adaptor.

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 AP-2 for Size 121 and 122:

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-0D-090 for Size 121 and 122: PSU-0D-120

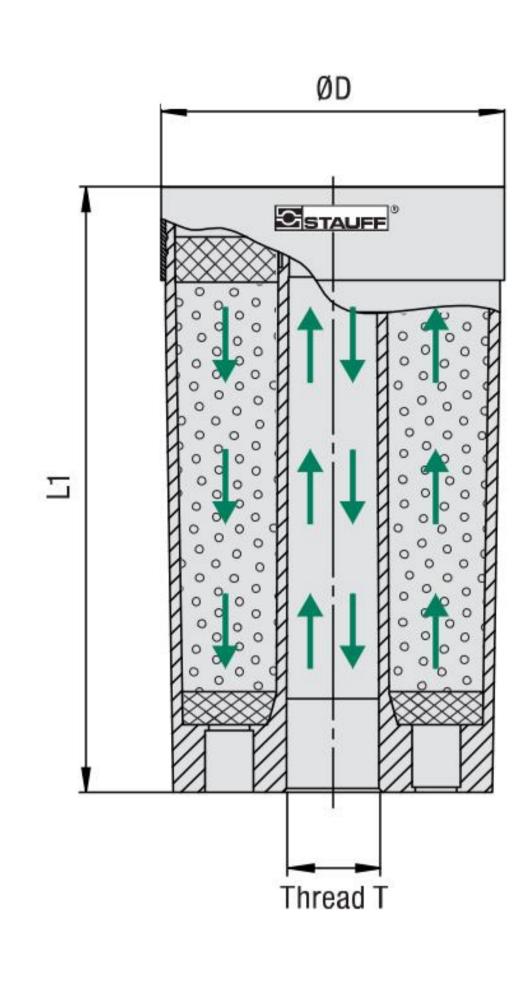
Please see page 53 for details.



Drying Agent
Changes Colour with



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

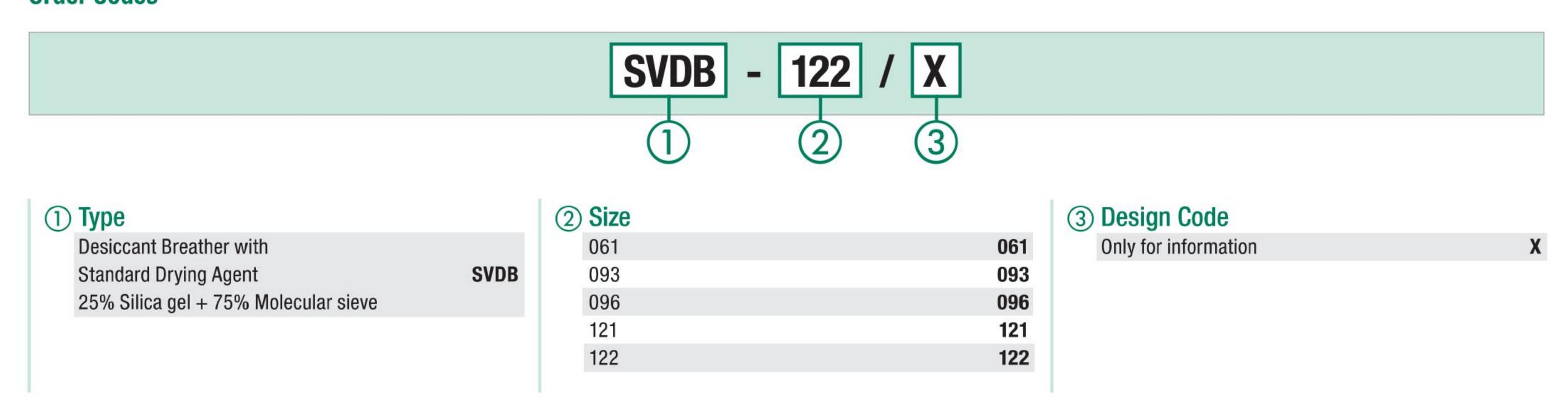


Desiccant Breather (Simplified Design)
Type SVDB

Dimensions and Technical Data

Туре	Thread T Dimensions			Weight M		PUR filter disc	JR filter disc	
		(mm/ _{in)} ØD	L1	(g/ _{lbs)} Complete Unit	Absorption (g/lbs)	Filter Material	Max. Air Flow Rate	
OVDD 004	G3/8 BSP	63	96,5	182	29		0,05 m ³ /min	
SVDB-061	Female (ISO 228)	2.48	3.80	.40	.06	PUR	1.77 cfm	
CVDD 000	G3/4 BSP	91	106,5	375	86	DUD	0,70 m ³ /min	
SVDB-093	Female (ISO 228)	3.58	4.19	.83	.19	PUR	24.71 cfm	
CVDD 00C	G3/4 BSP	91	161,5	630	172	DUD	0,70 m ³ /min	
SVDB-096	Female (ISO 228)	3.58	6.36	1.39	.38	PUR	24.71 cfm	
CVDD 404	G 1-1/4 BSP	121	168,5	1100	288	DUD	1,50 m³/min	
SVDB-121	Female (ISO 228)	4.76	6.63	2.43	.63	PUR	52.97 cfm	
CVDD 100	G 1-1/4 BSP	121	286,5	2035	576	DUD	1,50 m³/min	
SVDB-122	Female (ISO 228)	4.76	11.28	4.49	1.27	PUR	52.97 cfm	

Order Codes

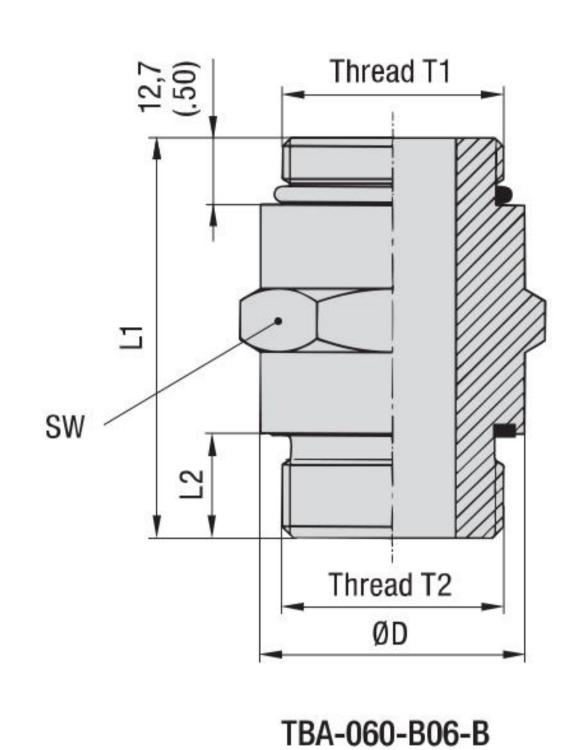


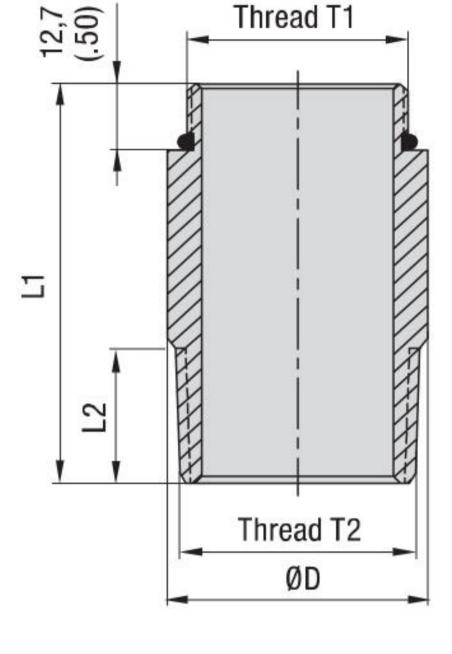
Alternative types on request.



Adaptors Type TBA







Thread T1

Delivery Standard SDBL

TBA-120-N20-B

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

TBA-120-B20

TBA-090-N16

Thread T2

Dimensional drawings: All dimensions in mm (in).

TBA-090-B12-B

TBA-120-B20-B

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	Dime	nsions	(mm/in)			for use with	Order Codes
		L1	L2	L3	ØD	SW		
G3/8 BSP Male	G3/8 BSP Male	43	11		21,9	22	SDBL-061 / SVDB-061	TBA-060-B06-B-W32
(ISO 228)	(ISO 228)	1.69	.43		.86	.86		IDIT GGG DGG D WGZ
G3/4 BSP Male	G3/4 BSP Male	57	16		32	32	SDBL-093 / SVDB-093 SDBL-096 / SVDB-096	TBA-090-B12-B-W32
(ISO 228)	(ISO 228)	2.24	.63		1.26	1.26	Air Breather SGB-090	1DA-030-D12-D-W32
G3/4 BSP Male	G1 BSP Male	49	20	19,2		41	SDBL-093 / SVDB-093	TBA-090-B16-W32
(ISO 228)	(ISO 228)	1.93	.79	.76		1.61	SDBL-096 / SVDB-096	1DA-090-D10-W32
G3/4 BSP	1 NPT	53,5	23,5	17		38	SDBL-093 / SVDB-093	TDA OOO NAG MOO
Male (ISO 228)	Male (ANSI B1.20.1)	2.11	.93	.67		1.50	SDBL-096 / SVDB-096	TBA-090-N16-W32
G1-1/4 BSP	3/4 NPT	60,5	23,5	20		50	SDBL-121 / SVDB-121	TDA 100 N16 W20
Male (ISO 228)	Male (ANSI B1.20.1)	2.38	.93	.79		1.97	SDBL-122 / SVDB-122	TBA-120-N16-W32
G1-1/4 BSP	G1 BSP	58	18	20		50	SDBL-121 / SVDB-121	TDA 400 D40 W00
Male (ISO 228)	Male (ISO 228)	2.28	.71	.79		1.97	SDBL-122 / SVDB-122	TBA-120-B16-W32
G1-1/4 BSP	G1-1/4 BSP	76	20		50	50	SDBL-121 / SVDB-121	TDA 400 DOG D 1400
Male (ISO 228)	Male (ISO 228)	3.00	.79		1.97	1.97	SDBL-122 / SVDB-122 Air Breather SGB-120	TBA-120-B20-B-W32
G1-1/4 BSP	G1-1/4 BSP	60	20	20		50	SDBL-121 / SVDB-121	TD 4 400 DOS 11100
Male (ISO 228)	Male (ISO 228)	2.36	.79	.79		1.97	SDBL-122 / SVDB-122	TBA-120-B20-W32
G1-1/4 BSP	1-1/4 NPT	76	22		42		SDBL-121 / SVDB-121	TD 4 400 NOO D 11100
Male (ISO 228)	Male (ANSI B1.20.1)	3.00	.88		1.65		SDBL-122 / SVDB-122 Air Breather SGB-120	TBA-120-N20-B-W32

0,35 bar (5 PSI) . 0,02 bar (.29 PSI)

Ø50 (Ø1.97)

SW50 (Hex 1.97)

Dimensional drawings: All dimensions in mm (in).

Characteristics

Valve Units type PSU-P-TF increase the service life and reduce maintenance intervals of particle and desic-cant 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

Valve Unit Type PSU-P-TF



Order Code

Order Code

TBA-090-B12F-B12F-B0.35

G 1-1/4 G 1-1/4 G 1-1/4

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

Valve Unit Type PSU-P



Order Code

Order Code

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

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

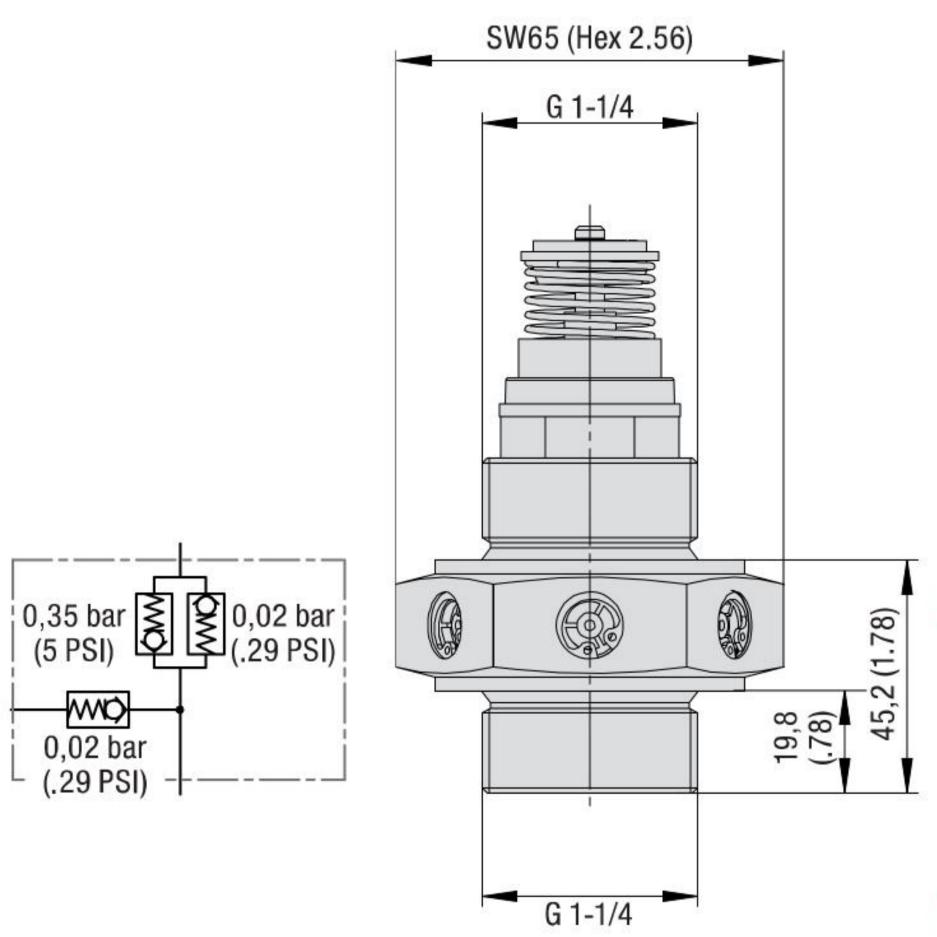
Valve Unit Type PSU-QE



Order Code

Order Code

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



Dimensional drawings: All dimensions in mm (in).



Adaptor Plate Type AP



A-ALK Ø73 (2.87) Thread T1 Thread T2 0-Ring Ø58 x 2,5 (2.300 ID x .103 THK)

6x Ø5,5 (.22)

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.

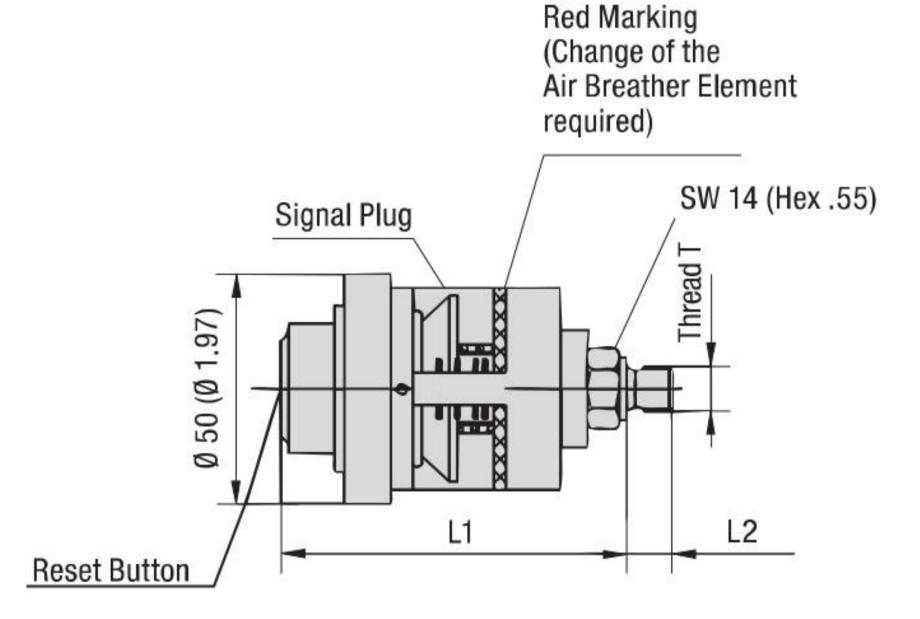
Order Codes and Dimensions

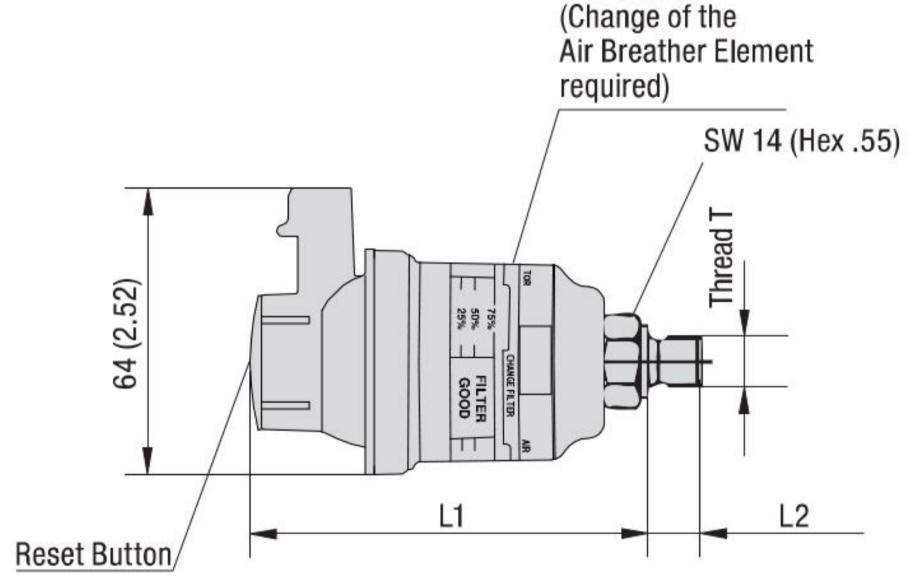
Thread T1	Thread T2	Dimensi	ons (mm/in)	Socket Cap	for use with	Order Code
		Н	ØD	Screws included		
G3/4 BSP	G3/4 BSP Female (ISO 228) G1/8 BSP Female (ISO 228)	50	88	M5 x 60 - 8.8	SDB-093/096 SBDL-093/096	AP-1-B12F
		1.98	3.46	(Steel, zinc-plated)	SVDB-093/096	
G1-1/4 BSP			100	M5 x 80 - 8.8	SDB-121/122	AD 2 D20E
Female (ISO 228)	Female (ISO 228)	2.76 3.94	(Steel, zinc-plated)	SBDL-121/122 SVDB-121/122	AP-2-B20F	

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







Red Marking

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.)

Technical Data (FME)

Vacuum First Movement:

• Electrical Connection (FME): Metri-Pack 150 plug

1,5 kPa (6 IN.)

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 und Dimensions

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

Order Codes und Dimensions

Dimensions (m	m/in)	Order Code		
Length	Diameter			
140	60	TRA_000_R_0D_140		
5.51	2.36	TBA-090-B-0D-140		
210	60	TDA 000 D 010		
8.27	2.36	TBA-090-B-0D-210		

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



Order Codes

for use with	Order Code
SDBL/SVDB-093/096	PSU-0D-090
SDBL/SVDB-121/122	PSU-0D-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 a 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.

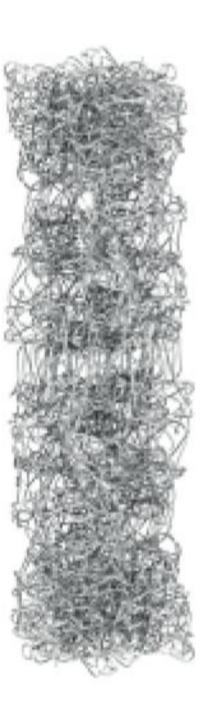
Features

- 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





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 easelie 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

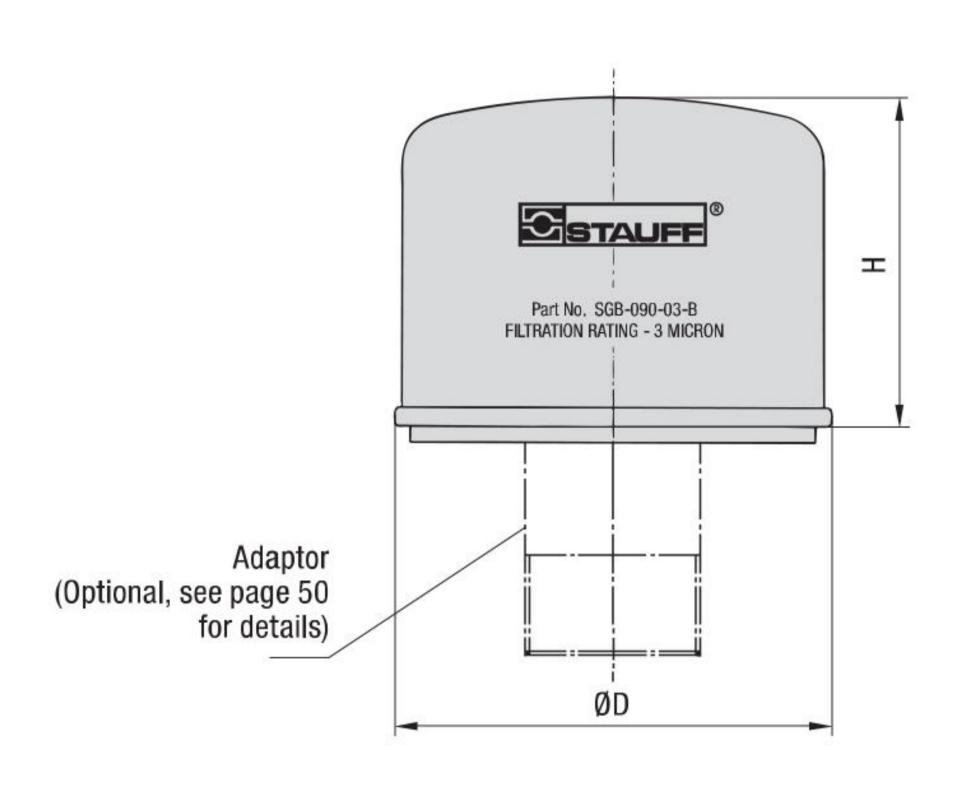


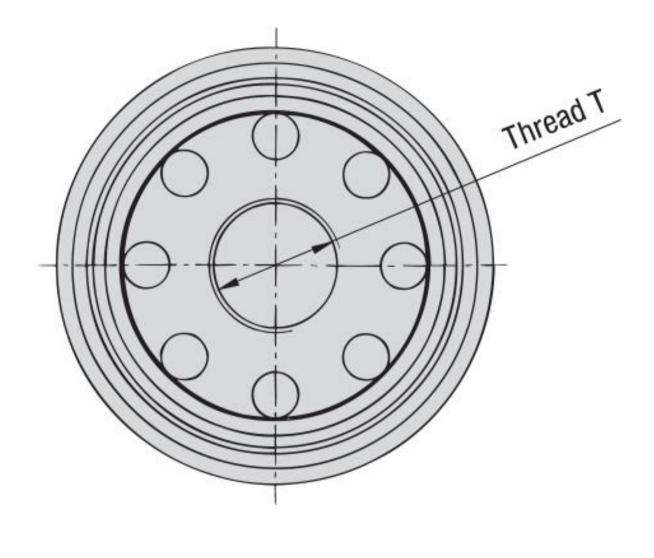




Particle Breather (Air Breather Element) Type SGB







Characteristics

Replaceable Air Breather Elements for STAUFF Particle and Desiccant Breathers.

They can also be used with an Adaptor as seperate 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

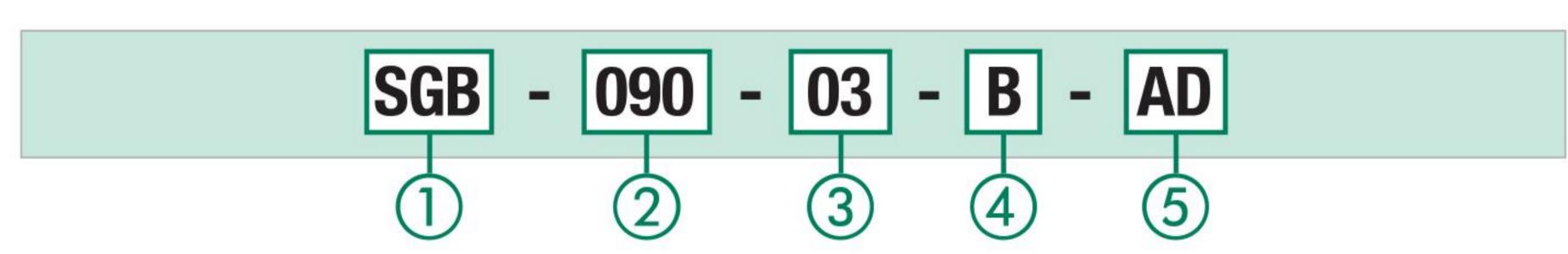
Maximum air flow rates:
 0,05 m³/min / 1.77 cfm for SGB-060
 0,70 m³/min / 24.71 cfm for SGB-090
 1,50 m³/min / 52.97 cfm for SGB-120

Dimensions and Filter Specifications

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

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

Order Codes



1) Type					
Air Breather	SGB				
© Circ					
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 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.