

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.

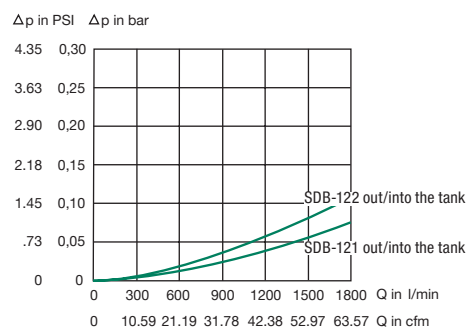
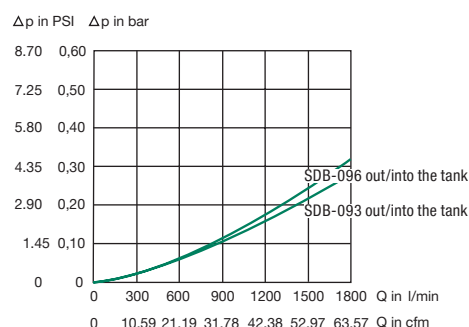
Features

- 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:

Drying Agent Refill (supplied in air tight container)

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

FM

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).

Oil Demister

- for Size 093 and 096, 121 and 122

TBA-...-OD

Adaptor Ring (Only for combination SDB+SDBL)

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

PSU-HC

Please see page 53 for details.

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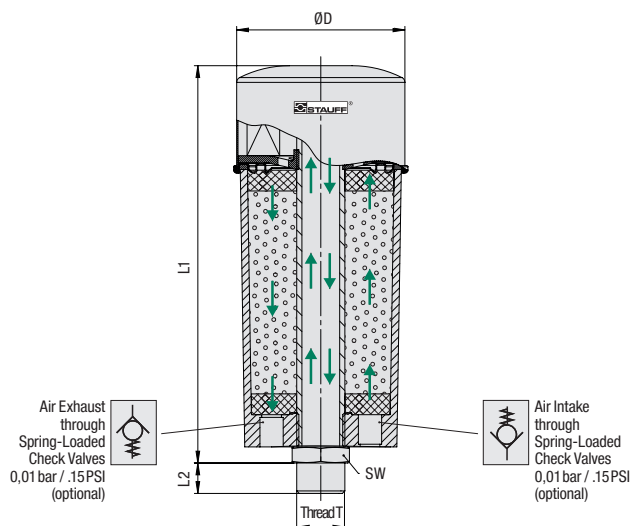
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Drying Agent

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**