

Section 2:

AIR BREATHERS



Air Breathers

Quality Air Breathers are Essential

Breathers are integral components of any hydraulic system. A common mistake is treating breathers as a commodity and selecting one based solely on price. Due to particulate contamination found in harsh industrial and mobile environments, this mistake can lead to system inefficiencies and component failures. We offer a portfolio of high quality, cost effective air breathers with various options for a wide range of applications. Choosing the proper breather combats the ingress of airborne contamination while increasing the efficiency and improving the reliability of your hydraulic system.

The Schroeder Difference

Breather elements are typically constructed with low-grade paper or low-quality sponge material, which tend to tear when exposed to moisture and provide insufficient filtration ratings. Conversely, our breather elements are constructed of phenolic resin impregnated paper or synthetic media. Both types provide high resistance to moisture and adequate micron ratings, ensuring proper filtration while extending the operational service life of the breather.

Recommendations

Increasing demands for fluid cleanliness levels are requiring more frequent use of high-quality media for the filtration of oils. Schroeder recommends selecting a breather with a filtration rating (micron rating) that is equivalent to or finer than your finest system filters.

Since breathers do get clogged over time, Schroeder recommends the following change-out schedules:

Breathers without pressure gauges or visual indicators change your breather every 6 months or with every service interval.

Breathers with pressure gauges change your breather at 3 psi pressure drop (at higher pressure drops, the pump can cavitate).

Air Breathers

Air Breathers

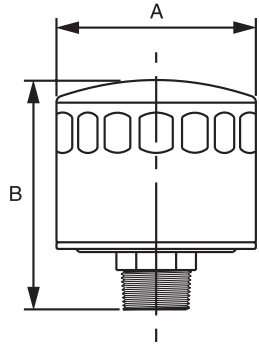
Schroeder offers high quality breathers to effectively combat the ingress of airborne contamination and moisture, therefore increasing the efficiency and reliability of the system.

Available breather series are ABF, PAB, SAB, and D-AB. Many are available with filler strainer, dipstick, indicator and check/relief valve options. The ABC air breather check can take the guesswork out of when to change your breather.

ABF-3/10 ABF-3/10-M-P12 ABF-S40 ABF-S40-M-P12
 MBF-3-M-P20 MBF-10-M-P20

Features and Benefits

- Durable metal housing
- Optional filler strainer
- Large pleated surface areas offers high dirt holding and air flow capacity
- NPT or Flange adapter available
- Available with three micron rating

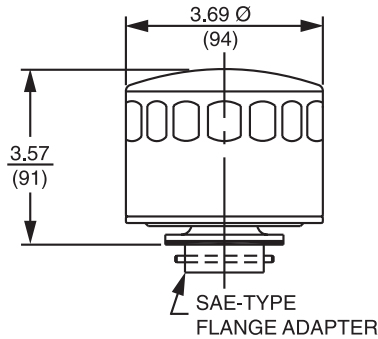


Model Number	A	B	Adapter Type	Minimal Micron Retention	Max Flow Rate	Air Flow/psi Drop
ABF-3/10 ABF-3/10-M-P12	3.69 (94)	4.28 (109)	.75" NPT Nylon .75" NPT Steel	3 3	40 SCFM	0.4 psi at 20 SCFM- 1.25 psi at 40 SCFM
ABF-S40 ABF-S40-M-P12	3.69 (94)	4.28 (109)	.75" NPT Nylon .75" NPT Steel	40 40	40 SCFM	0.29 psi at 20 SCFM- 1.06 psi at 40 SCFM
MBF-3-M-P20 MBF-10-M-P20	5.06 (128)	8.31 (211)	1.25" NPT Steel	3 10	200 SCFM	0.3 psi at 70 SCFM- 1.25 psi at 200 SCFM

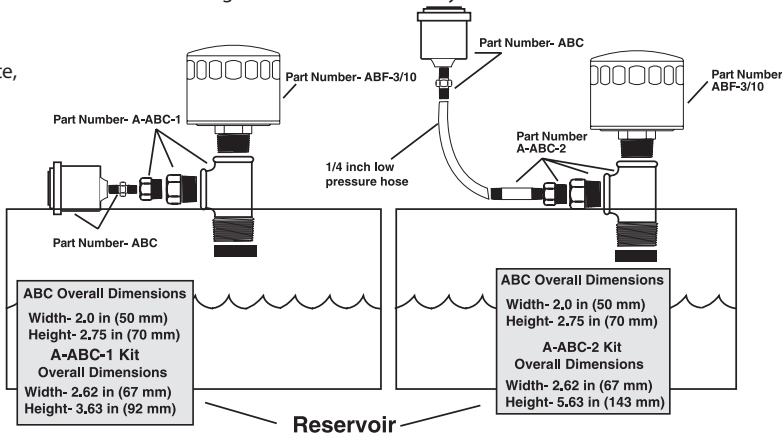
SCFM = Standard Cubic Feet per Minute

ABF-3/10-F ABF-S40-F

These breathers are designed for retrofit on hydraulic reservoirs using the SAE-type flange fill port assembly.



The Air Breather Check (ABC) takes the guesswork out of when to change your air breather because it doesn't care how dirty the air breather looks or how long it's been installed. It only cares how well the breather is working. The air breather check is calibrated in inches of water and will activate, providing a visual indication, when a vacuum equivalent of 15 inches of water (3.75 kPa) is reached. The ABC can be reset simply by depressing the yellow button and used over and over again.



Air Breathers

Suction Separators and Strainers

Breathers with NPT Adapters

Oil Sight Glasses



Specifications

Breathers with Flange Adapters



Air Breather Check (ABC) An Indicator For Your Air Breather



Air Breathers

Filler
Breather
with
Strainer

ABF-3/10-S
ABF-3/10-S6

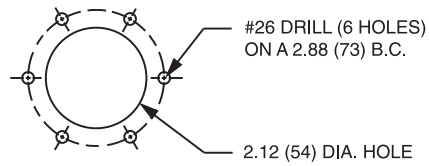
ABF-S40-S
ABF-S40-S6

The strainer used here is #24 mesh and is available in the lengths shown.

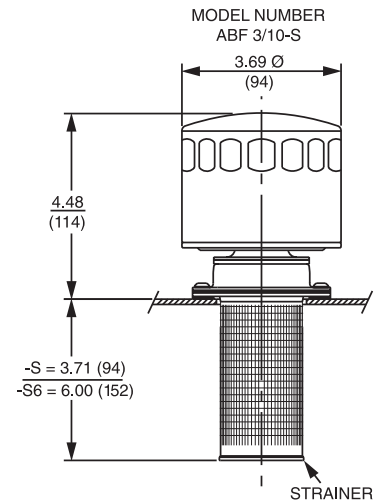
Model Number	Adapter Type	Minimal Micron Retention	Max Flow Rate	Air Flow/psi Drop
ABF-3/10-S ABF-3/10-S6	SAE-type flange	10 10	40 SCFM	0.4 psi at 20 SCFM - 1.25 psi at 40 SCFM
ABF-S40-S ABF-S40-S6	SAE-type flange	40 40	40 SCFM	0.29 psi at 20 SCFM - 1.06 psi at 40 SCFM

SCFM = Standard Cubic Feet per Minute

To replace breather only, order
ABF-3/10-F or ABF-S40-F.



MOUNTING REQUIREMENT



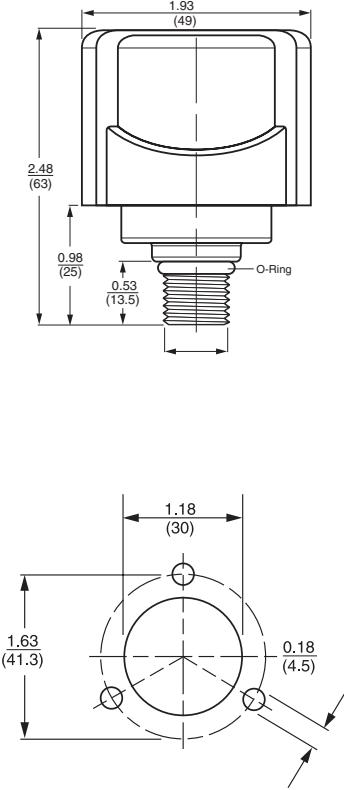
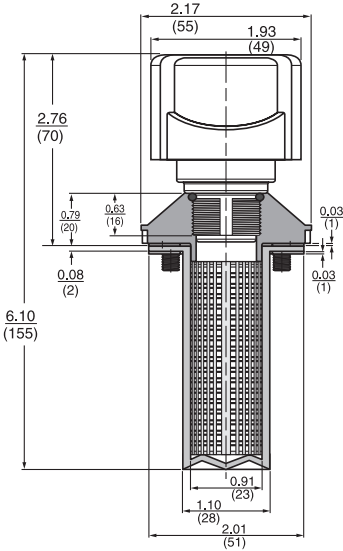
SAME DAY SHIPMENT MODEL AVAILABLE!

Air Breathers

Air Breathers

Features and Benefits

- Durable synthetic Nylon 6 housing
- Phenolic resin impregnated filter element
- Standard Buna N O-Ring
- Available with anti-splash or relief valve
- Optional customer logo (contact factory)
- Optional dipstick (contact factory)



PAB1 Breather



PABS1 Breather

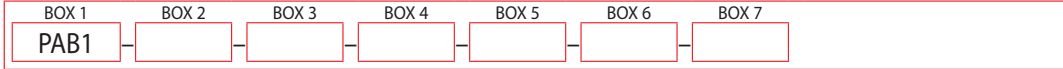


Suction Separators and Strainers
Oil Sight Glasses

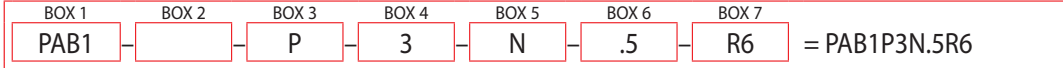
Max. Flow Rate: 7 SCFM / 51 gpm at .15 psi 13 SCFM / 100 gpm at .6 psi
Filtration Rating: 3 μm absolute
Operational Temperature: -22° to 212°F (-30° to 100°C)

Specifications

How to Build a Valid Model Number for a Schroeder PAB1:



Example: NOTE: One option per box



Filter Model Number Selection

Same Day Shipment Model

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6
Model Number	Replacement Element	Connection Type	Filtration Rating	Gauge Option	Connection Size
PAB1	Omit	P = NPT	3	N = No Gauge	.5 = 1/2" NPT
PABS1		S = SAE			12 = 3/4" SAE
		For PABS1 Only			For PABS1 Only
		F = Flanged			1 = Standard
BOX 7					
Options					
AS = Anti-Splash					
R6 = 6 psi relief valve					
For PAB1 Only					
D = Dipstick					
				For PABS1 Only	
				Replacement Elements: PAB1M3N22	

NOTE:
Contact factory for lead time and minimum order quantity for other models.

Air Breathers

PAB3 Breather

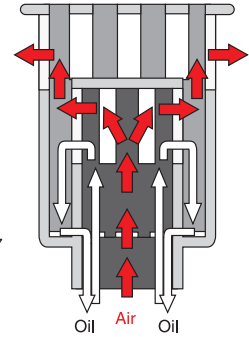
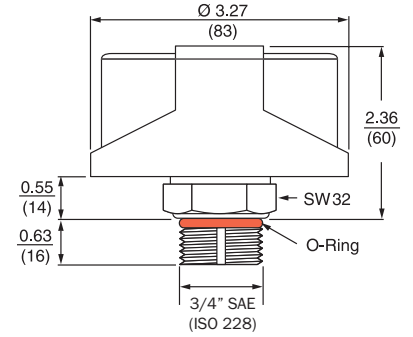
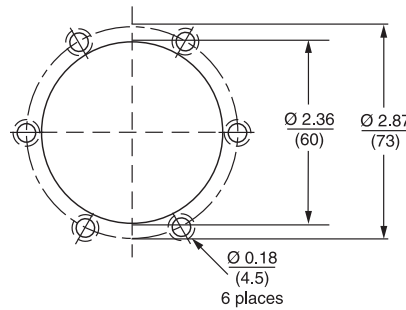
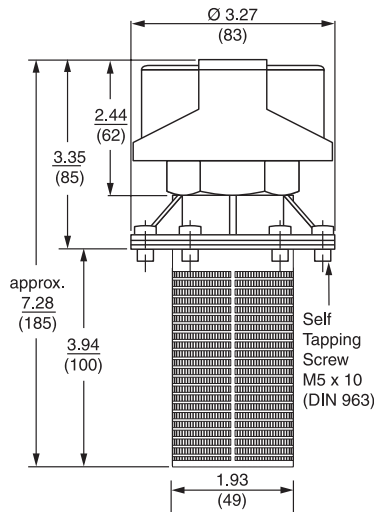


PABS3 Breather



Features and Benefits

- Durable synthetic Nylon 6 housing
- Phenolic resin impregnated filter element
- Standard Buna N O-Ring
- Available with anti-splash or relief valve
- Optional customer logo (contact factory)
- Optional dipstick (contact factory)



Specifications

Max. Flow Rate: 14 SCFM / 105 gpm at .15 psi
30 SCFM / 230 gpm at .6 psi

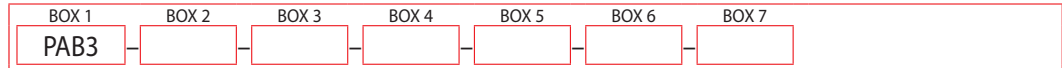
Filtration Rating: 3 μ m absolute

Operational Temperature: -22° to 212°F (-30° to 100°C)

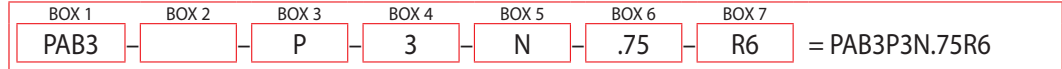
Filter Model Number Selection

Same Day Shipment Model

How to Build a Valid Model Number for a Schroeder PAB3:



Example: NOTE: One option per box



BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6
Model Number	Replacement Element	Connection Type	Filtration Rating	Gauge Option	Connection Size
PAB3	Omit	P = NPT	3	N = No Gauge	.75 = 3/4" NPT
PABS3		S = SAE			12 = 3/4" SAE
		For PABS3 Only			For PABS3 Only
		F = Flanged			1 = Standard

BOX 7
Options
AS = Anti-Splash
R6 = 6 psi relief valve
For PAB3 Only
D = Dipstick

For PABS3 Only

Replacement Elements: PAB3M3N42

NOTE:

Contact factory for lead time and minimum order quantity for other models.

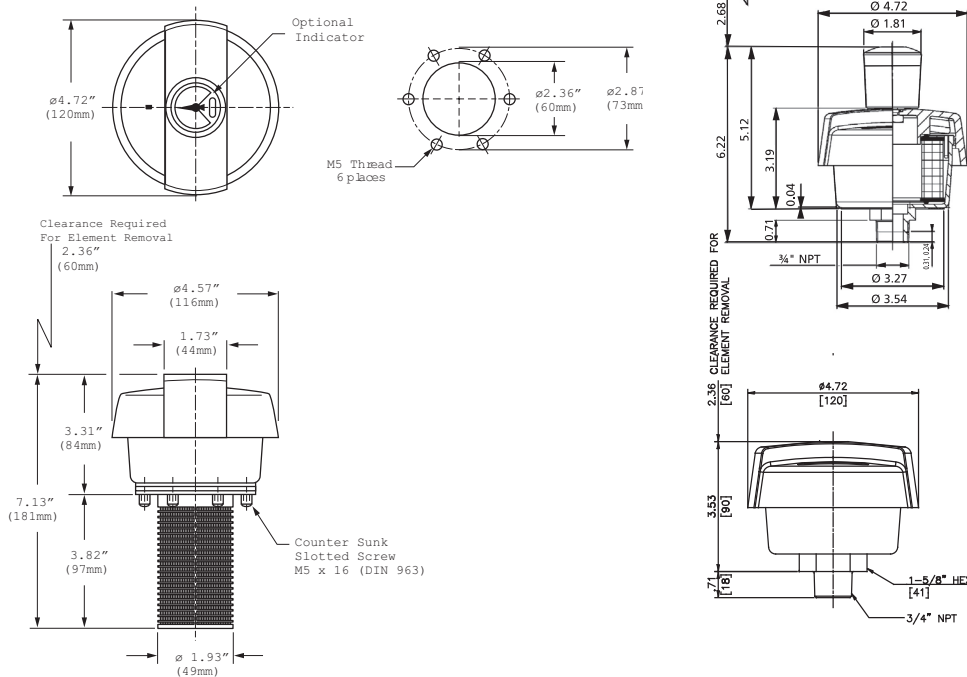
SAME DAY SHIPMENT MODEL AVAILABLE!

Air Breathers

Air Breathers

Features and Benefits

- Durable synthetic Nylon 6 housing
- Phenolic resin impregnated filter element
- Standard Buna N O-Ring
- Integrated anti-splash insert for PABR7 only
- Optional differential gauge
- Optional customer logo (contact factory)



PABR7 Breather



Suction Separators and Strainers
and
Oil Sight Glasses

PABSR7 Breather



Max. Flow Rate: 35 SCFM / 260 gpm at .15 psi
64 SCFM / 475 gpm at .6 psi

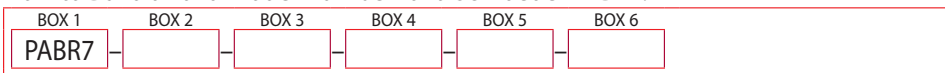
Filtration Rating: 3 μm

Operational Temperature: -22° to 212°F (-30° to 100°C)

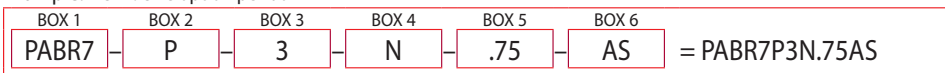
Range of Indication: 0.5 psi

Specifications

How to Build a Valid Model Number for a Schroeder PABR7:



Example: NOTE: One option per box



BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6
Model Number	Connection Type	Filtration Rating	Gauge Option	Connection Size	Options
PABR7	P = NPT	3	N = No Gauge	.75 = 3/4" NPT	AS = Anti-Splash
PABSR7	S = SAE		W = With Gauge	1 = 1" SAE	
	For PABSR7 Only				
	F = Flanged				

For PABSR7 Only

Replacement Elements: R-PAB7-3

Filter Model Number Selection

Same Day Shipment Model

NOTE:

Contact factory for lead time and minimum order quantity for other models.

Air Breathers

SAB22 Breather

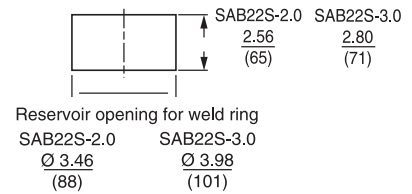
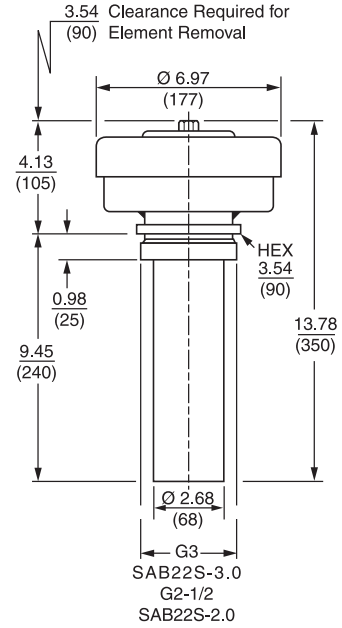
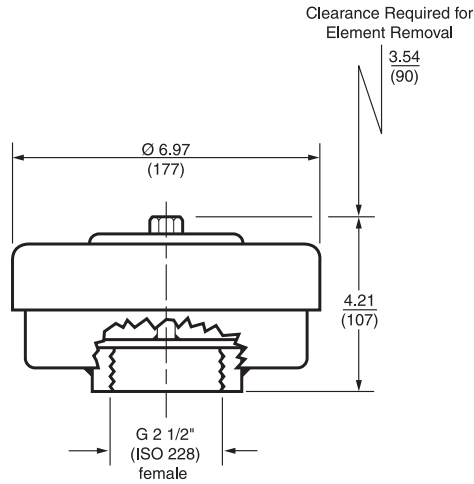


SABS22 Breather



Features and Benefits

- Durable steel housing
- Wide range of flow rates
- Replaceable element



Specifications

Max. Flow Rate: 90 SCFM / 685 gpm at .15 psi
105 SCFM / 790 gpm at .6 psi

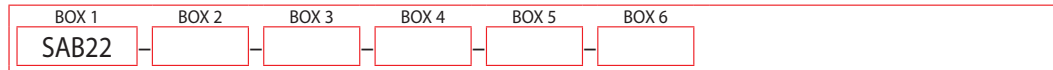
Filtration Rating: 3 μm absolute, Phenolic resin impregnated filter element

Connection: G2 ½" female thread

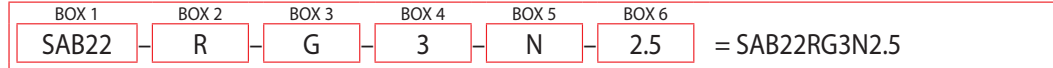
Lid: Removable lid to access fill port

Filter Model Number Selection

How to Build a Valid Model Number for a Schroeder SAB22:



Example: NOTE: One option per box



BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
Model Number	Replacement Element	Connection Type	Filtration Rating	Gauge Option
SAB22	R = Replacement Elements	G = BSPP	3	N = No Gauge
SABS22				
	BOX 6			
	Connection Size			
	2.5 = Female BSPP	Replacement Elements: R-SAB22-3		

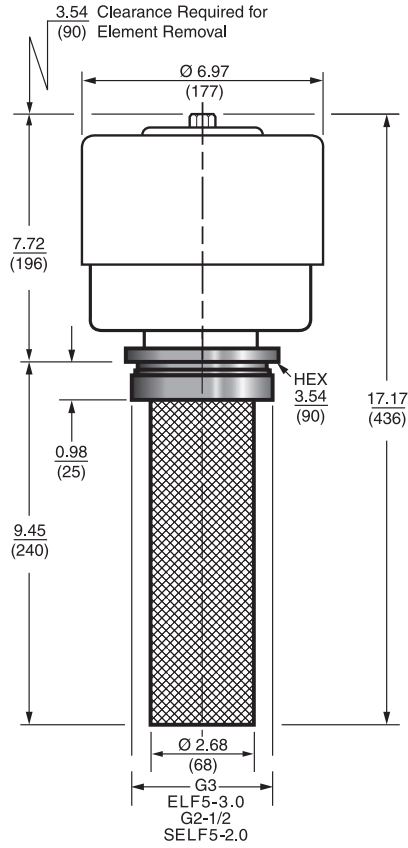
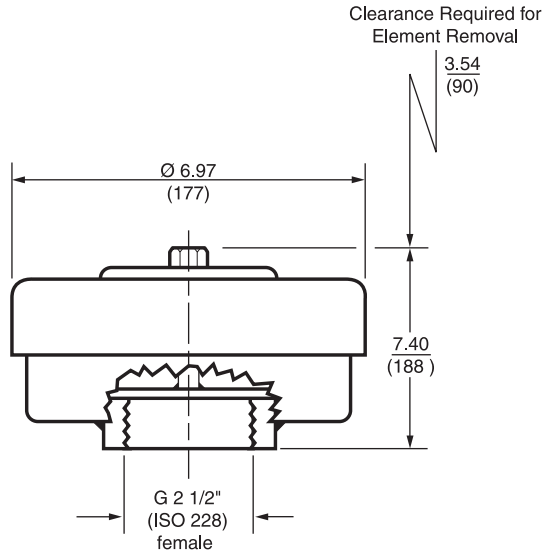
SAME DAY SHIPMENT MODEL AVAILABLE!

Air Breathers

Air Breathers

Features and Benefits

- Durable steel housing
- Wide range of flow rates
- Replaceable element



SAB35 Breather



SABS35 Breather



Suction Separators and Strainers
Oil Sight Glasses

Max. Flow Rate: 127 SCFM / 950 gpm at .15 psi
176 SCFM / 1320 gpm at .6 psi

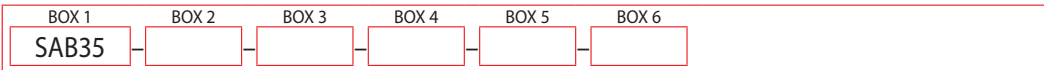
Filtration Rating: 3 μm absolute, Phenolic resin impregnated filter element

Connection: G2 1/2" female thread

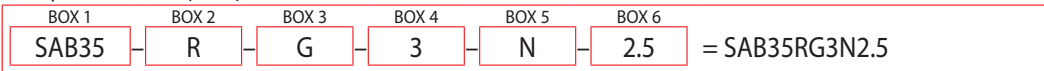
Lid: Removable lid to access fill port

Specifications

How to Build a Valid Model Number for a Schroeder SAB35:



Example: NOTE: One option per box



Filter Model Number Selection

Same Day Shipment Model

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
Model Number	Replacement Element	Connection Type	Filtration Rating	Gauge Option
SAB35	R = Replacement Elements	G = BSPP	3	N = No Gauge
SABS35				
BOX 6				
Connection Size				
2.5 = Female BSPP				
Replacement Elements: R-SAB22-3 (2 per breather)				

NOTE:

Contact factory for lead time and minimum order quantity for other models.

Air Breathers

SAB70 Breather

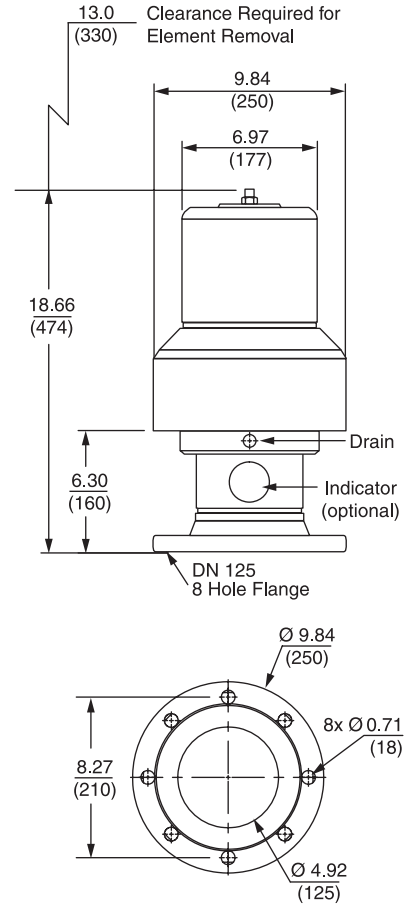
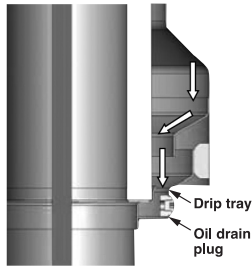


Features and Benefits

- Ideal for large reservoir with high return flow
- Durable steel housing
- Replaceable element
- Unique Oil Mist Trap design
- Optional pressure indicator

Oil Mist Trap

The oil mist in the filter is collected in a "drip tray" and is returned safely to the tank, or it can be drained via an oil drain plug.



Specifications

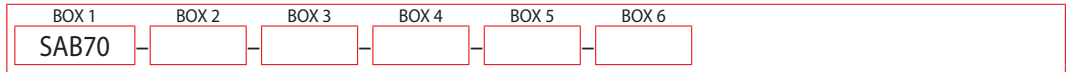
Max. Flow Rate: 340 SCFM / 2560 gpm at .15 psi
528 SCFM / 3960 gpm at .6 psi

Filtration Rating: 2 μ m Excellement[®] Z-Media[™]

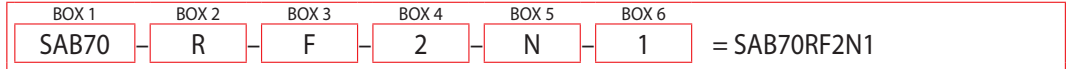
Connection: 8 bolt DN 125 flange

Filter Model Number Selection

How to Build a Valid Model Number for a Schroeder SAB70:



Example: NOTE: One option per box



BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
Model Number	Replacement Element	Connection Type	Filtration Rating	Gauge Option
SAB70	R = Replacement Elements	F = Flanged	2	N = No Gauge W = With Gauge

BOX 6
Connection Size
1 = Standard (DN125)

Replacement Elements: R-SAB70-Z2