

# HYDRAULIC ACCESSORIES

## Products Catalog

Plastic Reservoirs  
(and Tank Straps)

ISO Clean Tank  
Assemblies

Oil Sight Glasses

Indicators

Complete Tank  
Assembly Solutions

Test Points & Equipment

Air & Desiccant Filter  
Breathers



## About Schroeder Industries

Schroeder Industries is a family company of 76 years which manufactures, designs, and markets a complete range of Advanced Fluid Conditioning Solutions®. Headquartered in Leetsdale, PA, we are in the heart of manufacturing country.

Schroeder Brothers Corporation was founded after Bill Schroeder returned from WW2. Bill wrote a letter to his brother Jack, a young engineer, describing an opportunity to distribute an important new product to the mining industry. In the letter, Bill explained that he believed they could build a business around this technology.

Schroeder Brothers Corporation grew rapidly, adding additional mining products and eventually becoming the largest mining equipment distributor in the Appalachia's. Over time, Schroeder began to manufacture hydraulic systems and components for the mines. The systems came first, and with the systems came issues related to contamination.

To this day, underground mining is still one of the most difficult hydraulic system operating environments. With his system experience, Bill realized that there was a critical need for high efficiency filtration. Together with his brothers Jack & Reed, Bill pioneered the development of many hydraulic and lubrication filtration concepts, products, and standards that are still the benchmarks of performance today. Time continued to march on, and Schroeder's business continued to evolve further into a manufacturing company.

Today, Schroeder Industries serves almost every market where high efficiency fluid filtration is required. Our Advanced Fluid Conditioning Solutions® are forged through the real-world experience gained in the world's toughest operating environments.

## Mission Statement

Our success is a product of customer-driven innovation and technically advanced fluid conditioning products and services, in which our people deliver value to our stakeholders, communities and environment.

## Quality Policy

Continuous improvement in our business to ensure a quality product, shipped on time, without compromise.

## Vision

To be the global leader of engineered, fluid conditioning products & services.

## Core Values (F.I.L.T.E.R.S)

- **Fueled:** By the success of our customer.
- **Ingenuity:** Engineered solutions for a complex environment.
- **Lead by example:** Better every day through continuous improvement.
- **Together:** We excel through clear communication & teamwork.
- **Empowering:** Employees to provide exceptional quality & service.
- **Responsiveness:** With determination, we make it happen.
- **Safety:** We pride ourselves on a safe, fun & family-oriented work environment.

### Limitations of Liability

The information contained in the catalog (including, but not limited to, specifications, configurations, drawings, photographs, dimensions and packaging) is for descriptive purposes only. Any description of the products contained in this catalog is for the sole purpose of identifying the products and shall not be deemed a warranty that the products shall conform to such description. No representation or warranty is made concerning the information contained in this catalog as to the accuracy or completeness of such information. Schroeder Industries LLC reserves the right to make changes to the products included in this catalog without notice. A copy of our warranty terms and other conditions of sale are available upon request. A placed order constitutes acceptance of Schroeder's terms and conditions.

Failure, improper selection or improper use of the products and/or systems described herein or related items can cause death, personal injury and property damage.

This catalog and other documentation from Schroeder Industries provides product information for consideration by users possessing technical expertise.

It is important that the user analyze all aspects of the specific application and review the current product information in the current catalog. Due to the variety of operating conditions and applications



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# Corporate Overview

Schroeder Industries, an ISO 9001:2015 certified company, focuses on developing filtration and fluid service products for our customers in the fluid power industry and is proud of our proven track record of providing quality products over the last sixty years. The designs you see in this catalog are the result of thousands of hours of field testing and laboratory research... and decades of experience.



Schroeder was one of the first companies to demonstrate the need for, and benefits of, hydraulic filtration. We pioneered the development of micronic filtration, helping to set performance standards in industrial fluid power systems. As a result, Schroeder is now a leader in filtration and fluid conditioning—and the proof of our expertise lies in our broad mix of unsurpassed products. Our mission statement reflects our continuing commitment to excellence:

## Partnerships

**Innovating products, solutions, processes and services to improve performance and efficiency in industry.**

We design solutions for industry and for the success of our customers by:

- Optimizing the use of technology with applications
- Using an efficient, timely customization process to fill specific customer needs
- Increasing manufacturing capacity and streamlining operations
- Preserving our reputation for reliability
- Expanding globally to support our customers and stay current with new technologies
- Leveraging and sharing our knowledge to meet challenges openly
- Nurturing a creative, cooperative culture committed to the individual and to providing the best solutions for our customers

Our goal is to be your filtration partner. Our expertise in filtration technology, our superior filter and element manufacturing capabilities, and our dedication to customer service and product support are the reasons we're considered experts in Advanced Fluid Conditioning Solutions®.

We are committed to providing the best available filter products to meet necessary cleanliness levels at a competitive price. As a cost-effective quality producer, we can work with your purchasing department to supply contamination control technology or develop long-range pricing programs that can improve your company's bottom line.

Schroeder's web site, [www.schroederindustries.com](http://www.schroederindustries.com), is filled with helpful resources.

Replacing filter elements is simpler than ever before with our Online Cross-Reference Guide to Bestfit® replacement elements. With this user-friendly guide you can match 41,000 filter elements from 150 other manufacturers with appropriate Bestfit® replacements. Click the BestFit® link on our home page or go to the direct link at [www.schroederindustries.info](http://www.schroederindustries.info).

**Visit Us Online...**



# Corporate Overview

## Product Distribution

Schroeder Industries has in place a strategically located international distribution network, supported by our professional and experienced sales and marketing team. Distributor personnel are trained in the important aspects of filter application by Schroeder in training sessions held at our factory and around the globe. The effectiveness of our product and service support is multiplied by utilizing Schroeder's extensive distributor network. All Schroeder Industries distributors meet very strict criteria to enhance our ability to serve the needs of our valued customers.

Schroeder's distributor network includes over 100 distributor locations throughout Europe, the United Kingdom, South Africa, Australia, Asia, North America and South America, so that customers worldwide can rely on Schroeder's exceptional support.

## Manufacturing and Testing

Schroeder Industries' corporate headquarters are located in Leetsdale, PA (USA) with an additional manufacturing facility in Cumberland, MD (USA). Filter housings and diagnostic and specialty products are manufactured at our Pittsburgh plant, while filter elements are manufactured in our Cumberland plant. Both facilities have the skilled workforce and the capacity to meet our customers' needs. Schroeder's research and development center as well as our contamination control laboratory are located at our corporate headquarters.

## An Open Invitation

We invite you to present us with any specific filtration challenge you may experience. Schroeder will design and make filters to meet your specific requirements. To find out more, and/or obtain a quote, call us to speak with a sales representative or technical specialist. They can help determine the optimal filtration strategy for a given system. While the quantity of any product manufactured to fit a customer's needs will determine the economic feasibility of a particular project, in many cases, we can offer modified products in relatively small quantities at competitive prices and short lead times.

Over the years, Schroeder design engineers have encountered virtually every type of hydraulic system. We are proud of our continuing success in providing "value-added products" for our customers, that is, making or modifying our products to meet their specific needs. When customers order products from Schroeder, they are assured of a reliable source of supply, consistent and prompt service, and direct support. Pre and post-technical service is provided to ensure customer satisfaction.

So if you're faced with a filtration dilemma, call us.  
Schroeder Industries: Advanced Fluid Conditioning Solutions®.



# Capabilities

Schroeder Industries offers a complete range of reservoir accessories, rotomolded reservoir subsystems and individual accessory components with unique value-added options. Schroeder's hydraulic accessories product offering consists of air breather (desiccant and phenolic resin impregnated cellulose media), pressure gauges, filler-strainers, fluid level monitors, oil sight glasses, suction strainers, magnetic suction separators, hydraulic test points and rotomolded reservoirs.

Along with the standard offerings, Schroeder Industries has the ability to tailor products into a custom sub-system solution for a customer's specific needs. Schroeder Industries also offers several patent protected technologies in our accessories line we can offer as value added solutions.

Schroeder's continued commitment to developing technically relevant accessories continually expands the portfolio in both breadth as well as in technical complexity. When implementing any of Schroeder Industries accessories products customers can be confident that all products meet Schroeder Industries strict quality control standards.

From advanced technology desiccant breathers to metal fill caps to diagnostic test point and test kits, Schroeder fills the technology gap left by traditional accessory manufacturers.

## Accessories



# Markets Served

Schroeder's products, technical expertise, commitment to research and development, and ongoing improvements in manufacturing enable us to provide products and services that improve performance and efficiency in many major industries, including:



AGRICULTURE



AUTOMOTIVE  
MANUFACTURING



BULK FUEL  
FILTRATION



CHEMICAL  
PROCESSING



CONSTRUCTION



INDUSTRIAL



MACHINE  
TOOL



MARINE



MINING  
TECHNOLOGY



MOBILE  
VEHICLES



OFFSHORE



POWER  
GENERATION



PULP & PAPER



RAILROAD



STEEL  
MAKING



WASTE WATER  
TREATMENT





Section 1:

# COMPLETE TANK PACKAGES

# Reservoir Accessories

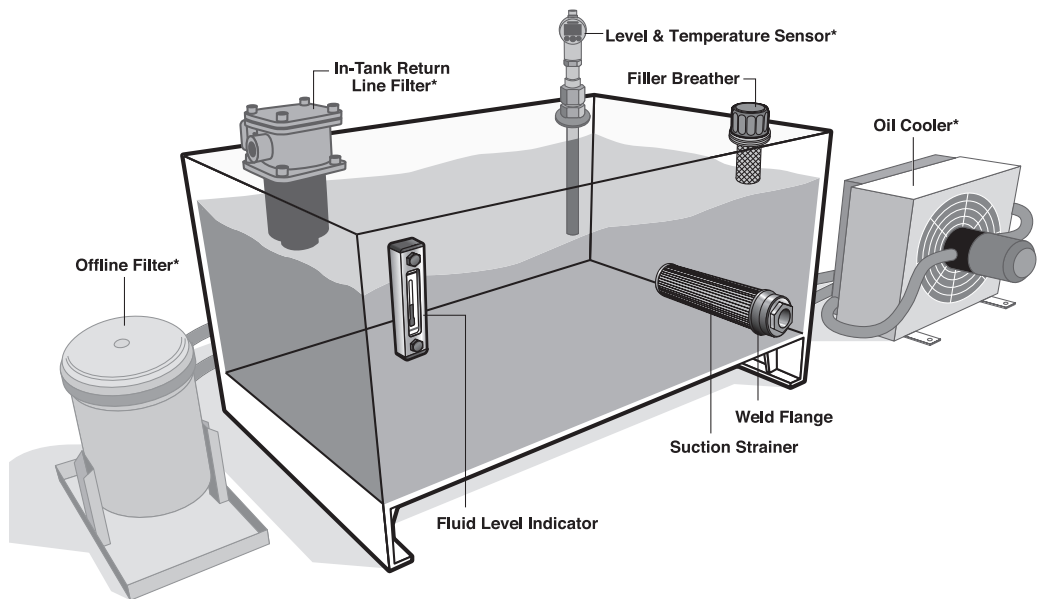
A hydraulic systems' reservoir can play a significant role in the ingress of contamination into the system. Concurrently, the reservoir presents great opportunities to correct the negative fluid conditions. The proper application of Schroeder reservoir accessories will greatly increase a system's cleanliness level. It's good to remember this rule of thumb: "it costs 10 times more to remove contamination from your system than it does to exclude it from your system."

Installing an efficient air breather is critical yet often overlooked when system filtration is considered. In systems operating in dusty atmospheric conditions, the use of an air breather will minimize the ingestion of airborne particles when reservoir levels experience significant change. The sole purpose of an air breather, as with any filtration device, is to reduce the cost of operation. By lowering the rate of ingress, the contamination level of the system will be reduced and the service life of the system fluid filters will be increased.

The fluid replenishment process is another opportunity for contamination to enter the system. Schroeder filler breathers can prevent large contaminants from entering the tank during filling. Most new oil does not meet the cleanliness recommendations of most components within a system when it is delivered from the manufacturer. Removal of the fine particles can be easily accomplished by using Schroeder filter carts. More information regarding filter carts can be found in the filter system catalog.

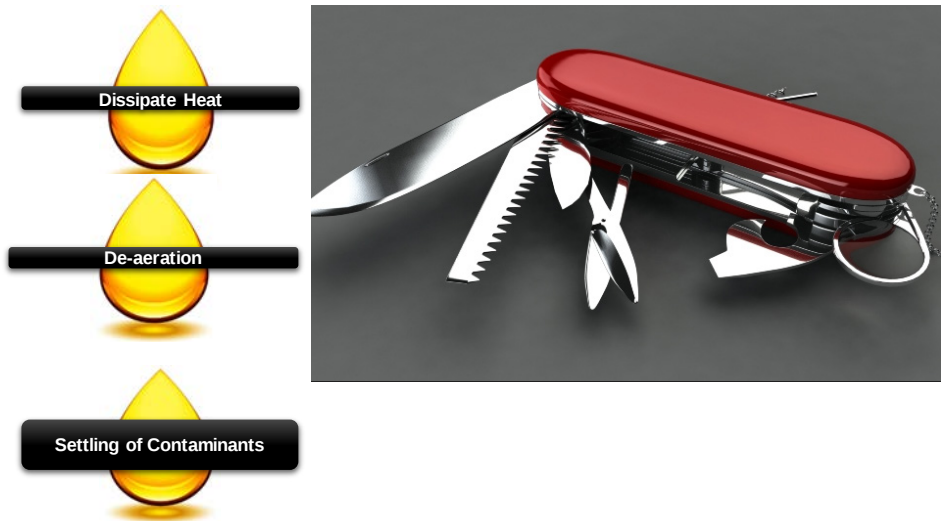
Protecting the pump is an integral step in ensuring system longevity. Installing a suction strainer will stop the larger pieces of unwanted debris from entering the suction line causing catastrophic problems downstream. Schroeder's magnetic suction separators offer unique protection for pumps suction line from all sizes of ferrous particles without starving the pump.

Designed for simple installation on most equipment, Schroeder oil sight glasses provide maintenance and lubrication management professionals a complete and immediate visual oil analysis. Although easy detection and discharge of water contamination are leading benefits, operators can also visually monitor the oil level and condition as discoloration or debris.

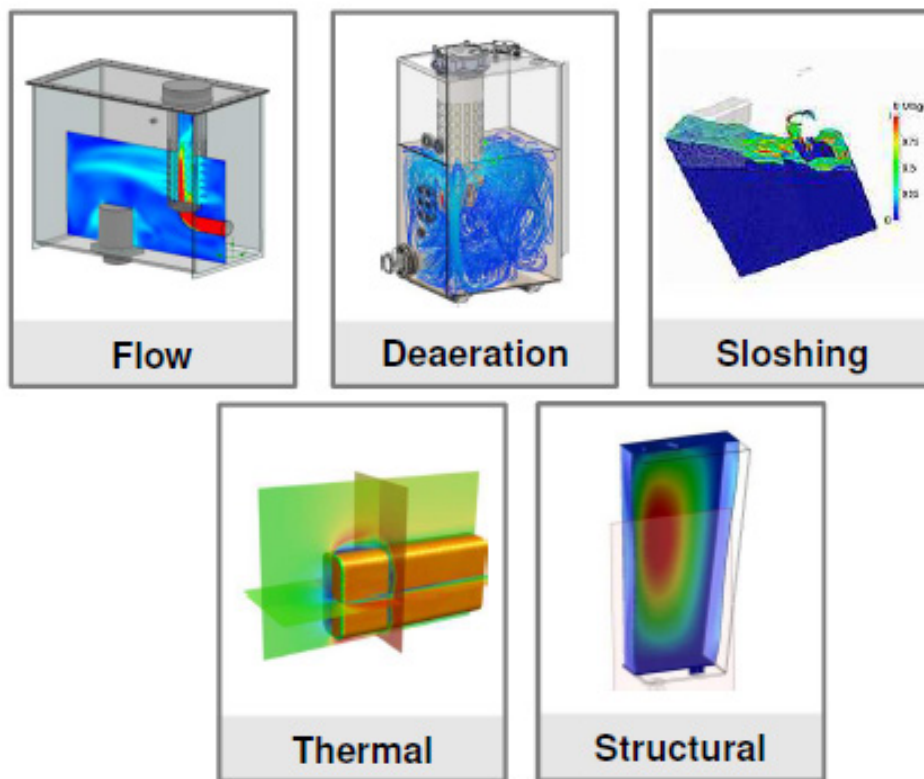


# Tank Optimization - Purpose

A fuel tank is a box, a hydraulic tank is a vital system component with several important functions.



A hydraulic reservoir is more than a container of fluid. If properly designed and configured, a hydraulic tank can improve the performance of the entire hydraulic system in the same manner as other active components. A custom made hydraulic tank can improve the hydraulic circuit in areas such as heat dissipation, de-aeration, and settling of contaminants. More than just storage, an expertly engineered hydraulic tank is a versatile toolbox that will improve efficiency of every component in the circuit.



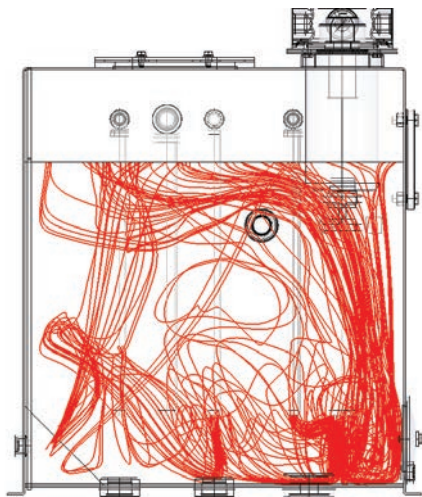
Computer-aided optimization of tank systems

Schroeder Industries ensures every tank we design will perform at the highest level by conducting a series of simulation and analysis before the actual construction. Depending on the customer needs, our engineering team will model the hydraulic reservoir and simulate conditions that can accurately predict application performance in various areas.

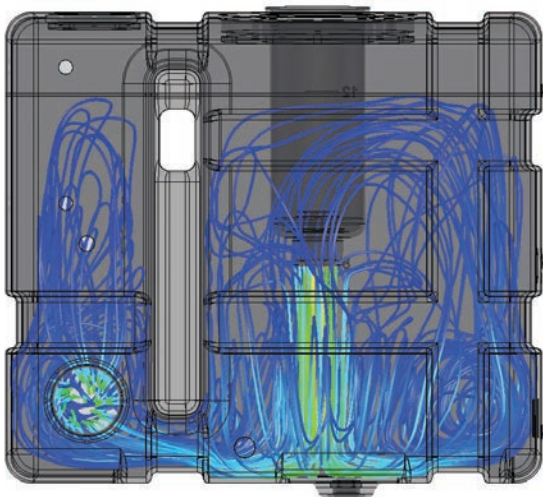
## Stimulation and Analysis

**Fluid Optimization:  
De-Aeration**

Initial Approach: Study of flow trajectory and residence time using single-phase CFD.



Old Tank

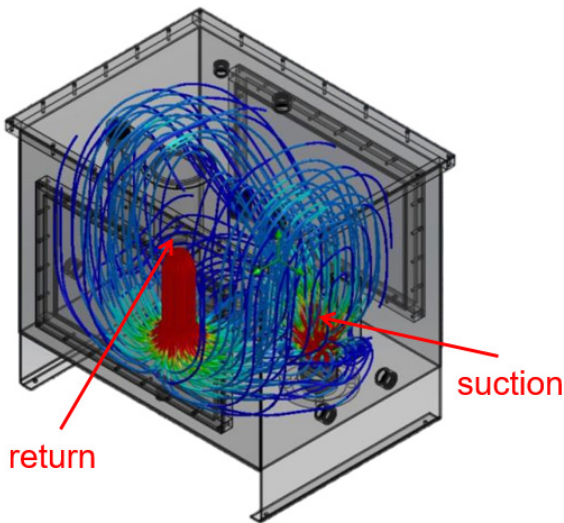
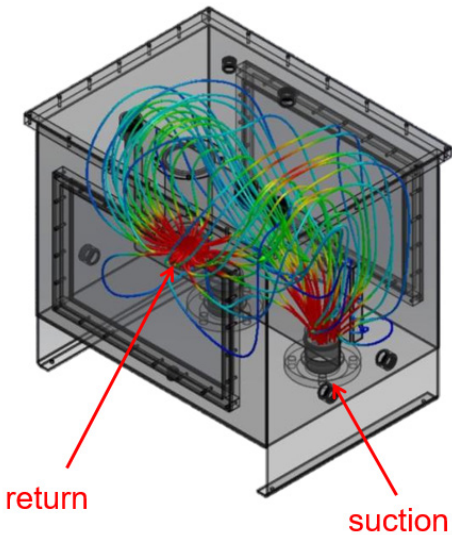


New Tank

An important aspect of tank optimization is maximizing the usage of tank space. A larger tank does not mean better performance if the fluid inside only travels through a small section of the space. By using internal baffles and contours, Schroeder ensures that fluid travels through as much of the tank as possible. This improves space economy by using only the minimally required size for the tank.

Air Residence Time - 5.75 sec

Air Residence Time - 15.25 sec (63% improvement)



Fluid optimization is further assisted by increased dwell time within the tank. Through maximizing the space usage within the tank, we also ensure that fluid spends more time inside the fluid before it passes through. With increased dwell time, the fluid has a chance to go through de-aeration, heat dissipation, and contamination settlement process within the tank.

# Complete Tank Solutions



## Features and Benefits

- Complete hydraulic reservoir solution with accessories like gauges, in-tank filters, and air breathers already installed
- Patented insertion ring for filter head flange mounting prevents leakage
- Patented integrated baffle wall creates settling zone for returning oil (degassing) with simultaneous cooling effect
- Tank is optimized for air and heat removal
- Tested for leakage (no end-user testing is required)
- Tank is certified clean, eliminating time-consuming flushing processes and testing
- Lightweight and cost efficient
- No risk of corrosion
- Available in five (5) performance optimized sizes (4, 7, 12, 18, & 25 gal.)
- Return-line filter options available with GeoSeal® aftermarket retaining elements

TNK4 - 4 Gallons  
TNK7 - 7 Gallons  
TNK12 - 12 Gallons  
TNK18 - 18 Gallons  
TNK25 - 25 Gallons

**100 psi**  
**(7 bar)**  
**Return Line**  
**Filter**

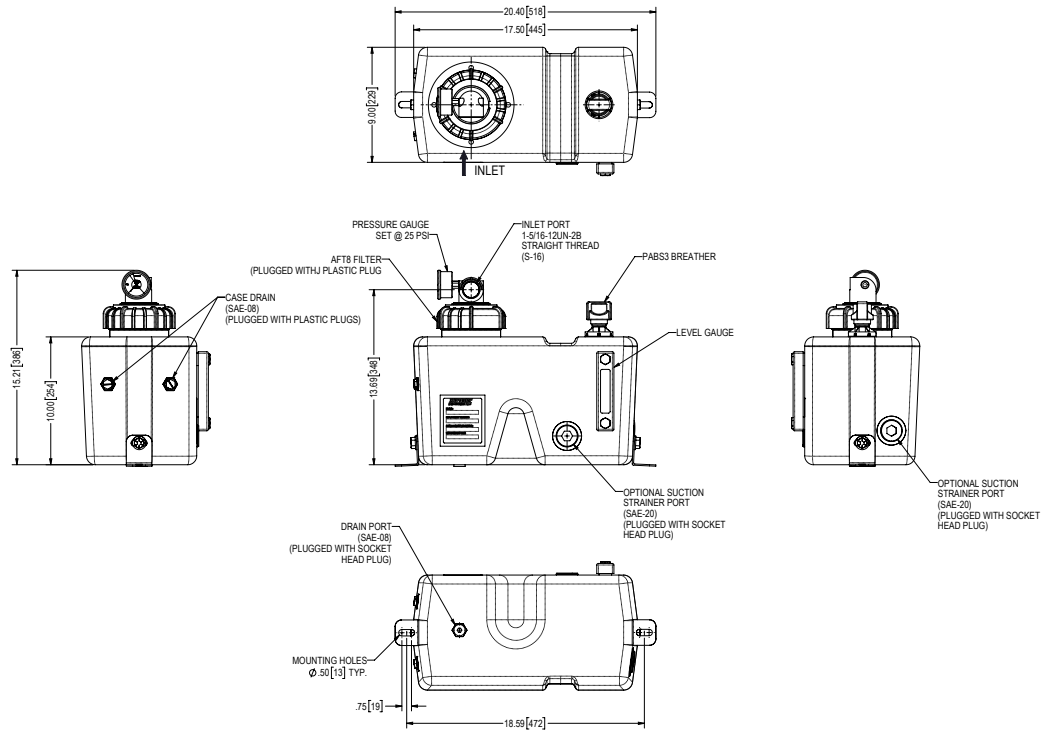
## Specifications

|                                      |                                                                                                                                                                                                                      |                                                        |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| <b>Tank Materials:</b>               | High Density Polyethylene (HDPE)                                                                                                                                                                                     |                                                        |
| <b>Tank Volumes:</b>                 | 4 gal (15L), 7 gal (26L), 12 gal (45L), 18 gal (70L) or 25 gal (100L)                                                                                                                                                |                                                        |
| <b>Operating Temperature:</b>        | High Density Polyethylene (HDPE) - 20°F to 180°F (-29°C to 82°C)<br>Nylon (PA) - 32°F to 240°F (0°C to 116°C)                                                                                                        |                                                        |
| <b>Return Line Filter:</b>           | TNK4: AFT<br>TNK7: MTB<br>TNK12: ZT & GZT                                                                                                                                                                            | TNK18: ZT & GZT<br>TNK25: RT & GRT                     |
| <b>Max. Return Flow:</b>             | TNK4: 25 gpm<br>TNK7: 35 gpm (135 L/min)<br>TNK12: 40 gpm (150 L/min)                                                                                                                                                | TNK18: 40 gpm (150 L/min)<br>TNK25: 75 gpm (284 L/min) |
| <b>Breather:</b>                     | 3 µ phenolic resin impregnated paper element                                                                                                                                                                         |                                                        |
| <b>Suction Strainer:</b>             | 100 µ wire mesh<br>SAE20: 20 gpm<br>SAE24: 30 gpm                                                                                                                                                                    |                                                        |
| <b>Weight of TNK:</b>                | TNK4 (AFT4): 11.5 lbs<br>TNK4 (AFT8): 11.5 lbs<br>TNK7: 16 lbs (7.3 kg)<br>TNK12: 21 lbs (9.7 kg)                                                                                                                    | TNK18: 33 lbs (15 kg)<br>TNK25: 45 lbs (20 kg)         |
| <b>Element Change Clearance:</b>     | TNK4 (AFT4): 5.3" (134mm)<br>TNK4 (AFT8): 8.6" (219 mm)<br>TNK7: 5" (127mm)<br>TNK12: 10" (254mm)                                                                                                                    | TNK18: 10" (254mm)<br>TNK25: 9.5" (241mm)              |
| <b>Ultra Violet Light Rating*:</b>   | HDPE = UV-12<br>Nylon = UV-10                                                                                                                                                                                        |                                                        |
| <b>Filter and Element Selection:</b> | For proper filter and element selection, information and pressure drop calculations, please refer to the individual filters (MTB, ZT, GZT, RT & GRTB) sections in the Schroeder Hydraulic and Lube Catalog (L-2520). |                                                        |

\*UV Rating is determined by the number of years a material can be exposed to direct sunlight and retain a minimum of 50% of its original mechanical properties (ex. High Density Polyethylene with a UV-12 rating would be recommended to be replaced every 12 years if not painted or coated).

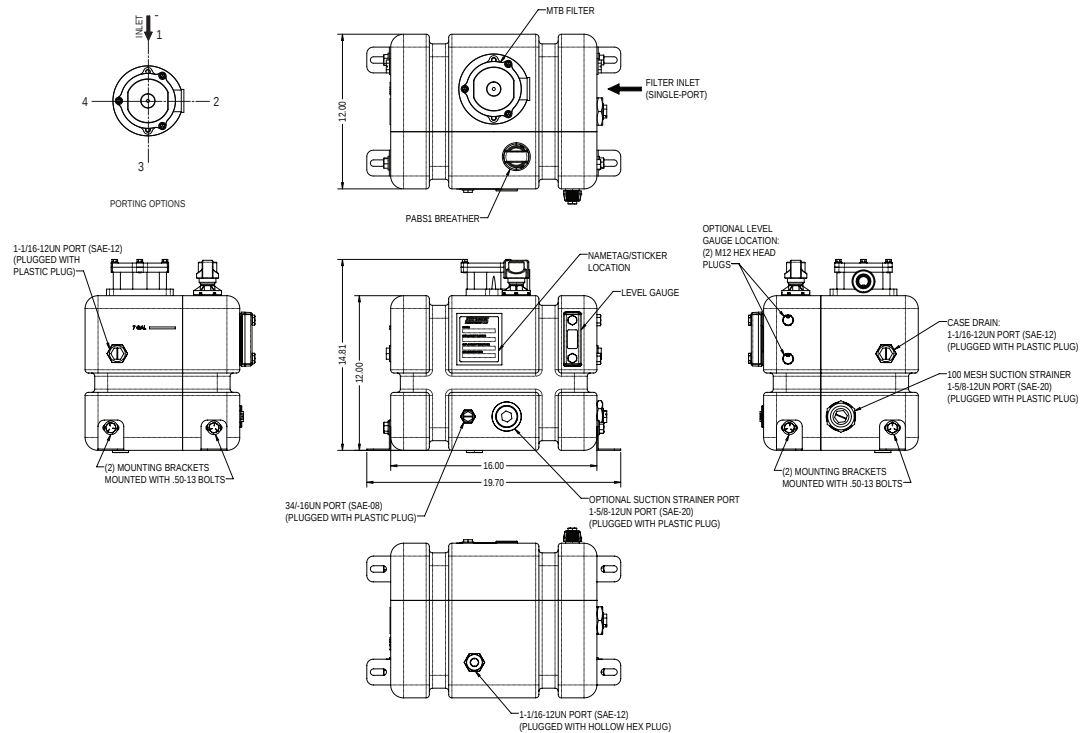
# Complete Tank Solutions

## TNK4

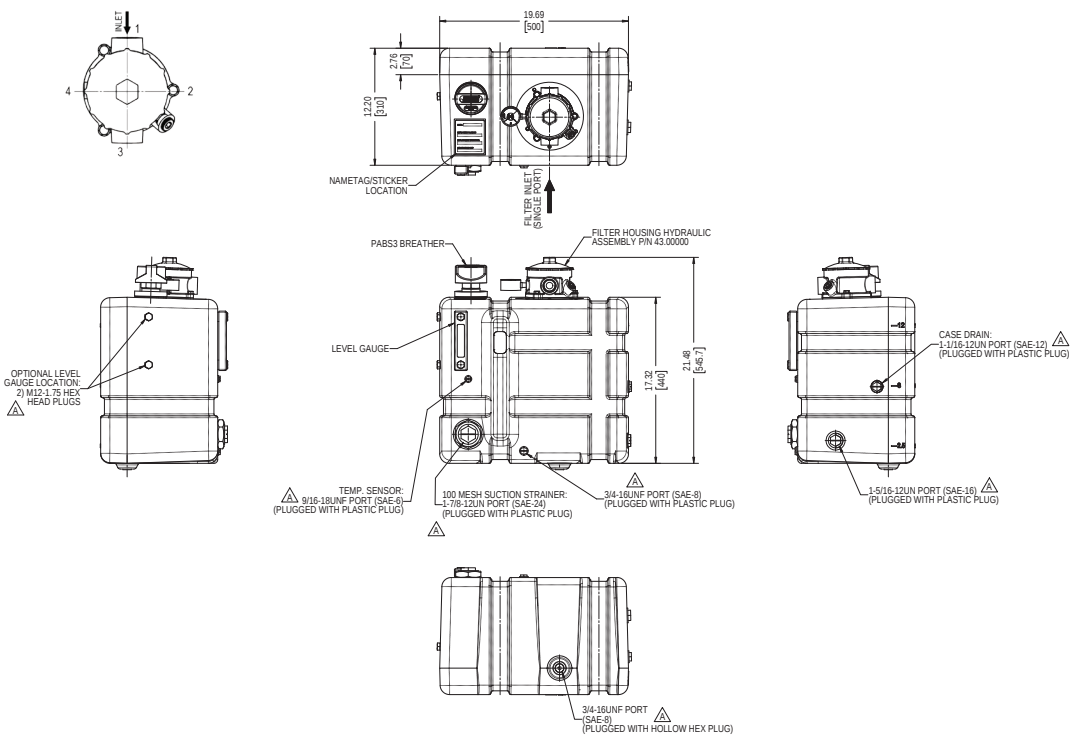


Metric dimensions in [ ].

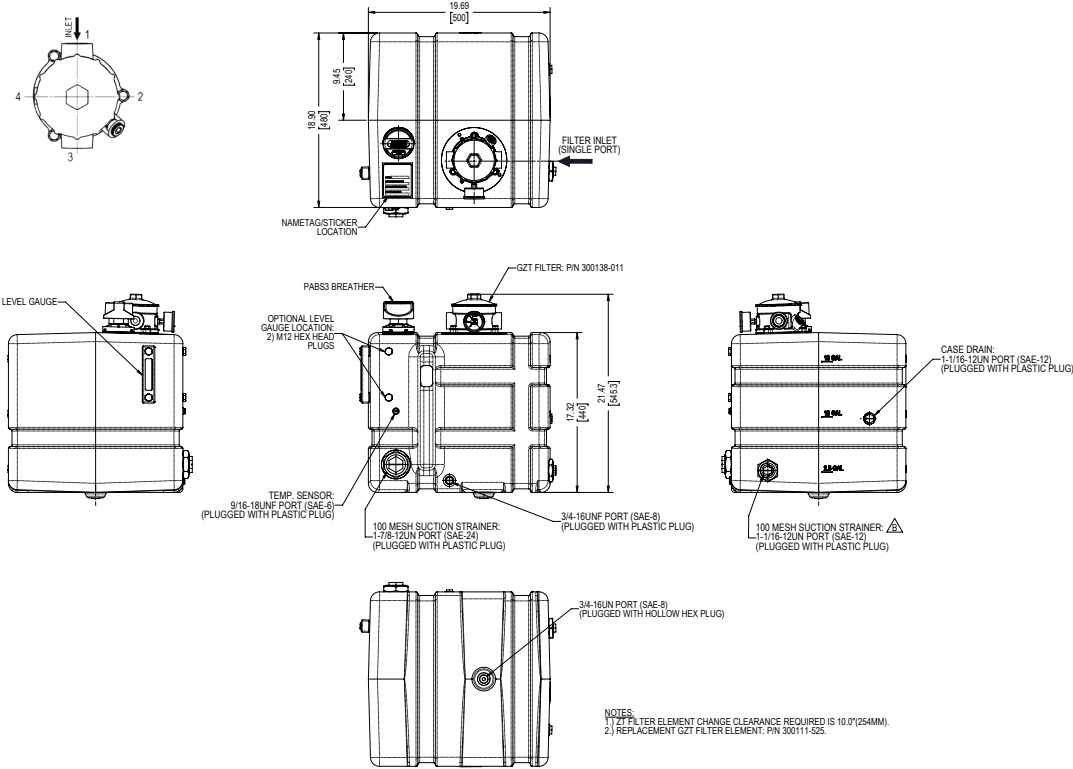
## TNK7



Metric dimensions in [ ].



Metric dimensions in [ ].

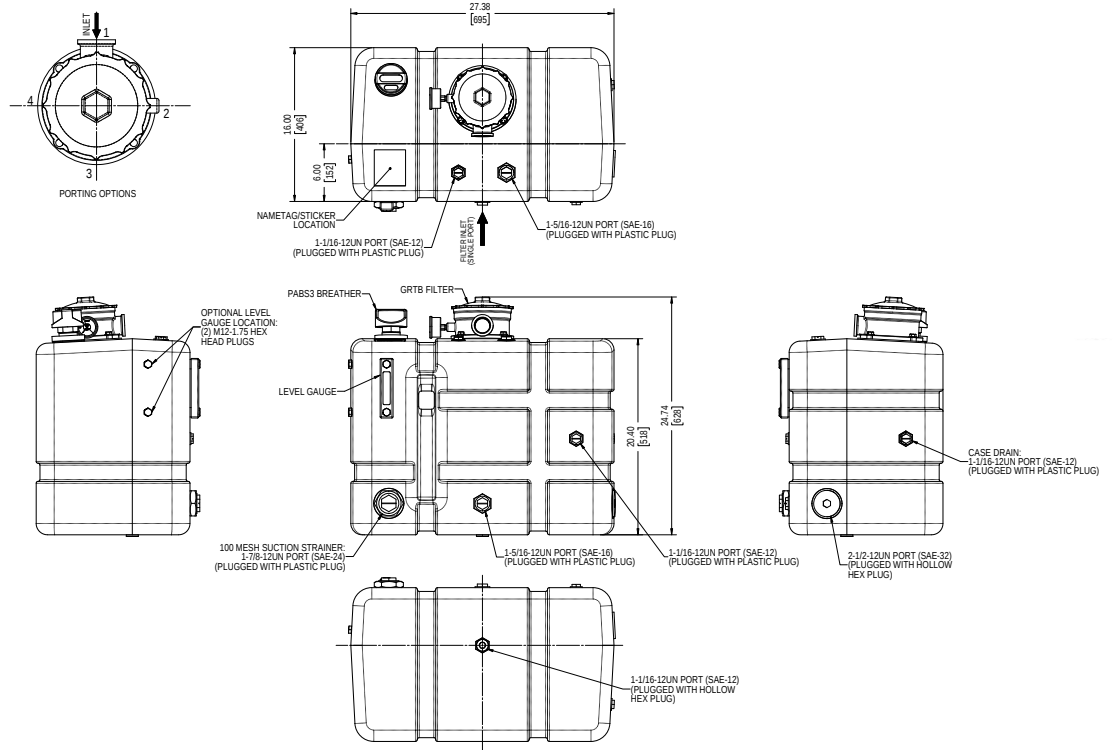


NOTES:  
1.) GZT FILTER ELEMENT CHANGE CLEARANCE REQUIRED IS 10.0"(254MM).  
2.) REPLACEMENT GZT FILTER ELEMENT: PIN 300111-525.

Metric dimensions in [ ].

# Complete Tank Solutions

TNK25



Metric dimensions in [ ].

## Usable Fluid Levels

|       | Middle Level of Gauge (gal) | Top Level of Gauge (gal) |
|-------|-----------------------------|--------------------------|
| TNK4  | 2.6                         | 3.7                      |
| TNK7  | 5.4                         | 6.0                      |
| TNK12 | 10.1                        | 11.5                     |
| TNK18 | 14.8                        | 16.6                     |
| TNK25 | 23.4                        | 26.0                     |

## Torque Specifications

|                                                                                                                                                                                                                     |                                             |                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------|
| SAE-06 PORT: 8ft.-lbs.<br>SAE-08 PORT: 10ft.-lbs.<br>SAE-10 PORT: 20ft.-lbs.<br>SAE-12 PORT: 25ft.-lbs.<br>SAE-16 PORT: 25ft.-lbs.<br>SAE-20 PORT: 28ft.-lbs.<br>SAE-24 PORT: 30ft.-lbs.<br>SAE-32 PORT: 30ft.-lbs. | M12 PORT: 8ft.-lbs.<br>M14 PORT: 10ft.-lbs. | 1/4-20 PORT: 2ft.-lbs.<br>3/8-16 PORT: 6ft.-lbs.<br>1/2-13 PORT: 8ft.-lbs. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------|

\* NOT RECOMMENDED TO EXCEED 30ft.-lbs. TORQUE

# Complete Tank Solutions

## TNK 4

### How to Build a Valid Model Number for a Schroeder TNK4:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 | BOX 9 | BOX 10 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| TNK   |       |       |       |       |       |       |       |       |        |

**Example:** NOTE: Only box 10 may contain more than one option

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5  | BOX 6 | BOX 7 | BOX 8 | BOX 9 | BOX 10 |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|--------|
| TNK   | 4     | HD    | AFT   | 4LKZ10 | S16   | Y2    | F     | S1    | N      |

= TNK4HDAFT4LKZ10S16Y2F51N

BOX 1

| Product Series |
|----------------|
| TNK            |

BOX 2

| Size         |
|--------------|
| 4 = 4 Gallon |

BOX 3

| Material   |
|------------|
| HD = HDPE  |
| PA = Nylon |

BOX 4

| Return Filter |
|---------------|
| AFT           |

BOX 5

| Element Micron Selection       |
|--------------------------------|
| 4LKZ3 = 4" 3 micron Z-Media®   |
| 4LKZ5 = 4" 5 micron Z-Media®   |
| 4LKZ10 = 4" 10 micron Z-Media® |
| 4LKZ25 = 4" 25 micron Z-Media® |
| 8LKZ3 = 8" 3 micron Z-Media®   |
| 8LKZ5 = 8" 5 micron Z-Media®   |
| 8LKZ10 = 8" 10 micron Z-Media® |
| 8LKZ25 = 8" 25 micron Z-Media® |

BOX 6

| Inlet Porting (AFT) |
|---------------------|
| S16 = SAE-16        |
| L16 = 90 Deg SAE-16 |

BOX 7

| Gauge Port Option (Elbow Only)                   |
|--------------------------------------------------|
| N = Plugged                                      |
| Y2 = Tricolor Visual Indicator (Back Mounted)    |
| Y2C = Tricolor Visual Indicator (Bottom Mounted) |
| ES = Electric Switch                             |
| ES1 = Heavy Duty Electric Switch                 |

BOX 8

| Filler/Breather |
|-----------------|
| F = PABS1       |

BOX 9

| Sight Glass           |
|-----------------------|
| S1 = Sight Glass Side |
| N = No Sight Glass    |

BOX 10

| Suction Strainer                      |
|---------------------------------------|
| S = SAE-20, Side - Flow Rate: 25 GPM  |
| F = SAE 20, Front - Flow Rate: 25 GPM |
| N = No Strainer                       |

**Filter  
Model  
Number  
Selection  
For TNK4**

NOTES:

Suction flow rate for the TNK 4 Strainer is 10 GPM.

NOTES:

Box 4. Micron Rating refers to the return filter element rating.

FURTHER INFORMATION:  
Tank Mounting Straps sold as a separate part number, please see next page for configurations and options.

## Filter Model Number Selection For TNK7

### How to Build a Valid Model Number for a Schroeder TNK7:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 | BOX 9 | BOX 10 | BOX 11 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| TNK   |       |       |       |       |       |       |       |       |        |        |

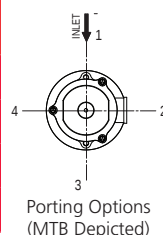
Example: NOTE: Only box 10 may contain more than one option

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 | BOX 9 | BOX 10 | BOX 11 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| TNK   | 7     | HD    | MTB10 | S12   | 3     |       | F     | S1    | S      |        |

= TNK7HDTBZ10S123FS1S

| BOX 1          | BOX 2        | BOX 3                   | BOX 4                                                                                                                                                                                                              |
|----------------|--------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Series | Size         | Material                | Return Filter & Element Micron Selection                                                                                                                                                                           |
| TNK            | 7 = 7 Gallon | HD = HDPE<br>PA = Nylon | <b>MTB</b><br>MTB3 = 3 µm Excellement® Z-Media® (Synthetic)<br>MTB5 = 5 µm Excellement® Z-Media® (Synthetic)<br>MTB10 = 10 µm Excellement® Z-Media® (Synthetic)<br>MTB25 = 25 µm Excellement® Z-Media® (Synthetic) |

| BOX 5                                                                                                      | BOX 6                                          | BOX 7                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inlet Porting (MTB)                                                                                        | Filter Inlet Port Orientation                  | Filter Options                                                                                                                                             |
| P12 = ¾" NPTF<br>P16 = 1" NPTF<br>S12 = SAE-12<br>S16 = SAE-16<br>B12 = ISO 228 G-¾"<br>B16 = ISO 228 G-1" | 1 = Rear<br>2 = Right<br>3 = Front<br>4 = Left | Omit = None<br>Visual<br>Y2C = Bottom-mounted gauge in cap<br>Y5 = Back-mounted gauge in cap<br>Electrical<br>ESC = Electric pressure switch (2 terminals) |



| BOX 8           | BOX 9                                                                 |
|-----------------|-----------------------------------------------------------------------|
| Filler/Breather | Sight Glass                                                           |
| F = PABS1       | S1 = Sight Glass Side<br>S2 = Sight Glass Front<br>N = No Sight Glass |

| BOX 10                                                                                            | BOX 11                              |
|---------------------------------------------------------------------------------------------------|-------------------------------------|
| Suction Strainer                                                                                  | Options                             |
| S = SAE-20, Side - Flow Rate: 25 GPM<br>F = SAE-20, Front - Flow Rate: 25 GPM<br>N = No Strainers | Omit = No Feet<br>M = Mounting Feet |

#### NOTES:

Box 4. Micron Rating refers to the return filter element rating.  
 Box 6. MTB option offers single porting option only. Please align single port with corresponding directional number.

#### FURTHER INFORMATION:

Tank Mounting Straps sold as a separate part number, please see next page for configurations and options.

### How to Build a Valid Model Number for a Schroeder TNK12 & TNK18:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 | BOX 9 | BOX 10 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| TNK   |       |       |       |       |       |       |       |       |        |

**Example:** NOTE: Only box 10 may contain more than one option

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 | BOX 9 | BOX 10 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| TNK   | 12    | HD    | ZT10  | S     | 3     | Y2    | F     | S2    | S      |

= TNK12HDZT10S3Y2FS2S

| BOX 1                 | BOX 2                            | BOX 3                   | BOX 4                                                                                                                                                                                                                                                                                                   |
|-----------------------|----------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Series</b> | <b>Size</b>                      | <b>Material</b>         | <b>Return Filter &amp; Element Micron Selection</b>                                                                                                                                                                                                                                                     |
| TNK                   | 12 = 12 Gallon<br>18 = 18 Gallon | HD = HDPE<br>PA = Nylon | <b>ZT/GZT (GeoSeal®)</b><br>ZT1/GZT1 = 1 µm Excellement® Z-Media® (Synthetic)<br>ZT3/GZT3 = 3 µm Excellement® Z-Media® (Synthetic)<br>ZT5/GZT5 = 5 µm Excellement® Z-Media® (Synthetic)<br>ZT10/GZT10 = 10 µm Excellement® Z-Media® (Synthetic)<br>ZT25/GZT25 = 25 µm Excellement® Z-Media® (Synthetic) |

| BOX 5                                                                                                            | BOX 6                                          |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| <b>Inlet Porting (ZT/GZT)</b>                                                                                    | <b>Filter Inlet Port Orientation</b>           |
| P = 1" NPTF<br>PP = Dual 1" NPTF<br>S = SAE-16<br>SS = Dual SAE-16<br>B = ISO 228 G-1"<br>BB = Dual ISO 228 G-1" | 1 = Rear<br>2 = Right<br>3 = Front<br>4 = Left |

| BOX 7                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Filter Options</b>                                                                                                                                                                                                                              |
| Omit = None<br>D = Diffuser<br>Visual<br>Y2 = Back-mounted tricolor gauge<br>Y2C = Bottom-mounted gauge in cap<br>Y5 = Back-mounted gauge in cap<br>Electrical<br>ES = Electric switch<br>ES1 = Heavy-duty electric switch with conduit connection |

| BOX 8                  |
|------------------------|
| <b>Filler/Breather</b> |
| F = PABS3              |

| BOX 9                                                                 |
|-----------------------------------------------------------------------|
| <b>Sight Glass</b>                                                    |
| S1 = Sight Glass Side<br>S2 = Sight Glass Front<br>N = No Sight Glass |

| BOX 10                                                                                 |
|----------------------------------------------------------------------------------------|
| <b>Suction Strainer</b>                                                                |
| S = SAE-20, 100 Mesh Strainer (25 GPM Flow Rate)<br>N = No Strainer / SAE-32 Open Port |
| <b>For TNK18 Only</b>                                                                  |
| B = SAE-12 Flow Rate: 10 GPM<br>SAE-24 Flow Rate: 25 GPM                               |

Porting Options (ZT Depicted)

### Filter Model Number Selection For TNK12 & TNK18

#### NOTES:

Box 4. Micron Rating refers to the return filter element rating.

**FURTHER INFORMATION:**  
Tank Mounting Straps sold as a separate part number, please see next page for configurations and options.

## Filter Model Number Selection For TNK25

### How to Build a Valid Model Number for a Schroeder TNK25:

|       |       |       |       |        |        |        |        |       |       |       |        |
|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|--------|
| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5A | BOX 5B | BOX 6A | BOX 6B | BOX 7 | BOX 8 | BOX 9 | BOX 10 |
| TNK   |       |       |       |        |        |        |        |       |       |       |        |

**Example:** NOTE: Only box 10 may contain more than one option

|       |       |       |       |        |        |        |        |       |       |       |        |
|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|--------|
| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5A | BOX 5B | BOX 6A | BOX 6B | BOX 7 | BOX 8 | BOX 9 | BOX 10 |
| TNK   | 25    | HD    | RT10  | S      |        | 3      |        | Y2    | F     | S2    | R      |

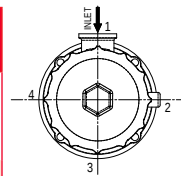
= TNK25HDRT10S3Y2FS2R

| BOX 1          | BOX 2          | BOX 3                   |
|----------------|----------------|-------------------------|
| Product Series | Size           | Material                |
| TNK            | 25 = 25 Gallon | HD = HDPE<br>PA = Nylon |

Choose BOX 5A/6A or 5B/6B

| BOX 5A               |
|----------------------|
| Inlet Porting (GRTB) |
| P = 1.25" NPT        |
| S = SAE-20           |
| B = ISO 228 G-1.25"  |

| BOX 6A                        |
|-------------------------------|
| Filter Inlet Port Orientation |
| 1 = Rear                      |
| 2 = Right                     |
| 3 = Front                     |
| 4 = Left                      |

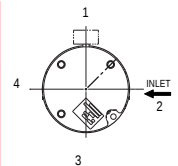


Porting Options (GRTB Depicted)

| BOX 4                                                                                                          |
|----------------------------------------------------------------------------------------------------------------|
| Return Filter & Element Micron Selection                                                                       |
| GRTB/RT/GRT (G= GeoSeal®)                                                                                      |
| GRTB1/RT1/GRT1 = 1 µm Excellement® Z-Media® (Synthetic)                                                        |
| GRTB3/RT3/GRT3 = 3 µm Excellement® Z-Media® (Synthetic)                                                        |
| GRTB5/RT5/GRT5 = 5 µm Excellement® Z-Media® (Synthetic)                                                        |
| GRTB10/RT10/GRT10 = 10 µm Excellement® Z-Media® (Synthetic)                                                    |
| GRTB25/RT25/GRT25 = 25 µm Excellement® Z-Media® (Synthetic)                                                    |
| Filters chosen here, go to the corresponding inlet porting options in either Box 5A (GRTB) or Box 5B (RT/GRT). |

| or BOX 5B                              |                                        |                               |
|----------------------------------------|----------------------------------------|-------------------------------|
| Inlet Porting (RT/GRT) Port A          | Inlet Porting (RT/GRT) Port B          | Inlet Porting (RT/GRT) Port C |
| N = None                               | N = None                               | N = None                      |
| P16 = 1" NPTF                          | P16 = 1" NPTF                          | P2 = 1/8" NPTF                |
| P20 = 1 1/4" NPTF                      | P20 = 1 1/4" NPTF                      | P16 = 1" NPTF                 |
| P24 = 1 1/2" NPTF                      | P24 = 1 1/2" NPTF                      | S16 = SAE-16                  |
| P32 = 2" NPTF                          | P32 = 2" NPTF                          |                               |
| S16 = SAE-16                           | S16 = SAE-16                           |                               |
| S20 = SAE-20                           | S20 = SAE-20                           |                               |
| S24 = SAE-24                           | S24 = SAE-24                           |                               |
| S32 = SAE-32                           | S32 = SAE-32                           |                               |
| F20 = 1 1/4" SAE 4-bolt flange Code 61 | F20 = 1 1/4" SAE 4-bolt flange Code 61 |                               |
| F24 = 1 1/2" SAE 4-bolt flange Code 61 | F24 = 1 1/2" SAE 4-bolt flange Code 61 |                               |
| F32 = 2" SAE 4-bolt flange Code 61     | F32 = 2" SAE 4-bolt flange Code 61     |                               |
| B24 = ISO 228 G-1/2"                   | B24 = ISO 228 G-1/2"                   |                               |

| BOX 6B                        |
|-------------------------------|
| Filter Inlet Port Orientation |
| 1 = Rear                      |
| 2 = Right                     |
| 3 = Front                     |
| 4 = Left                      |



Porting Options (RT/GRT Depicted)

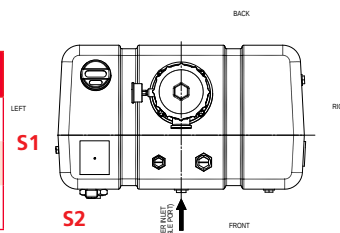
| BOX 7                                                    |
|----------------------------------------------------------|
| Filter Options                                           |
| Omit = None                                              |
| D = Diffuser                                             |
| Visual                                                   |
| Y2 = Back-mounted tricolor gauge                         |
| Y2C = Bottom-mounted gauge in cap                        |
| Y5 = Back-mounted gauge in cap                           |
| Electrical                                               |
| ES = Electric switch                                     |
| ES1 = Heavy-duty electric switch with conduit connection |

#### NOTES:

Box 4. Micron Rating refers to the return filter element rating.  
\*Box 7. Y2C and Y5 options for RT/GRT only.

FURTHER INFORMATION:  
Tank Mounting Straps sold as a separate part number, please see next page for configurations and options.

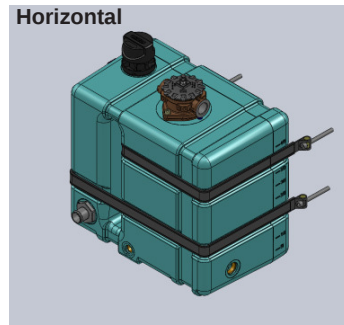
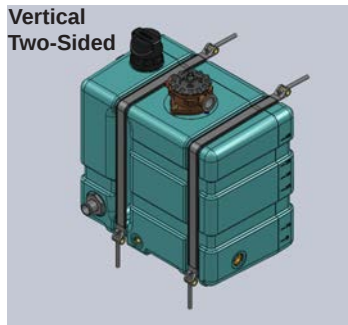
| BOX 8           | BOX 9                  |
|-----------------|------------------------|
| Filler/Breather | Sight Glass            |
| F = PABS1       | S1 = Sight Glass Side  |
|                 | S2 = Sight Glass Front |
|                 | N = No Sight Glass     |



| BOX 10                                                            |
|-------------------------------------------------------------------|
| Options                                                           |
| N = No Suction Strainer                                           |
| R = SAE-24, 100 Mesh Strainer on front side<br>Flow Rate: 25 GPM  |
| B = SAE-24, 100 Mesh Strainer on both sides<br>(25 GPM Flow Rate) |

# Complete Tank Solutions

Mobile applications have unique requirements for hydraulic components. Often, these components need to be small, compact and as lightweight as possible. Making sure these reservoirs are secure is often overlooked. Schroeder Industries has taken the steps to ensure that customers have all the tools necessary to securely operate their mobile equipment. Schroeder's Plastic Tank (TNK) Reservoir, a money and time-saving solution with an integrated return filter and accessories in one compact package, also includes mounting straps. These mounting straps have been developed to assure a safe and secure connection to the frame or chassis of any mobile vehicle. These straps are offered in three configurations for both sizes of the Plastic Tank in a rubber coated steel strap.



## Plastic Tank Strap Arrangement Introduction

**Mounting Possibility**  
Represents 12, 18 & 25 Gallon Strap Locations

| TNK7 Straps*      |        |                  |        |
|-------------------|--------|------------------|--------|
| Vertical Overhead | 443635 | Horizontal Upper | 444066 |

| TNK12 Straps*      |        |                  |        |
|--------------------|--------|------------------|--------|
| Vertical Overhead  | 443868 | Horizontal Upper | 444066 |
| Vertical Two-Sided | 443889 | Horizontal Lower | 444185 |

| TNK18 Straps*      |         |                  |         |
|--------------------|---------|------------------|---------|
| Vertical Overhead  | 3054998 | Horizontal Upper | 444490  |
| Vertical Two-Sided | 444183  | Horizontal Lower | 3521866 |

| TNK25 Straps*      |         |                  |         |
|--------------------|---------|------------------|---------|
| Vertical Overhead  | 4231789 | Horizontal Upper | 444490  |
| Vertical Two-Sided | 444183  | Horizontal Lower | 4389641 |

\*Straps are not sold in sets. Each part number designates one strap.

## Ordering Information:

## Description

Schroeder Industries FTC (Filter/ Tank/ Cooler) integration is a fluid conditioning unit that cuts down on the use of hydraulic oil. With our advanced de-aeration filter, this package functions in the footprint of a 25 gallon reservoir.



## Features and Benefits

- Optimized 7 gallon reservoir
- Cooler with up to 15hp of heat rejection
- Easily mounts to Truck Frame
- Patent pending De-aeration AFT Filter
- Complete Package to fit in a 25-gallon reservoir footprint
- Hydraulic or DC Fan Motor Available



## Markets Served

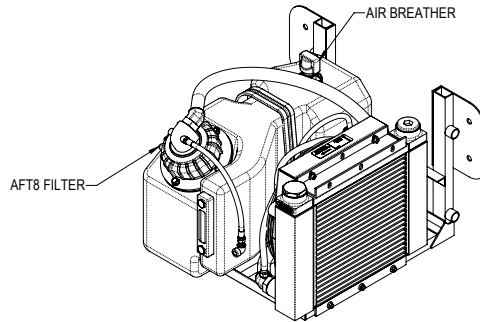
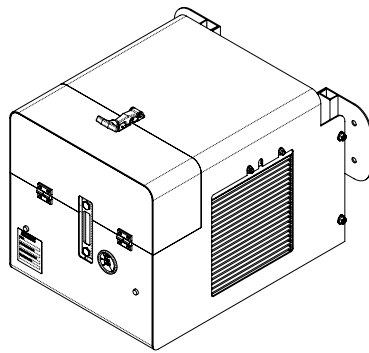
- Automotive
- Environmental
- Forestry
- Industrial
- Machine Tools
- Mobile Vehicles
- Refuse

## Specifications

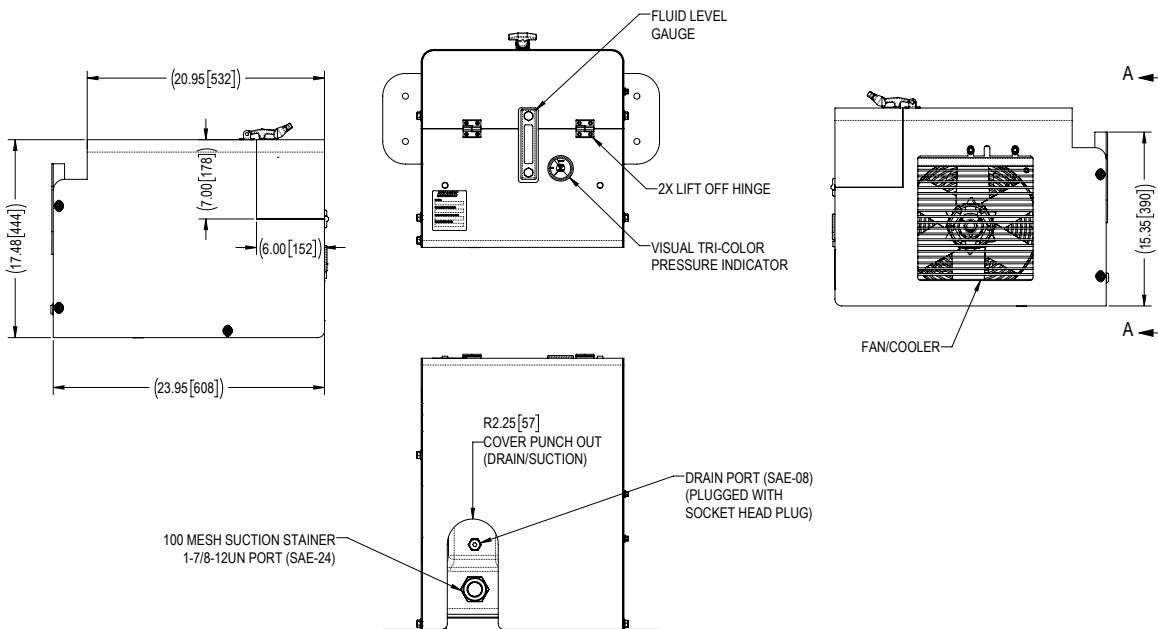
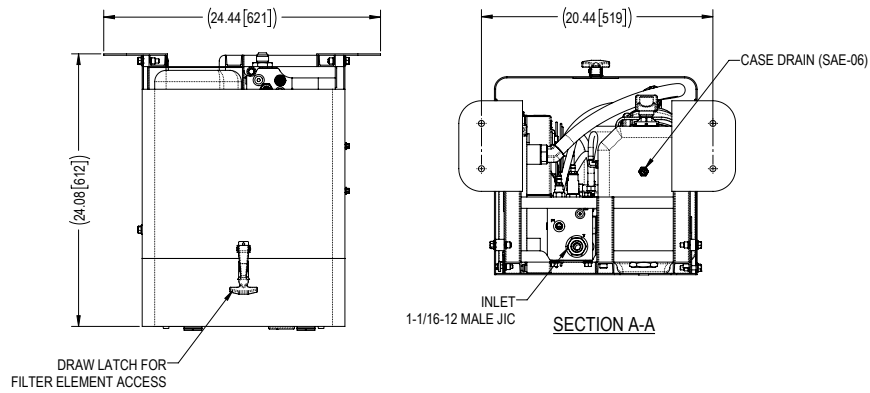
|                                   |                                                                                                                                           |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tank Material:</b>             | High Density Polyethylene (HDPE), Nylon (PA)                                                                                              |
| <b>Tank Volume:</b>               | 7 Gallon (26L)                                                                                                                            |
| <b>Operating Temperature:</b>     | High Density Polyethylene (HDPE) - 20°F to 180°F (-29°C to 82°C)<br>Nylon (PA) - 32°F to 240°F (0°C to 116°C)                             |
| <b>Return Line Filter:</b>        | AFT Filter with either 4" or 8" element lengths                                                                                           |
| <b>Max Return Flow:</b>           | 40 GPM                                                                                                                                    |
| <b>Breather:</b>                  | 3 μ phenolic resin impregnated paper element                                                                                              |
| <b>Suction Strainer:</b>          | 100 Mesh Strainer                                                                                                                         |
| <b>Weight:</b>                    | Contact Factory                                                                                                                           |
| <b>Element Change Clearance:</b>  | 8" Element with Cover = 3.25"<br>8" Element with No Cover = 5.00"<br>4" Element with Cover = 0.50"<br>4" Element with No Cover = 2.00"    |
| <b>Ultra Violet Light Rating:</b> | HDPE = UV-12<br>Nylon = UV-10                                                                                                             |
| <b>Cooler Material:</b>           | Housing: welded steel<br>Heat exchanger: aluminum, brazed bar-and-plate<br>Fan: plastic<br>Motor: aluminum housing, steel gears and shaft |
| <b>Max Cooler Pressure:</b>       | 230 psi (16 bar)                                                                                                                          |
| <b>Fan Noise Level:</b>           | 69 dBa @ 1 meter                                                                                                                          |

## 7.5 GAL FTC UNIT

N (SAE-06)



INTERNAL VIEW



## Filter Model Number Selection For FTC

### How to Build a Valid Model Number for a Schroeder FTC:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 | BOX 9 | BOX 10 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| FTC   |       |       |       |       |       |       |       |       |        |

**Example:** NOTE: Only box 10 may contain more than one option

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 | BOX 9 | BOX 10 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| FTC   | 7     | HD    | 4LKZ5 | Y2    | FSA   | S     | ELD3  | 12    |        |

= FTC7HD4LKZ5Y2FSAELD312

| BOX 1      | BOX 2            | BOX 3                   | BOX 4                                                                                                                                                                | BOX 5                                                                                                                                                                                                     |
|------------|------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FTC</b> | <b>Tank Size</b> | <b>Material</b>         | <b>Return Filter and Element Micron Selection</b>                                                                                                                    | <b>Filter Indicator</b>                                                                                                                                                                                   |
| FTC        | 7 = 7 Gallon     | HD = HDPE<br>PA = Nylon | 4LKZ5 = 5 micron, 4" element (20 GPM)<br>4LKZ10 = 10 micron, 4" element (20 GPM)<br>8LKZ5 = 5 micron, 8" element (40 GPM)<br>8LKZ10 = 10 micron, 8" element (40 GPM) | Y2 = Tricolor visual indicator<br>ES = Electrical Indicator<br>ES1 = Heavy Duty Electrical Switch<br>ES2 = Heavy-duty electric switch with conduit connection<br>ES3 = Electric switch with DIN connector |

| BOX 6                                          | BOX 7                                    | BOX 8                                                                                              | BOX 9                                                        |
|------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| <b>Sight Glass</b>                             | <b>Suction Strainer</b>                  | <b>Cooler</b>                                                                                      | <b>Cooler Voltage</b>                                        |
| FSA = FSA Sight Glass<br>FSK = FSK Sight Glass | S = 100 Mesh Strainer<br>N = No Strainer | ELD 3 = DC motor with 15 HP Heat Rejection<br>ELH 3 = Hydraulic Motor with 22 HP of Heat Rejection | 12 = 12 volt DC<br>24 = 24 volt DC<br>Omit = Hydraulic Motor |

| BOX 10                     |
|----------------------------|
| <b>Cover</b>               |
| Omit = Include<br>N = None |

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

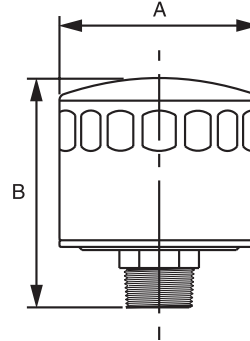
Schroeder offers high quality breathers to effectively combat the ingress of airborne contamination and moisture, therefore increasing the efficiency and reliability of the system.

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

### 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

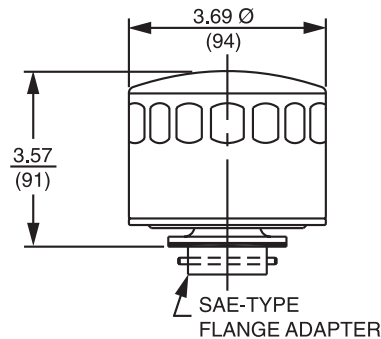


| Model Number                | A          | B          | Adapter Type                     | Minimal Micron Retention | Max Flow Rate | Air Flow/psi Drop                           |
|-----------------------------|------------|------------|----------------------------------|--------------------------|---------------|---------------------------------------------|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

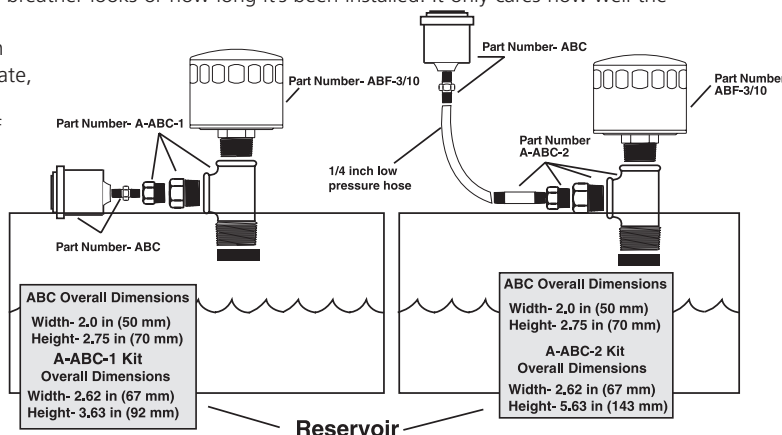
SCFM = Standard Cubic Feet per Minute

**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

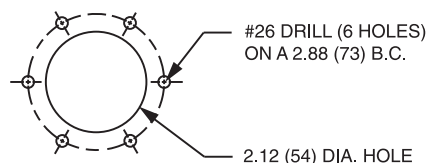
ABF-S40-S  
ABF-S40-S6

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

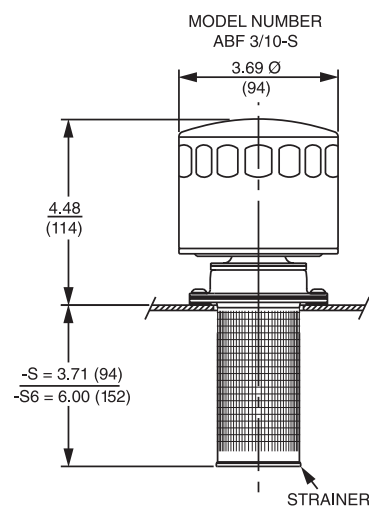
| Model Number              | Adapter Type    | Minimal Micron Retention | Max Flow Rate | Air Flow/psi Drop                            |
|---------------------------|-----------------|--------------------------|---------------|----------------------------------------------|
| ABF-3/10-S<br>ABF-3/10-S6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

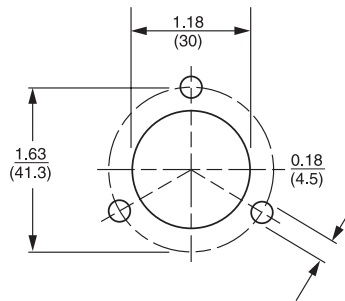
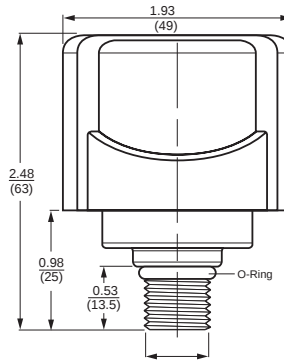
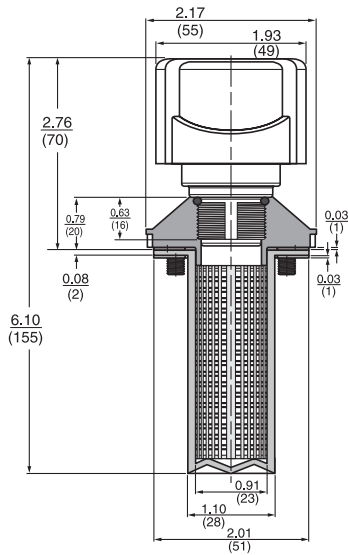


MOUNTING REQUIREMENT



## 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



Suction  
Separators  
and  
Strainers

Oil Sight  
Glasses

## PABS1 Breather



Max. Flow Rate: 7 SCFM / 51 gpm at .15 psi  
13 SCFM / 100 gpm at .6 psi

Filtration Rating: 3  $\mu$ m absolute

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

## Specifications

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

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 |
|-------|-------|-------|-------|-------|-------|-------|
| PAB1  |       |       |       |       |       |       |

**Example:** NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 |
|-------|-------|-------|-------|-------|-------|-------|
| PAB1  |       | P     | 3     | N     | .5    | R6    |

= PAB1P3N.5R6

## 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

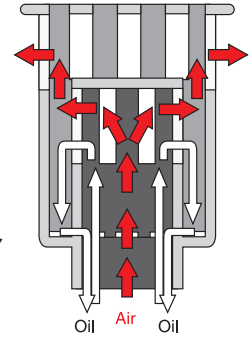
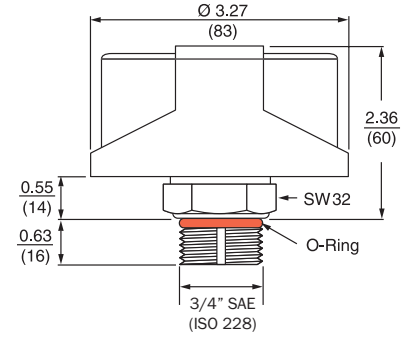
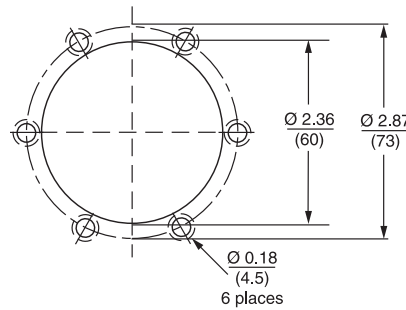
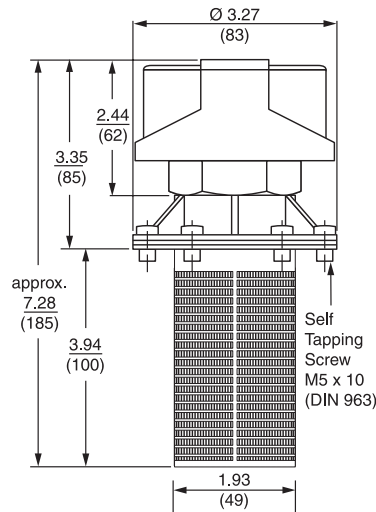


## PABS3 Breather



### 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  $\mu$ 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:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 |
|-------|-------|-------|-------|-------|-------|-------|
| PAB3  |       |       |       |       |       |       |

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 |
|-------|-------|-------|-------|-------|-------|-------|
| PAB3  |       | P     | 3     | N     | .75   | R6    |

= PAB3P3N.75R6

| 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

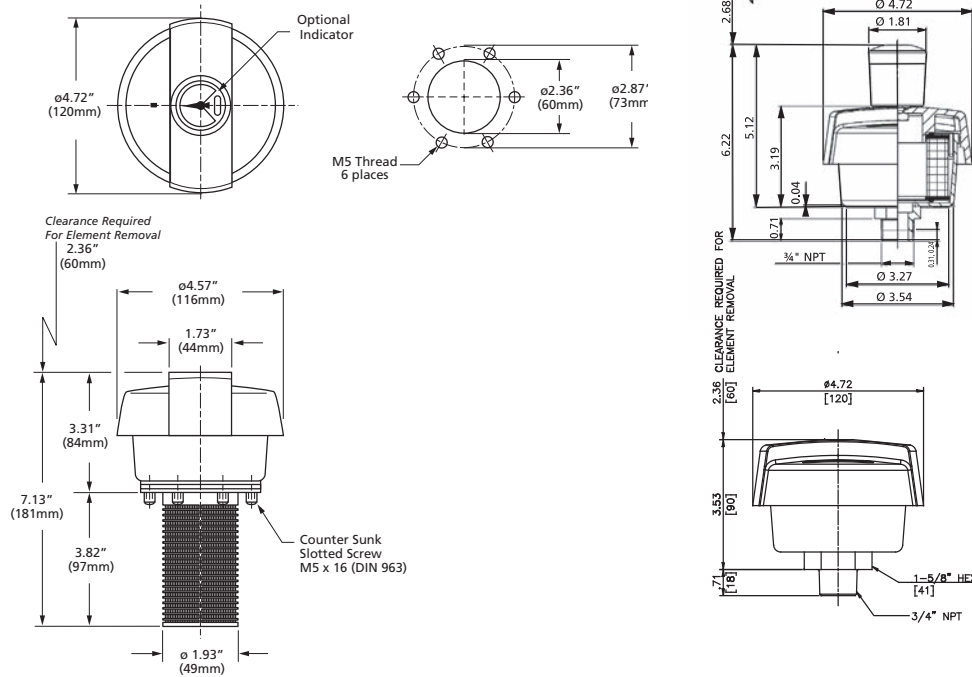
Replacement Elements: PAB3M3N42

NOTE:

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

## 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

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  $\mu$ m

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:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 |
|-------|-------|-------|-------|-------|-------|
| PABR7 |       |       |       |       |       |

**Example:** NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 |
|-------|-------|-------|-------|-------|-------|
| PABR7 | P     | 3     | N     | .75   | AS    |

= PABR7P3N.75AS

| 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

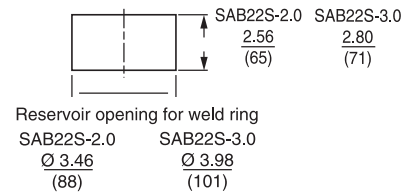
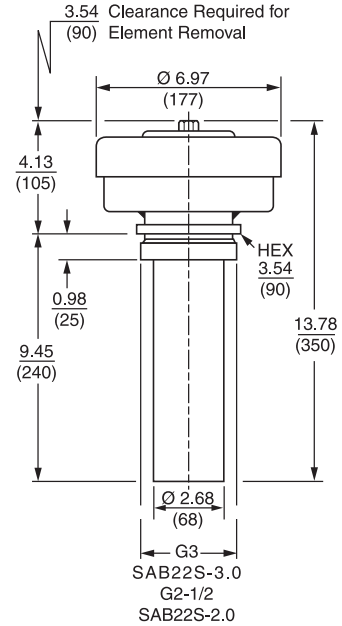
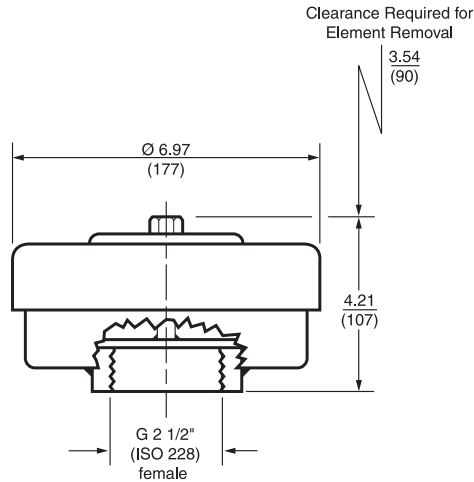


## SABS22 Breather



### 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:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 |
|-------|-------|-------|-------|-------|-------|
| SAB22 |       |       |       |       |       |

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 |
|-------|-------|-------|-------|-------|-------|
| SAB22 | R     | G     | 3     | N     | 2.5   |

= SAB22RG3N2.5

| 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         |              |

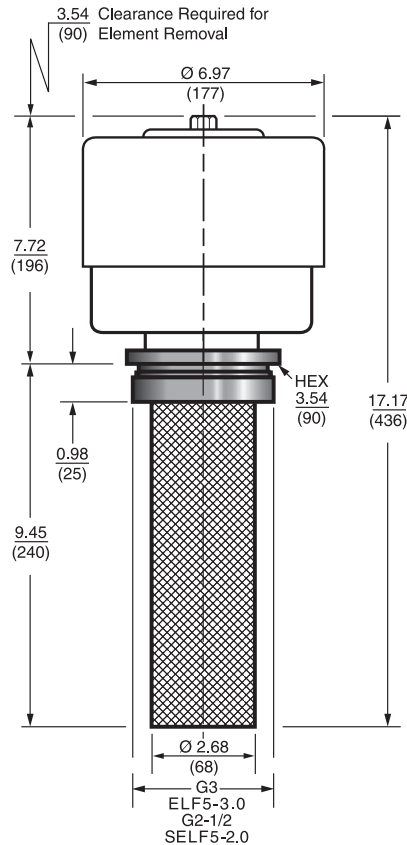
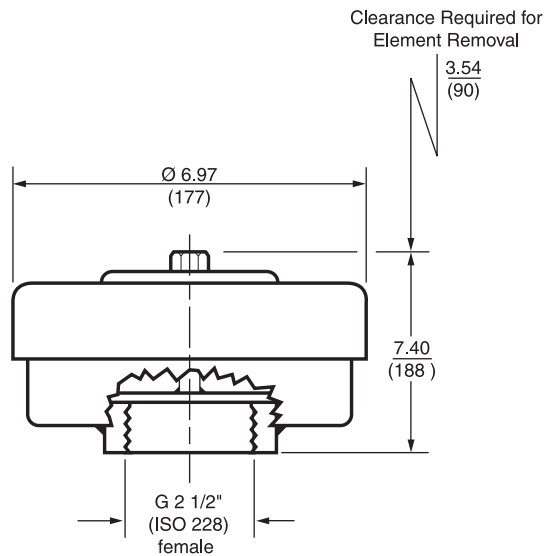
**SAME DAY SHIPMENT MODEL AVAILABLE!**

# Air Breathers

**Air Breathers**

## Features and Benefits

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



## SAB35 Breather



Suction  
Separators  
and  
Strainers

Oil Sight  
Glasses

## SABS35 Breather



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

Filtration Rating: 3  $\mu$ m 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:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 |
|-------|-------|-------|-------|-------|-------|
| SAB35 |       |       |       |       |       |

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 |
|-------|-------|-------|-------|-------|-------|
| SAB35 | R     | G     | 3     | N     | 2.5   |

= SAB35RG3N2.5

## 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

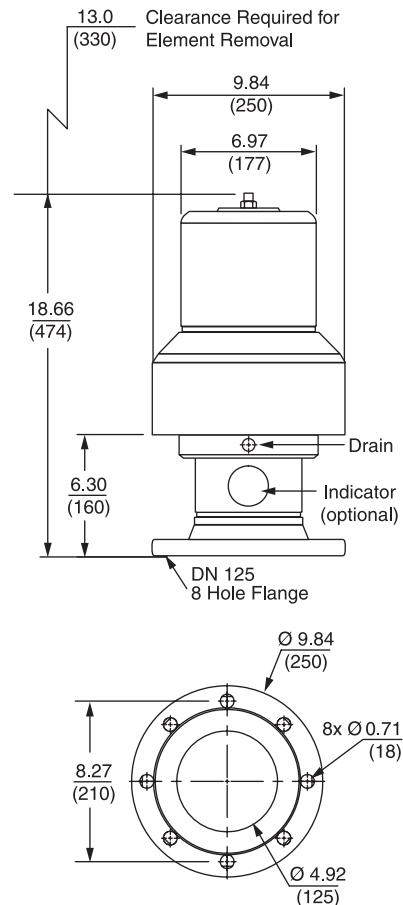
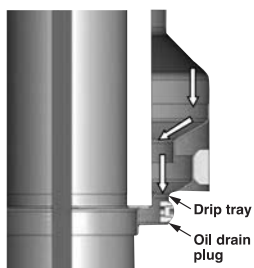


### Features and Benefits

- 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 µm Excellement® Z-Media®

Connection: 8 bolt DN 125 flange

## Filter Model Number Selection

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

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 |
|-------|-------|-------|-------|-------|-------|
| SAB70 |       |       |       |       |       |

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 |
|-------|-------|-------|-------|-------|-------|
| SAB70 | R     | F     | 2     | N     | 1     |

= SAB70RF2N1

| 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<br>W = With Gauge |

| BOX 6                |
|----------------------|
| Connection Size      |
| 1 = Standard (DN125) |

|                       |            |
|-----------------------|------------|
| Replacement Elements: | R-SAB70-Z2 |
|-----------------------|------------|

Section 3:

# DESICCANT BREATHERS

## Introduction

Schroeder Industries desiccant breathers are pivotal in keeping hydraulic fluid dry. Dry hydraulic fluid lasts longer and reduces wear and tear on components as well as reducing varnish formation in the hydraulic fluid. Maintaining a consistent fluid condition at the optimum level is critical for performance.

Schroeder Industries offers two types of desiccant breathers to our customers. Schroeder D-AB series desiccant breather has been a flagship of the breather portfolio for many years. Using silica gel, the D-AB series breathers remove moisture from the air as it passes through the breather into the reservoir. The D-AB desiccant breathers can hold up to 18.5 oz. of water. The silica gel changed color according to the color code on the package to indicate when the breather element has been spent and the breather needs replaced. The D-AB breather has a 2 micron sponge breather at the base of the element to prevent particulate contamination from entering the reservoir.

The second desiccant breather offered by Schroeder Industries is the DBE. This next generation desiccant breather expands on the capabilities of the D-AB. The DBE desiccant breather utilizes two stages of absorbent media to increase performance and optimizes the drying efficiency. The first stage of the drying process is Silica gel which is efficient at removing high humidity levels quickly. The second stage is a molecular sieve which can reduce low level humidity efficiently. Finally there is a Star pleated 3 micron phenolic resin impregnated media to filter out particulate contamination. All of these features improve the performance life of the DBE. However, the most important improvement made to the DBE is the addition of a base with integral inlet and outlet check valves. During operation, as air is drawn into the breather, the inlet valves open and the outlet valves close forcing the air through the breather media. But as the reservoir exhales, the outlet valves open and the inlet valves close allowing the air to vent directly to atmosphere without going through the media. This allows the media to last longer and for a reduction in operations costs.

Schroeder Industries Desiccant breathers will help maintain the cleanliness and condition of the fluid in the circuit by keeping the fluid dry and free from airborne particulate contamination.

# Desiccant Air Breathers

## Air Breathers

The Schroeder desiccant air breathers are designed to increase operational efficiency while reducing operating costs by protecting industrial systems from moisture and particle contaminants.

As fluid levels drop and pressure changes occur in a system, moist air is drawn through the breather (as shown in the diagram below). Air passes through a 2-micron solid contaminant filter and a diffuser to ensure maximum efficiency in the silica gel chamber. Water vapor in the air is absorbed by the silica gel before the dry air passes through a second 2-micron contaminant filter. The filtered air that enters the reservoir is void of moisture and contaminants.

## Features

### Bidirectional Air Flow

As moist air flows through the breather's filtration system, it is cleaned of impurities and dried. Expelled air partially regenerates the silica gel and "backflushes" the particulate to prolong the life of the breather.

### Durable Construction

The desiccant air breathers are manufactured from rugged polycarbonate in DLP plastic, and impact-modified Plexiglas.

### Water Vapor Absorbent

Silica gel is chemically inert, non-toxic, non-deliquescent, non-corrosive and environmentally disposable. Its internal structure of interconnected microscopic pores absorbs up to 40% of its weight. The operating temperature range is -22°F to 212°F (-30°C to 100°C).

### Color Indicator

As the gold silica gel absorbs water, it turns green to indicate that it has reached its functional capacity and that replacement of the breather is required.

### Dual Anti-static Filter System

The solid contaminant filters are designed to reduce the potential for explosion in dusty environments.

### Safety Sealed

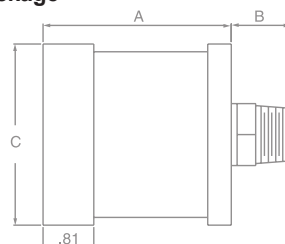
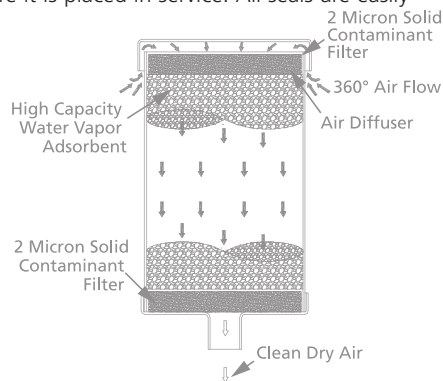
To ensure a long shelf life and premium operating performance, each desiccant breather is individually sealed and vacuum packed to protect it from moisture before it is placed in service. All seals are easily removable without the use of tools or sharp instruments.

## Benefits

- Anti-static features to protect against fire ignition
- High water absorption capacity (4 oz)
- Long operating life and low maintenance costs
- Environmentally safe disposable silica gel
- Compatibility with a variety of applications
- Prevents rust and oxidation
- Minimizes component wear and maintenance
- Curtails freezing and additive depletion
- Diminishes fluid degradation and orifice blockage
- Extends oil filter and hydraulic system life

## Applications

- New and Retrofit Applications
- Gear Boxes
- Hydraulic Reservoirs
- Storage Tanks



## D-AB Desiccant Filter Breather

Suction Separators and Strainers

Oil Sight Glasses



### D-AB-2

### D-AB-2-F

### D-AB-8

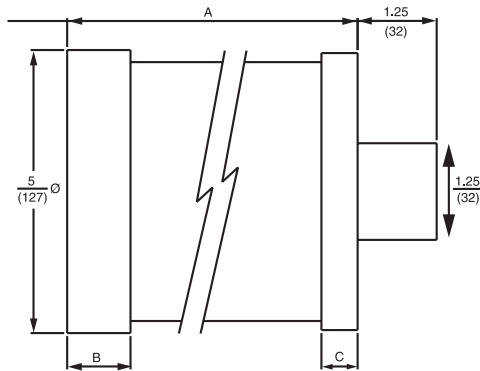
| Model Number | Connection            | Normal Capacity | Air Flow/<br>psi Drop | A          | B               | C         |
|--------------|-----------------------|-----------------|-----------------------|------------|-----------------|-----------|
| D-AB-2       | .75" NPT Male         | 20 SCFM         | 2 psi at 20 SCFM      | 3.16 (80)  | 0.95 (24)       | 3.25 (83) |
| D-AB-2-F     | 2.25" SAE J829 Flange | 20 SCFM         | 2 psi at 20 SCFM      | 3.16 (80)  | Contact factory | 3.25 (83) |
| D-AB-8       | 2" NPT Male           | 20 SCFM         | 0.5 psi at 20 SCFM    | 10.0 (254) | 1.75 (44)       | 5.0 (127) |

# Desiccant Air Breathers



**D-AB-4**

**R-AB-4**



## Specifications

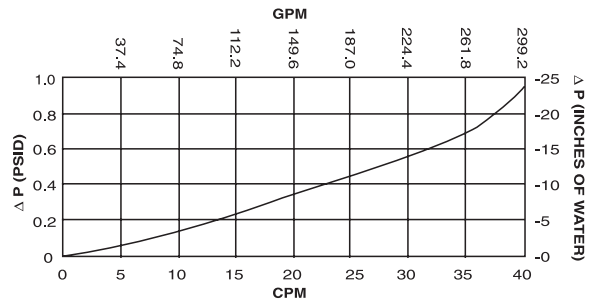
| Model Number | Max. Air Flow | Air Flow/<br>psi Drop | A        | B         | C         |
|--------------|---------------|-----------------------|----------|-----------|-----------|
| D-AB-4       | 35 SCFM       | 0.70 psi at 35 SCFM   | 8 (203)  | 1.75 (44) | 0.75 (19) |
| R-AB-4       | 35 SCFM       | 0.70 psi at 35 SCFM   | 10 (254) | 3.00 (76) | 1.50 (38) |

The R-AB-4 features inlet and outlet check valves located in the reusable cap (head), which control both the airflow into the reservoir and the airflow out of the reservoir and prolongs the life of the desiccant by allowing the air to flow through the breather only when needed to protect the integrity of the reservoir by establishing the thresholds of vacuum (air in) and pressure (air out). Check valve settings are 0.3 psi in and 2.1 psi out.

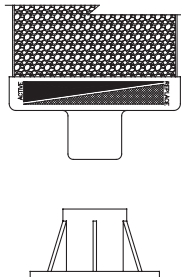
The R-AB-4 also includes a reusable top cap which allows for the economic replacement of the desiccant cartridge.

P/N for replacement cartridge is R-AB-ELE.

Both D-AB-4 and R-AB-4 require an adapter. Purchase separately. See below for Adapter Selection Guide.

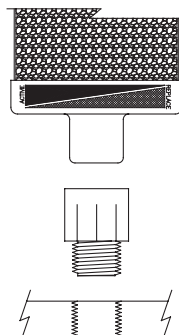


## Adapter Selection Guide



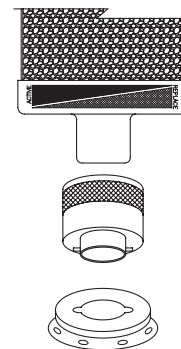
**Flange Adapter**

Part No. D-AB-FA (without holes)  
Part No. D-AB-FA1 (with holes)



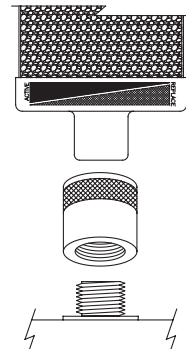
**Threaded Adapter**

Part No. D-AB-TA1 (1" MNPT)  
Part No. D-AB-TA34 (3/4" MNPT)



**Bayonet Adapter**

Part No. D-AB-BA



**Spin On Adapter**

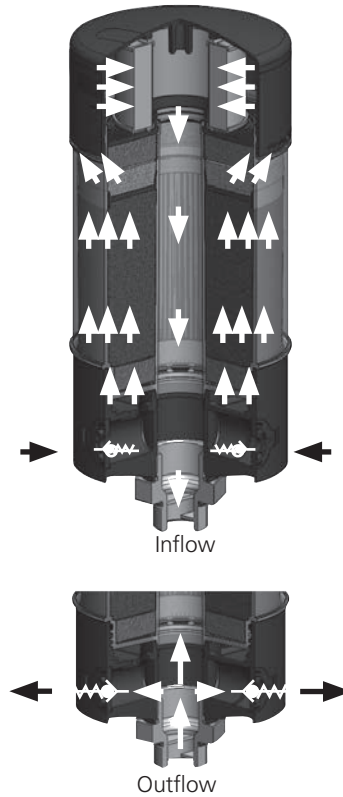
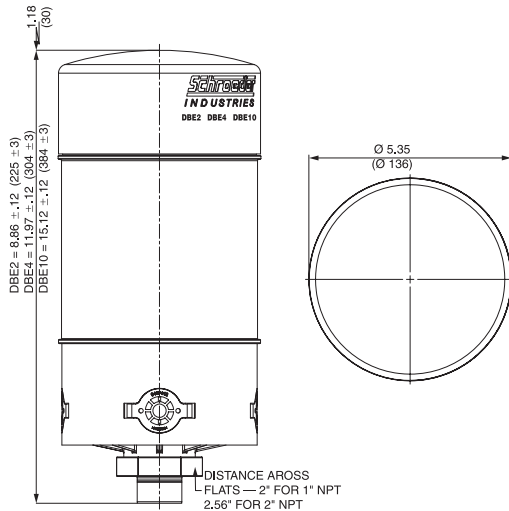
Part No. D-AB-SOA1 (1" 12UNF)  
Part No. D-AB-SOA112 (1-1/2" 16UNF)

# Desiccant Air Breathers

## Air Breathers

### Features and Benefits

- Unique air flow design with suction tube as splash protection and protection against absorbent getting into the tank
- 2 stages of absorbent provide optimal combination of drying efficiency and water retention
- Pleated air filter with 2  $\mu$ m filtration rating
- Reusable base with check (intake) and bypass (outflow) valves
- Check valves prevent absorbents being saturated during system downtime
- Bypass valves divert out flow away from water removal media to preserve its life
- Robust Zinc die-casting connection piece with integrated anti-splash baffles
- Replacement cartridge available in 3 different sizes



DBE-4

Suction  
Separators  
and  
Strainers

Oil Sight  
Glasses

### Dimensions

- New and Retrofit Applications
- Gear Boxes
- Hydraulic Reservoirs
- Wind Turbines

### Applications

Element Contamination Retention Capacity: (2  $\mu$ m), 26g

Operating Temperature: -20°F to 210°F (-29°C to 99°C)

Storage Temperature: from -40°F(-40°C)

### Specifications

| Size   | Water Retention Capacity (gallon) |        | Optimal Air Flow Rate (SCFM) | Max. Drying Capacity at Medium Humidity (SCF) | Max. Drying Capacity at High Humidity (SCF) |
|--------|-----------------------------------|--------|------------------------------|-----------------------------------------------|---------------------------------------------|
|        | Max.                              | Actual |                              |                                               |                                             |
| DBE-2  | .06                               | .05    | 21                           | 350                                           | 210                                         |
| DBE-4  | .13                               | .08    | 28                           | 880                                           | 530                                         |
| DBE-10 | .20                               | .13    | 35                           | 1450                                          | 880                                         |

## Filter Model Number Selection

### How to Build a Valid Model Number for a Schroeder DBE:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 |
|-------|-------|-------|-------|-------|-------|-------|-------|
| DBE   |       |       |       |       |       |       |       |

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 |
|-------|-------|-------|-------|-------|-------|-------|-------|
| DBE   | 4     | R     | P     | 2     | N     | 1     | R.04  |

= DBE4RP2N1R.04

| BOX 1         | BOX 2                                        | BOX 3                          | BOX 4                              | BOX 5              |
|---------------|----------------------------------------------|--------------------------------|------------------------------------|--------------------|
| Model Number  | Size                                         | Replacement *Element           | Connection Type                    | Filtration *Rating |
| DBE           | 2<br>4<br>10                                 | R = Replaceable                | P = NPT<br>B = BSPT<br>F = Flanged | 2 μ                |
| BOX 6         | BOX 7                                        | BOX 8                          |                                    |                    |
| Gauge Options | Connection Size                              | Check Valve Options            |                                    |                    |
| N = None      | Omit = Flange<br>1 = 1"<br>2 = 2" (NPT only) | Omit = None<br>R.04 = 0.04 psi |                                    |                    |

### How to Build a Valid Model Number for a Schroeder DBE Base:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 |
|-------|-------|-------|-------|
| DBE   |       |       |       |

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 |
|-------|-------|-------|-------|
| DBE   | P     | 1     | R.04  |

= DBEP1R.04

| BOX 1        | BOX 2                              | BOX 3                                        | BOX 4                          |
|--------------|------------------------------------|----------------------------------------------|--------------------------------|
| Model Number | Connection Type                    | Connection Size                              | Check Valve Options            |
| DBE          | P = NPT<br>B = BSPT<br>F = Flanged | Omit = Flange<br>1 = 1"<br>2 = 2" (NPT only) | Omit = None<br>R.04 = 0.04 psi |

### Replacement Cartridge Only:

| BOX 1               | BOX 2        | BOX 3        |
|---------------------|--------------|--------------|
| Replacement Element | Model Number | Size         |
| R = Replaceable     | DBE          | 2<br>4<br>10 |

# Desiccant "Low-Profile" Breather

**DLP**

**Air Breathers**

## Benefits

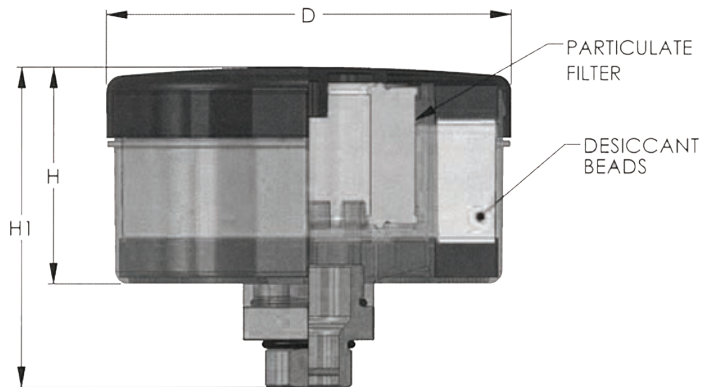
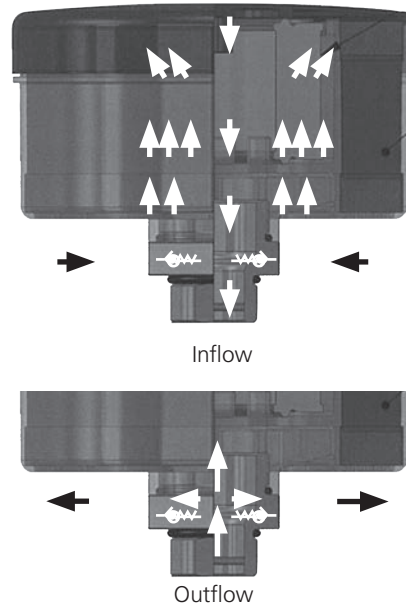
- Low-profile, high capacity design with low machine clearance dimensions in mind
- Prevents dirt and water vapor from entering gearboxes and/or hydraulic systems
- Improves the overall life of the equipment they're mounted on
- High water absorption capacity (4 oz)
- Environmentally safe disposable silica gel
- Prevents rust and oxidation

## Applications

- New and Retrofit Applications
- Gear Boxes
- Hydraulic Reservoirs
- Storage Tanks

DLP-2P

DLP-2B



**DLP  
Desiccant  
"Low-Profile"  
Breather**

**Suction  
Separators  
and  
Strainers**

**Oil Sight  
Glasses**



## Dimensions

## Specifications

| Model Number | Connection  | Normal Capacity | Air Flow/<br>psi Drop | H1   | H    | D    |
|--------------|-------------|-----------------|-----------------------|------|------|------|
| DLP-2P       | 1" NPT Male | 20 SCFM         | 1 psid at 20 SCFM     | 4.75 | 3.25 | 6.00 |
| DLP-2B       | BSP 1" Male | 20 SCFM         | 1 psid at 20 SCFM     | 4.75 | 3.25 | 6.00 |

# Reservoir Breather Adapter Kit

The reservoir breather adapter kit offer constant protection during the transition phase of fluid storage. Whether it is draining or filling, the action can be performed through the air tight seal provided by the adapter kit. This ensures airborne contamination is minimized and the breather protection is upheld consistently. Current adapters are designed to be used for either drum or tote storage, and equipped with high performing desiccant breathers.

## DK-DAB

## Drum Adaptor Kit



### Specifications

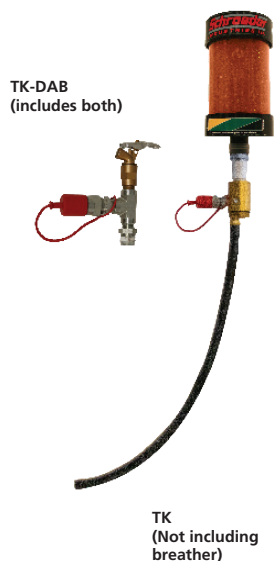
|            |                                                                                                                                                                      |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Breather:  | D-AB-4                                                                                                                                                               |
| Suction:   | Gold 2" drum bung adapter with 1" threaded breather port<br>33" stainless steel 3/4" downtube cut at 45 degree angle<br>1" male ISO-B quick disconnect with dust cap |
| Discharge: | 24" stainless steel 1/2" down tube for return to drum<br>3/4" drum bung adapter<br>3/4" male ISO-B quick disconnect with dust cap                                    |

### Features and Benefits

- Easy integration to your equipment for a seamless connection to Schroeder filtration systems
- Prevents the ingress of dirt and moisture by utilizing a Schroeder D-AB-4 desiccant breather
- Customizable to fit all your needs

## TK-DAB

## Tote Adaptor Kit



### Specifications

|            |                                                                                                                                                            |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Breather:  | D-AB-4                                                                                                                                                     |
| Discharge: | Gold 2" Tote Adapter with 1" threaded breather port<br>3/4" male ISO-B quick disconnect with dust cap<br>24" flexible return hose                          |
| Suction:   | 3/4" tee with 1" MNPT for tote bottom suction port connection<br>Self closing gravity feed dispenser valve<br>1" Male ISO-B quick disconnect with dust cap |

With quick connects via the 1" NPT threaded adapter, this allows your system to remain completely sealed to atmospheric ingress, while allowing for easy access during offline filtration or topping off reservoirs.

### Features and Benefits

- Easy integration to your equipment for a seamless connection to Schroeder filtration systems
- Prevents the ingress of dirt and moisture by utilizing a Schroeder D-AB-4 desiccant breather
- Customizable to fit all your needs
- Offered in 1" NPT connection for easy connection on most poly totes
- Spring loaded faucet for easy dispensing



Section 4:

*SUCTION STRAINERS & MAGNETIC SUCTION SEPARATORS*

## Introduction

Protecting the pump is an integral step in ensuring system longevity. Installing a suction strainer will stop the larger pieces of unwanted debris from entering the suction line causing catastrophic problems downstream. Schroeder Industries offer two types of strainers: standard metal based suction strainers and magnetic suction separators.

Schroeder's Magnetic Suction Separators offer unique protection for pumps suction line from all sizes of ferrous particles without starving the pump.

The all metal suction strainers are furnished with optimized pleat size and screen area for extended life and low pressure drop. 100 mesh stainless steel screens (140 micron) has 33.3% open area. Porting head is carbon steel; center core is plated perforated steel. End cap is heavy gauge zinc plated steel. These strainers can handle temperatures up to 250°F (121°C). 60 mesh (238 micron) and 200 mesh (74 micron) models also available – contact factory

# Filler Strainer Assemblies

## A-TB-779

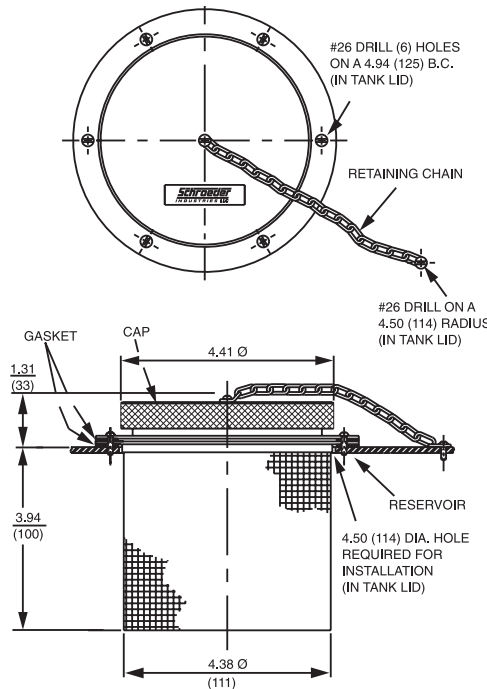
## A-TB-780

Speed the process of adding fluid to a reservoir by using our rapid fill cap and strainer. The strainer is 4.38" in diameter and designed to accept cold viscous fluids easily. Choose from two strainer mesh sizes: A-TB-779, which features #24 mesh, and A-TB-780, which is supplied with #70 mesh. The cap completely seals the opening. All assemblies are supplied with necessary hardware, including retaining chain for cap and self tapping screws for installation.

### Specifications: A-TB's

| Model Number | Mesh Size | Strainer O.D. | Strainer Height | Flange Diameter |
|--------------|-----------|---------------|-----------------|-----------------|
| A-TB-780     | 70        | 4.38          | 3.94            | 5.56            |
| A-TB-779     | 24        | (111)         | (100)           | (141)           |

Metric dimensions in ( ).



## Air Breathers

### Rapid Fill Cap and Strainer

### Suction Separators and Strainers

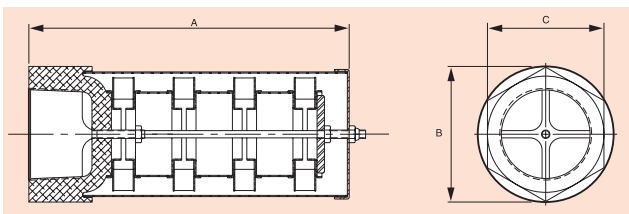
### Oil Sight Glasses



# Magnetic Suction Separators

With the use of Schroeder's Magnetic Suction Separators, suction line filtration is provided without starving the pump. They offer unique protection for pumps from all sizes of ferrous particles, some of which have the potential of destroying a pump in a single pass. Large ceramic magnets are spaced along the length of the separator. All hydraulic fluid entering the pump must move at low velocity through a powerful magnetic field. This field traps large quantities of micronic ferrous particles. The viscous properties of the fluid can cause some non-ferrous particles to adhere to the magnetically trapped particles.

Schroeder SKB's are available in sizes ranging from one to three inches. The chart below shows the part numbers, specifications, and dimensions of available models.



| Complete Model Number | Pipe Size | Flow gpm  | Δ psi at Max. gpm | Dimensions |            |            |
|-----------------------|-----------|-----------|-------------------|------------|------------|------------|
|                       |           |           |                   | A          | B          | C          |
| SKB-1                 | 1"        | 15 (55)   | 0.05              | 5.25 (133) | 3.25 (83)  | 1.62 (41)  |
| SKB-1.25              | 1¼"       | 25 (95)   | 0.05              | 8.25 (210) | 3.50 (89)  | 3.00 (76)  |
| SKB-1.5               | 1½"       | 35 (135)  | 0.08              | 8.25 (210) | 3.50 (89)  | 3.00 (76)  |
| SKB-2                 | 2"        | 50 (190)  | 0.10              | 8.25 (210) | 3.50 (89)  | 3.00 (76)  |
| SKB-3                 | 3"        | 100 (380) | 0.02              | 10 (254)   | 4.75 (121) | 4.00 (102) |

Metric dimensions in ( ).

The standard outer screen has adequate open area (.079 inch diameter perforations) to eliminate the possibility of pump starvation. All models are also available with a pleated 20 mesh screen (850 micron) by adding SS20 to the model number. (Example SKB-1-SS20.)

Please note that we also offer in-line filter housings equipped with SKB elements. See In-Line Magnetic Suction Separators and Tank-Mounted Magnetic Suction Separators (pages 287-290) for details.



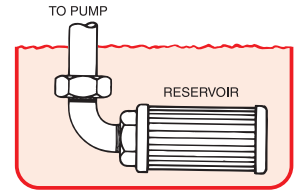
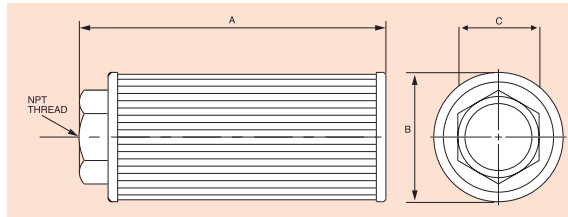
# Suction Strainer Elements

## SS Tank Mounted Suction Strainer Elements



These all metal suction strainers are furnished with optimized pleat size and screen area for extended life and low pressure drop. 100 mesh stainless steel screen (140 micron) has 33.3% open area. Porting head is carbon steel, center core is plated perforated steel. End cap is heavy gauge zinc plated steel. These strainers can handle temperatures up to 250°F (121°C).

60 mesh (238 micron) and 200 mesh (74 micron) models also available – contact factory.



\* Flow rating based on 5 FPS or less.

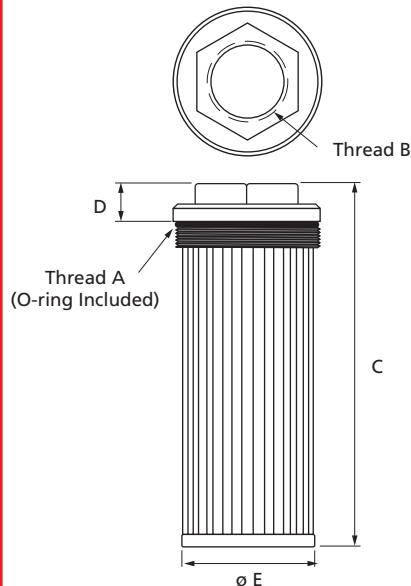
\*\* denotes coupling instead of bushing

Metric dimensions in ( ).

Examples: SS-2-100 SS suction strainer, 2" NPT, without bypass valve.  
SS-1-100-3 SS suction strainer, 1" NPT, with 3 psi bypass valve.

| Model Number |                       |           |                   | Other Information |            |                           |                       |
|--------------|-----------------------|-----------|-------------------|-------------------|------------|---------------------------|-----------------------|
| Basic Model  | Optional 3 psi Bypass | Pipe Size | Flow* gpm (L/min) | Dimensions        |            |                           | Screen Area in2 (cm2) |
|              |                       |           |                   | A                 | B          | C                         |                       |
| SS-.5-100    | (Omit) = None         | ½"        | 5 (19)            | 3.10 (79)         | 2.63 (67)  | 1.12 (28)                 | 68 (439)              |
| SS.75-100    |                       | ¾"        | 8 (30)            | 3.55 (90)         | 2.63 (67)  | 1.31 (33)                 | 68 (439)              |
| SS-1-100     |                       | 1"        | 10 (38)           | 5.35 (136)        | 2.63 (67)  | 1.62 (41)                 | 112 (723)             |
| SS-1.25-100  | -3 = Bypass valve     | 1¼"       | 20 (76)           | 6.85 (174)        | 3.38 (89)  | 1.88 (48)                 | 165 (1065)            |
| SS-1.5-100   |                       | 1½"       | 30 (114)          | 8.01 (204)        | 3.38 (89)  | 2.12 (54)                 | 251 (1619)            |
| SS-2-100     |                       | 2"        | 50 (189)          | 9.85 (250)        | 3.94 (100) | 2.75 (70)                 | 351 (2265)            |
| SS-2.5-100   |                       | 2½" **    | 75 (284)          | 10.10 (257)       | 5.12 (130) | 3.22 (82) Round Coupling  | 405 (2613)            |
| SS-3-100     |                       | 3" **     | 100 (379)         | 11.83 (300)       | 5.12 (130) | 4.00 (102) Round Coupling | 502 (3239)            |

## SSO Tank Mounted Suction Strainer Elements



These suction strainers have O-ring built in for a more secure fitting. The suction strainers can be supplied with a bypass valve to reduce high pressure drop caused by contaminated elements or high viscosity fluids during cold starting.

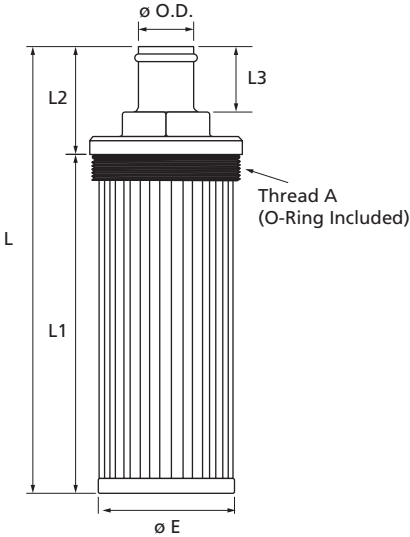
| Model Code | Optional 3 psi Bypass | Per SAEJ514 |           |          | GPM | Screen Area (Sq. In.) | Dimensions |       |       |
|------------|-----------------------|-------------|-----------|----------|-----|-----------------------|------------|-------|-------|
|            |                       | THD A       | THD B     | Hex Size |     |                       | C          | D     | ØE    |
| SSO-20-100 | (Omit) = None         | 2-1/2"-12   | 1-5/8"-12 | 2.13"    | 9   | 90                    | 9.00"      | 0.75" | 2.24" |
| SSO-24-100 | (-3) = Bypass valve   | 3-3/8"-12   | 1-7/8"-12 | 2.50"    | 21  | 230                   | 8.80"      | 0.90" | 3.22" |
| SSO-32-100 |                       | 3-3/8"-12   | 2-1/2"-12 | 3.00"    | 39  | 230                   | 9.30"      | 0.98" | 3.22" |

# Suction Strainer Elements

Air Breathers

Suction  
Separators  
and  
Strainers

Oil Sight  
Glasses

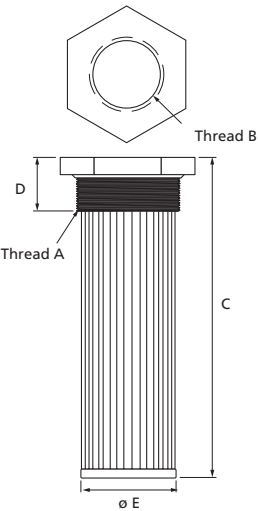


These suction strainers have additional fittings attached for hose barb settings.

Hose Barb |  
SSHB Tank  
Mounted  
Suction  
Strainer  
Elements



| Model Code    | Optional<br>3 psi Bypass<br>(Omit) = None<br>(-) = Bypass<br>valve | Per SAEJ514 |       | Hex Size | GPM | Dimensions |       |       |       |       |
|---------------|--------------------------------------------------------------------|-------------|-------|----------|-----|------------|-------|-------|-------|-------|
|               |                                                                    | THD A       | O.D.  |          |     | L          | L1    | L2    | L3    | E     |
| SSHB-1.25-100 | (Omit) = None                                                      | 2-1/2"-12   | 1.25" | 1.50"    | 14  | 10.00"     | 8.00" | 2.00" | 1.25" | 2.12" |
| SSHB-2-100    | (-) = Bypass<br>valve                                              | 3-3/8"-12   | 2.00" | 2.50"    | 40  | 10.80"     | 7.84" | 2.97" | 2.00" | 3.22" |



These suction strainers have external fitting installed for male NPT ports.

NPT Tank  
Mounted  
Suction Strainer  
Element



| Model Code | Optional<br>5 psi Bypass<br>(Omit) = None<br>(-) = Bypass<br>valve | GPM | Screen Area<br>(Sq. In.) | THD A  | THD B  | Hex<br>Size | Dimensions |       |       |
|------------|--------------------------------------------------------------------|-----|--------------------------|--------|--------|-------------|------------|-------|-------|
|            |                                                                    |     |                          |        |        |             | C          | D     | ØE    |
| SSP-2-100  | (Omit) = None                                                      | 50  | 260                      | 3" NPT | 2" NPT | 3.30        | 10.25"     | 1.70" | 3.03" |
| SSP-3-100  | (-) = Bypass<br>valve                                              | 100 | 315                      | 4" NPT | 3" NPT | 5.00        | 11.30"     | 1.80" | 3.78" |

# SAE Weld Flanges

## SAE Weld Flanges

Available immediately, Schroeder has a line of reservoir weld flanges. These flanges have SAE female O-ring port threads and are intended to be welded into a reservoir.

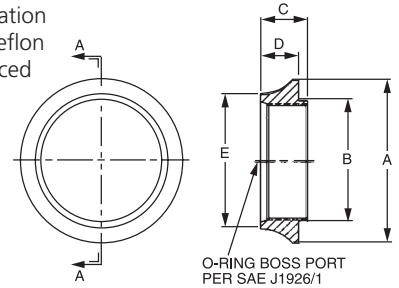
- Fewer leaks
- Cleaner installation
- Reduced cavitation of pumps/aeration of oil when used on suction lines
- Faster assembly time
- Reduced contamination (no pipe dope or Teflon tape being introduced into the system)

### Specifications

Flange material: Forged steel

Flange finish: Black phosphate (suitable for welding)

Port sizes: See chart below for listing of available port sizes



SECTION A-A

| Part Number | SAE Size | Port Thread Size    | Dimensions - inches (mm) |           |           |           |            |
|-------------|----------|---------------------|--------------------------|-----------|-----------|-----------|------------|
|             |          |                     | A                        | B         | C         | D         | E          |
| WF-4        | SAE-4    | 7/16" - 20 UNF-2B   | 1.50 (38)                | 0.93 (24) | 0.56 (14) | 0.31 (8)  | 1.00 (25)  |
| WF-5        | SAE-5    | 1/2" - 20 UNF-2B    | 1.50 (38)                | 0.93 (24) | 0.56 (14) | 0.31 (8)  | 1.00 (25)  |
| WF-6        | SAE-6    | 9/16" - 18 UNF-2B   | 1.50 (38)                | 0.93 (24) | 0.56 (14) | 0.31 (8)  | 1.00 (25)  |
| WF-8        | SAE-8    | 3/4" - 16 UNF-2B    | 1.50 (38)                | 0.93 (24) | 0.56 (14) | 0.31 (8)  | 1.00 (25)  |
| WF-10       | SAE-10   | 7/8" - 14 UNF-2B    | 2.13 (54)                | 1.38 (35) | 0.69 (18) | 0.44 (11) | 0.44 (11)  |
| WF-12       | SAE-12   | 1 1/16" - 12 UNF-2B | 2.13 (54)                | 1.38 (35) | 0.69 (18) | 0.44 (11) | 0.44 (11)  |
| WF-14       | SAE-14   | 1 3/16" - 12 UNF-2B | 2.38 (60)                | 1.66 (42) | 0.75 (19) | 0.50 (13) | 1.75 (44)  |
| WF-16       | SAE-16   | 1 5/16" - 12 UNF-2B | 2.38 (60)                | 1.66 (42) | 0.75 (19) | 0.50 (13) | 1.75 (44)  |
| WF-20       | SAE-20   | 1 5/8" - 12 UNF-2B  | 2.69 (68)                | 2.00 (51) | 0.75 (19) | 0.50 (13) | 2.13 (54)  |
| WF-24       | SAE-24   | 1 7/8" - 12 UNF-2B  | 3.00 (76)                | 2.25 (57) | 0.75 (19) | 0.50 (13) | 2.38 (60)  |
| WF-32       | SAE-32   | 2 1/2" - 12 UNF-2B  | 3.50 (89)                | 2.63 (67) | 0.84 (21) | 0.59 (15) | 2.88 (73)  |
| WF-48       | SAE-48   | 3 3/8" - 12 UNF-2B  | 4.63 (118)               | 3.66 (93) | 1.00 (25) | 0.81 (21) | 3.94 (100) |

### NOTE:

WF-48 has 33/8-12 O-ring thread that was extrapolated from SAE standard threads

Section 5:

# ***OIL SIGHT GLASSES***

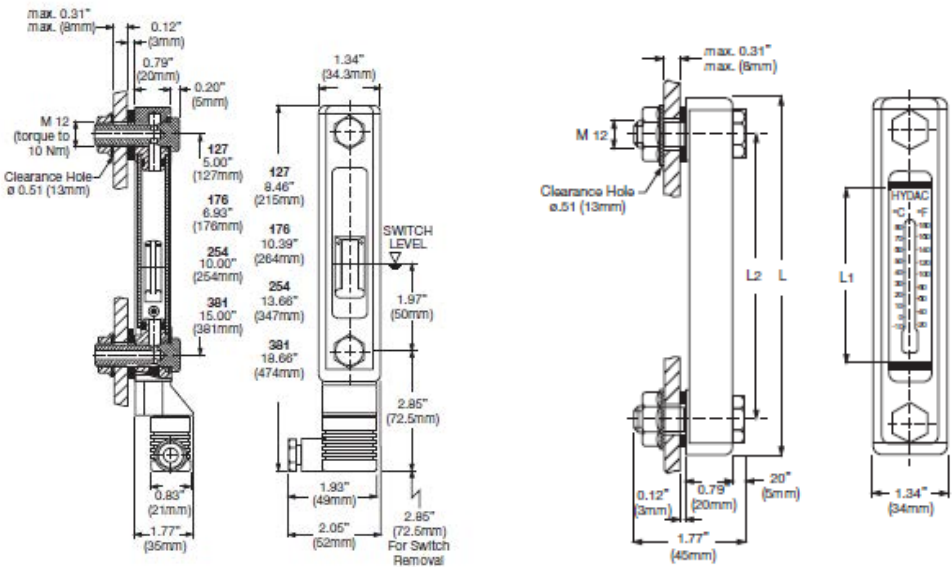


# Fluid Level Indicators

## SLG Fluid Level Indicator



When seeing and maintaining the level of oil in your reservoir is critical, the Sight Level Gauge (SLG) provides constantly monitoring of the oil level in the reservoir.



| Model Code | Size | Dimensions |       |        |
|------------|------|------------|-------|--------|
|            |      | L          | L1    | L2     |
| SLG-3      | 76   | 4.25"      | 1.46" | 2.99"  |
| SLG-5      | 127  | 6.26"      | 2.99" | 5.00"  |
| SLG-10     | 254  | 11.26"     | 7.99" | 10.00" |

# Fluid Level Indicators

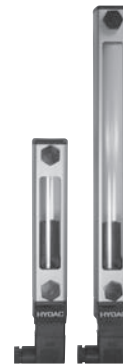
Air Breathers

Suction  
Separators  
and  
Strainers

Fluid Level  
Indicators

Oil Sight  
Glasses

FSK



The FSK fluid level sensor monitors the tank fluid level via an electrical switching signal. This switch signal can be used for a warning or to control the fluid level. The fluid enters the unit via the lower connection bore and pushes a float up the tube. The float now shows the fluid level in the tank. If the level of the fluid drops again, the float will activate a switch contact. Switching contacts can either be Type O (opens when fluid is at low level), Type C (closes when fluid is at low level), or type W (dual switching mode) which can be used either to close on contact or to open on contact.

Contact Ratings: Max. BW

Maximum Voltage: 50V AC or DC

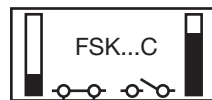
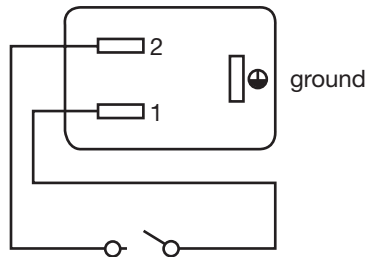
Maximum Current: 200 mA (magnetic float inside the tube trips switch when fluid level drops within 50mm of lower bolt. See illustration)

## Specifications

NOTE:

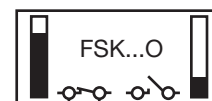
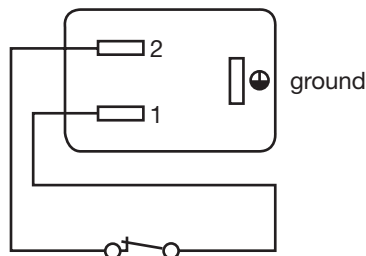
FSA/FSK not suitable for use with glycol or fluids containing glycol.

FSK...C (open at normal level)



Contacts **CLOSE**  
when fluid level drops  
**BELOW** switching level

FSK...O (closed at normal level)



Contacts **OPEN**  
when fluid level drops  
**BELOW** switching level

## Electric Level Switch

### Electrical Specifications

Contact Ratings

- Max. 8W

Maximum Voltage

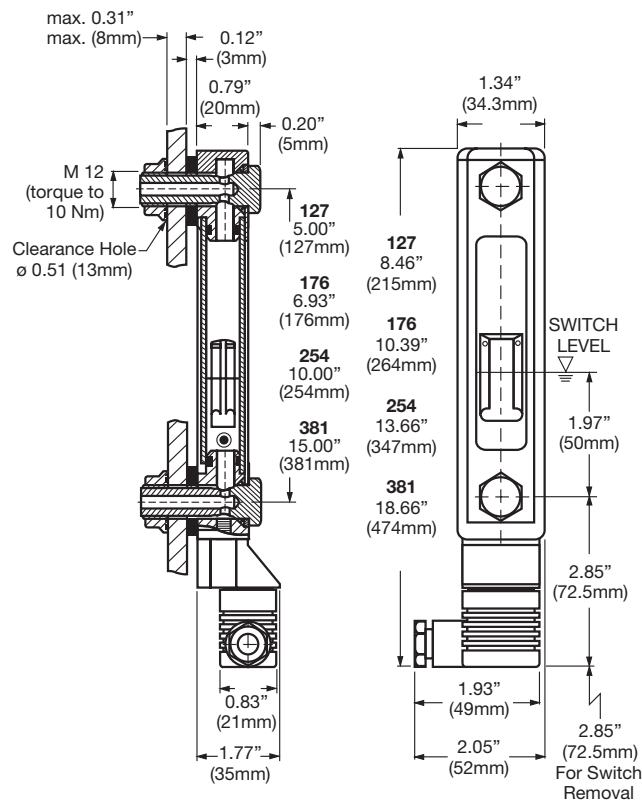
- 50V AC or DC

Maximum Current

- 200 mA

Magnetic Float inside tube trips switch when fluid level drops within 50mm of lower bolt. (see illustration)

# Fluid Level Indicators



## Sensor Model Number Selection

### How to Build a Valid Model Number for a Schroeder FSK

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 |
|-------|-------|-------|-------|-------|-------|-------|-------|
| FSK   |       |       |       |       |       |       |       |

Example: NOTE: One option per box

| BOX 1         | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 |
|---------------|-------|-------|-------|-------|-------|-------|-------|
| FSK           | 127   | 2     | 4     | C     |       | 12    |       |
| = FSK12724C12 |       |       |       |       |       |       |       |

| BOX 1        | BOX 2                                          | BOX 3            | BOX 4                                |
|--------------|------------------------------------------------|------------------|--------------------------------------|
| Model Number | Size (mounting hole centers)                   | Seals            | Modification Number                  |
| FSK          | 127 = 5"<br>176 = 7"<br>254 = 10"<br>381 = 15" | 2 = Fluorocarbon | 4 = FSK (determined by manufacturer) |

| BOX 5                                                  | BOX 6                                                                                                                                    | BOX 7                | BOX 8                                                           |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------|
| Electrical Switch                                      | Thermometer                                                                                                                              | Hex Head Bolt        | Sight Tube                                                      |
| C = Open at normal level<br>O = Closed at normal level | Omit = No thermometer (standard)<br>FT 100 = 3.94" (100 mm)<br>FT 200 = 7.87" (200 mm)<br>FT 300 = 11.87" (300 mm)<br>TS = Thermo Switch | 12 = M12 x 1.75 bolt | Omit = Polyamide construction<br>SO14 = Glass tube construction |

NOTE:  
On instruments with a different modification number, please read the label or the technical amendment details supplied with the instrument.

# Fluid Level Indicators

Air Breathers

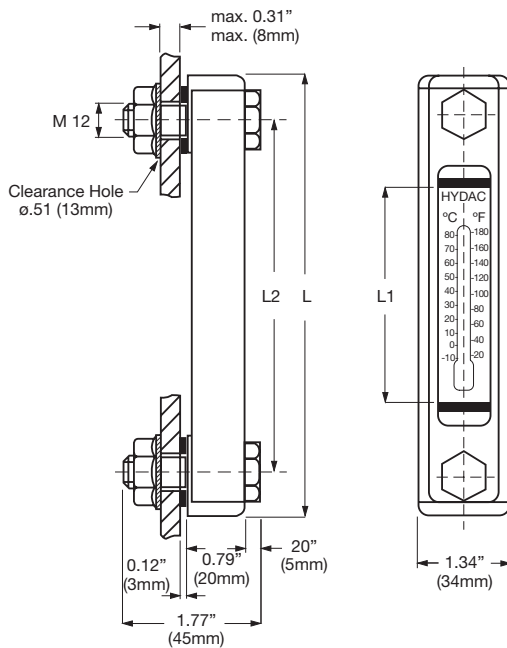
By Using the FSA, The fluid level can be easily seen on the outside of the tank. The fluid enters the unit via the lower connection bore and is clearly visible in the tube. By selecting the right size, the tank fluid level can be visually monitored.

FSA

Suction  
Separators  
and  
Strainers

Fluid Level  
Indicators

Oil Sight  
Glasses



| Size | L                 | L1                | L2                |
|------|-------------------|-------------------|-------------------|
| 76   | 4.25"<br>(108mm)  | 1.46"<br>(37mm)   | 2.99"<br>(76mm)   |
| 127  | 6.26"<br>(159mm)  | 2.99"<br>(76mm)   | 5.00"<br>(127mm)  |
| 176  | 8.19"<br>(208mm)  | 4.92"<br>(125mm)  | 6.93"<br>(176mm)  |
| 254  | 11.26"<br>(286mm) | 7.99"<br>(203mm)  | 10.00"<br>(254mm) |
| 381  | 16.26"<br>(413mm) | 12.99"<br>(330mm) | 15.00"<br>(381mm) |

NOTE:  
FSA/FSK not suitable  
for use with glycol  
or fluids containing  
glycol.

## How to Build a Valid Model Number for a Schroeder FSK

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 |
|-------|-------|-------|-------|-------|-------|-------|
| FSA   |       |       |       |       |       |       |

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 |
|-------|-------|-------|-------|-------|-------|-------|
| FSA   | 76    | 1     | 0     |       | 12    |       |

= FSA761012

| BOX 1                                                                                                                                                         | BOX 2                                                     | BOX 3                                                           | BOX 4                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Model Number                                                                                                                                                  | Size (mounting hole centers)                              | Seals                                                           | Housing Material                                                                         |
| FSA                                                                                                                                                           | 76 = 3"<br>127 = 5"<br>176 = 7"<br>254 = 10"<br>381 = 15" | 1 = NBR<br>2 = Fluorocarbon                                     | 0 = Steel (only for SO14 glass tube construction)<br><br>1 = Aluminum<br>2 = ABS Plastic |
| BOX 5                                                                                                                                                         | BOX 6                                                     | BOX 8                                                           |                                                                                          |
| Thermometer                                                                                                                                                   | Hex Head Bolt                                             | Sight Tube                                                      |                                                                                          |
| Omit = No thermometer (standard)<br>T = Built-in Tube<br>FT 100 = 3.94" (100 mm)<br>FT 200 = 7.87" (200 mm)<br>FT 300 = 11.87" (300 mm)<br>TS = Thermo Switch | 12 = M12 x 1.75 bolt                                      | Omit = Polyamide construction<br>SO14 = Glass tube construction |                                                                                          |

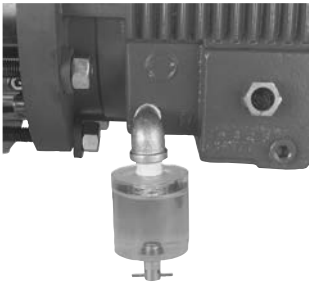
# Oil Sight Glasses

Schroeder Oil Sight Glasses provide maintenance and lubrication management professionals a complete and immediate visual oil analysis. Constructed of durable cast acrylic, they withstand most petroleum products to remain crystal clear. Although easy detection and discharge of water contamination are leading benefits, operators can also visually monitor the oil for discoloration or debris. The drain valve is made from brass with a vulcanized rubber seal. Both materials have excellent resistance to hydrocarbon and petroleum-based products, hydraulic fluids, most silicone fluids, and fuels. A detailed chemical resistance chart is available upon request.

Our Oil Sight Glass product line includes models for vertical and horizontal mounting, high temperature applications, large volume bowls, level indication and the all encompassing Oil Sight Glass and Level Monitor. The revolutionary 3-D Oil Sight Glass can replace the problematic, old-fashioned sight plug on your oil reservoir to provide greater visibility.

### Benefits

- Withstand most petroleum products to remain crystal clear
- Continuously monitor oil level and condition
- Extremely low maintenance
- Low purchase and installation costs
- Save expensive equipment through early detection and action



For many systems the 1 oz. Oil Sight Glass is adequate. The 3 oz. Oil Sight Glass provides additional volume and should be used when the condensation or water spillover is excessive. Schroeder also offers 16 oz. and 32 oz. Oil Sight Glasses for special applications that require the ability to accumulate substantial volumes of water due to large oil reservoirs, high condensation problems or excessive water spillover. Even larger sizes and unique configurations are available for special applications.



VERTICAL

|                        | 1 oz.<br>Oil Sight Glass                                                                                                                                                                      | 3 oz.<br>Oil Sight Glass |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Outside Diameter:      | 1.75 (44)                                                                                                                                                                                     | 2.50 (64)                |
| Length:                | 2.38 (60)                                                                                                                                                                                     | 2.38 (60)                |
| Maximum psi (bar):     | 225 (16)                                                                                                                                                                                      | 200 (14)                 |
| Operating Temperature: | -40°F to 165°F<br>-40°C to 74°C                                                                                                                                                               | -40°F to 165°F           |
| Specifications:        | Commercial grade acrylic<br>Brass drain valve<br>¼", ⅜" or ½" NPT brass nipples<br>Vertical and horizontal styles<br>Available in 16 oz and 32 oz sizes<br>Stainless steel hardware available |                          |

Metric dimensions in ( ).

# Oil Sight Glasses

Air Breathers

Suction  
Separators  
and  
Strainers

Fluid Level  
Indicators

Oil Sight  
Glasses

## Horizontal Oil Sight Glass

The *Horizontal* Oil Sight Glass is designed to be installed on equipment that has restricted vertical clearance. The design has the mounting nipple and drain valve eccentrically machined and oriented 180° apart. This provides the same ability to discharge any accumulated water.



HORIZONTAL

How to  
Order

| Part No.  | Description           | Part No.   | Description            |
|-----------|-----------------------|------------|------------------------|
| OSG1X250  | Vertical 1 oz ¼" NPT  | OSG1X250HZ | Horizontal 1 oz ¼" NPT |
| OSG1X375  | Vertical 1 oz ⅜" NPT  | OSG1X375HZ | Horizontal 1 oz ⅜" NPT |
| OSG1X500  | Vertical 1 oz ½" NPT  | OSG1X500HZ | Horizontal 1 oz ½" NPT |
| OSG3X250  | Vertical 3 oz ¼" NPT  | OSG3X250HZ | Horizontal 3 oz ¼" NPT |
| OSG3X375  | Vertical 3 oz ⅜" NPT  | OSG3X375HZ | Horizontal 3 oz ⅜" NPT |
| OSG3X500  | Vertical 3 oz ½" NPT  | OSG3X500HZ | Horizontal 3 oz ½" NPT |
| OSG16X500 | Vertical 16 oz ½" NPT |            |                        |
| OSG32X500 | Vertical 32 oz ½" NPT |            |                        |

Any oil sight glass can be equipped with a rare earth magnet that attracts and holds microscopic ferrous particles in your oil. Further analysis of these particles can help determine what component is failing for replacement. The magnet drain valve is easily interchanged with the standard drain valve on any OSG product.

Magnet  
Option



# Oil Sight Glasses

## Oil Sight Glass & Level Monitor



When seeing and maintaining the level of oil in your reservoir is critical, the Oil Sight Glass and Level Monitor (OSGL) provides all the benefits of the OSG plus the ability to constantly monitor the level of the reservoir oil. The dual port model has a second  $\frac{3}{8}$ " NPT thread at 180° to allow the installation of a drain valve or access to the oil reservoir utilizing a pilot tube and a pilot sample adapter. This all-in-one product provides continuous monitoring of the clarity, color, sediment, water contamination and level of the oil.

|                        |                                                                                                                                                                                                   |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outside Diameter:      | 1.75 (44)                                                                                                                                                                                         |
| Length:                | 3" (76), 6" (152), 9" (229), 12" (305), 15" (381), 18" (457), 24" (610), or custom available                                                                                                      |
| Maximum psi (bar):     | 225 (16)                                                                                                                                                                                          |
| Operating Temperature: | -40°F to 165°F<br>-40°C to 74°C                                                                                                                                                                   |
| Specifications:        | Commercial grade acrylic<br>Brass drain valve<br>$\frac{3}{8}$ " NPT brass nipples<br>Available in dual port version with a second $\frac{3}{8}$ " NPT port<br>Stainless steel hardware available |

Metric dimensions in ( ).

## How to Order

| Part No.  | Description                               |
|-----------|-------------------------------------------|
| OSGL3     | OSG and Level Monitor 3" (76)             |
| OSGL6     | OSG and Level Monitor 6" (152)            |
| OSGL9     | OSG and Level Monitor 9" (229)            |
| OSGL12    | OSG and Level Monitor 12" (305)           |
| OSGL3DP   | OSG and Dual Port Level Monitor 3" (76)   |
| OSGL6DP   | OSG and Dual Port Level Monitor 6" (152)  |
| OSGL9DP   | OSG and Dual Port Level Monitor 9" (229)  |
| OSGL12DP  | OSG and Dual Port Level Monitor 12" (305) |
| OSGL15    | OSG and Level Monitor 15" (381)           |
| OSGL18    | OSG and Level Monitor 18" (457)           |
| OSGL24    | OSG and Level Monitor 24" (610)           |
| OSGL15DP  | OSG and Dual Port Level Monitor 15" (381) |
| OSGL18DP  | OSG and Dual Port Level Monitor 18" (457) |
| OSGL224DP | OSG and Dual Port Level Monitor 24" (610) |

# Oil Sight Glasses

Air Breathers

The 3-D Oil Sight Glass is machined from one solid piece of impact resistant, high strength, stain-resistant cast acrylic. It has excellent resistance to hydrocarbon and petroleum-based products, hydraulic fluids, most silicone fluids, and fuels. Replaces problematic, old-fashioned oil level sight plugs. Fits virtually every oil reservoir. Revolutionary easy view design is visible from virtually any angle, minimizing false positives.

## 3-D Oil Sight Glass



Suction  
Separators  
and  
Strainers

Fluid Level  
Indicators

Oil Sight  
Glasses

|                        |                                                                         |
|------------------------|-------------------------------------------------------------------------|
| NPT:                   | 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"                                      |
| Outside Diameter:      | 7/8", 1 1/8", 1 3/8", 1 3/4", 2", 2 1/2"                                |
| Length:                | 1", 1 1/2" from last thread. Metric and custom sizes available.         |
| Maximum psi (bar):     | 300 (21)                                                                |
| Operating Temperature: | 200°F (93°C) at 66 psi (5 bar)<br>230°F (110°C) at atmospheric pressure |

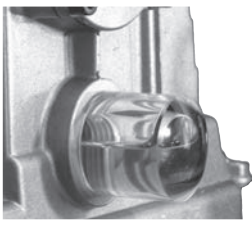
Metric dimensions in ( ).

| Part No.   | Description     | Part No. | Description |
|------------|-----------------|----------|-------------|
| 3DBM10X1.0 | Metric 10 x 1.0 | 3DB0250  | 1/4" NPT    |
| 3DBM10X1.5 | Metric 10 x 1.5 | 3DB0375  | 3/8" NPT    |
| 3DBM12X1.5 | Metric 12 x 1.5 | 3DB0500  | 1/2" NPT    |
| 3DBM16X1.5 | Metric 16 x 1.5 | 3DB0750  | 3/4" NPT    |
| 3DBM20X1.5 | Metric 20 x 1.5 | 3DB1000  | 1" NPT      |
| 3DBM22X1.5 | Metric 22 x 1.5 | 3DB1250  | 1 1/4" NPT  |
| 3DBM24X1.5 | Metric 24 x 1.5 | 3DB1500  | 1 1/2" NPT  |
| 3DBM26X1.5 | Metric 26 x 1.5 | 3DB2000  | 2" NPT      |
| 3DBM27X1.5 | Metric 27 x 1.5 |          |             |
| 3DBM30X2.0 | Metric 30 x 2.0 |          |             |
| 3DBM33X1.5 | Metric 33 x 1.5 |          |             |

## How to Order



BEFORE



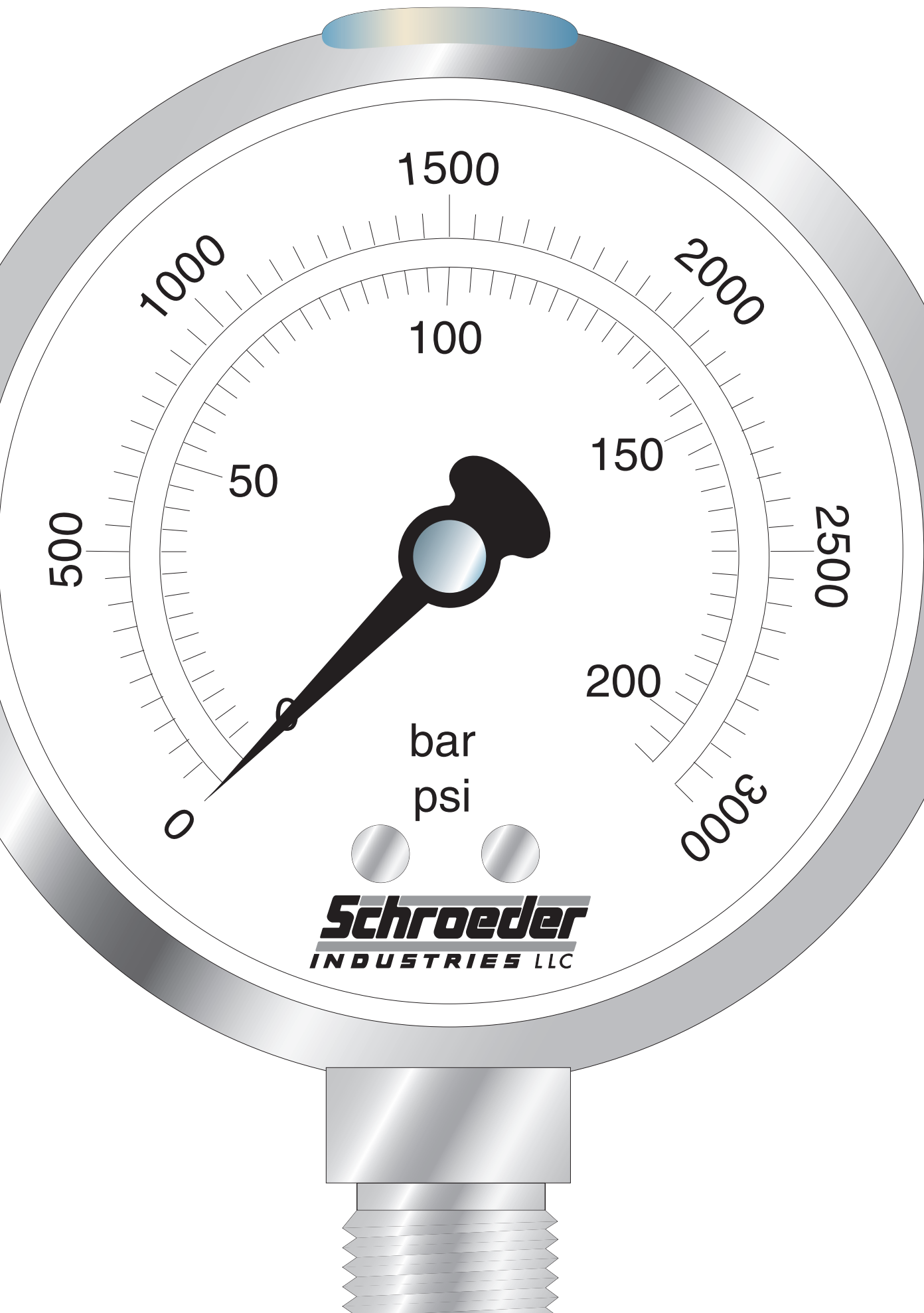
AFTER



## This image shows a single sheet of white paper with horizontal red ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Section 6:

# SCHROEDER CHECK



# Schroeder Check Test Point System

## Introduction

Schroeder Check test points provide a fast easy and safe way to test pressures up to 10,000 psi (680 bar) in hydraulic systems under operation. They are available in both 1620 (M16x20) and 1215 (M12x1.5) reverse buttress connections threads with a variety of screw port threads. The standard poppet style features a primary and secondary seal, providing for absolute sealing of fluid. The design allows connection by hand at pressures up to 10,000 psi (680 bar) without any loss of fluid. Metal caps and Buna seals are standard and each hydraulic test point is individually checked for quality assurance.

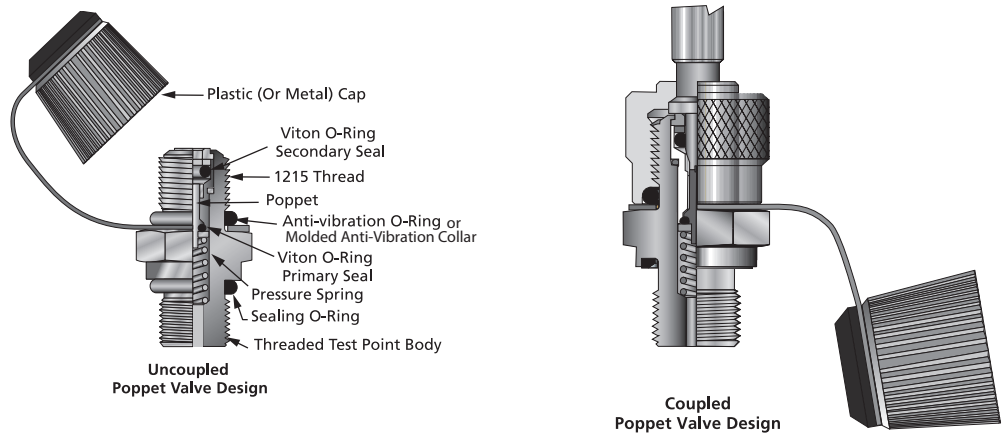
In addition to functioning as a secure access point for checking pressure, they can also be effectively used for collecting oil samples for subsequent testing or bleed air from a hydraulic system. Schroeder check test point can be used in conjunction with gauge adapters, pressure gauges, microflex hoses, and pressure gauge test kits.

Our hydraulic test point design allows easy, comfortable, and safe access to high pressure system enabling measuring , sampling, and filling without interfering with installation. Even connect and disconnect sensors at running installation for easy diagnosis and fluid condition monitoring.

### Benefits

- No mess, no-leak design means sealing is complete before connection is made to hydraulic system.
- No tools - simply hand tighten gauge, transducer or hose adapter onto Schroeder Check test points under full pressure to 10,000 psi (680 bar)
- No contamination - proper use of test points eliminates the introduction of contaminants into a hydraulic system

# Schroeder Check Test Point System



## Test Points

Adapters

Hose Joiners

Microflex Hose

Pressure Limiters

Test Kits

## Description

Schroeder Check Test point provide an easy, efficient and Safe method for testing pressure up to 10,000 psi (680 bar) in a hydraulic system during operation. Available in 1620 threads as a standard and 1215 as an option, the test point are available in a variety threads for the circuit thread of the test point. Utilizing a dual seal poppet design, that incorporated a primary and secondary soft seal and a hard seal on the end of the piston Schroeder Check Test points are capable of sealing completely allowing no leakage in hydraulic applications. This design permits connection of Microflex hoses in tandem with the Schroeder Check test point during machine operation safely by hand up to 10,000 psi (680 bar) with no loss of fluid. All Schroeder Check Test Points are equipped with a standard Metal (or Plastic) cap.

In Addition to serving as a secure access point for checking pressure during trouble shooting, test points can also be used to obtain oil samples for testing or to bleed air from a hydraulic circuit. Schroeder Check test points can be used in conjunction with gauge adapters, pressure gauges, Microflex hoses and the pressure gauge kits.

- No Mess  
No-leak design means sealing is complete before connection is made to hydraulic system.
- No Tools  
Simply hand tighten gauge, transducer or hose adapter onto Schroeder Check test points under full pressure to 10,000 psi (680 bar).
- No Contamination  
Proper use of test points eliminates the introduction of contaminants into a hydraulic system.

## Features

Pressure Gauges

GS

- Fluid sampling
- Air bleeding
- Connection for diagnostic products

## Applications

Reservoir Breather Fluid Sampling Adapter

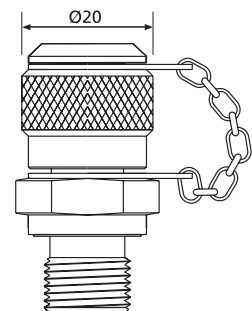
## Specifications

|                                                                             |                      |                                       |
|-----------------------------------------------------------------------------|----------------------|---------------------------------------|
| Maximum Working Pressure:                                                   | 10,000 psi (680 bar) |                                       |
| Materials:                                                                  | Standard Body:       | S12L14 AS 1442 (AISI-SAE composition) |
|                                                                             | Metal Cap:           | S12L14 AS 1442 (AISI-SAE composition) |
|                                                                             | Poppet:              | S12L14 AS 1442 (AISI-SAE composition) |
|                                                                             | Secondary Seal:      | Viton                                 |
|                                                                             | Ball:                | Hard Chrome                           |
|                                                                             | Seat:                | Stainless Steel 316                   |
| Operating Temperature Range: -22°F to +275°F (-30°C to +135°C)              |                      |                                       |
| Optional materials include stainless steel body and stainless steel poppet. |                      |                                       |

Probalizer

# Schroeder Check Test Point System

| G Thread     | Sealing System | Part Number                      |
|--------------|----------------|----------------------------------|
| 1/8" NPT     | Thread         | SP1620NPT18VM                    |
| 1/4" NPT     | Thread         | SP1215NPT14VSSM<br>SP1620NPT14VM |
| 5/16"-24 UNF | Viton O-Ring   | SP1215UN716VM                    |
| 7/16"-20 UNF | Viton O-Ring   | SP1620UN716VM<br>SP1215UN716VSSM |
| 9/16"-18 UNF | Viton O-Ring   | SP1620UN916VM                    |
| 1/8" BSPP    | WD Seal NBR    | SP1620G18WDM                     |
| 1/4" BSPP    | WD Seal NBR    | SP1620G14WDM                     |

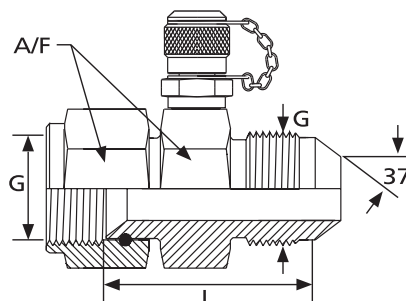


Test Point with metal cap

SP = Test point with poppet valve; SS = Stainless Steel; M = Metal Cap;  
 FP = Female Poppet  
 P = Plastic Cap  
 All Test Points have Viton® seals.

**Preferred order codes designate shorter lead times and faster delivery.**

## JIC Male/ Female In-Line Test Points

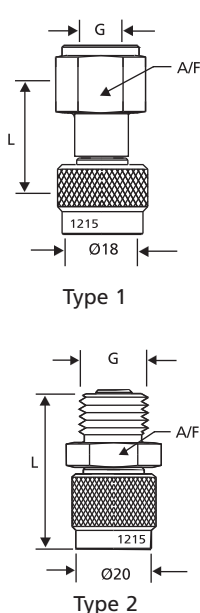


JIC according to SAE J514.  
 Male/female threads of the same size.

| G Thread       | Tube/Pipe dia | ΔP (max) psi (bar) | L in (mm) | A/F in (mm) | Part Number                     |
|----------------|---------------|--------------------|-----------|-------------|---------------------------------|
| 7/16"-20 UNF   | 1/4"          | 4500 (315)         | 1.38 (35) | .51 (13)    | SP1215L04JICP<br>SP1620L04JICM  |
| 9/16"-18 UNF   | 3/8"          | 4500 (315)         | 1.38 (35) | .63 (16)    | SP1215L06JICP<br>SP1620L06JICM  |
| 3/4"-16 UNF    | 1/2"          | 4500 (315)         | 1.50 (38) | .83 (21)    | SP1215L08JICVP<br>SP1620L08JICM |
| 1-1/16"-12 UNF | 3/4"          | 4500 (315)         | 1.89 (48) | 1.06 (27)   | SP1215L12JICVP<br>SP1620L12JICM |
| 1-5/16"-12 UNF | 1"            | 4500 (315)         | 1.97 (50) | 1.38 (35)   | SP1215L16JICP<br>SP1620L16JICM  |

**Preferred order codes designate shorter lead times and faster delivery.**

# Schroeder Check Test Point System



There is no internal check valve in these parts. They are used to connect gauges and pressure transducers directly onto test points without use of Schroeder Microflex hose.

| G Thread  | Type | $\Delta P$ (max)<br>psi (bar) | L<br>in (mm) | A/F<br>in (mm) | Part Number    |
|-----------|------|-------------------------------|--------------|----------------|----------------|
| 1/4" NPT  | 1    | 10,000 (680)                  | 0.83 (21)    | 0.75 (19)      | S1215DCNPT14   |
|           |      |                               |              |                | S1215DCNPT14SS |
| 1/4" BSPP | 1    | 10,000 (680)                  | 0.83 (21)    | 0.75 (19)      | S1620DCNPT14   |
|           |      |                               |              |                | S1215DCG14CU   |
| 7/16" UNF | 1    | 10,000 (680)                  | 0.83 (21)    | 0.75 (19)      | S1620DCG14CU   |
|           |      |                               |              |                | S1215DCUN716   |
| 1/4" NPT  | 2    | 10,000 (680)                  | 0.83 (21)    | 0.75 (19)      | S1620DCUN716   |
|           |      |                               |              |                | S1215DCMNPT14  |

Preferred order codes designate shorter lead times and faster delivery.

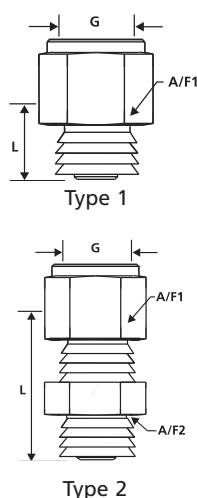
## Direct Gauge Adapters

Test Points

Adapters

Hose Joiners

Microflex Hose



There is no internal check valve in this arrangement. Type 1 is for direct connection of gauge to hose. Type 2 is for bulkhead connection of gauge to hose with bulkhead mounting.

| G Thread | Type | Gauge Seal | L<br>in (mm) | A/F1<br>in (mm) | A/F2<br>in (mm) | Part Number  |
|----------|------|------------|--------------|-----------------|-----------------|--------------|
| 1/4" NPT | 1    | Thread     | 1.34 (34)    | 0.75 (19)       | —               | S1215GANPT14 |
|          |      |            |              |                 |                 | S1620GANPT14 |

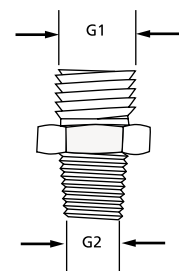
Preferred order codes designate shorter lead times and faster delivery.

## Gauge to Hose Adapters

Pressure Limiters

Test Kits

Pressure Gauges



There is no internal check valve in this arrangement.

| G1 Thread | G2 Thread     | Part Number |
|-----------|---------------|-------------|
| M12 x 1.5 | 1/8" NPT Male | S1215NPT18P |
| M12 x 1.5 | 1/4" NPT Male | S1215NPT14  |
| M12 x 1.5 | 1/4" NPT Male | S1215NPT14P |

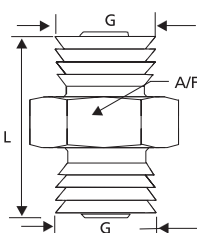
P = Plastic Cap

Preferred order codes designate shorter lead times and faster delivery.

## Change-Over Adapters

GS

Reservoir Breather Fluid Sampling Adapter



| G Thread    | $\Delta P$ (max)<br>psi (bar) | L<br>in (mm) | A/F<br>in (mm) | Part Number |
|-------------|-------------------------------|--------------|----------------|-------------|
| System 1215 | 10,000 (680)                  | 1.54 (39)    | 0.55 (14)      | SJ1215      |
| System 1620 | 10,000 (680)                  | 1.54 (39)    | 0.55 (14)      | SJ1620      |

Preferred order codes designate shorter lead times and faster delivery.

## Hose Joiners

Probalizer

# Schroeder Check Test Point System

## Microflex Hoses

Perforated polyamide / kevlar hose, 2 mm ID, 5 mm OD, plastic dust cap.  
Rated Differential Pressure 10,000 psi/680 bar max

### How to Build a Valid Model Number for a Schroeder Check Test Point System:

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 |
|-------|-------|-------|-------|-------|
| SM2   |       |       |       |       |

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 |
|-------|-------|-------|-------|-------|
| SM2   | NPT18 |       | SS    | 12    |

= SM2-NPT18-SS-012

Example: NOTE: One option per box

| BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 |
|-------|-------|-------|-------|-------|
| SM2   | NPT18 | 1215  |       | 12    |

= SM2-NPT18-1215-12

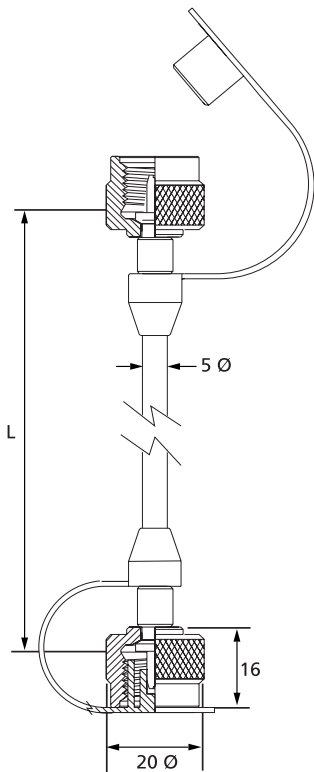
| BOX 1              | BOX 2                                      | BOX 3                                      |
|--------------------|--------------------------------------------|--------------------------------------------|
| MicroHose Diameter | Hose End System (1st End)                  | Hose End System (2nd End)                  |
| 1620               | 1620                                       | 1620                                       |
| SM2                | 1215                                       | 1215                                       |
| SM4                | NPT18 = 1/8 NPT (Male) Hose End            | NPT18 = 1/8 NPT (Male) Hose End            |
|                    | NPT14 = 1/4 NPT (Male) Hose End            | NPT14 = 1/4 NPT (Male) Hose End            |
|                    | NPFS14 = 1/4 NPT (Female Swivel) Hose End  | NPFS14 = 1/4 NPT (Female Swivel) Hose End  |
|                    | J716 = 7/16 UNF (Male) Hose End            | J716 = 7/16 UNF (Male) Hose End            |
|                    | JFS716 = 7/16 UNF (Female Swivel) Hose End | JFS716 = 7/16 UNF (Female Swivel) Hose End |
|                    | J916 = 9/16 UNF (Male) Hose End            | J916 = 9/16 UNF (Male) Hose End            |
|                    |                                            | Omit = Same as 1st end                     |

| BOX 4                    | BOX 5           |
|--------------------------|-----------------|
| Hose End Material Option | Length (inches) |
| Omit = Carbon Steel      | 6               |
| SS = Stainless Steel     | 12              |
|                          | 24              |
|                          | 36              |
|                          | 48              |
|                          | 72              |
|                          | 96              |

Preferred order codes designate shorter lead times and faster delivery.

4mm hoses are available for use with the TMU to allow adequate flow.

| L<br>in (mm) | ΔP (max)<br>psi (bar) | Part<br>Number |
|--------------|-----------------------|----------------|
| 6 (200)      | 10,000 (680)          | SM4-1620-06    |
| 12 (300)     | 10,000 (680)          | SM4-1620-12    |
| 35 (890)     | 10,000 (680)          | SM4-1620-35    |
| 71 (1800)    | 10,000 (680)          | SM4-1620-71    |



# Schroeder Check Test Point System



- Schroeder Pressure Test Kits are available in four configurations as shown below. Highest quality components were selected for versatility and long service life. Contents of each kit are listed below.
- The optional gauge range should be specified using the order code shown above.  
For example: UB102-1-2 specifies one (1) 100 psi gauge and one (1) 200 psi

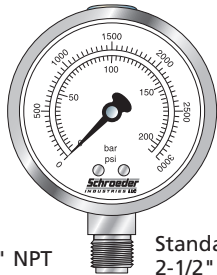
| UB101-(* )                     | UB102-(* )-(* )                | UB103-(* )-(* )-(* )           | UB106-(* )-(* )-(* )-(* )-(* )-(* )         |
|--------------------------------|--------------------------------|--------------------------------|---------------------------------------------|
| 1 U401 Gauge (* )              | 2 U401 Gauges (* )-(* )        | 3 U401 Gauges (* )-(* )-(* )   | 6 U401 Gauges (* )-(* )-(* )-(* )-(* )-(* ) |
| 1 Microflex Hose 36"           | 2 Microflex Hoses 36"/72"      | 3 Microflex Hoses 12"/36"/72"  | 6 Microflex Hoses, 2x12"/2x36"/2x72"        |
| 1 Hose Joiner                  | 1 Hose Joiner                  | 1 Hose Joiner                  | 3 Hose Joiners                              |
| 1 (Hose) Gauge Adapter         | 1 (Hose) Gauge Adapter         | 1 (Hose) Gauge Adapter         | 3 (Hose) Gauge Adapters                     |
| 1 Direct Gauge Adapter         | 1 Direct Gauge Adapter         | 1 Direct Gauge Adapter         | 3 Direct Gauge Adapters                     |
| 3 Schroeder Check Test Points: | 6 Schroeder Check Test Points: | 6 Schroeder Check Test Points: | 12 Schroeder Check Test Points:             |
| 1 ea. 1/4" NPT                 | 2 ea. 1/4" NPT                 | 2 ea. 1/4" NPT                 | 4 ea. 1/4" NPT                              |
| 1 ea. 7/16" UNF                | 2 ea. 7/16" UNF                | 2 ea. 7/16" UNF                | 4 ea. 7/16" UNF                             |
| 1 ea. 9/16" UNF                | 2 ea. 9/16" UNF                | 2 ea. 9/16" UNF                | 4 ea. 9/16" UNF                             |

Pressure test kits are also available with U400 all stainless steel gauges. Part numbers are U101-(\* ), U102-(\* )-(\* )...etc.



Custom Test Kits are designed for many special requirements. Utilizing components from Schroeder gauge and pressure test kits, these boxes are constructed for reliability and precision.

For additional information on custom test kits, please consult factory.



1/4" NPT Standard 2-1/2" Case

With the Schroeder Check System, one top quality gauge can do the work previously done by many. Compromising on low cost, short life gauges with questionable accuracy is no longer necessary. A series of precision instruments, Schroeder gauges are fluid filled with full scale accuracy of  $\pm 1.5\%$  (or better). Dual scale dial has a non-reflective white background and a high contrast matte black pointer. Cases and connections are stainless steel, internals are brass. Ideal for most liquids and gases under pressure or vacuum where contact with the liquid filling would not be hazardous. For additional applications, information, and pressure ranges, please consult the factory.

| Part Number     | Pressure                          | Order Code (needed for test kits) |
|-----------------|-----------------------------------|-----------------------------------|
| U401-30/100-01* | 30 in Hg VAC to 100 psi (6.9 bar) | 0                                 |
| U401-100-01     | 0 to 100 psi (6.9 bar)            | 1                                 |
| U401-200-01     | 0 to 200 psi (13.8 bar)           | 2                                 |
| U401-600-01     | 0 to 600 psi (41.2 bar)           | 6                                 |
| U401-1000-01    | 0 to 1000 psi (70.0 bar)          | 10                                |
| U401-1500-01    | 0 to 1500 psi (103.0 bar)         | 15                                |
| U401-3000-01*   | 0 to 3000 psi (207.0 bar)         | 30                                |
| U401-5000-01    | 0 to 5000 psi (345.0 bar)         | 50                                |
| U401-6000-01*   | 0 to 6000 psi (414.0 bar)         | 60                                |
| U401-10000-01   | 0 to 10000 psi (689.0 bar)        | 100                               |

\*Also available is U400-XXX-01 gauge, identical to U401 except with stainless steel internals.

Preferred order codes designate shorter lead times and faster delivery.

## Schroeder Pressure Test Kits

Test Points

Adapters

## Part Number

Hose Joiners

Microflex Hose

Pressure Limiters

## Schroeder Custom Test Kits

Test Kits

## Pressure Gauges

Pressure Gauges

GS

## Part Number

Reservoir Breather Fluid Sampling Adapter

Probalizer

# Multi-Gauge

## GS Multi-Gauge



P/N GS-5



P/N GS-6U

### Description

The Schroeder Multi-Gauge provides multiple pressure readings for hydraulic, transmission, and converter systems all in one compact enclosure. While one terminal connects all three gauges, the built-in gauge protector automatically protects the low and medium pressure gauges from high pressures. Each gauge is equipped with a high quality poppet valve. The Multi-Gauge is available with two types of connections: (1) the standard braided copper, flexible high pressure hose with male 1/8" pipe universal swivel fitting and (2) microbore flexhose and test point adapter (specified by U in the part number).

### Features

- **Protects against overpressurization.** The 150 psi gauge can not be damaged when a 2500 psi system is being checked. This design feature eliminates the need to know the pressure before testing.
- **Simple yet rugged construction.** The dust and moisture proof steel case is provided with a rubber bumper for shock protection. A hanger is also provided on the case back for the user's convenience.
- **Compact and portable.** The GS-5 and GS-6 models are 6-1/2" and 8-1/2" in diameter. The GS-5 fits easily into the average tool box for instant availability.
- **Saves time.** The three pressure ranges and one vacuum range provided in one case meet most routine hydraulic maintenance requirements.

### Specifications

|                     | GS-5 & GS-5U                                                              | GS-6 & GS-6U                                                               |
|---------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Case Diameter:      | 6.31 in (160 mm) O.D.                                                     | 8.50 in (216 mm) O.D.                                                      |
| Gauge Diameter:     | 1.50 in (38 mm) O.D.                                                      | 1.50 in (38 mm) O.D.                                                       |
| Approximate Weight: | 3.25 lbs (1.47 kg)                                                        | 4.5 lbs (2.0 kg)                                                           |
| Range:              | Vacuum (30" Hg) to 5000 psi (345 bar)                                     | Vacuum (30" Hg) to 6000 psi (3413 bar)                                     |
| Case:               | Steel with rubber bumper strip                                            | Steel with rubber bumper strip                                             |
| Vacuum Gauge:       | 30 in Hg                                                                  | 30 in Hg                                                                   |
| Pressure Gauges:    | 0 to 150 psi (10 bar)<br>0 to 600 psi (41 bar)<br>0 to 5000 psi (345 bar) | 0 to 300 psi (21 bar)<br>0 to 1000 psi (69 bar)<br>0 to 6000 psi (414 bar) |

### Model Number Selection

#### How to Build a Valid Model Number for a Schroeder GS:

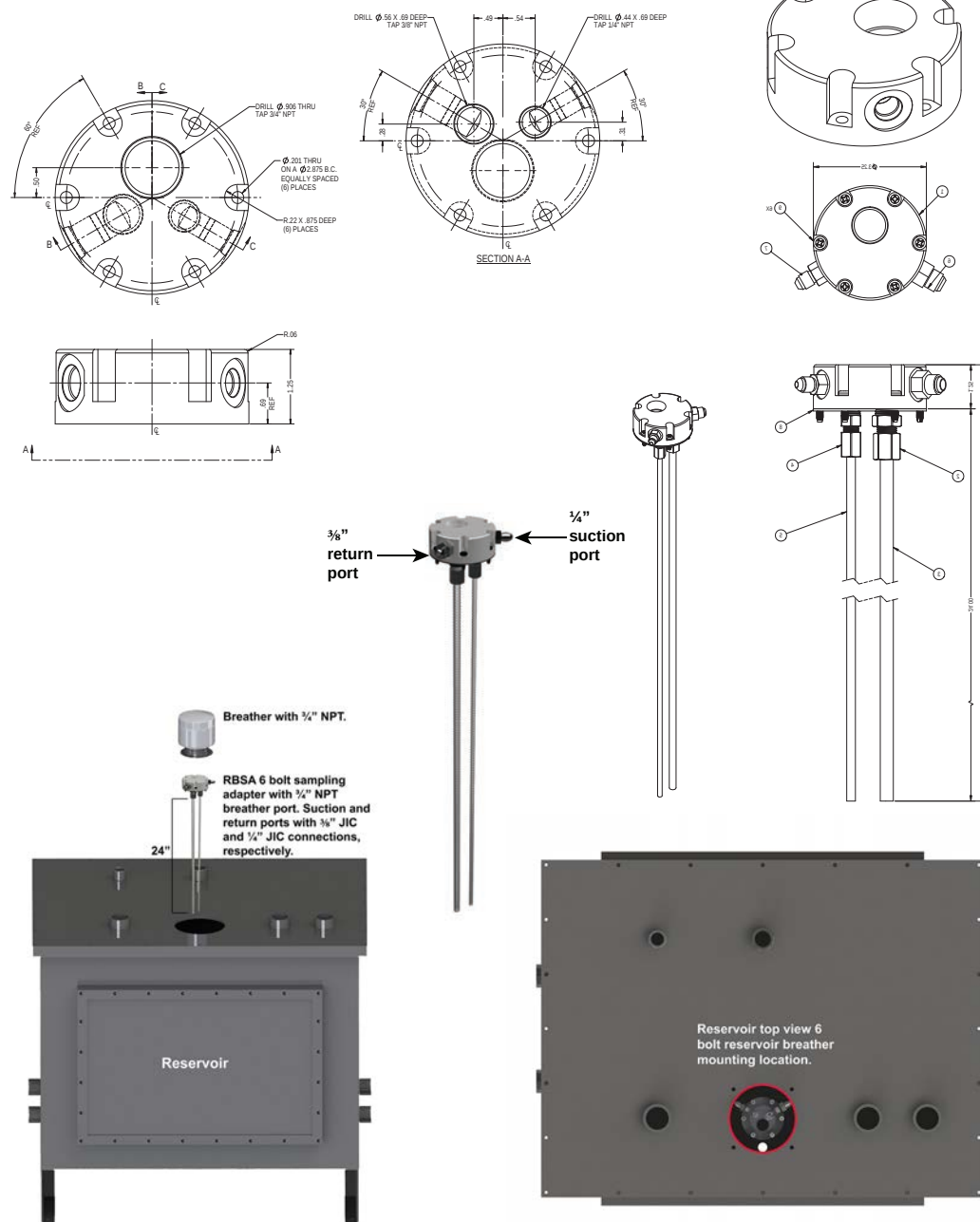
|       |       |
|-------|-------|
| BOX 1 | BOX 2 |
| GS    |       |

Example: ???

|       |       |
|-------|-------|
| BOX 1 | BOX 2 |
| GS    | 5U    |

| BOX 1 | BOX 2                                                                                                                                                                                                                                   |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model | Options                                                                                                                                                                                                                                 |
| GS    | 5 Standard Multi-Gauge<br>5U Multi-Gauge with Microbore Flexhose and Test Point Adapter<br>6 Multi-Gauge with 2-1/2" Liquid Filled Gauges<br>6U Multi-Gauge with 2-1/2" Liquid Filled Gauges, Microbore Flexhose and Test Point Adapter |

# Reservoir Breather Fluid Sampling Adapter



## Application Example

Test Points

Adapters

Hose Joiners

## Parts List Drawing

Microflex Hose

Pressure Limiters

## Reservoir Mounting Views

Test Kits

Pressure Gauges

GS

## How to Build a Valid Model Number for a Schroeder Reservoir Breather Fluid Sampling Adapter RBSA:

|       |       |
|-------|-------|
| BOX 1 | BOX 2 |
| RBSA  |       |

**Example:** NOTE: Box 2 can have multiple options.

|       |       |          |
|-------|-------|----------|
| BOX 1 | BOX 2 |          |
| RBSA  | 1     | = RBSA-1 |

| BOX 1 | BOX 2                                                                                                                   |
|-------|-------------------------------------------------------------------------------------------------------------------------|
| Model | Options                                                                                                                 |
| RBSA  | 1 = HY-TRAX® adapter fitting #6 & #4 JIC fittings and 6' supply/return hoses<br>2 = TMU adapter (suction hose included) |

## Model Number Selection

Reservoir Breather Fluid Sampling Adapter

Probalizer

# Probalizer Sampling Test Point



The Probalizer Sampling Test Point provides a point of access for obtaining representative fluid samples from an operational hydraulic system. The downstream channel is specially sized to accept the sampling probe from a customized cap/probe assembly screwed onto a sample bottle. (See photo). Use of this system minimizes leakage and helps to maintain the integrity of the sample.

Bottle and cap sold separately under P/N LF-7374.

Part Number: LF-7611

Flow Rate: 400 mL/min @ 35 psi; 1000 mL/min @ 100 psi

Burst Pressure: 4500 psi (310 bar) min

Sampling Pressure Range: 1 to 100 psi (0.07 to 6.89 bar)

Mounting Thread: 1/4" NPT

## Part Number Selection

| Part Number | Description                     |
|-------------|---------------------------------|
| LF-7611     | Probalizer Sampling Test Point  |
| LF-7374     | Bottle and cap (pictured above) |

## Adjustable Pressure Limiters

The Schroeder Pressure Limiters are engineered to pressure gauges, pressure switches, transducers, and any pressure sensitive component from system shocks and spikes utilizing a high speed valve ideal for protecting downstream components. Preset at the factory, the Schroeder Pressure Limiter is supplied in any of six standard ranges.

Standard seals are Viton® with other sealing materials available on request.

Housing is aluminum, other parts are zinc-plated steel.

Gauge Connector is 1/4" NPT Female.

| Part Number | Adjustable Range                      |
|-------------|---------------------------------------|
| U1200-01-01 | 75 to 150 psi (5.2 to 10.4 bar)       |
| U1200-01-02 | 150 to 350 psi (10.4 to 24.1 bar)     |
| U1200-01-03 | 350 to 1000 psi (24.1 to 69.0 bar)    |
| U1200-01-04 | 1000 to 1500 psi (69.0 to 103.0 bar)  |
| U1200-01-05 | 1500 to 3600 psi (103.0 to 248.0 bar) |
| U1200-01-06 | 3600 to 6000 psi (248.0 to 414.0 bar) |

**Note:** All units shipped will be preset at the minimum pressure of its range, unless otherwise specified at time of purchase.

Notes Section:

## This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal red lines across its entire width. The background is a uniform off-white or light gray color. There are no margins, text, or other markings present on the page.

## Best Filter Delivery Program

Schroeder Industries is pleased to announce the establishment of the Best Filter Delivery Program. We recognize that emergencies arise despite the best planning and forecasting efforts. To be able to offer support and service in these situations, we performed an analysis to determine our top selling filter model numbers. The result is a list of thirteen specific filter assemblies, comprising high pressure, medium pressure, return line, tank-mounted and spin-on models.

For all the models listed, guaranteed shipment is same day, provided we receive the purchase order by 1:00 pm EST. An option to specify element media other than that called for on the web page is available with a 5-day guaranteed ship date after receipt of order. No other substitutions are permitted.

At the onset of this program, a distributor/customer may be limited to a maximum quantity. This may be necessary to enable Schroeder to fulfill its guarantee of adequate inventory to all distributors alike.

The intent of this program is to provide our customers with access to the products they use most often. Therefore, as we witness shifts in filter usage, we will make changes to this list and update the corresponding web page accordingly.

We hope you and your customers find this new program useful in working through unforeseen crisis situations.

| Family                      | Product | Specifications                                                                                | Standard Part Number           | Alternate Elements                     |
|-----------------------------|---------|-----------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------|
| High Pressure, Top-Ported   | NF30    | 20 gpm, 3000 psi, SAE 1-1/16"-12 straight porting, cartridge dirt alarm                       | NF301NZ10SD5                   | N/A                                    |
| High Pressure, Top-Ported   | DF40    | 30 gpm, 4000 psi, SAE 1-5/16"-12 straight porting, cartridge dirt alarm                       | DF401CCZ3SD5                   | CC10, CCZ5                             |
| High Pressure, Base-Ported  | GKF30   | 100 gpm, 3000 psi, 1 element, SAE 1-7/8"-12 straight porting, cartridge dirt alarm            | GKF301KGZ10SD5                 | KG3, KG10, KG25, KGZ1, KGZ3, KGZ25     |
| Low Pressure, Tank-Mounted  | ZT      | 40 gpm, 100 psi, SAE 1-5/16"-12 straight inlet port, rear mounted tricolor visible dirt alarm | ZT8Z10SY2                      | N/A                                    |
| Low Pressure, Tank-Mounted  | GRT     | 100 gpm, 100 psi, 2 SAE 1.5" inlet ports, tricolor visible dirt alarm                         | GRT1KBGZ10S24S24NY2 (GRT-6915) | K3, K10, K25, KZ1, KZ3, KZ25           |
| Low Pressure, Tank-Mounted  | GRT     | 100 gpm, 100 psi, 1 SAE 1.25" straight inlet port, tricolor visible dirt alarm                | GRT1KBGZ10S20NNY2 (GRT-6916)   | KBG3, KBG10, BG25, KBGZ1, BGZ3, KBGZ25 |
| Low Pressure, Tank-Mounted  | LRT     | 150 gpm, 100 psi, 2 SAE 1.5" straight inlet ports, tricolor visible dirt alarm                | LRT18LZ10S24S24NY2 (LRT-1820)  | N/A                                    |
| Low Pressure, Spin-On       | PAF1    | 20 gpm, 100 psi, 3/4" NPTF porting, tricolor visible dirt alarm                               | PAF16PZ10PY2                   | N/A                                    |
| Low Pressure, Top-Ported    | GKF3    | 100 gpm, 300 psi, 1 element, SAE 1-7/8"-12 straight porting, cartridge dirt alarm             | GKF31KGZ25SD5                  | KG3, KG10, KG25, KGZ1, KGZ3, KGZ25     |
| Medium Pressure, Top-Ported | SRLT    | 25 gpm, 1400 psi, SAE 1-1/16"-12 straight porting, cartridge dirt alarm                       | SRLT6RZ10S12D5                 | 6RZ3, 6RZ25                            |
| Medium Pressure, Top-Ported | RLT     | 70 gpm, 1000 psi, 9" element, SAE 1-5/8"-12 straight porting, cartridge dirt alarm            | RLT9VZ10S20D5                  | 9V25, 9VZ25                            |

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