



## KleenVent® KV Series

Hydraulic Reservoir Isolators



ENGINEERING YOUR SUCCESS.



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If you have questions about the information contained herein, please contact:



#### **Accumulator & Cooler Division**

phone **815 636 4100**

[parker.com/accumulator](http://parker.com/accumulator)

The information specified in this guide serves to help understand how to install & maintain the product. The information given does not release the user from their own judgment and obligation of verification. The natural process of wear and aging also impacts how easily a product can be serviced.

Extra care is taken in the preparation of this literature, but Parker is not responsible for any inadvertent typographical errors or omissions. Information in this guide is only accurate as of the date of this publication. For a more current information base, please consult the Parker Accumulator & Cooler Division web site at: [parker.com/accumulator](http://parker.com/accumulator).

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### **⚠️WARNING**

**FAILURE OR 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 document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its related companies at any time without notice.

# KleenVent® KV Series

## Hydraulic Reservoir Isolators

Fluid contamination can lead to high maintenance costs and downtime in hydraulic systems. KleenVent® reservoir isolators provide protection against the ingestion of airborne contaminants –dust, chemicals, and water vapor – into your hydraulic system through the reservoirs breather-vent. By using an elastomer bladder as a lung, the changes in gas volume in a hydraulic system's reservoir can be trapped and prevented from mixing with the outside atmosphere. And unlike conventional breathervent filters, KleenVent® reservoir isolators provide a positive separation without the possibility of clogging or need for maintenance.

### Why Use KleenVent® Reservoir Isolators?

- Reduce hydraulic system maintenance costs
- Reduce hydraulic system downtime
- Reduce waste disposal costs
- Extends filter life
- Low maintenance solution
- Range of compounds for a variety of fluids

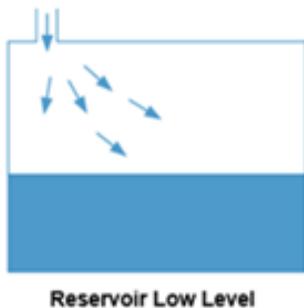
### Key Features:

- Capacities of 5, 20, 40 and 80 Gallons
- Powder Coated and Steel Shells
- Urethane bladder with a wide range of fluid compatibility. Consult factory for fluid compatibility information

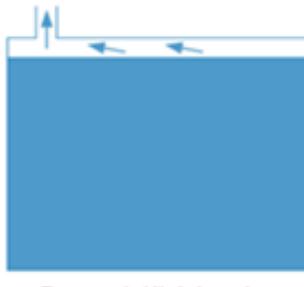
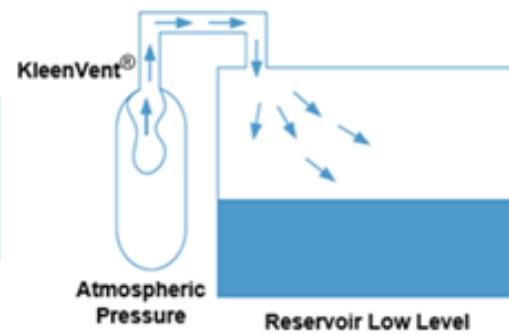
### KleenVent® Reservoir Isolators – The Right Choice For . . .

- Steel/Primary Metal Mills
- Foundries
- Pulp and Paper Mills
- Power Generation Plants
- Automotive Plants
- Any Highly Contaminated or Humid Environment

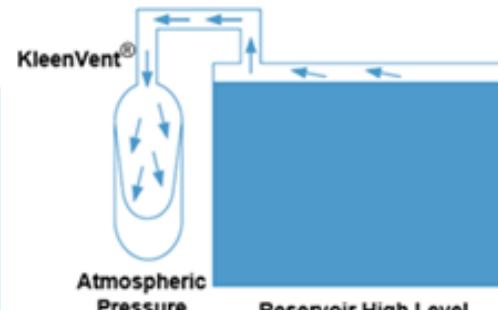
Find out more and where to buy at [www.parker.com/accumulator](http://www.parker.com/accumulator)



➤Traditional breathing reservoir ingests airborne contaminants such as dust particulates and water vapor

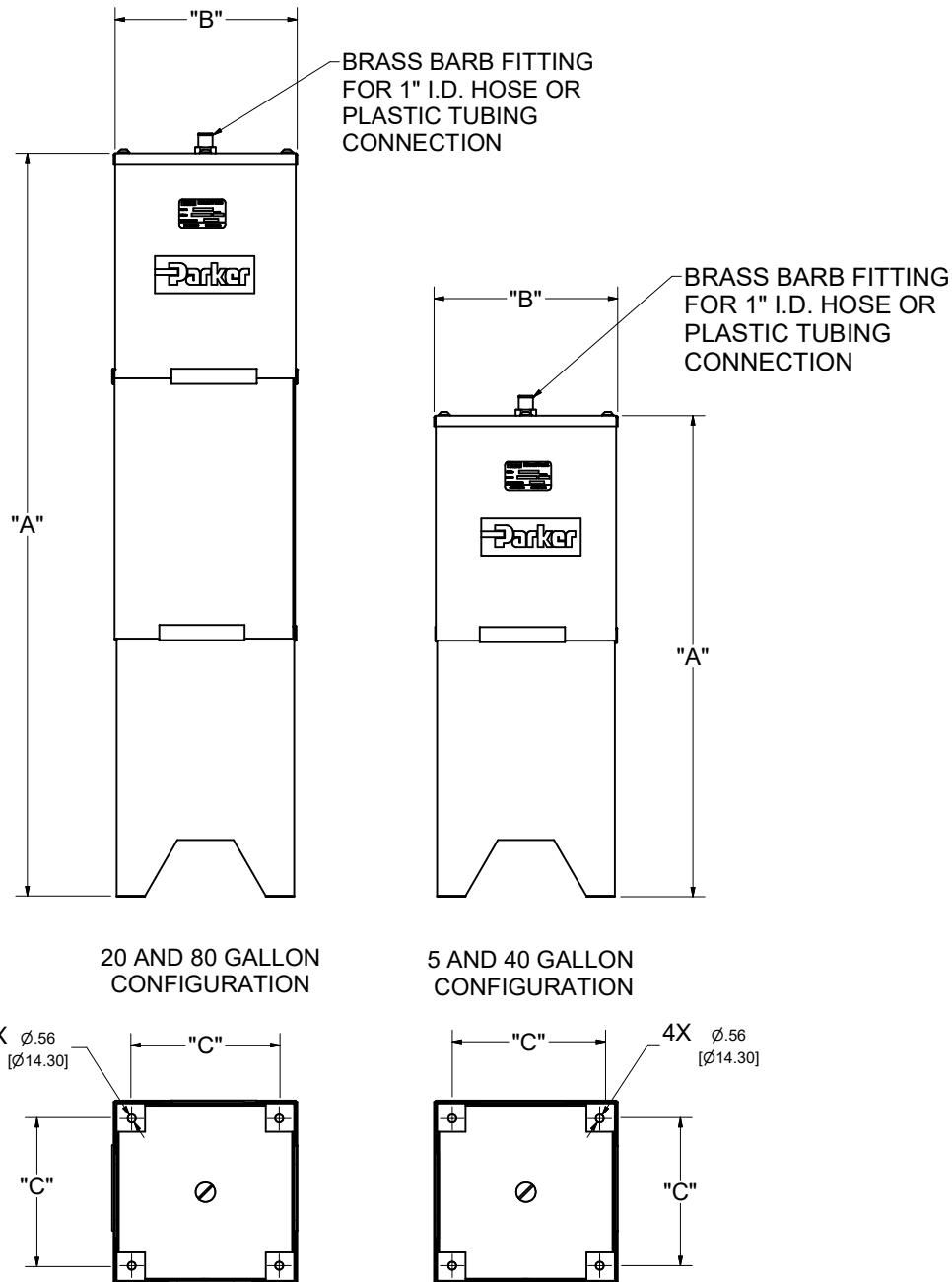


➤The use of an elastomeric lung (KleenVent®) traps the changes in reservoir gas volume and prevents the ingestion of airborne contaminants by providing a fixed atmosphere



# KleenVent® Features

## Models, Capacities and Dimensions



Specifications	Description
Enclosure	16 Gauge steel with black powder coating exterior
Connection Fitting	Brass barbed fitting for 1" I.D. hose or plastic tubing.
Pressure Rating	Atmospheric pressure
Fluids	KVE reservoir isolators are compatible with most hydraulic fluids. Consult your local distributor or the factory for fluid compatibility information.

# KleenVent® Sizing & Installation

KleenVent® units using a urethane bladder should be installed when the reservoir is at its lowest level. This will allow the bladder to inflate as the reservoir level rises. KleenVent® units should be installed in a vertical position for optimum performance. Multiple KleenVent® units should be installed in parallel when the required size exceeds 80 gallons. Always use "actual volumes" when sizing and select the next higher size when a capacity is required between size offerings.

## Sizing a KleenVent® on New and Existing Systems

On new systems, sum all single acting cylinder "differential" volumes (rod area x stroke) and all accumulator volumes in the system. Multiply this sum by 1.2 to find the KleenVent® volume required. Select one or multiple KleenVent® units with an actual capacity equal to or greater than the sum calculated. On existing systems, if the cylinder and accumulator sizes are known, the above method may be used. If not, calculate the total change in fluid volume in the system during operation by measuring the high and low fluid level of the reservoir. Multiply the difference in fluid levels by the width and length of the reservoir to calculate the total fluid exchange volume. Select one or multiple KleenVent® units with an actual capacity equal to or greater than the calculated fluid exchange volume. Feel free to contact the factory for sizing assistance.

For Additional Sizing Capabilities, Use the Gearbox & HPO Breather Sizing Calculator

<https://divapps.parker.com/divapps/cyl/kve-breather-calc-cat-std/>

## How to Order KleenVent® Units

For a more accurate way to size a KleenVent® use our calculator. Visit the Parker.com/accumulator to download a copy or consult factory.

The KVE offers true volumetric capacity in all sizes.

KVE Part Number	Enclosure Material	Usable Volume Gallons (Liters)	Dimensions, Inch (mm)			Fitting Size	Weight Lbs. [Kg]
			A	B	C		
KVE005M50A2	Metal	5	33.9 (861.06)	12.9 (327.6)	10.38 (263.6)	1" ID. hose barbed	35 [15.87]
KVE020M50A2	Metal	20	52.4 (1330.9)	12.9 (327.6)	10.38 (263.6)	1" ID. Hose barbed	60 [27.21]
KVE040M50A2	Metal	40	53.8 (1366.5)	21.4 (543.5)	18.88 (477.5)	1" ID. Hose barbed	95 [43.09]
KVE080M50A2	Metal	80	73.9 (1877.06)	21.4 (543.5)	18.88 (477.5)	1" ID. Hose barbed	140 [63.50]

Urethane bladder material with an operating temperature rating of -40 °F to 200 °F (-40 °C to 93 °C). Maximum temperature with reduced life 225 °F (107 °C)

Find out more product information and where to buy at [www.parker.com/accumulator](http://www.parker.com/accumulator)



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