

## Bladder Repair Kit

## Overview

### Bladder Accumulators, High Pressure RAS-

The bladder is the core of the accumulator product. High quality bladders can extend the accumulator life-time and operate smoothly in the hydraulic system. Our bladder repair kits are made in US and Europe with the best material quality on the market with the following features:

- High Quality Rubber Compound and Seals, Gas Valves
- Various Rubber Compound Options
- Two-piece bladder stem and gas valve design, saving cost for replacement
- Two Groups of Product as High Pressure (RK Series) and Low Pressure (RKL Series) by applications
- Both US sizes in Gallons and Metric sizes in Liters
- Custom stem and bladder sizes are available

#### CAPACITY:

<b>RK SERIES</b>	standard sizes: 1QT, 1G, 2.5G, 5G, 10G, 11G, 12.5G, 15G, 16.5G, or 1L, 2.5L, 4L, 5L, 6L, 10L, 12L, 20L, 24L, 32L, 42L, 50L, 57L
<b>RKL SERIES</b>	standard sizes: 150L/40G, 200L/53G, 275L/73G, 300L/80G, 375L/100G, 475L/125G, 530L/140G, 575L/150G

#### RUBBER COMPOUNDS:

We offer various high quality rubber materials for the different fluid media applications. Use the following chart for your reference. The performance can be different by different operations, storage, working time, etc.

Code	Abbr.	Description	Temperature Range	Comments
01*	N33	Standard Nitrile NBR, BUNA-N	-20 °C to +90 °C -4 °F to 194 °F	Mostly used, mineral, silicon and lubricating oils, industrial water, glycols, non-flammable liquids (HFA-HFB-HFC), aliphatic hydrocarbons, butane, diesel oil, kerosene, fuel oils etc.
02	N28	Low ACN content Nitrile	-40 °C to +80 °C -40 °F to 176 °F	Low Temp. Nitrile.
03	N40	High ACN content Nitrile	-10 °C to +105 °C 14 °F to 221 °F	High Temp. Nitrile, gasoline.
04	NH1	Hydrogenated Nitrile	-50 °C to +130 °C -58 °F to 266 °F	Better Behavior NBR with both extreme high and low temperatures performance.
05	ECO	Hydrin	-30 °C to +115 °C -22 °F to 239 °F	Standard Hydrin.
06	EP1	EPDM	-20 °C to +120 °C -4 °F to 248 °F	For phosphate-ester media, brake fluids, hot water, leaching fluids, detergents, water-glycol (HFC), many acids and bases, saline solutions, skydrol, etc.
07	IIR	Butyl	-20 °C to +110 °C -4 °F to 230 °F	Phosphoric esters (HFD-R), fyrquel, hot water, ammonia, caustic soda, some kinds of Freon (22-31-502), glycolbased brake fluids, some acids, alcohols, ketones, esters, skydrol 7000, etc.
08	FKM	Flouroelastomer- Viton	-20 °C to +140 °C -4 °F to 284 °F	The same as with standard NBR with excellent performance at both high and low temperatures.

\* Stocking materials

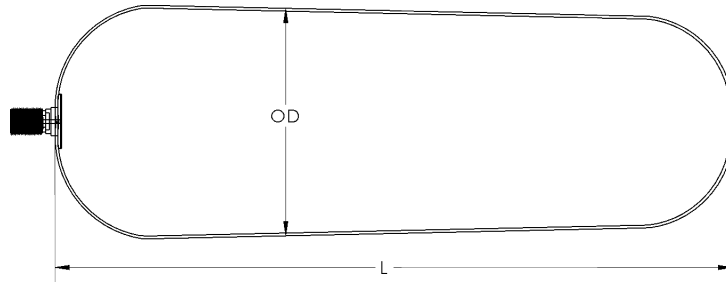
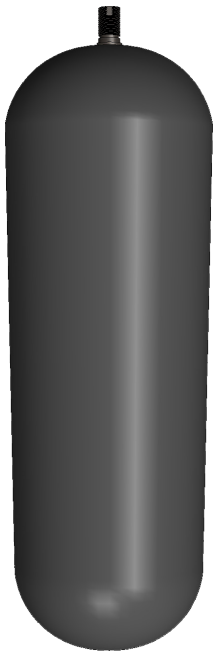
- Check our website for the rubber compatibility chart before selection.
- Special materials may take longer lead time with setup tooling fee, contact us before order.
- Contact us for other special materials not listed.

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# Series & Specifications

Bladder Accumulators, High Pressure RAS-

## RK SERIES:



CAPACITY	1 QT	1 G	2.5 G	5 G	10 G	11 G	12.5 G*	15 G	16.5 G*
<b>OD (in/mm)</b>	3.94/100	5.90/150	7.88/200	7.88/200	7.88/200	7.88/200	7.88/200	7.88/200	7.88/200
<b>L (in/mm)**</b>	5.90/150	8.25/208	11.25/286	23.20/590	43.86/1115	49.0/1245	52.0/1320	68.20/1730	72.50/1830
<b>Stem Std.</b>	5/8"-18	7/8"-14	7/8"-14	7/8"-14	7/8"-14	7/8"-14	1 5/16"-12	7/8"-14	1 5/16"-12
<b>Std. Part #</b>	R702928	R702956	R702970	R702984	R702998	R703012	R703020	R703026	R703034

### Stem Types A-F, Carbon Steel, Stainless Steel

<p>0.305-32 Thread Valve Core 5/8"-18</p> <p><b>A- 1QT Std.</b></p>	<p>1/2"-20 UNF SAE#5 7/8"-14 UNF</p> <p><b>B- 1-15G Std.</b></p>	<p>3/8"-24 UNF SAE#3 7/8"-14 UNF</p> <p><b>C- 1-15G</b></p>	<p>1/2"-20 UNF SAE#5 2"-12 UNF</p> <p><b>D- 10-15G</b></p>	<p>0.305-32 Thread Valve Core 7/8"-14 UNF 2"-12 UNF</p> <p><b>E- 10-15G HYDAC Type</b></p>	<p>1-5/16"-12 UNF SAE#16 2"-12 UNF</p> <p><b>F- 12.5/16.5G Komatsu Type</b></p>
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Not all the above materials are in stock, check the availability on your special order.

**The RK series bladder repair kit includes the following parts:**

- Bladder
- Metal Back Up Ring
- O-ring
- Washer
- High Pressure Gas Valve (1 to 15 G. only)

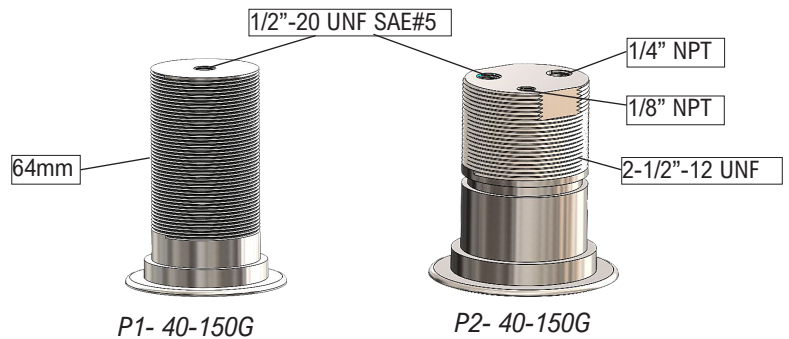
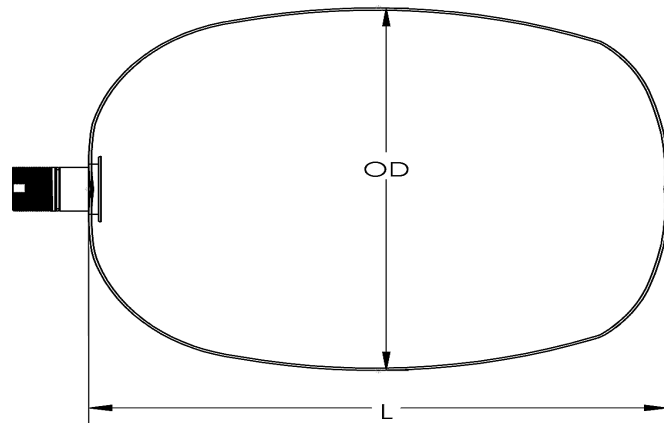
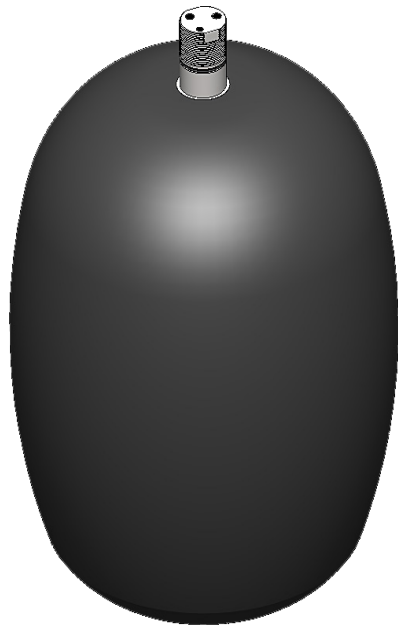
ITEM	SIZE	1 QT	1 G	2.5-15 G
<b>Metal Back-up Ring (Stainless Steel)</b>		R225010	R225020	R225030
<b>O-ring (Nitrile)</b>		R225210	R225220	R225230
<b>Washer (Nitrile)</b>		R225410	R225420	R225430
<b>Gas Valve (3,000PSI)</b>		-	G10026	G10026

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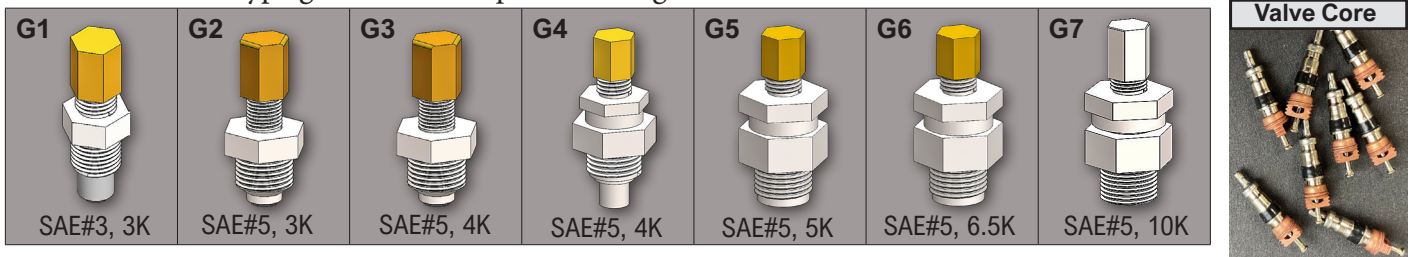
## RKL SERIES:



CAPACITY	40G(150L)	53G(200L)	73G(275L)	80G(300L)	100G(375L)	125G(475L)	140G(530L)	150G(575L)
<b>OD (in/mm)</b>	21/533	21/533	21/533	21/533	21/533	21/533	21/533	21/533
<b>L (in/mm)*</b>	23.3/593	33.3/847	42.4/1077	46.3/1175	62.1/1578	75.1/1907	81.2/2062	89.2/2266
<b>Stem Std.</b>	64mm/2.5"	64mm/2.5"	64mm/2.5"	64mm/2.5"	64mm/2.5"	64mm/2.5"	64mm/2.5"	64mm/2.5"
<b>Std. Part #</b>	RKL04001	RKL05301	RKL07301	RKL08001	RKL10001	RKL12501	RKL14001	RKL15001

## GAS VALVE OPTIONS:

Different Shrader type gas valves with pressure ranges from 3,000 PSI to 10,000 PSI



CODE	G1	G2	G3	G4	G5	G6	G7	Valve Core
<b>Max. Pressure (PSI)</b>	3,000	3,000	4,000	4,000	5,000	6,500	10,000	3,000/4,000
<b>Thread, Bottom</b>	3/8"-24	1/2"-20	1/2"-20	1/2"-20	1/2"-20	1/2"-20	1/2"-20	-
<b>Type</b>	valve core	valve core	valve core	valve core+ metal seal, military type	metal seal, military type	metal seal, military type	metal seal, military type	-
<b>Part Number</b>	G100025	G100026	G100027	G100028	G100029	G100030	G100031	G100003/G100004

# Bladder Repair Kit

# How to Order

## Bladder Accumulators, High Pressure RAS-

Use the following chart to order accumulator bladder repair kit. To order the bladder only, use the prefix "X" in front.

example: RK-05-01B is standard 5-gallon bladder repair kit; XRK-05-01B is the 5-gallon bladder only.

①	②	③	④	⑤
<b>Series</b>	<b>Size</b>	<b>Bladder/Seal Matl.</b>	<b>Stem Type</b>	<b>Stem Matl.</b>
RK	05	01	B	-

① Series	
Standard High Pressure	RK
Standard Low Pressure	RKL
<i>(use prefix "X" for bladder only)</i>	

② Nominal Size	
RK Series	
1QT/1Liter	002
1 Gallon/4 Liter	01
2.5 Gallon/10 Liter	02
5 Gallon/20 Liter	05
10 Gallon/38 Liter	10
11 Gallon/42 Liter	11
12.5 Gallon	125
50 Liter	13
15 Gallon/57 Liter	15
16.5 Gallon	165
RKL Series	
40 Gallon/150 Liter	040
53 Gallon/200 Liter	053
73 Gallon/275 Liter	073
80 Gallon/300 Liter	080
100 Gallon/375 Liter	100
125 Gallon/475 Liter	125
140 Gallon/530 Liter	140
150 Gallon/575 Liter	150

③ Bladder/Seal Material	
Nitrile/Buna-N, Std.	01
Low Temp. Nitrile	02
High Temp. Nitrile	03
Hydrogenated Nitrile	04
Hydrin	05
EPDM	06
Butyl	07
Viton/FKM	08
Others	09
<i>(see Bladder Repair Kits section for details)</i>	

⑤ Stem Material	
Carbon Steel	-
Stainless Steel 316	S

④ Stem Type	
RK Series	
5/8"-18, 1QT Std.	A
7/8"-14 UNF Std.	B
7/8"-14 UNF, SAE#3	C
2"-12 UNF Std.	D
2"-12 UNF Hydac	E
2"-12 UNF Komatsu	F
Others	X
RKL Series	
64mm	P1
2-1/2"-12 UNF	P2

Not all the combinations are available. Not all the materials are in stock. Some special materials and designs may have long lead time with no cancellation, or return. Check our customer service for the availability.



**PRESSURIZED VESSEL USE DRY NITROGEN ONLY!**  
Please refer to ReasonTek Bladder Replacement & Charging Instructions to avoid damage or failure due to improper operations.