

Standard High Pressure  
Low Pressure PulseKushon™  
Komatsu Type



**BLADDER  
REPAIR KITS**

The bladder is the core of the accumulator product. High quality bladders can extend the accumulator lifetime 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.

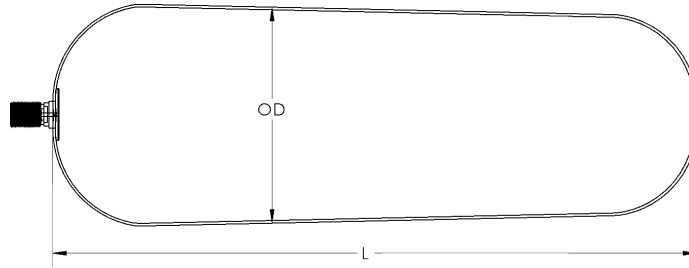
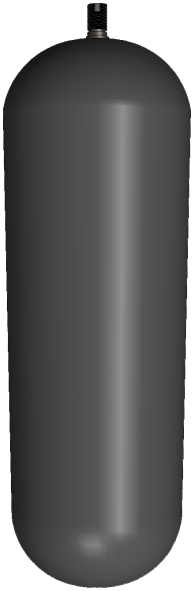
Code	Abbre.	Description	Temperature Range	Comments
<b>01*</b>	N33	Standard Nitrile NBR, BUNA-N	-20 °C to +90 °C -4 °F to 194 °F	Mostly used, mineral, silicon and lubricating oils, industrial water, glycols, non-flammable liquids (HFA-HFB-HFC), aliphatic hydrocarbons, butane, diesel oil, kerosene, fuel oils etc.
<b>02</b>	N28	Low ACN content Nitrile	-40 °C to +80 °C -40 °F to 176 °F	Low Temp. Nitrile.
<b>03</b>	N40	High ACN content Nitrile	-10 °C to +105 °C 14 °F to 221 °F	High Temp. Nitrile, gasoline.
<b>04</b>	NH1	Hydrogenated Nitrile	-50 °C to +130 °C -58 °F to 266 °F	Better Behavior NBR with both extreme high and low temperatures performance.
<b>05</b>	ECO	Hydrin	-30 °C to +115 °C -22 °F to 239 °F	Standard Hydrin.
<b>06</b>	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.
<b>07</b>	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), glycol-based brake fluids, some acids, alcohols, ketones, esters, skydrol 7000, etc.
<b>08</b>	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.

#### RK SERIES:

RK series bladder repair kits are standard bladder repair kits used for Reasontek high pressure accumulators RAS series and low pressure accumulators RAL series with various rubber compound options. Different bladder stem types are available.



CAPACITY	1 QT	1 G	2.5 G	5 G	10 G	11 G	12.5 G*	15 G	16.5 G*
OD (in/mm)	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
L (in/mm)**	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
Stem Std.	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
Std. Part #	R702928	R702956	R702970	R702984	R702998	R703012	R703020	R703026	R703034

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

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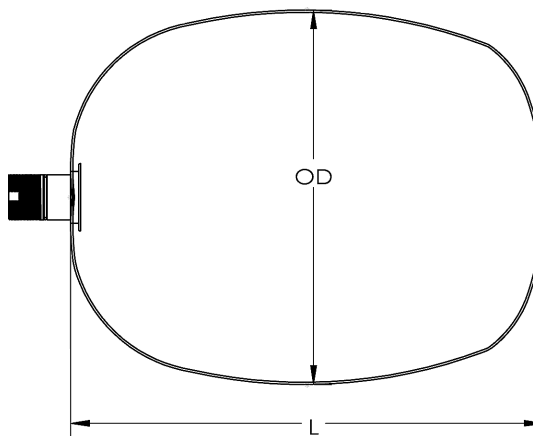
Not all the above materials are in stock, check the availability on your special order.

**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

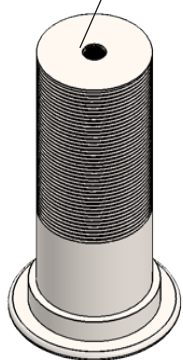
#### RKL SERIES:



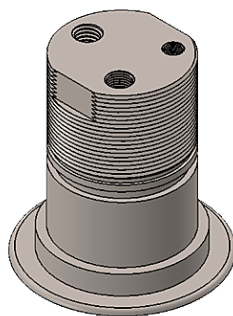
RKL series bladder repair kit is specially designed for Reasontek PluseKushon™ low pressure surge suppressors with various rubber compound options.

RKL series bladder uses 3-port 2.5" stem, which is especially designed for low pressure pressure tanks with both pressure charging and gauge monitoring functions.

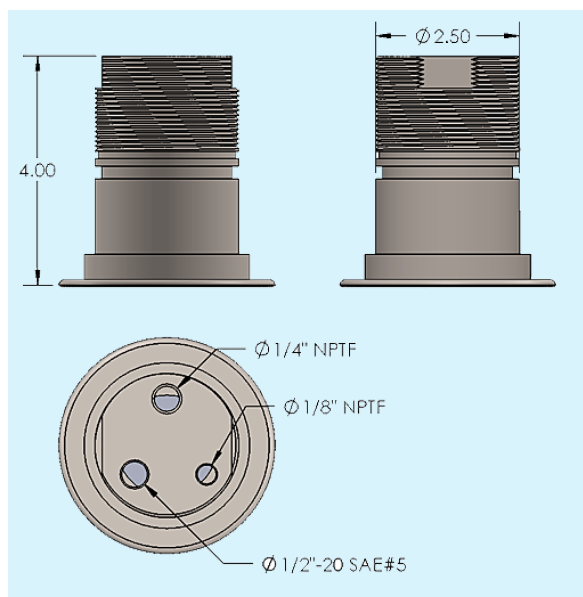
1/2"-20 UNF SAE#5



P1- 64mm



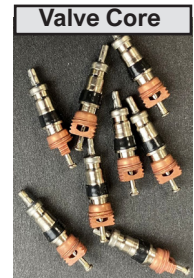
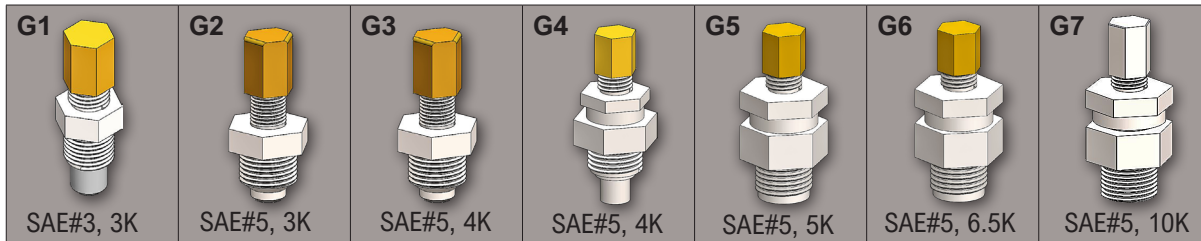
P2- standard 2.5"



CAPACITY	40G(150L)	53G(200L)	73G(275L)	80G(300L)	100G(375L)	125G(475L)	140G(530L)	150G(575L)
OD (in/mm)	21/533	21/533	21/533	21/533	21/533	21/533	21/533	21/533
L (in/mm)*	23.3/593	33.3/847	42.4/1077	46.3/1175	62.1/1578	75.1/1907	81.2/2062	89.2/2266
Stem Std.	P2/2.5"	P2/2.5"	P2/2.5"	P2/2.5"	P2/2.5"	P2/2.5"	P2/2.5"	P2/2.5"
Std. Part #	RKL04001	RKL05301	RKL07301	RKL08001	RKL10001	RKL12501	RKL14001	RKL15001

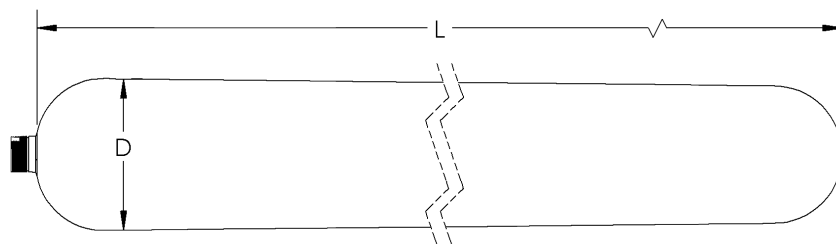
#### GAS VALVE OPTIONS:

Different Schrader type gas valves with pressure ranges from 3,000 PSI to 10,000 PSI. Also see the gas valve section below for more details.



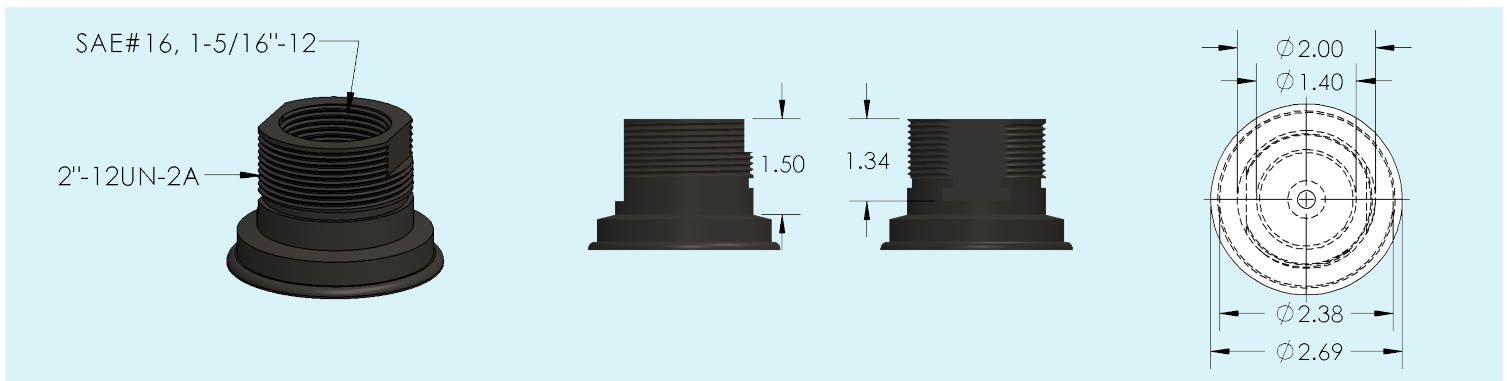
CODE	G1	G2	G3	G4	G5	G6	G7	Valve Core
Max. Pressure (PSI)	3,000	3,000	4,000	4,000	5,000	6,500	10,000	3,000/4,000
Thread, Bottom	3/8"-24	1/2"-20	1/2"-20	1/2"-20	1/2"-20	1/2"-20	1/2"-20	-
Type	valve core	valve core	valve core	valve core+ metal seal, military type	metal seal, military type	metal seal, military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

#### RK SERIES, KOMATSU TYPE:



Part Number	Size	L in. (mm)	D in. (mm)	Stem #	Material
RK-125-01/R703020	12.5G	52(1320)	7.88(200)	324B031240	Nitrile
RK-125-01/PC2040*	12.5G	61(1560)	7.88(200)	324B031240	Nitrile
RK-165-01/R703034	16.5G	72(1830)	7.88(200)	324B031240	Nitrile

\* New Komatsu 12.5G, Parker model: BA12BYT04X504/PC2040  
Dimensions are for reference only, special dimensions are made by orders.



# Bladder Repair Kit

## Ordering Code and Options

Bladder Accumulators, RAS, RAL, RPK Series

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
Series	Size	Bladder/Seal Matl.	Stem Type	Stem Matl.
RK	05	01	B	-

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

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

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

⑤ Stem Material
Carbon Steel <b>-</b>
Stainless Steel 316 <b>S</b>

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

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.