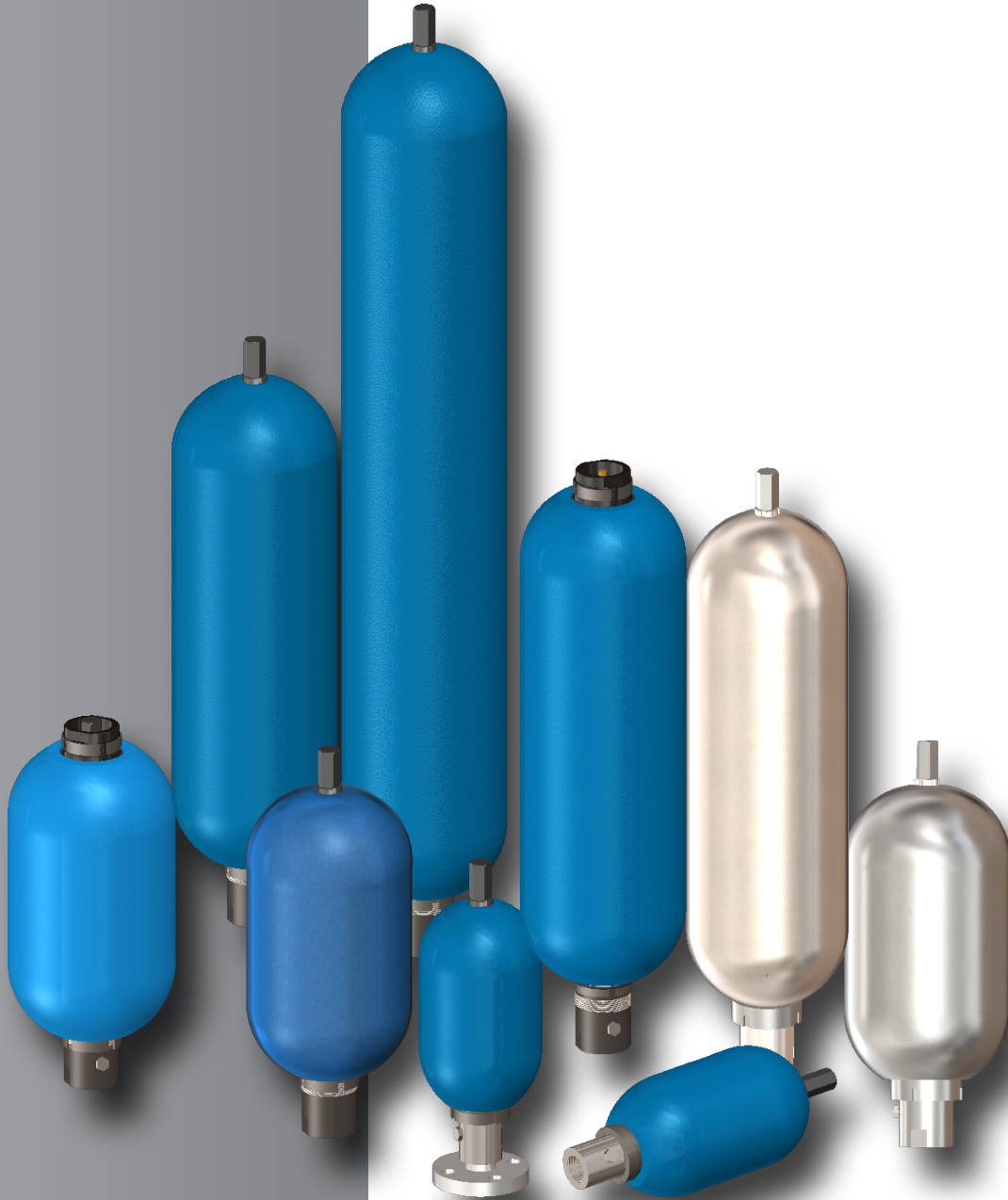
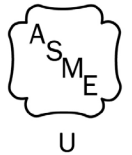
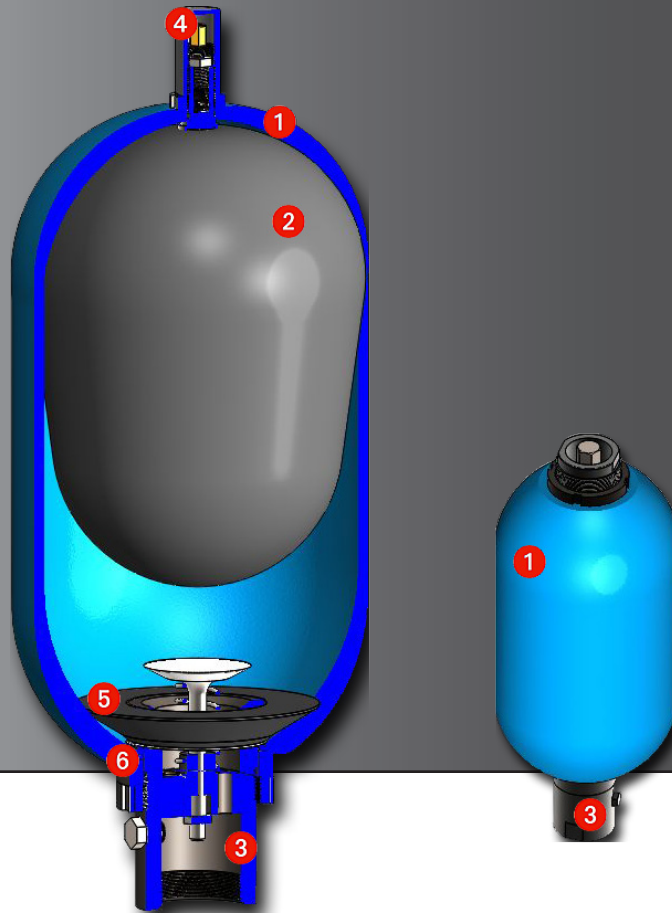


Lube Oil Services Water & Chemical Services



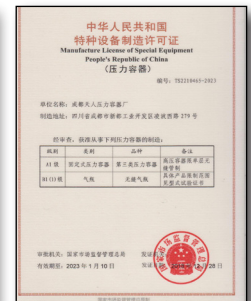
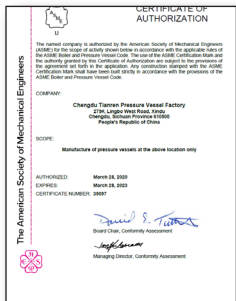
HIGH PRESSURE ACCUMULATORS

RAS



Our standard bladder accumulator is designed for energy storage, pulsation dampening, shock absorption in the hydraulic system, consisting of a molded rubber bladder inside a forged steel shell with a nitrogen gas valve on one end and a fluid port at the other. All of our bladder accumulators are ASME code stamped and interchangeable with major brands on the market. The bladders, anti-extrusion rings, O-rings and seals are all made in USA or Europe with the highest quality. They are widely used in hydraulic power units, blowout preventer (BOP) systems, surge suppressions, pump pulsation controls, etc. with the following major features:

- Rapid response to pressure changes and work**
- Complete separation of gas and fluid**
- Highly resistant to fluid contamination**
- Low maintenance, trouble-free operation**
- Readily available, low cost replacement parts**
- Eliminate costly down time on expensive systems due to simple repairs.**



CERTIFICATIONS:

Size	Standard ASME Certification			ASME Appendix 22	
	Status	Rating	D.F	Rating	D. F
1-15 Gallon 3,000 PSI	Standard	3,000 PSI	4 to 1	4,000 PSI	3 to 1
1-15 Gallon 5,000 PSI	Standard	5,000 PSI	4 to 1	6,600 PSI	3 to 1

SPECIFICATIONS:**Materials**

Shell-high strength alloy steel (SA372) with ASME Certification; Stainless steel 316 with ASME Certification. NB registered with U stamp.

Fluid Port-high strength alloy steel for oil and water services (with Nickel plate. Stainless steel 316 for water & chemical services.

Poppet & Spring - 304/316 stainless steel.

Gas Valve Protector - steel, stainless steel.

Bladder - various rubber compounds, see the bladder repair kit section.

Bladder Stem-steel, stainless steel

Maximum Flow Rates

1-gallon: 150 GPM or 568 LPM

2 ½-15-gallon Std.: 220 GPM or 833 LPM

2 ½-15-gallon High Flow: 600 GPM or 2271 LPM

Pressure Ratings

3000 and 5000 psi bladder accumulators are rated at minimum 4 to 1 design factors as standard. 4000 and 6000 psi (ASME Appendix 22) bladder accumulators are available as an option at minimum 3 to 1 design factors. For pressures over 6600 psi, consult the factory. Hydrostatic Test Pressure: Design Pressure x 1.5

Max. Recommended Compression Ratio

(Max. Working pressure/pre-charge pressure) 4 to 1.

Pre-charge

Units are shipped with nominal nitrogen pre-charge as standard. For specific pre-charge pressures, specify at time of order.

Services

Standard lube oil service

Water and chemical service

CONSTRUCTION:

❶ **The Accumulator Shell** is a seamless pressure vessel forged or fabricated from high grade steel designed and manufactured to meet various relevant international standards. The standard materials are Cr-Mo High Strength Alloy Steel SA372 and stainless steel 316. For special applications various surface coatings are available as well as stainless steel construction. See the Service Coating section for more details.

❷ **The Bladder** is made by the various high quality rubber compounds including Nitrile, Low Temp. Nitrile, High Temp Nitrile, Butyl, Viton/FKM, Hydrin, EPDM for different fluid media application. See the details on the Bladder Repair Kits section.

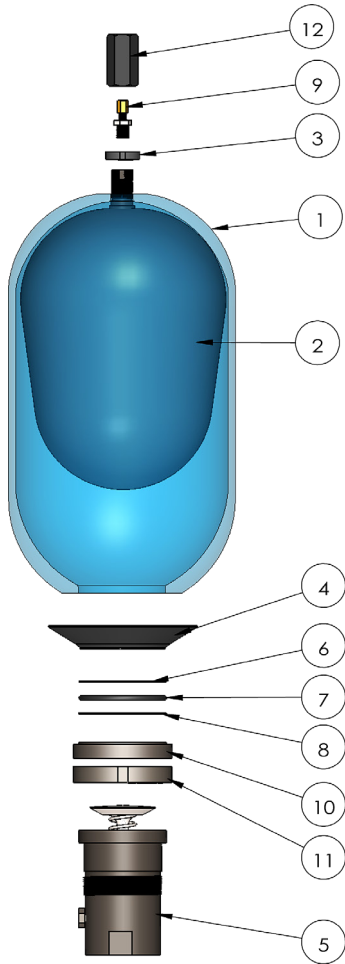
❸ **The Fluid Port** is specially designed and constructed by the flow and service line requirements. Various materials and coating as well as size and connection options are available for different services and installations. See the Fluid Port section for details.

❹ **The Gas Valve** is connected to the bladder by a rubber coated washer to ensure a gas tight joint. Two types of gas valves are available on bladder accumulators. Standard 3000 PSI and 4000 PSI rated models are offered with a cored gas valve cartridge; 5000 PSI and higher rated models are equipped with heavy duty military type metal seals.

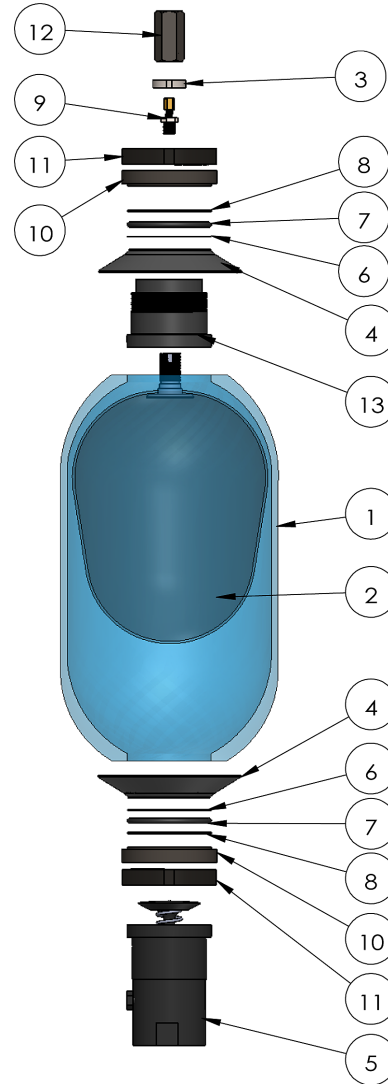
❺ **The Anti-Extrusion Ring** is made of various rubber compounds for different fluid media applications with Zinc plated or stainless steel metal rings.

❻ **The Seal Kit** consists of stainless steel metal back up ring, high quality rubber O-ring and washer.

STANDARD BILL OF MATERIALS: 3,000 PSI



BR- Bottom Repairable

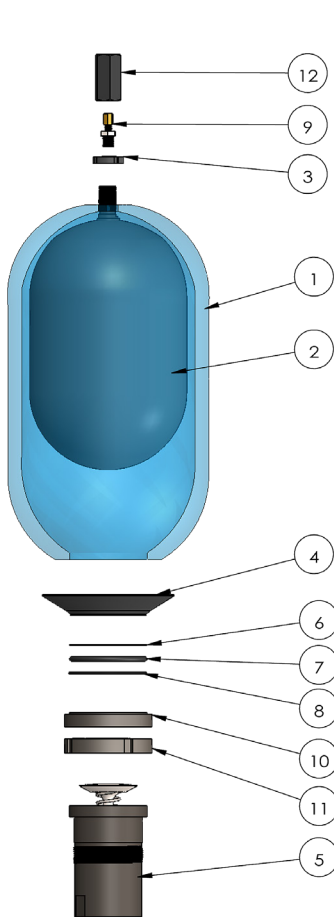


TR- Top Repairable

ITEM NO.	PART NO.		DESCRIPTION	QTY REQD	
	BR	TR		BR	TR
1	0010001-0010015	0020002-0020015	SHELL, 1-15 GALLON	1	1
2	700001-700015	700001-700015	BLADDER ASSY. , 1-15 GALLON	1	1
3	R20005	R20005	JAM NUT	1	1
4	AER01-02	AER01-02	ANTI-EXTRUSION RING	1	2
5	100001, 100002	100002	FLUID PORT ASSY, 1-1/4"NPT, 2"NPT	1	1
6	R225030,R225034	R225034	BACKUP RING, METAL	1	2
7	R225220, R225230	R225230	O-RING	1	2
8	R225400, R225420	R225420	WASHER	1	2
9	AVT500	AVT500	GAS VALVE	1	1
10	R300001, R300003	R300001, R300003	SPACER RING	1	2
11	R300002, R300004	R300002, R300004	LOCK NUT	1	2
12	R200006	R200006	VALVE GUARD	1	1
13	-	R400010	PLUG, GAS END	1	1

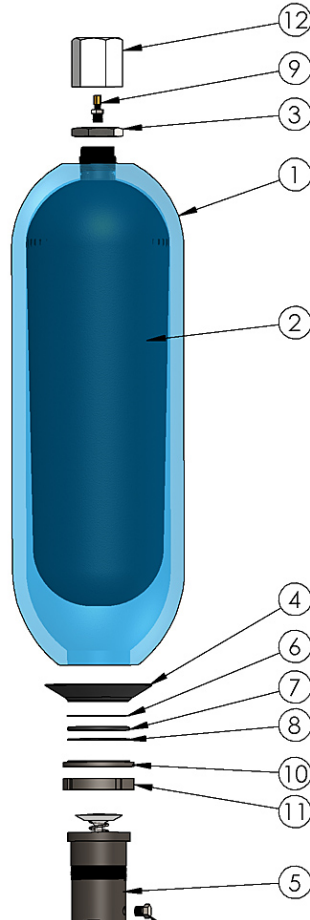
STANDARD BILL OF MATERIALS: 5,000/6,600 PSI

2" stem available for 5-15 gallon sizes bottom repairable 5,000/6,600 accumulators. Check the ordering code and bladder repair kit sections for different stem details.

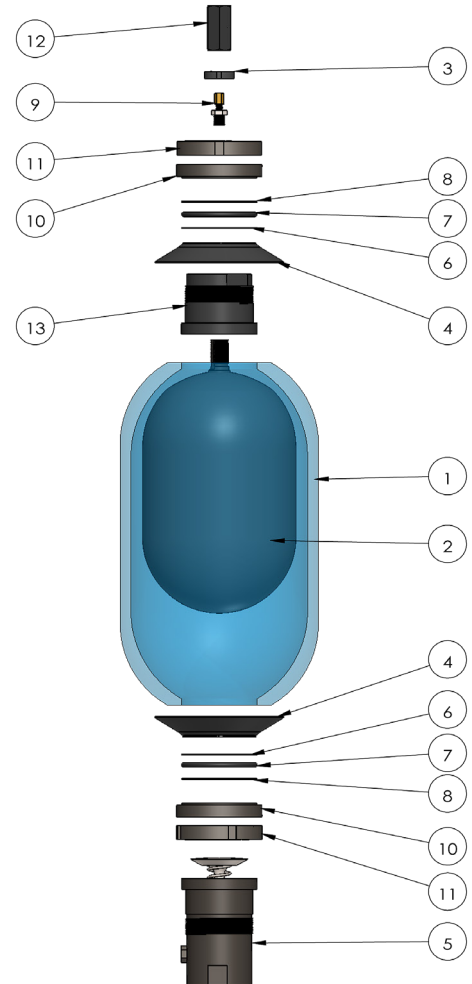


Type I-7/8" Stem B

BR- Bottom Repairable



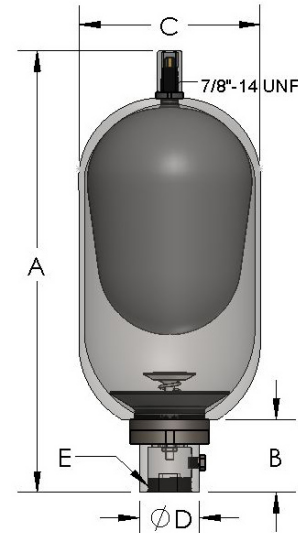
Type II-2" Stem D



TR- Top Repairable

ITEM NO.	PART NO.		DESCRIPTION	QTY REQD	
	BR (Type I)	TR		BR	TR
1	0010001-0010015	0020002-0020015	SHELL, 1-15 GALLON	1	1
2	700001-700015	700001-700015	BLADDER ASSY. , 1-15 GALLON	1	1
3	R20005	R20005	JAM NUT	1	1
4	AER01-02	AER01-02	ANTI-EXTRUSION RING	1	2
5	100101, 100102	100102	FLUID PORT ASSY, 1-1/4"NPT, 2"NPT	1	1
6	R225030, R225034	R225034	BACKUP RING, METAL, SS	1	2
7	R225220, R225230	R225230	O-RING, NITRILE	1	2
8	R225400, R225420	R225420	WASHER, NITRILE	1	2
9	G10026	G10026	GAS VALVE, 3K	1	1
10	R300001, R300003	R300001, R300003	SPACER RING	1	2
11	R300002, R300004	R300002, R300004	LOCK NUT	1	2
12	R200006	R200006	VALVE GUARD	1	1
13	-	R400110	PLUG, GAS END	1	1

The bottom repairable type is simple and cost effective design as industry standard bladder accumulator. Sizes range from 1 quart to 15 gallons



3000 PSI (207 Bar), 4000 PSI (275 Bar) Appendix 22, standard

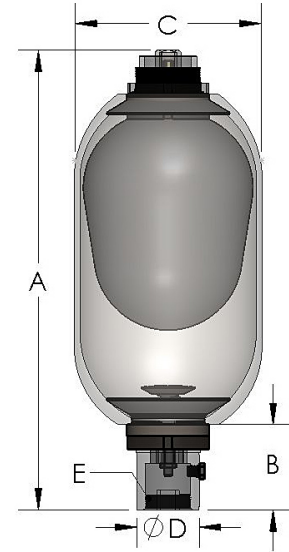
Models	Size Gallon (Liters)	Dimensions, inch (mm)				Fluid Port, Thread E ¹		Bleed Port	Weight lbs. (Kg.)
		A	B	C	D	SAE	NPT		
RAS-002C3B01N RAS-002C3B01NW1	1 Qt. (1)	11.12 (282)	2.00 (51)	4.5 (114)	1.62 (41)	SAE#12 1-1/16"-12	3/4"	-	10 (4.5)
RAS-01C3B01N RAS-01C3B01NW1	1 (3.8)	17 (432)	3.50 (89)	6.75 (171)	2.37 (60)	SAE#20 1-5/8"-12	1-1/4"	1/4" NPT	34 (15)
RAS-02C3B01N RAS-02C3B01NW1	2.5 (9.46)	21.38 (543)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	80 (36)
RAS-05C3B01N RAS-05C3B01NW1	5 (18.9)	33.38 (848)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	120 (55)
RAS-10C3B01N RAS-10C3B01NW1	10 (38)	54.38 (1382)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	220 (100)
RAS-11C3B01N RAS-11C3B01NW1	11 (41.6)	59.88 (1520)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	240 (109)
RAS-15C3B01N RAS-15C3B01NW1	15 (56.8)	77.88 (1978)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	305 (139)

5000 PSI (345 Bar), 6600 PSI (455 Bar) Appendix 22, standard

Models	Size Gallon (Liters)	Dimensions, inch (mm)				Fluid Port, Thread E ¹		Bleed Port	Weight lbs. (Kg.)
		A	B	C	D	SAE	NPT		
RAS-02C5(6)B01N RAS-02C5(6)B01NW1	2.5 (9.46)	22.55 (573)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	120 (55)
RAS-05C5(6)B01N RAS-05C5(6)B01NW1	5 (18.9)	34.80 (884)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	200 (91)
RAS-10C5(6)B01N RAS-10C5(6)B01NW1	10 (38)	55.30 (1405)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	335 (152)
RAS-11C5(6)B01N RAS-11C5(6)B01NW1	11 (41.6)	60.88 (1546)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	375 (209)
RAS-15C5(6)B01N RAS-15C5(6)B01NW1	15 (56.8)	79.80 (2027)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	485 (220)

1) Note: High flow fluid ports available, see fluid port section on page 10

The top repairable accumulator allows easy checking and maintenance of the bladder without removing the accumulator from the pipe line, saving time and cost. Sizes range from 2-1/2 to 15 gallons.



3000 PSI (207 Bar), 4000 PSI (275 Bar) Appendix 22, standard

Models	Size Gallon (Liters)	Dimensions, inch (mm)				Fluid Port, Thread E ¹		Bleed Port	Weight lbs. (Kg.)
		A	B	C	D	SAE	NPT		
RAS-02C3T01N RAS-02C3T01NW1	2.5 (9.46)	20.50 (521)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	80 (36)
RAS-05C3T01N RAS-05C3T01NW1	5 (18.9)	32.74 (832)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	120 (55)
RAS-10C3T01N RAS-10C3T01NW1	10 (38)	53.25 (1353)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	220 (100)
RAS-11C3T01N RAS-11C3T01NW1	11 (41.6)	59.00 (1499)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	240 (109)
RAS-15C3T01N RAS-15C3T01NW1	15 (56.8)	77.38 (1965)	3.62 (92)	9.06 (230)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	305 (139)

5000 PSI (345 Bar), 6600 PSI (455 Bar) Appendix 22, standard

Models	Size Gallon (Liters)	Dimensions, inch (mm)				Fluid Port, Thread E ¹		Bleed Port	Weight lbs. (Kg.)
		A	B	C	D	SAE	NPT		
RAS-02C5(6)T01N RAS-02C5(6)T01NW1	2.5 (9.46)	21.68 (551)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	120 (55)
RAS-05C5(6)T01N RAS-05C5(6)T01NW1	5 (18.9)	33.92 (862)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	200 (91)
RAS-10C5(6)T01N RAS-10C5(6)T01NW1	10 (38)	54.42 (1382)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	335 (152)
RAS-11C5(6)T01N RAS-11C5(6)T01NW1	11 (41.6)	59.98 (1523)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	375 (209)
RAS-15C5(6)T01N RAS-15C5(6)T01NW1	15 (56.8)	78.36 (1990)	3.88 (99)	9.63 (245)	3.00 (76)	SAE#24 1-7/8"-12	2"	1/4" NPT	485 (220)

1) Note: High flow fluid ports available, see fluid port section on page 10.

RAS-CARBON STEEL ACCUMULATORS

Standard lube oil service and water or chemical service

Specifications:

- Carbon steel shell, ASME Certified with U stamp, 9” diameter
- Operating Pressures: 3000PSI/5000PSI/6600PSI
- Standard sizes from 1 to 15 Gallons, Top/Bottom Repairable
- Highest quality US/European made bladders
- Various bladder compound options
- Multiple types of fluid port including Hi-flow
- Special coating option for water and chemical services
- Custom products are available by request

Services:

Standard Lube Oil Service-Carbon steel shell, corrosion protective lubrication interior; black primed exterior; carbon steel fluid components.

Standard Water Service-Carbon steel shell, Nickel plate coating interior; Polyester painting exterior, carbon steel fluid components with Nickel plate.

Extreme Water & Chemical Service, Subsea- Carbon steel shell epoxy coated interior, epoxy coated or 2-layer marine painting exterior; stainless steel fluid components.

See the coating section on page 12 for details



Std. Lube Oil Service



Water Service

RAS-STAINLESS STEEL ACCUMULATORS

Specially designed for water services, food industries, corrosive chemical medium, and other harsh environment applications



Water & Chemical Service

Specifications:

- SS316 shell, ASME Certified with U stamp, 9” diameter
- Wetted parts, SS316; other non-wetted parts, SS300 series
- Operating Pressures: 2000PSI
- Standard sizes from 1 to 15 Gallons, Top & Bottom Repairable
- Highest quality US/European made bladders
- Various bladder compound options
- Multiple types of fluid port including Hi-flow
- Custom products are available by request

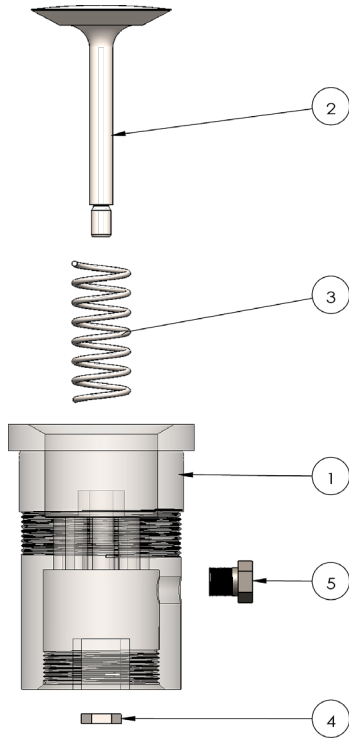
Services:

All Stainless Steel Accumulators-Seamless stainless steel shell 316, stainless steel fluid components in 300 series. Epoxy coating available on demand. Maximum corrosion protection for special applications.

See the coating section on page 12 for details

HYDRAULIC FLUID PORT ASSEMBLY

Standard flow, medium flow, high flow, carbon steel & stainless steel



FLUID PORT ASSEMBLY 3000 PSI, 5000/6600 PSI

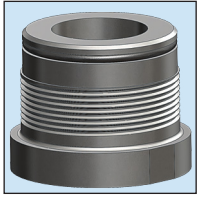
PART	DESCRIPTION	SERVICE	MATERIAL
1	Fluid Port	Lube Oil	Carbon Steel
		Water & Chemical	Carbon Steel + Nickel Plate (W1) ; Stainless Steel (W2, W3)
2	Poppet	Lube Oil	Carbon Steel
		Water & Chemical	Stainless Steel (W1, W2, W3)
3	Spring	Lube Oil	Carbon Steel
		Water & Chemical	Stainless Steel (W1, W2, W3)
4	Lock Nut	Lube Oil	Carbon Steel
		Water & Chemical	Carbon Steel
5	Bleed Plug	Lube Oil	Carbon Steel
		Water & Chemical	Carbon Steel + Nickel Plate (W1); Stainless Steel (W1, W2, W3)

Size	Standard Port	Optional Port				High Flow Port		Part Number (std.) NPT/SAE		
	NPT Thread	SAE Thread	NPT Undersized	Metric Thread	BSPP Thread	NPT Thread	Metric Thread	CS	Nickel Plate	Stainless Steel
3000 PSI ASSEMBLIES										
1 Qt	3/4" NPTF	SAE#12	-	M27X2	3/4-14	-	-	10000Q 10001Q	10000QW 10001QW	10000QS 10001QS
1 Gal.	1-1/4" NPTF	SAE#20	-	M42X2	1-1/4-11	-	-	100001 100011	100001W 100011W	100001S 100011S
2.5-15 Gal.	2" NPTF	SAE#24	1-1/4" NPTF	M48X2	2-11	4" NPTF	M95X2	100002 100012	100002W 100012W	100002S 100012S
5000/6600 PSI ASSEMBLIES										
1 Gal.	1-1/4" NPTF	SAE#20	-	M42X2	1-1/4-11	-	-	100101 100111	100101W 100111W	100101S 100111S
2.5-15 Gal.	2" NPTF	SAE#24	1-1/4" NPTF	M48X2	2-11	4" NPTF	M95X2	100102 100112	100102W 100112W	100102S 100112S

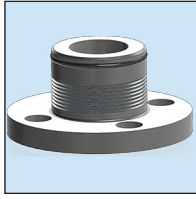


CUSTOM HYDRAULIC FLUID PORT

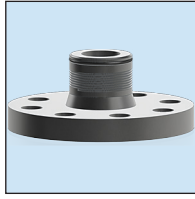
Custom fluid ports are available for international customers with special connections. See the following fluid ports with custom adapters and flanges. Contact us for your special requirements.



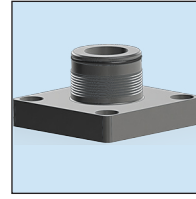
1/2" NPT



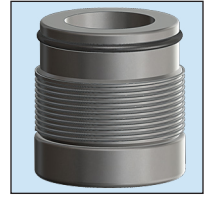
ANSI 1"-150#



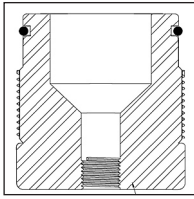
ANSI 2"-300#



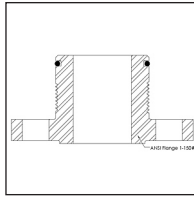
Flange, Square



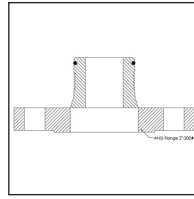
1/4" NPT



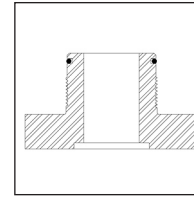
NPT Reducer



ANSI Flange 150#



ANSI Flange 300#



Square Flange



COATING AND SERVICE

We offer various coating and service options for different major applications. See the following major options and descriptions. Some of the coatings will need customer's approval before ordering. Please note, special coatings may take longer time to deliver.

Service Code	Shell Material	Fluid Port Material	Wetted Parts	Non-wetted Parts	Coating	Applications
Std. (-omit)	carbon steel	carbon steel	carbon steel	carbon steel	protective lubrication interior primed black exterior	lube oil service, hydraulic units.
W1	carbon steel	carbon steel+ Nickel plate	stainless steel 300	carbon steel+ Zinc plate	Nickel plate interior,	standard water service.
W2	carbon steel	stainless steel 316	stainless steel 300	stainless steel 300	Nickel plate interior,	high water and chemical service.
W3	carbon steel	stainless steel 316	stainless steel 300	stainless steel 300	Phenolic and epoxy coating interior and exterior, marine paint	harsh environment, offshore drilling, subsea.
S	stainless steel 316	stainless steel 316	stainless steel 316	stainless steel 300	(coating by demand)	best corrosion protection, food industry, highly corrosive water & chemical.

Contact us for other special coating options.

BLADDER RUBBER COMPOUNDS

The choice of the elastomer used for the bladder depends on the liquid to be used and on the operating temperatures (and at times, storage). Our accumulator products use high quality rubber materials to meet customer's different requirements. Check our website for the rubber compatibility file or contact us for any other special applications.

Code	Abbre.	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 temperature 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.

HOW TO ORDER RAS SERIES BLADDER ACCUMULATORS:

RAS series bladder accumulators can be specified by using the following symbols in the chart. Please note, not all the combinations are valid. For details about the bladder material selection, please visit our website at:

Contact us if you have special options not listed.

①	②	③	④	⑤	⑥
Series	Size	Shell Matl.	Pressure	Construction	Bladder/Seal Matl.
RAS	05	C	3	B	01

① Series
Standard High Pressure RAS

③ Shell Material
Carbon Steel C
Stainless Steel 316 S

⑤ Construction
Top Repairable T
Bottom Repairable B

② Nominal Size
1QT/1Liter 002
1 Gallon 01
2.5 Gallon 02
5 Gallon 05
10 Gallon 10
11 Gallon 11
15 Gallon 15
Others XX
<i>(use Liters+L on metric sizes)</i>

④ Pressure
2000 PSI/138 Bar <i>(for stainless steel shell only)</i> 2
3000 PSI/207 Bar 3
4000 PSI/276 Bar 4
5000 PSI/345 Bar 5
6600 PSI/455 Bar 6
Others X

⑥ 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>

• Check the rubber compounds chart on page #12, the temperature range could be different by different applications.
 • See the rubber compatibility chart for different fluid media applications.
 • Non-standard materials may take longer lead time, check for the availability before order.

7	8	9	10	11 (Optional)
Bladder Type	Fluid Port	Service & Coating	Certificate	ACCESSORIES (OPTIONAL)
-	N	W1	-	-

7	Bladder Type
	7/8" stem, Std. -
	2" stem D
	2" stem, Hydac type E
	Others X
	<i>(see Bladder Repair Kits section for details)</i>

9	Service & Coating
	Std. Lube Oil -
	Std. WS, Nickel Plate Shell+ Zinc Plated Components W1
	High WS, Nickel Plated Shell+ Stainless Steel Components W2
	Extreme WS, Interior/Exterior Epoxy, Marine Paint+ Stainless Steel Components W3
	All Stainless Steel S
	Others X
	<i>(see Service & Coating section for details)</i>

8	Fluid Port
	NPT Thread, Std N
	1 QT 3/4" NPT
	1 Gallon 1-1/4" NPT
	2.5-15 Gallon 2" NPT
	Other Sizes ("X" sizes) NX
	NPT Thread Undersized U
	2.5-15 Gallon, 1-1/4" NPT
	SAE Thread S
	1 QT SAE#12
	1 Gallon SAE#20
	2.5-15 Gallon SAE#24
	Other Sizes ("X" sizes) SX
	SAE 4-Bolt Split Flange P
	2.5-15G, 3K Code 61, 2"
	2.5-15G, 5K Code 62, 1.5"
	Other Sizes ("X" sizes) PX
	Metric Thread M
	1 QT M27*2
	1 Gallon M42*2
	2.5-15 Gallon M48*2
	Other Sizes ("X" sizes) MX
	BSPP Thread B
	1 QT 3/4-14
	1 Gallon 1 1/4-11
	2.5-15 Gallon 2-11
	Other Sizes ("X" sizes) BX
	High Flow Port
	4" NPTF, 2.5-15 Gallon H
	M95*2, 2.5-15 Gallon I
	Other Sizes ("X" sizes) HX
	Flange Adapter F
	pipe size + flange rating, eg. F3-300
	<i>(see Fluid Port section for details)</i>

10	Certificate
	Std. ASME -
	CE/PED C
	CRN R
	SELO S
	Others X

11	Accessories
	Single Bolt Clamp, 1G,3K RMS-67
	Double Bolt Clamp, 2.5-15G,3K RMD-91
	Single Bolt Clamp, 1G, 5K RMS-71
	Double Bolt Clamp, 2.5-15G, 5K RMD-97
	Single Bolt Clamp,1G, SS RMS-67S
	Double Bolt Clamp, 2.5-15G, SS RMD-91S
	Base Bracket, 1G RBB-45
	Base Bracket, 1G, SS RBB-45S
	Base Bracket, 2.5-15G RBB-66
	Base Bracket, 2.5-15G, SS RBB-66S
	Charging Kit, 3K RGA-100-X
	Service Kit, 3K (13pcs) RMK-100
	Valve Guard & Gaging RGA-102X
	Rupture Disc RRD-
	<i>(see Tools & Accessories section for details)</i>

