Global Bladder Accumulators

BA Series – Bottom & Top Repairable

Parker

ENGINEERING YOUR SUCCESS.

Parker Has You Covered – Wherever You Are

Discover Reliable Bladder Accumulators That Fit Your Global Footprint

Parker's global bladder accumulators provide **four standard certifications that cover three continents**. That's the largest geographical footprint of any line of standard accumulators in the market today. Whether your equipment is operating in North America, Europe or Australia, our global bladder accumulators are ready to perform. With one standard product featuring four distinct certifications, you can trust that your growing bladder accumulator needs will be met – with quality and precision.

Superior Design Engineering
Parker's global bladder accumulators are specially engineered to the highest quality standards, ensuring greater productivity in your application.

We offer:

- **Availability in standard sizes, including 1, 2.5, 5, 10 and 15 gallons**
- **Safe Engineering Practice designation for smaller sizes that fall below certification size or capacity**
- **Availability in bottom and top repairable**
- **Buna Nitrile, Hydrin, Butyl, EPR and Fluoroelastomer compounds available as standard compounds**

Product Features
Parker helps reduce worry and improves efficiency with features such as:

- **American Society of Mechanical Engineering ASME Certification**
- **CE Certification from Pressure Equipment Directive covering Europe**
- **CRN Canadian pressure vessel certification**
- **AS1210 Australian certification**
- **Bladder repair kits are reverse compatible and can be used in traditional ASME only shells**
- **Built in the USA for rapid availability**

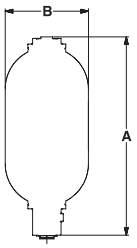
Flexible Offering to Meet Your Requirements
Parker provides a variety of standard and optional bladders to suit a wide range of fluids and operating temperatures. The table below lists the optional bladders available, the recommended operating temperature ranges and the fluid types that are generally compatible.

Bladder Options for Global Accumulators

Product Features				
Seal Code	**Polymer**	**Recommended Operating Temperature Range***	**Maximum Temperature with Reduced Life**	**General Application & Compatibility****
01	Buna-Nitrile (Standard)	-20°F to 200°F -29°C to 93°C	225°F 107°C	Standard Compound – Compatible with most mineral oil-based fluids
04	Hydrin (Low Temperature)	-40°F to 225°F -40°C to 107°C	250°F 121°C	Compatible with most mineral oil-based fluids with enhanced low temperature performance
06	Butyl	-40°F to 200°F -40°C to 93°C	300°F 149°C	Compatible with most phosphate ester fluids and some synthetic fluids
08	Ethylene Propylene (EPR)	-40°F to 200°F -40°C to 93°C	300°F 149°C	Compatible with some synthetic fluids and water
28	Fluoroelastomer	-10°F to 250°F -23°C to 121°C	400°F 204°C	Compatible with most mineral oil-based fluids at higher temperatures and some exotic fluids

* Temperature ranges may vary depending upon the fluid used in the hydraulic system.
** Consult your local distributor or factory for fluid compatibility information.

Improve Efficiency – From Bottom to Top



Bottom Repairable 3000 psi ASME / 330 bar PED Certified Shells					
Nominal Size	**Model Code**	**Gas Volume cu. in. (L)**	**Dimensions, inch (mm)**		
			A inch (mm)	**B inch (mm)**	**Weight lbs (kg)**
10 cu. in. (0.16L)	BAC10B3T##Y2	10.3 (.17)	11.12 (282.6)	2.00 (50.8)	3.4 (1.6)
1 pint (0.47L)	BA001B3T##Y2	32 (.53)	9.93 (252.3)	3.50 (89.0)	5.8 (2.6)
1 quart (0.95L)	BA002B3T##Y2	58 (.95)	10.93 (277.7)	4.49 (114.0)	9.2 (4.2)
150 cu. in. (2.5L)	BA005B3T##Y2	155 (2.54)	18.93 (480.9)	4.49 (114.0)	16.3 (7.4)
1 gal (3.79L)	BA01B3T##P2	222 (3.65)	17.26 (438.5)	6.61 (168.0)	29.6 (13.4)
2.5 gal (9.46L)	BA02B3T##P2	578 (9.46)	22.21 (564.1)	8.78 (223.0)	61.5 (27.9)
5 gal (18.9L)	BA05B3T##P2	1167 (19.1)	33.85 (859.8)	8.78 (223.0)	98 (44.5)
10 gal (37.9L)	BA10B3T##P2	2174 (35.6)	55.46 (1409)	8.78 (223.0)	161 (73.0)
11 gal (41.6L)	BA11B3T##P2	2419 (39.6)	59.98 (1524)	8.78 (223.0)	175 (79.4)
15 gal (56.8L)	BA15B3T##P2	3275 (53.7)	77.85 (1978)	8.78 (223.0)	231 (104.8)

Note: 1 gallon size available with 4000 psi Appendix 22 Approval. 2.5 gallon through 15 gallon size available with 3600 psi ASME Appendix 22 Approval.

Top Repairable 3000 psi ASME / 330 bar PED Certified Shells					
Nominal Size	**Model Code**	**Gas Volume cu. in. (L)**	**Dimensions, inch (mm)**		
			A inch (mm)	**B inch (mm)**	**Weight lbs (kg)**
2.5 gal (9.46L)	BA02T3T##P2	571 (9.35)	20.98 (533.0)	8.78 (223.0)	66.7 (30.25)
5 gal (18.9L)	BA05T3T##P2	1160 (18.98)	33.23 (844.1)	8.78 (223.0)	103 (46.7)
10 gal (37.9L)	BA10T3T##P2	2167 (35.50)	54.23 (1377.5)	8.78 (223.0)	167 (75.7)
11 gal (41.6L)	BA11T3T##P2	2412 (39.53)	59.36 (1507.7)	8.78 (223.0)	180 (81.6)
15 gal (56.8L)	BA15T3T##P2	3269 (53.58)	77.23 (1961.7)	8.78 (223.0)	234 (106.1)

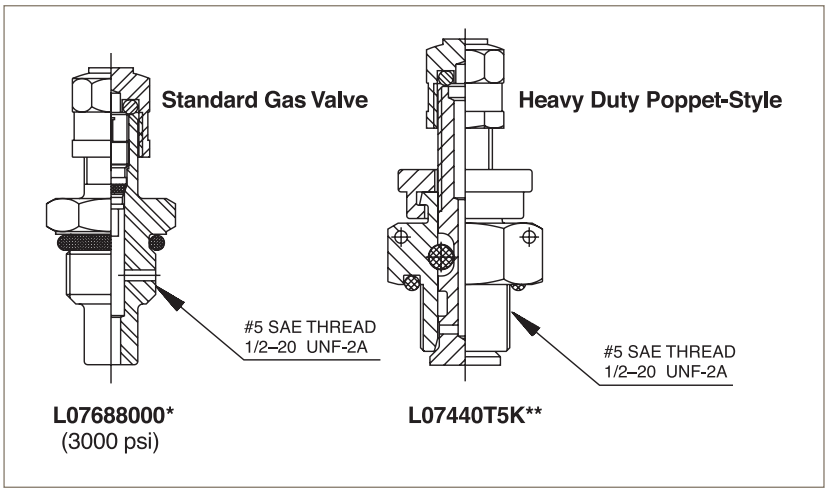
Note: 2.5 gallon through 15 gallon size available with 3600 psi ASME Appendix 22 Approval.

Global Design Specifications

Compliance on Three Continents

Design Code Table												
Style	Size	United States Design Certifications				Europe Design Certifications			Canadian & Australian Certifications			
		Non-ASME	ASME	Non-ASME & ASME Design Pressure	Appendix 22 Design Pressure	Stand. Engineering Practice (SEP)	CE	PED Design Pressure	CRN	AS 1210	CRN & AS 1210 Design Pressure	
											ASME	App. 22
Bottom Repairable	10 cu. in.	Y		3000 psi		Y		330 bar				
	1 Pint	Y		3000 psi		Y		330 bar				
	1 Quart	Y		3000 psi		Y		330 bar				
	150 cu. in.	Y		3000 psi			Y	330 bar				
	1 Gallon		P	3000 psi	4000 psi		P	330 bar	P	P	3000 psi	4000 psi
	2.5-15 Gallon		P	3000 psi	3600 psi		P	330 bar	P	P	3000 psi	3600 psi
Top Repairable	2.5-15 Gallon		P	3000 psi	3600 psi		P	330 bar	P	P	3000 psi	3600 psi

Design Code Key
Y = Non-ASME / PED (< 1 Gallon)
P = ASME / App. 22 / PED / CRN / AS1210



L07688000*
(3000 psi)

L07440T5K**

Gas Valves

Two types of gas valves are available on the global bladder accumulator. Our standard offers a cored gas valve cartridge. We also offer a heavy duty poppet-style gas valve.

*Standard Gas Valve – Seal Compound	
Q	Compatible with Buna-Nitrile, Hydrin & Butyl configuration
E	Compatible with Fluoroelastomer configurations
D	Compatible with EPR configurations

**Heavy Duty Poppet Style – Seal Compound	
9	Compatible with Buna-Nitrile, Hydrin & Butyl configuration
5	Compatible with Fluoroelastomer configurations
7	Compatible with EPR configurations

Legacy Products

Parker is proud to provide legacy products for these brands:

OLAER®

GRR BLADDER PRODUCTS

How To Order Bladder Accumulators

Ordering Parker bladder accumulators is quick and easy. Simply use the symbols in the chart below to specify your bladder accumulator and gas bottle, and then develop a model number. Select only those symbols that represent the desired features and place them in the sequence indicated by the example at the top of the chart.

Series	Size	Construction	Gas Pressure	Hyd. Port	Bladder/Seal Compound	Design Modification	Design Code
BA	001	B	3	T	01	P	2

Series

BA	Accumulator
BG	Gas Bottle

Size

C10*	10 cu. in.
001*	1 Pint
002*	1 Quart
005	150 cu. in.
01	1 Gallon
02	2 1/2 Gallon
05	5 Gallon
10	10 Gallon
11	11 Gallon
15	15 Gallon

Type of Construction

B	Bottom Repairable Standard on all sizes
T	Top Repairable Optional for 2 1/2 Gallon and up

Pressure Options

3	3,000 psi

Hydraulic Port

T	**SAE Straight Thread O-Ring (Standard)**	
	10 cu. in.	SAE #8
	1 Pint	SAE #12
	150 cu. in., 1 Quart	SAE #16
	1 Gallon	SAE #20
	2 1/2 Gallon through 15 Gallon	SAE #24
U	**NPTF Pipe**	
	10 cu. in.	3/4" NPTF Male
	1 Pint	3/4" NPTF
	1 Quart & 150 cu. in.	1" NPTF
	1 Gallon	1 1/4" NPTF
	2 1/2 Gallon through 15 Gallon	2" NPTF
L	1 Gallon	1 1/4" Code 61 (207 Bar Max)
	2 1/2 Gallon through 15 Gallon	2" Code 61 (207 Bar Max)
F	**SAE 4-Bolt Split Flange****	
	10 cu. in. through 150 cu. in.	N/A
	1 Gallon	1 1/4" Code 62
	2 1/2 Gallon through 15 Gallon	1.5" Code 62

* 1 Pt., 1 Qt. and 150 cu. in. – ASME design, available with "U" stamp. If "U" stamp is required, it must be specified at time of order.

** The flange port does not increase the working pressure of the vessel.

*** Consult factory for nonstandard options.

NOTE: ASME documentation or any other certification must be requested at time of order.

Design Code

2	Standard
-	Number given***

Design Modification (1st Digit)

Blank	(Standard) Oil Service
W	Water Service▲
H	Chemical Service
N	Poppet Style Valve (Oil Service)
T	Poppet Style Valve (Water Service)

Design (2nd Digit)

P	Standard ASME (1 Gallon and up)
Y	Non ASME/PED < 1 Gallon
S	Special

▲ Consult factory when using water/chemical service with any port other than the standard SAE.

Bladder/Seal Compound

01	Buna-Nitrile (Standard)
04	Hydrin
06	Butyl
08	EPR
28	Fluoroelastomer

⚠ WARNING - USER RESPONSIBILITY

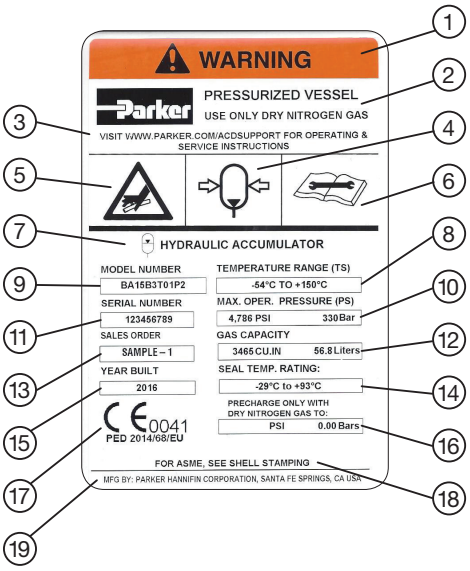
FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors. To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

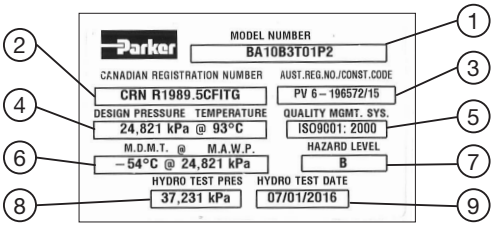
Follow the QR code to Parker's online configurator for our Global Bladder Accumulator.

Global Labels At-A-Glance

Standard Labels to Call Out All Four Certifications



1	Warning Notice per ISO 3864-2.
2	Nitrogen only warning.
3	Note to visit Parker website for details.
4	Warning of Accumulator under pressure per ISO 7000 symbol #3317.
5	Warning noting the danger of pressurized fluid injection per ISO 9244.
6	Warning to read technical manual per ISO 7000 symbol #1659.
7	ISO 1219 schematic symbol for a bladder accumulator.
8	Temperature range external load bearing metal components will meet per PED 2014/68/EU (formerly 97/23/EC). The ASME range is stamped on the shell. They are different.
9	Parker's BA Series Model Number.
10	The maximum operating pressure the accumulator will meet per PED 2014/68/EU (formerly 97/23/EC). The max. ASME operating pressure is stamped on the shell. They are different.
11	Serial number of the specific accumulator.
12	The internal gas capacity of the accumulator.
13	Parker's sales order number for the manufacturing lot. This helps customer service rapidly answer any questions pertaining to the specific accumulator.
14	Temperature range the internal seal components and bladder will continuously meet without rapid degradation.
15	The year the accumulator was manufactured.
16	The customer specified nitrogen pre-charge pressure. If no pre-charge is specified by the customer, this will be left blank. There will still be a holding charge of 29 psi (2 bar) inside the accumulator.
17	Parker's CE registration number per PED 2014/68/EU (formerly 97/23/EC). If the vessel pressure x volume (PS x V) ratio is less than 50, then the accumulator will be marked SEP for Sound Engineering Practice per Article 4.3. (Formerly Article 3.3 under 97/23/EC.)
18	Reminder that all ASME information is stamped on the shell.
19	Parker's manufacturing address.



1	Parker's BA Series Model Number.
2	Canadian Registration Number (CRN).
3	Australian Registration Number.
4	Maximum Allowable Working Pressure (MAWP) based on ASME Section VIII, Division I, Appendix 22.
5	Parker's Quality Management System as required by Australian AS1210.
6	Minimum Design Metal Temperature (MDMT) based on ASME Section VIII, Division 1, Appendix 22.
7	Hazard Levels A, B, C and D under Australian Standard AS4343.
8	Pressure the accumulator was hydrotested to (1.5 x MAWP).
9	Date accumulator was hydrotested.

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