



aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
**hydraulics**  
pneumatics  
process control  
sealing & shielding



## UK Industrial- UK Series Bladder Accumulators

High Pressure, 207 to 420 bar



ENGINEERING YOUR SUCCESS.

## Description

The Parker UK Series is ideally suited for the UK Industrial market and is fitted with a bonded seal fluid port and ¼" BSP gas connection as standard (more options available).

The UK bladder accumulator offers a reliable and efficient solution for storing energy under pressure. Utilizing comprehensive tools and resources including an applications database, CAD/CAM, finite element analysis, reliability studies and simulation we have optimized the design and performance of the accumulator. Parker Olaer bladder accumulators are suitable for use in more than 35 countries (all hydraulic accumulators for Europe are CE marked) and they can meet an extensive range of international and industry approvals.

Rigorous product testing and continuous product development help to ensure our hydraulic accumulators operate at optimum efficiency and can perform in the most demanding environments. Parker accumulator accessories such as Safety Blocks, Burst Discs and Permanent Charging Sets, can aid the safe installation and operation of the accumulators in any hydraulic system.

Parker Olaer have developed very sophisticated simulation software to optimize sizing recommendations for hydraulic accumulators. You can download the accumulator sizing software from [www.Parker.com/acde](http://www.Parker.com/acde).

## Features/Benefits

- **Extensive range of international and industry approvals (PED 2014/68/EU, EN 14359, ATEX, ASME VIII div 1 and PD5500)**
- **Rigorous product testing and continuous product development**
- **Large selection of materials and fittings to suit every hydraulic system.**
- **Parker Olaer offers a wealth of product knowledge and experience thus enabling us to provide first class technical support and customer service.**

## Markets

- **Industrial**

## Applications

- **Hydrostatic bearings**
- **Lubricating oil supplies**
- **Chucking systems**
- **Machine tools**
- **Safety/Emergency braking systems**

# Design & Features

**Shell:** Oil Service - seamless shell, designed and manufactured to PED 2014/68/EU and CE marked. Material - Chromium-molybdenum steel. Working pressure 207, 310, 345 and 420 bar. Water service as above with shell interior epoxy resin lined.

**Label:** With assembly specification and installation details.

**Material Certification:** Available on request for all major pressure loaded parts to EN 10204 3.1

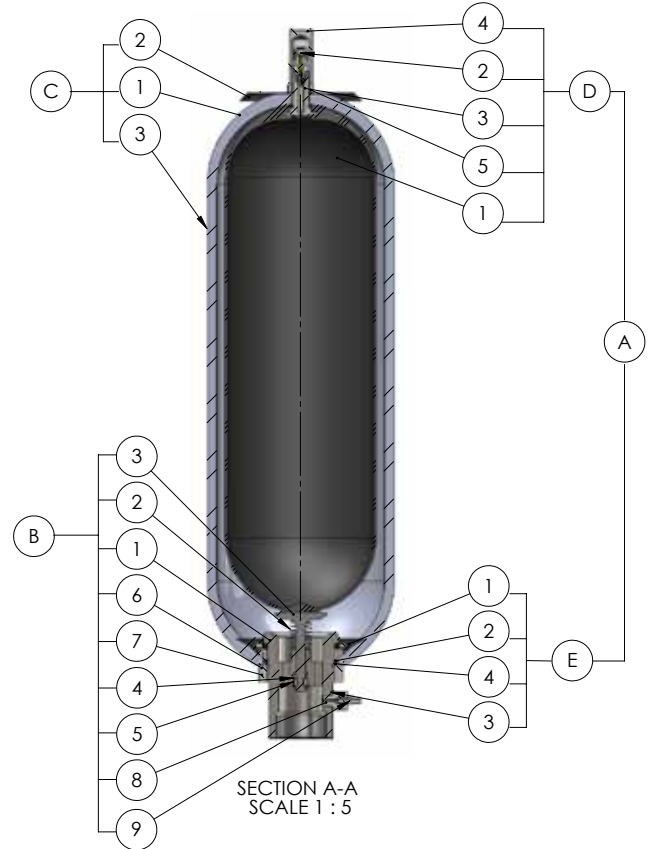
**Finish:** One coat primer paint as standard. Special paints available.

**Bladder:** Totally enclosed construction with an extensive range of elastomers available. See page 5 for Bladder details.

**Fluid Port Assembly:** Integral high-flow port and poppet valve assembly with an anti-extrusion ring.

**Safety:** All gas-loaded accumulators are pressurised vessels and it is recommended that safety consideration be given to the application in which they are used. A relief valve should always be fitted to the hydraulic system with the option of a burst disc to protect the accumulator. See Installation and Servicing data sheet for information regarding installation of accumulators.

**Pressure Testing:** A hydro static pressure test is carried out on all our accumulator shells during the manufacturing process. We can carry out additional pressure testing witnessed by a specified Inspection Authority and/or customer as an optional extra if required. We can also carry out a hydro-pneumatic pressure test on the complete assembly as an optional extra if required. Again this can be witnessed by a specified inspection authority and/or customer.



<b>A</b>	<b>Bladder Kit comprising:</b>
<b>D</b>	<b>Bladder assembly</b>
D1	Bladder
D2	Gas valve assembly
D3	Locknut
D4	Protective cap
D5	'O' ring stem
<b>E</b>	<b>Anti extrusion ring assembly</b>
E1	Anti extrusion ring
E2	'O' ring fluid port*
E3	Bonded seal
E4	Back-up ring
<b>B</b>	<b>Fluid port assembly comprising</b>
B1	Fluid port body
B2	Spring
B3	Poppet valve
B4	Collett
B5	Piston
B6	Flanged washer
B7	Locking ring
B8	Bleed adaptor*
B9	Bleed valve*
<b>C</b>	<b>Shell assembly comprising:</b>
C1	Shell
C2	Label
C3	Label warning

Note: Models 1/54 litres detailed above. Models 0.6 litres have Gas Valve assembly integral with bladder stem without protective cap fitted. \* Not fitted on all models

# UK Series 207 to 420 bar: How to order

**03 0 0A-00-34 1**

**Volume in Litres**

- |                            |                          |
|----------------------------|--------------------------|
| <b>0B:</b> for 0.16 Litres | <b>10:</b> for 10 Litres |
| <b>0F:</b> for 0.6 Litres  | <b>20:</b> for 20 Litres |
| <b>011:</b> for 1 Litres   | <b>28:</b> for 28 Litres |
| <b>03:</b> for 2.5 Litres  | <b>37:</b> for 37 Litres |
| <b>04:</b> for 4 Litres    | <b>54:</b> for 54 Litres |

**Bladder Material**

- 0:** Nitrile standard
- 1:** Butyl
- 2:** Low temperature nitrile
- 3:** Low permeability nitrile
- 6:** Viton
- 8:** High temperature nitrile

**Bladder Stem/Gas Valve**

**0.16 to 3 Litres**

- 0A:** 5/8"UNF CS Stem/ 1/4"BSP Brass Gas Valve
- 9A:** 5/8"UNF CS Stem/ 0.302"-32 Brass Gas Valve

**4-37 Litres**

- 0A:** 7/8"UNF CS Stem/ 1/4"BSP Brass Gas Valve
- 9A:** n/a

**54 Litres**

- 0A:** M50x1.5P CS Stem/ 1/4"BSP Brass Gas Valve
- 9A:** M50x1.5P CS Stem/ 0.302"-32 Brass Gas Valve

**Shell and Fluid Port**

- 00:** Oil service
- 02:** Low/medium corrosive service (lined shell)
- 03:** Underground mining - water service
- 04:** Underground mining - oil service

Note: For other assembly options please contact your local Parker Sales Company.

**Maximum Working Pressure**

- 20:** 207 bar
- 31:** 310 bar
- 34:** 345 bar
- 35:** 350 bar
- 42:** 420 bar (10-54L only)

**Design Standard/ Authority Approval**

- 1:** Lloyds/CE

Nominal Capacity Litres	Effective Gas vol. Litres	Work press. bar	Max Flow Rate lt/min	Weight Dry Kilo	Dimensions in mm unless stated otherwise and subject to manufacturer's tolerances													
					A Inches	B Inches	C	D	E	F	G	H	J Inches	K	L	M	N	P
OB	0.16	345	27	2.00	¼ BSP	5/8 UNF	24	40	292	205	55	36	½ BSPF	26	-	-	-	23
OF	0.60	345	109	2.70	¼ BSP	5/8 UNF	24	40	266	175	90	37	¾ BSPF	35	-	-	-	32
011	1.15	207	109	5.4	¼ BSP	5/8 UNF	24	40	292	200	115	37	¾ BSPF	35	-	-	-	32
011	1.15	345	109	5.7	¼ BSP	5/8 UNF	23	40	292	200	115	37	¾ BSPF	35	-	-	-	32
03	2.5	345	215	10.00	¼ BSP	5/8 UNF	23	40	506	402	115	49	1 BSPF	44	5	32	15	41
04	3.8	207	477	15.20	¼ BSP	7/8 UNF	33	78	455	289	169	74	1 ¼ BSPF	60	36	39	9	55
04	3.8	345	477	15.20	¼ BSP	7/8 UNF	33	78	455	289	169	74	1 ¼ BSPF	60	36	39	9	55
10	9.4	207	749	35.00	¼ BSP	7/8 UNF	33	78	575	407	219	70	2 BSPF	76	36	46	9	69
10	9.4	310	749	35.00	¼ BSP	7/8 UNF	33	78	575	407	219	70	2 BSPF	76	36	46	9	69
10	9.4	345	749	35.00	¼ BSP	7/8 UNF	33	78	575	407	221	70	2 BSPF	76	36	46	9	69
10	9.4	420	749	34.00	¼ BSP	7/8 UNF	33	78	575	407	229	70	2 BSPF	76	36	46	9	69
20	18.8	207	749	55.00	¼ BSP	7/8 UNF	33	78	886	718	219	70	2 BSPF	76	36	46	9	69
20	18.8	310	749	55.00	¼ BSP	7/8 UNF	33	78	886	718	219	70	2 BSPF	76	36	46	9	69
20	18.8	345	749	55.00	¼ BSP	7/8 UNF	33	78	886	718	221	70	2 BSPF	76	36	46	9	69
20	18.8	420	749	54.00	¼ BSP	7/8 UNF	33	78	886	718	229	70	2 BSPF	76	36	46	9	69
28	25.8	207	749	61.00	¼ BSP	7/8 UNF	33	78	1158	990	221	70	2 BSPF	76	36	46	9	69
28	25.8	345	749	61.00	¼ BSP	7/8 UNF	33	78	1158	990	221	70	2 BSPF	76	36	46	9	69
37	35.2	207	749	91.00	¼ BSP	7/8 UNF	33	78	1407	1239	219	70	2 BSPF	76	36	46	9	69
37	35.2	310	749	91.00	¼ BSP	7/8 UNF	33	78	1407	1239	219	70	2 BSPF	76	36	46	9	69
37	35.2	345	749	91.00	¼ BSP	7/8 UNF	33	78	1407	1239	221	70	2 BSPF	76	36	46	9	69
37	35.2	420	749	86.00	¼ BSP	7/8 UNF	33	78	1407	1239	229	70	2 BSPF	76	36	46	9	69
54	49.2	207	749	130.00	¼ BSP	M50x 1.5	69	66	1922	1766	219	70	2 BSPF	76	36	46	9	69
54	49.2	310	749	130.00	¼ BSP	M50x 1.5	69	66	1922	1766	219	70	2 BSPF	76	36	46	9	69
54	49.2	345	749	130.00	¼ BSP	M50x 1.5	69	66	1922	1766	221	70	2 BSPF	76	36	46	9	69
54	49.2	420	749	119.00	¼ BSP	M50x 1.5	69	66	1922	1766	229	70	2 BSPF	76	36	46	9	69

Note: Dimensions are based on current stock and are subject to change without prior notice.

