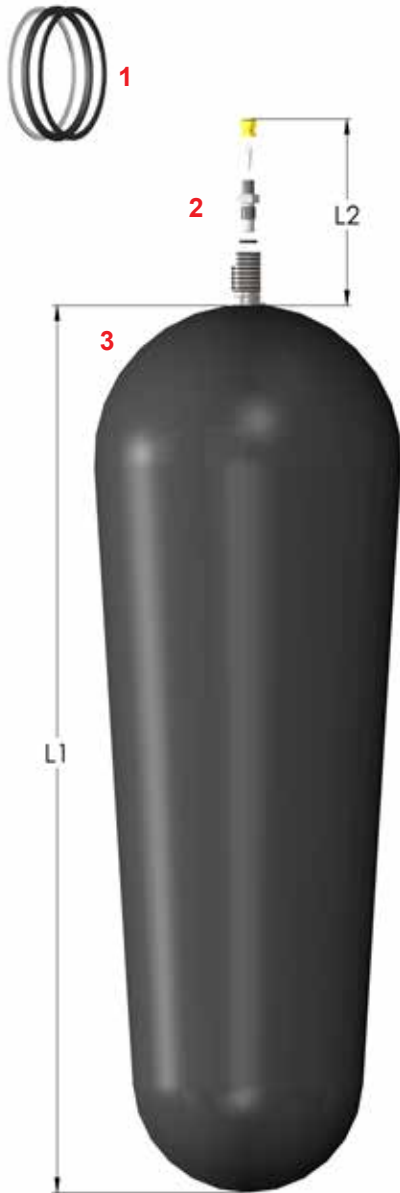


# BLADDERS & BLADDER KITS

## BLADDER ACCUMULATORS - PARTS



### COMPONENT PARTS

- |   |            |
|---|------------|
| 1 | Seal Rings |
| 2 | Gas Valve* |
| 3 | Bladder    |

\*3000 PSI gas valve shown,  
P/N AI-GT3-309-KIT

### 3000 PSI BLADDER SPECIFICATIONS

| SIZE (PART NO.)         | L1 (IN) | L2 (IN) | STD. THREAD OD | WEIGHT (LBS) |
|-------------------------|---------|---------|----------------|--------------|
| 1 Pint (AI-1PT-3KT)     | 5.25    | 1.7     | 5/8"-18 UNF    | 1            |
| 1 Quart (AI-1QT-3KT)    | 5.7     | 1.7     | 5/8"-18 UNF    | 1            |
| 150 CI (AI-150CI-3KT)   | 11      | 1.7     | 5/8"-18 UNF    | 1            |
| 1 Gallon (AI-1-3KT)     | 8       | 2.3     | 7/8"-14 UNF    | 1            |
| 1.5 Gallon (AI-1.5-3KT) | 12.0    | 2.3     | 7/8"-14 UNF    | 1            |
| 2.5 Gallon (AI-2.5-3KT) | 11.5    | 2.3     | 7/8"-14 UNF    | 2            |
| 5 Gallon (AI-5-3KT)     | 23      | 2.3     | 7/8"-14 UNF    | 4            |
| 10 Gallon (AI-10-3KT)   | 43.5    | 2.3     | 7/8"-14 UNF    | 6            |
| 11 Gallon (AI-11-3KT)   | 49.5    | 2.3     | 7/8"-14 UNF    | 7            |
| 15 Gallon (AI-15-3KT)   | 64      | 2.3     | 7/8"-14 UNF    | 8            |
| 40 Gallon (AI-40-3KT)   | 80      | 5       | 2"-12 UNF      | 25           |

### 5000 & 6000 PSI BLADDER SPECIFICATIONS

| SIZE (PART NO.)           | L1 (IN) | L2 (IN) | STD. THREAD OD | WEIGHT (LBS) |
|---------------------------|---------|---------|----------------|--------------|
| 1 Quart (AI-1QT-5-3KT)    | 5.7     | 1.7     | 7/8"-14 UNF    | 1            |
| 1 Gallon (AI-1-6-3KT)     | 8       | 1.7     | 7/8"-14 UNF    | 1            |
| 2.5 Gallon (AI-2.5-6-3KT) | 11.5    | 3.3     | 7/8"-14 UNF    | 2            |
| 5 Gallon (AI-5-6-3KT)     | 23      | 3.3     | 7/8"-14 UNF    | 4            |
| 10 Gallon (AI-10-6-3KT)   | 43.5    | 3.3     | 7/8"-14 UNF    | 6            |
| 15 Gallon (AI-15-6-3KT)   | 64      | 3.3     | 7/8"-14 UNF    | 8            |

### 10000 PSI BLADDER SPECIFICATIONS

| SIZE (PART NO.)               | L1 (IN) | L2 (IN) | STD. THREAD OD | WEIGHT (LBS) |
|-------------------------------|---------|---------|----------------|--------------|
| 2.5 Gallon (AI-2.5-10-3KT-SS) | 11.5    | 5.2     | 2"-12 UNF      | 5            |
| 5 Gallon (AI-5-10-3KT-SS)     | 23      | 5.2     | 2"-12 UNF      | 7            |
| 10 Gallon (AI-10-10-3KT-SS)   | 43.5    | 5.2     | 2"-12 UNF      | 9            |
| 15 Gallon (AI-15-10-3KT-SS)   | 64      | 5.2     | 2"-12 UNF      | 11           |

### GT TYPE 3000 & 5000 PSI BLADDER SPECIFICATIONS

| SIZE (PART NO.)             | L1 (IN) | L2 (IN) | STD. THREAD OD | WEIGHT (LBS) |
|-----------------------------|---------|---------|----------------|--------------|
| 2.5 Gallon (AI-2.5-GT5-3KT) | 11.5    | 4.8     | 2"-12 UNF      | 6            |
| 5 Gallon (AI-5-GT5-3KT)     | 23      | 4.8     | 2"-12 UNF      | 8            |
| 10 Gallon (AI-10-GT5-3KT)   | 43.5    | 4.8     | 2"-12 UNF      | 10           |
| 15 Gallon (AI-15-GT5-3KT)   | 64      | 4.8     | 2"-12 UNF      | 12           |

For a list of available elastomers, see page 9.

### ANTI-EXTRUSION RINGS\*

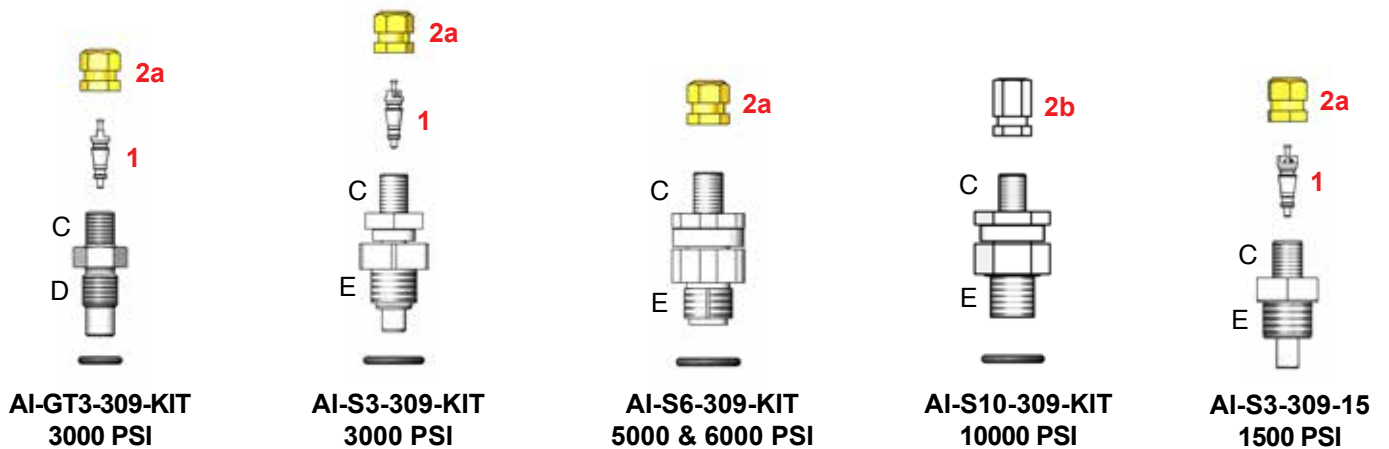
| PART NUMBER | SIZE                         |
|-------------|------------------------------|
| AI-1PT-407  | 1 PT, 3000 PSI               |
| AI-1QT-407  | 1 QT, 3000 & 5000 PSI        |
| AI-1-407    | 1 & 1.5 GAL, 3000 & 6000 PSI |
| AI-S-407    | 2.5-15 GAL, 3000 & 6000 PSI  |
| AI-S10-407  | 2.5-15 GAL, 10000 PSI        |
| AI-HF-407   | High Flow                    |

\*Anti-Extrusion Rings are not included  
in bladder kits

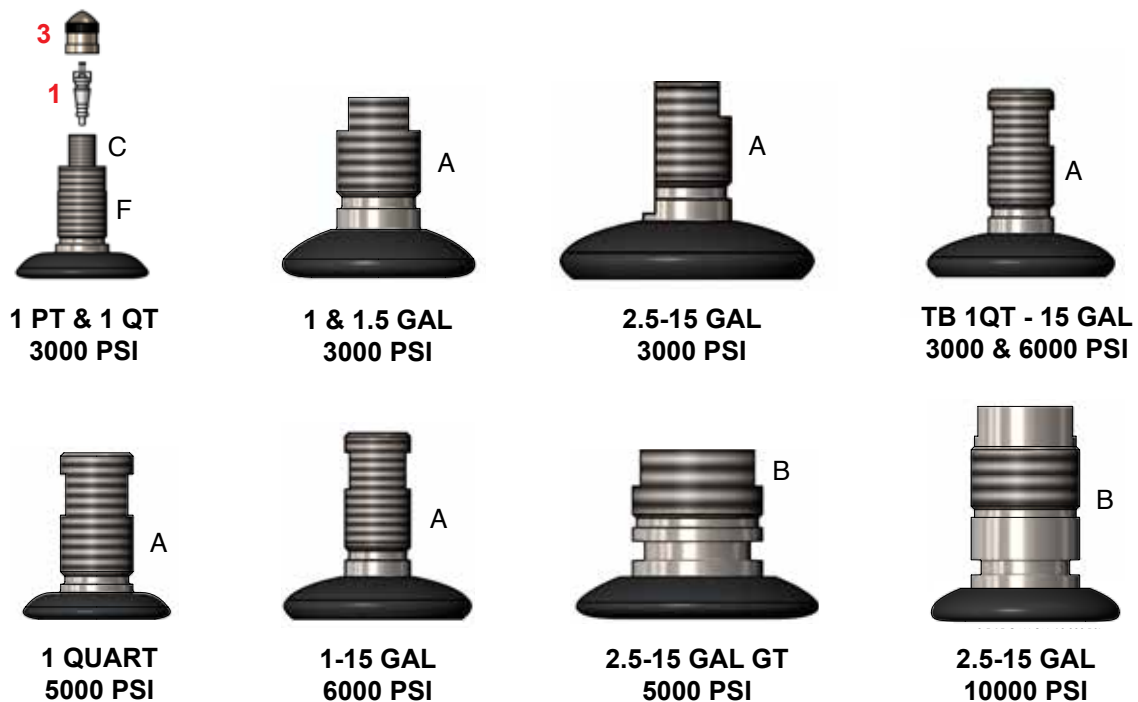
# GAS VALVES & MOLDED BLADDER VALVE STEMS

## BLADDER ACCUMULATORS - PARTS

### GAS VALVES



### MOLDED BLADDER VALVE STEMS



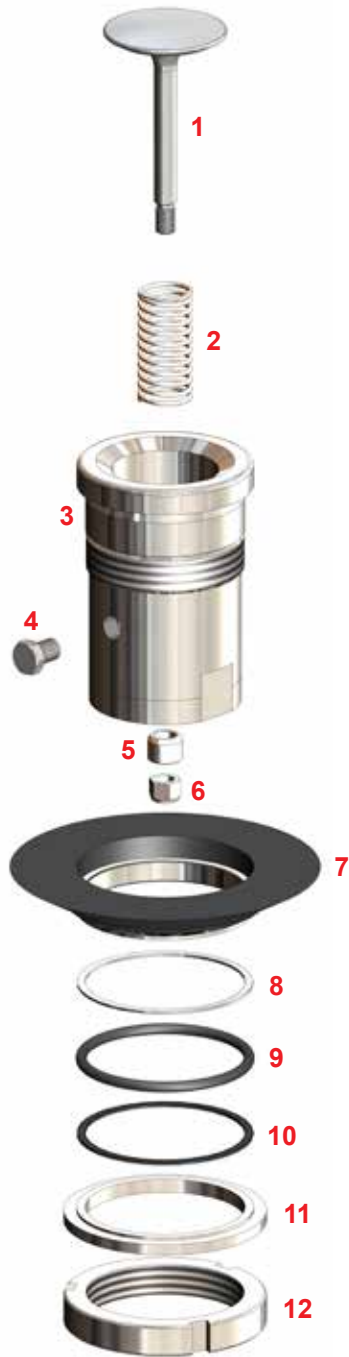
Other custom designs available, including European designs. Drawings are not shown to scale.

| COMPONENT PARTS |                      |                 |
|-----------------|----------------------|-----------------|
| PART            | DESCRIPTION          | AI PART #       |
| 1               | Valve core           | AI-S-304        |
| 2a              | Valve cap            | AI-S-303        |
| 2b              | Valve cap, stainless | AI-S-303-SS-316 |
| 3               | Valve cap, 1 quart   | AI-1QT-303      |

| OD THREAD SPECIFICATIONS |                  |
|--------------------------|------------------|
| PART                     | DESCRIPTION      |
| A                        | 7/8"-14 UNF OD   |
| B                        | 2"-12 UNF OD     |
| C                        | .305"-32 UNEF OD |
| D                        | 3/8"-24 UNF OD   |
| E                        | 1/2"-20 UNF OD   |
| F                        | 5/8"-18 UNF OD   |

# FLUID PORTS

## BLADDER ACCUMULATORS - PARTS



| 3000 PSI ASSEMBLIES |                                |               |              |               |
|---------------------|--------------------------------|---------------|--------------|---------------|
| PART                | DESCRIPTION                    | 1 QUART       | 1-1.5 GALLON | 2.5-15 GALLON |
|                     | Fluid port assembly (1-12)     | AI-1QT-400    | AI-1-400     | AI-S3-400     |
|                     | Plug and poppet assembly (1-6) | AI-1QT-401    | AI-1-401     | AI-S3-401     |
| 1                   | Poppet                         | AI-1QT-404    | AI-1-404     | AI-S-404      |
| 2                   | Spring                         | AI-1QT-409-SS | AI-1-409-SS  | AI-S-409-SS   |
| 3                   | Fluid port                     | AI-1QT-402    | AI-1-402     | AI-S3-402     |
| 4                   | Bleed plug                     | -             | -            | -             |
|                     | NPT                            | -             | AI-S-418     | AI-S-418      |
|                     | SAE                            | -             | AI-S-419     | AI-S-419      |
| 5                   | Piston                         | AI-1QT-405-SS | AI-1-405-SS  | AI-S-405-SS   |
| 6                   | Stop nut                       | AI-1QT-408    | AI-1-408     | AI-S-408-SS   |
| 7                   | Anti-extrusion ring            | AI-1QT-407    | AI-1-407     | AI-S-407      |
| 8                   | Metal backup ring              | AI-1QT-412    | AI-1-412     | AI-S-412      |
| 9                   | O-ring                         | AI-1QT-410    | AI-1-410     | AI-S-410      |
| 10                  | Rubber backup ring             | -             | AI-1-411     | AI-S-411      |
| 11                  | Spacer                         | AI-1QT-406    | AI-1-406     | AI-S3-406     |
| 12                  | Locknut                        | AI-1QT-403    | AI-1-403     | AI-S-403      |

| 5000 AND 6000 PSI ASSEMBLIES |                                |                     |                      |                           |
|------------------------------|--------------------------------|---------------------|----------------------|---------------------------|
| PART                         | DESCRIPTION                    | 1 QUART<br>5000 PSI | 1 GALLON<br>6000 PSI | 2.5-15 GALLON<br>6000 PSI |
|                              | Fluid port assembly (1-12)     | AI-1QT-400          | AI-1-6-400           | AI-S6-400                 |
|                              | Plug and poppet assembly (1-6) | AI-1QT-401          | AI-1-6-401           | AI-S6-401                 |
| 1                            | Poppet                         | AI-1QT-404          | AI-1-404             | AI-S-404                  |
| 2                            | Spring                         | AI-1QT-409-SS       | AI-1-409-SS          | AI-S6-409-SS              |
| 3                            | Fluid port                     | AI-1QT-402          | AI-1-6-402           | AI-S6-402                 |
| 5                            | Piston                         | AI-1QT-405-SS       | AI-1-405-SS          | AI-S-405-SS               |
| 6                            | Stop nut                       | AI-1QT-408          | AI-1-408             | AI-S-408-SS               |
| 7                            | Anti-extrusion ring            | AI-1QT-407          | AI-1-407             | AI-S-407                  |
| 8                            | Metal backup ring              | AI-1QT-412          | AI-1-412             | AI-S-412                  |
| 9                            | O-ring                         | AI-1QT-410          | AI-1-410             | AI-S-410                  |
| 10                           | Rubber backup ring             | -                   | AI-1-411             | AI-S-411                  |
| 11                           | Spacer                         | AI-1QT-406          | AI-1-6-406           | AI-S6-406                 |
| 12                           | Locknut                        | AI-1QT-403          | AI-1-403             | AI-S-403                  |

Our fluid ports are available in carbon steel, nickel-plated carbon steel and stainless steel. Replacement fluid port assemblies for 1 Pint 3000 PSI and 2.5-15 Gallon 10000 PSI accumulators are also available.