

# 3000

## **Series 3000 Piston Accumulators**

- Heavy Duty Service with 3000 PSI Operating Pressure
- 2" thru 12" Bores with Over 50 Standard Capacities
- Patented V-O-ring Piston Seals
- Serviceable Threaded End Construction
- Six Standard Seal Options to Handle a Variety of Fluids & Temperatures
- ASME Certification Available



**Materials**

- Shell – high strength alloy steel (7" thru 12" bores comply with ASME material specifications as standard)
- Caps – steel (7" thru 12" bores comply with ASME material specifications as standard)
- Pistons – aluminum (2" thru 7"), ductile iron (9" & 12")
- Gas Valve Cartridge – stainless steel
- Gas Valve Protector – steel
- Piston Glide Rings – PTFE
- Piston & End Seals – various polymers
- Piston Seal Backups – PTFE

**Actual Bore Sizes & Maximum Flow Rates**

| Nominal Bore Size (in.) | Actual Bore Size |       | Max. Recommended Flow* |       |
|-------------------------|------------------|-------|------------------------|-------|
|                         | (in.)            | (mm)  | GPM                    | LPM   |
| 2                       | 2.025            | 51.44 | 100                    | 380   |
| 3                       | 3.000            | 76.20 | 220                    | 834   |
| 4                       | 4.030            | 102.4 | 397                    | 1504  |
| 6                       | 5.782            | 146.9 | 818                    | 3096  |
| 7                       | 7.000            | 177.8 | 1199                   | 4538  |
| 9                       | 9.000            | 228.6 | 1982                   | 7502  |
| 12                      | 11.875           | 301.6 | 3450                   | 13061 |

\*Note: Based on 120 in/sec maximum piston speed, port & fitting size will become limiting factors for most applications.

**Pressure Ratings**

Parker Series 3000 piston accumulators are rated at 3000 psi and a minimum 4 to 1 design factor. For pressures over 3000 psi, see Series 4000 and Series 5000 accumulators.

**Fluids**

Parker's piston accumulators are compatible with a wide variety of fluids. Standard accumulators (with nitrile seals) may be used with petroleum-based industrial oils or water-based flame resistant fluids. Optional seals compatible with most industrial fluids are available with temperature ranges from -65°F to 400°F (-53°C to 204°C).

**Precharge**

Units are shipped with a 25 psi nitrogen precharge as standard. For other precharge pressures, specify at the time of order.

**Auxiliary Gas Bottles**

When space does not permit the installation of the required piston accumulator, a smaller accumulator may be used by connecting it to an auxiliary gas bottle(s) that can be located in a nearby spot where space is available. In some cases, a piston accumulator and gas bottle combination may be more economical, especially large capacity sizes. Piston travel, confined to the accumulator, must be calculated with ample margins to store the required fluid.

**Standard Ports**

The following ports are supplied as standard on all fluid ends and on the gas end of accumulators ordered for use with gas bottles:

**Notes:**

- 1) For flange dimensions, see tables below.
- 2) On standard 7" & 9" bore accumulators, both SAE Straight Thread and Flange ports are available as standard. Omit port code for SAE #32 Straight Thread, specify "PL" port code for 2" Code 61 Flange when ordering. Flange ports are recommended at operating pressures above 2000 PSI due to pressure limitations of most #32 SAE Straight Thread fittings.

| Bore Size | Standard Ports  |                         |                |                                |
|-----------|-----------------|-------------------------|----------------|--------------------------------|
|           | Standard Models |                         | Metric Models  |                                |
|           | SAE Port        | SAE Flange <sup>1</sup> | BSPP Port (in) | Metric SAE Flange <sup>1</sup> |
| 2         | #12             | –                       | 3/4            | –                              |
| 3         | #12             | –                       | 1              | –                              |
| 4         | #20             | –                       | 1              | –                              |
| 6         | #24             | –                       | 1-1/2          | –                              |
| 7         | #32             | 2" Code 61              | –              | 2" Code 61                     |
| 9         | #32             | 2" Code 61              | –              | 2" Code 61                     |
| 12        | –               | 3" Code 61              | –              | 3" Code 61                     |

1) See flange dimensions in Port Options.

**Available Options** – a wide variety of options are available on Parker's piston accumulators including:

- Seal Compounds
- Ports
- Port Adapters
- Water Service
- Gas Valves
- Fuse Plugs Assemblies
- Fixed Gauge Mounts
- Piston Sensors (Consult Factory)

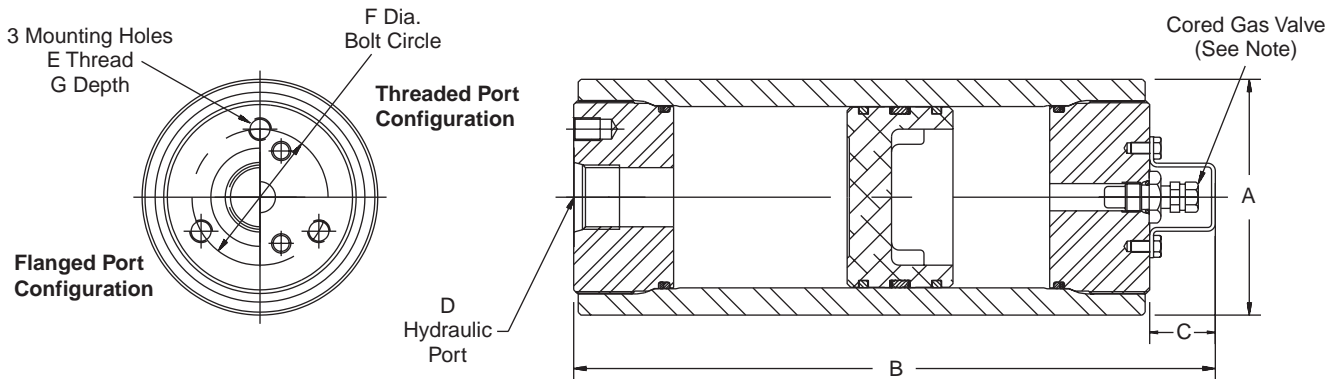
**Certifications**

Parker offers ASME (Section VIII, Div. 1) and TÜV Certifications as standard options on piston accumulators and gas bottles as follows:

| Bore Size | ASME   |           | TÜV (207 Bar) |
|-----------|--------|-----------|---------------|
|           | Req'd. | Available |               |
| 2"        | no     | no        | option        |
| 3"        | no     | no        | option        |
| 4", 6"    | no     | option    | option        |
| 7"        | yes    | option    | option        |
| 9", 12"   | yes    | option    | no            |

See page 4 for a complete certification summary.

**3000 PSI Piston Accumulators for Oil and Water Service**

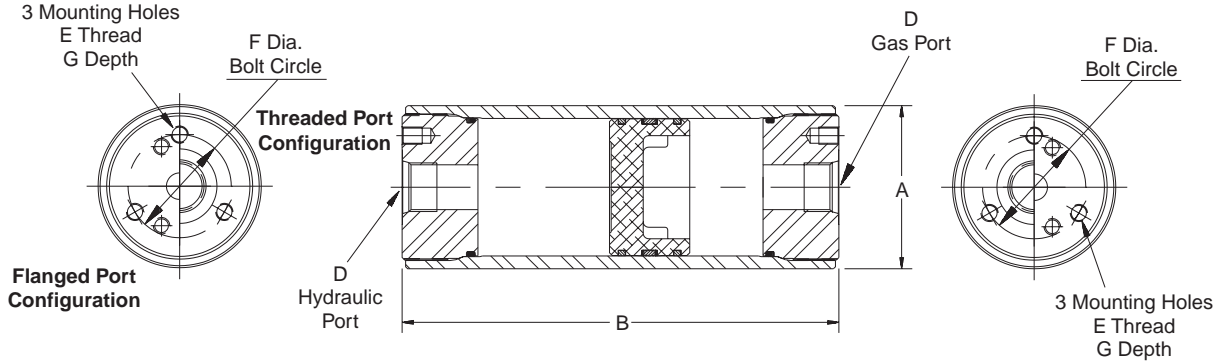


| Model No. <sup>1</sup> | Fluid Volume |       | Gas Volume (cu in) | A (in) | B (in) | C (in) | D-Hydraulic Port |             |                  | E (in)   | F (in) | G (in) | Weight (lbs) |
|------------------------|--------------|-------|--------------------|--------|--------|--------|------------------|-------------|------------------|----------|--------|--------|--------------|
|                        | Oil Service  | (gal) |                    |        |        |        | (cu in)          | SAE No.     | Thread Size (in) |          |        |        |              |
| A2N0005D1K             | -            | 5     | 6.5                |        | 6.76   |        |                  |             |                  |          |        |        | 4.0          |
| A2N0010D1K             | -            | 10    | 11.5               |        | 8.31   |        |                  |             |                  |          |        |        | 4.5          |
| A2N0015D1K             | -            | 15    | 16.5               | 2.38   | 9.78   | 1.06   | 12               | 1-1/16 - 12 | 3/4              | -        | -      | -      | 5.5          |
| A2N0029D1K             | 1 Pint       | 29    | 30.5               |        | 14.19  |        |                  |             |                  |          |        |        | 6.6          |
| A2N0058D1K             | 1 Quart      | 58    | 59.5               |        | 23.19  |        |                  |             |                  |          |        |        | 9.7          |
| A3N0029D1K             | 1 Pint       | 29    | 34                 |        | 10.25  |        |                  |             |                  |          |        |        | 20           |
| A3N0058D1K             | 1 Quart      | 58    | 63                 |        | 14.34  |        |                  |             |                  |          |        |        | 23           |
| A3N0090D1K             | 1.5 Liter    | 90    | 95                 | 3.56   | 18.94  | 1.13   | 12               | 1-1/16 - 12 | 3/4              | 3/8 - 24 | 2.25   | 0.56   | 28           |
| A3N0116D1K             | 1/2 Gal.     | 116   | 121                |        | 22.56  |        |                  |             |                  |          |        |        | 31           |
| A3N0183D1K             | 3 Liter      | 183   | 188                |        | 32.06  |        |                  |             |                  |          |        |        | 35           |
| A4N0058D1K             | 1 Quart      | 58    | 68                 |        | 11.63  |        |                  |             |                  |          |        |        | 32           |
| A4N0116D1K             | 1/2 Gal.     | 116   | 126                |        | 16.19  |        |                  |             |                  |          |        |        | 38           |
| A4N0231D1K             | 1 Gal.       | 231   | 241                | 4.75   | 25.19  | 1.13   | 20               | 1-5/8 - 12  | 1-1/4            | 1/2 - 20 | 3.25   | 0.75   | 51           |
| A4N0347D1K             | 1-1/2 Gal.   | 347   | 357                |        | 34.31  |        |                  |             |                  |          |        |        | 64           |
| A4N0578D1K             | 2-1/2 Gal.   | 578   | 588                |        | 52.38  |        |                  |             |                  |          |        |        | 89           |
| A6N0231D1K             | 1 Gal.       | 231   | 266                |        | 17.38  |        |                  |             |                  |          |        |        | 77           |
| A6N0347D1K             | 1-1/2 Gal.   | 347   | 382                |        | 21.81  |        |                  |             |                  |          |        |        | 91           |
| A6N0578D1K             | 2-1/2 Gal.   | 578   | 613                |        | 30.63  |        |                  |             |                  |          |        |        | 118          |
| A6N0924D1K             | 4 Gal.       | 924   | 959                | 6.88   | 43.81  | 1.13   | 24               | 1-7/8 - 12  | 1-1/2            | 1/2 - 20 | 4.38   | 0.75   | 159          |
| A6N1155D1K             | 5 Gal.       | 1155  | 1190               |        | 52.63  |        |                  |             |                  |          |        |        | 186          |
| A6N1733D1K             | 7-1/2 Gal.   | 1733  | 1768               |        | 74.63  |        |                  |             |                  |          |        |        | 247          |
| A6N2310D1K             | 10 Gal.      | 2310  | 2345               |        | 96.63  |        |                  |             |                  |          |        |        | 323          |

**Notes:**

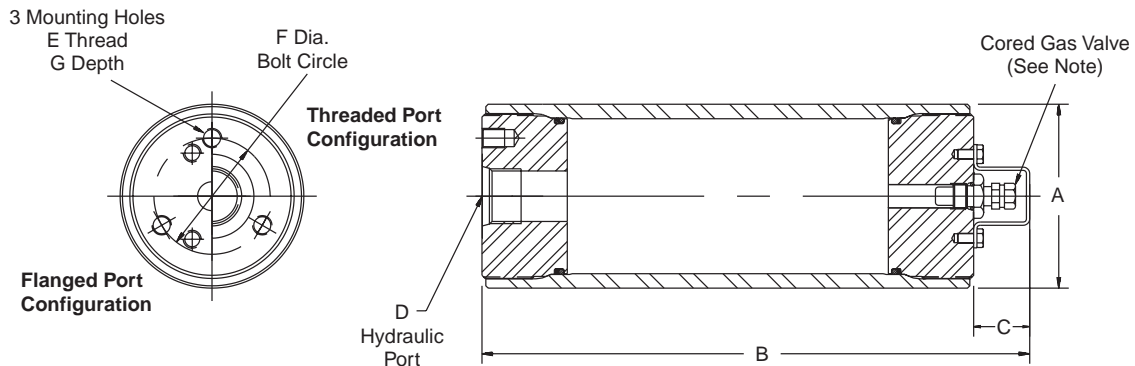
- 1) For Water Service add "W" after construction code, see "How to Order" information.
- 2) Most SAE #32 fittings are rated for 2000 PSI. If 2000 to 3000 PSI service is required, two options are available; order accumulator with optional standard 2" SAE Code 61 4-bolt flange port by specifying "PL" code when ordering or order the accumulator with a SAE #24 port or smaller, see "Port Options" for dimensions and "How to Order".
- 3) See Port Options for complete listing of optional ports.
- 4) ASME Certified accumulators and gas bottles are available. All 7", 9" and 12" bores comply with ASME material specifications as standard.
- 5) TÜV Certification available on 3", 4", 6" and 7" bores. Consult factory for other sizes.
- 6) When accumulators are to be used with gas bottles, order "Gas Bottle Accumulators".
- 7) 2", 3", 4" & 6" bores standard with cored gas valves. Poppet type (military) gas valve available as an option.

**3000 PSI Accumulators for Use with Gas Bottles**



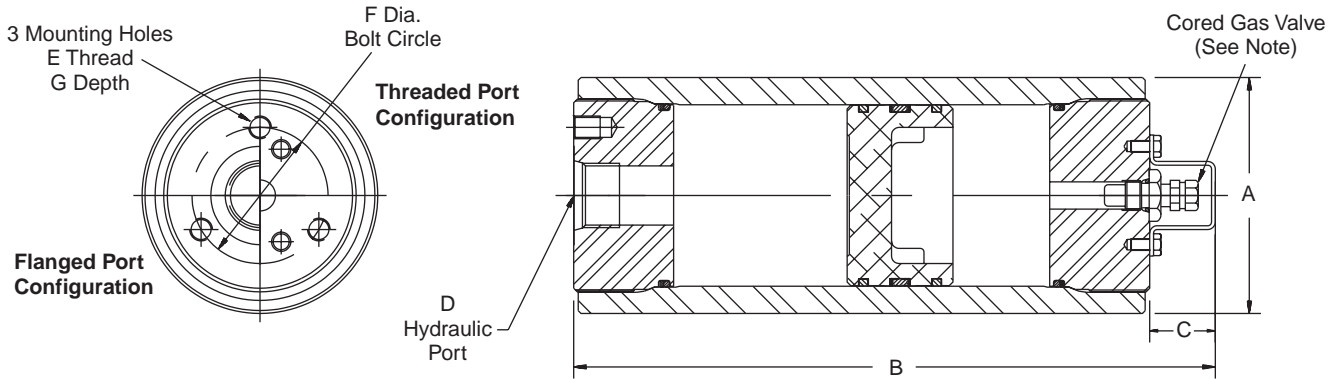
| Accumulator Model No. | Fluid Volume |         | Gas Volume (cu in) | A (in) | B (in) | D Port (Both Ends) |                  |           | E (in)   | F (in) | G (in) | Weight (lbs) |
|-----------------------|--------------|---------|--------------------|--------|--------|--------------------|------------------|-----------|----------|--------|--------|--------------|
|                       | (gal)        | (cu in) |                    |        |        | SAE No.            | Thread Size (in) | Tube Size |          |        |        |              |
| A4N0058D3KTFTF        | 1 Quart      | 58      | 68                 | 4.75   | 10.50  | 20                 | 1-5/8 - 12       | 1-1/4     | 1/2 - 20 | 3.25   | 0.75   | 32           |
| A4N0116D3KTFTF        | 1/2 Gal.     | 116     | 126                |        | 15.06  |                    |                  |           |          |        |        | 38           |
| A4N0231D3KTFTF        | 1 Gal.       | 231     | 241                |        | 24.06  |                    |                  |           |          |        |        | 51           |
| A4N0347D3KTFTF        | 1-1/2 Gal.   | 347     | 357                |        | 33.19  |                    |                  |           |          |        |        | 64           |
| A4N0578D3KTFTF        | 2-1/2 Gal.   | 578     | 588                | 51.25  |        |                    |                  |           |          |        |        | 89           |
| A6N0231D3KTGTG        | 1 Gal.       | 231     | 266                | 6.88   | 16.25  | 24                 | 1-7/8 - 12       | 1-1/2     | 1/2 - 20 | 4.38   | 0.75   | 77           |
| A6N0347D3KTGTG        | 1-1/2 Gal.   | 347     | 382                |        | 20.68  |                    |                  |           |          |        |        | 91           |
| A6N0578D3KTGTG        | 2-1/2 Gal.   | 578     | 613                |        | 29.50  |                    |                  |           |          |        |        | 118          |
| A6N0924D3KTGTG        | 4 Gal.       | 924     | 959                |        | 42.68  |                    |                  |           |          |        |        | 159          |
| A6N1155D3KTGTG        | 5 Gal.       | 1155    | 1190               |        | 51.50  |                    |                  |           |          |        |        | 186          |
| A6N1733D3KTGTG        | 7-1/2 Gal.   | 1733    | 1768               |        | 73.50  |                    |                  |           |          |        |        | 247          |
| A6N2310D3KTGTG        | 10 Gal.      | 2310    | 2345               |        | 95.50  |                    |                  |           |          |        |        | 323          |

**3000 PSI Auxiliary Gas Bottles**



| Model No.  | Gas Volume    |                | A (in) | B (in) | C (in) | D Port  |                  |           | E (in)   | F (in) | G (in) | Weight (lbs) |
|------------|---------------|----------------|--------|--------|--------|---------|------------------|-----------|----------|--------|--------|--------------|
|            | Nominal (gal) | Actual (cu in) |        |        |        | SAE No. | Thread Size (in) | Tube Size |          |        |        |              |
| B4N0058D1K | 1 Quart       | 86             | 4.75   | 11.63  | 1.13   | 20      | 1-5/8 - 12       | 1-1/4     | 1/2 - 20 | 3.25   | 0.75   | 28           |
| B4N0116D1K | 1/2 Gal.      | 144            |        | 16.19  |        |         |                  |           |          |        |        | 34           |
| B4N0231D1K | 1 Gal.        | 259            |        | 25.19  |        |         |                  |           |          |        |        | 47           |
| B4N0347D1K | 1-1/2 Gal.    | 375            |        | 34.31  |        |         |                  |           |          |        |        | 60           |
| B4N0578D1K | 2-1/2 Gal.    | 606            |        | 52.38  |        |         |                  |           |          |        |        | 85           |
| B6N0231D1K | 1 Gal.        | 319            | 6.88   | 17.38  | 1.13   | 24      | 1-7/8 - 12       | 1-1/2     | 1/2 - 20 | 4.38   | 0.75   | 65           |
| B6N0347D1K | 1-1/2 Gal.    | 435            |        | 21.81  |        |         |                  |           |          |        |        | 79           |
| B6N0578D1K | 2-1/2 Gal.    | 666            |        | 30.63  |        |         |                  |           |          |        |        | 106          |
| B6N0924D1K | 4 Gal.        | 1012           |        | 43.81  |        |         |                  |           |          |        |        | 167          |
| B6N1155D1K | 5 Gal.        | 1243           |        | 52.63  |        |         |                  |           |          |        |        | 174          |
| B6N1733D1K | 7-1/2 Gal.    | 1821           |        | 74.63  |        |         |                  |           |          |        |        | 235          |
| B6N2310D1K | 10 Gal.       | 2398           |        | 96.63  |        |         |                  |           |          |        |        | 322          |

**207 Bar Metric Accumulators for Oil and Water Service**

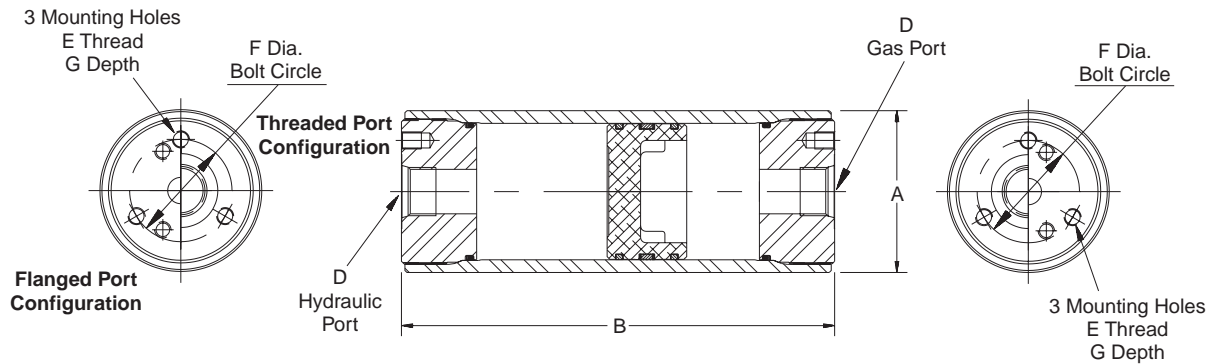


| Model No. <sup>1</sup> | Fluid Volume |         | Gas Volume (Liters) | A (mm) | B (mm) | C (mm) | D-Hydraulic Port |            | E (mm) | F (mm) | G (mm) | Weight (Kg) |
|------------------------|--------------|---------|---------------------|--------|--------|--------|------------------|------------|--------|--------|--------|-------------|
|                        | (Liters)     | (cu in) |                     |        |        |        | BSP/G (in)       | SAE Flange |        |        |        |             |
| A2N0005D2K             | 0.08         | 5       | 0.11                | 60     | 172    | 27     | 3/4              | -          | -      | -      | -      | 1.81        |
| A2N0010D2K             | 0.16         | 10      | 0.19                |        | 211    |        |                  |            |        |        |        | 2.04        |
| A2N0015D2K             | 0.25         | 15      | 0.24                |        | 250    |        |                  |            |        |        |        | 2.25        |
| A2N0029D2K             | 0.48         | 29      | 0.50                |        | 360    |        |                  |            |        |        |        | 2.99        |
| A2N0058D2K             | 0.95         | 58      | 0.98                |        | 589    |        |                  |            |        |        |        | 4.40        |
| A3N0029D2K             | 0.48         | 29      | 0.56                | 90     | 260    | 29     | 1                | -          | M10    | 60     | 15     | 8.89        |
| A3N0058D2K             | 0.95         | 58      | 1.03                |        | 364    |        |                  |            |        |        |        | 10.6        |
| A3N0090D2K             | 1.47         | 90      | 1.56                |        | 481    |        |                  |            |        |        |        | 12.5        |
| A3N0116D2K             | 1.90         | 116     | 1.98                |        | 573    |        |                  |            |        |        |        | 14.0        |
| A3N0183D2K             | 3.00         | 183     | 3.08                |        | 814    |        |                  |            |        |        |        | 15.9        |
| A4N0058D2K             | 0.95         | 58      | 1.11                | 121    | 295    | 29     | 1                | -          | M12    | 82     | 18     | 14.5        |
| A4N0116D2K             | 1.90         | 116     | 2.06                |        | 411    |        |                  |            |        |        |        | 17.2        |
| A4N0231D2K             | 3.79         | 231     | 3.95                |        | 640    |        |                  |            |        |        |        | 23.1        |
| A4N0347D2K             | 5.69         | 347     | 5.85                |        | 871    |        |                  |            |        |        |        | 29.0        |
| A4N0578D2K             | 9.47         | 578     | 9.64                |        | 1330   |        |                  |            |        |        |        | 40.4        |
| A6N0231D2K             | 3.79         | 231     | 4.36                | 175    | 441    | 29     | 1-1/2            | -          | M12    | 110    | 18     | 34.9        |
| A6N0347D2K             | 5.69         | 347     | 6.26                |        | 554    |        |                  |            |        |        |        | 41.3        |
| A6N0578D2K             | 9.47         | 578     | 10.0                |        | 778    |        |                  |            |        |        |        | 53.5        |
| A6N0924D2K             | 15.1         | 924     | 15.7                |        | 1113   |        |                  |            |        |        |        | 72.1        |
| A6N1155D2K             | 18.9         | 1155    | 19.5                |        | 1337   |        |                  |            |        |        |        | 84.4        |
| A6N1733D2K             | 28.4         | 1733    | 29.0                |        | 1896   |        |                  |            |        |        |        | 112         |
| A6N2310D2K             | 37.9         | 2310    | 38.4                |        | 2454   |        |                  |            |        |        |        | 147         |

**Notes:**

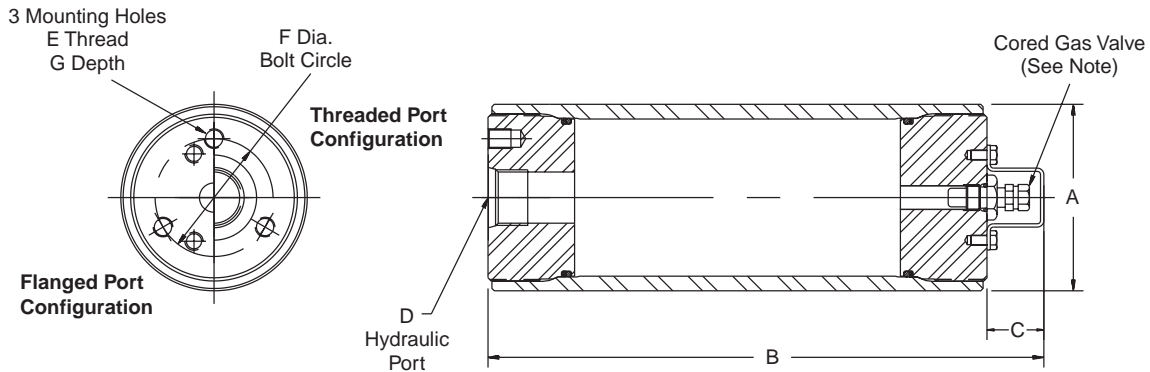
- 1) For Water Service add "W" after construction code, see "How to Order" information.
- 2) See Port Options for complete listing of port options.
- 3) ASME Certified accumulators and gas bottles are available. All 7", 9" and 12" bores comply with ASME material specifications as standard.
- 4) TÜV Certification available on 3", 4", 6" and 7" bores. Consult factory for other sizes.
- 5) When accumulators are to be used with gas bottles, order "Gas Bottle Accumulators".
- 6) 2", 3", 4" & 6" bores standard with cored gas valves. Poppet type (military) gas valves available as an option.

**207 Bar Metric Accumulators for Use with Gas Bottles**



| Accumulator Model No. | Fluid Volume |         | Gas Volume (Liters) | A (mm) | B (mm) | D-Hydraulic Port |            | E (mm) | F (mm) | G (mm) | Weight (Kg) |
|-----------------------|--------------|---------|---------------------|--------|--------|------------------|------------|--------|--------|--------|-------------|
|                       | (Liters)     | (cu in) |                     |        |        | BSPP/G (in)      | SAE Flange |        |        |        |             |
| A4N0058D2KRDRD        | 0.95         | 58      | 1.11                | 121    | 267    | 1                | -          | M12    | 82     | 18     | 14.5        |
| A4N0116D2KRDRD        | 1.90         | 116     | 2.06                |        | 383    |                  |            |        |        |        | 17.2        |
| A4N0231D2KRDRD        | 3.79         | 231     | 3.95                |        | 611    |                  |            |        |        |        | 23.1        |
| A4N0347D2KRDRD        | 5.69         | 347     | 5.85                |        | 843    |                  |            |        |        |        | 29.0        |
| A4N0578D2KRDRD        | 9.47         | 578     | 9.64                |        | 1302   |                  |            |        |        |        | 40.4        |
| A6N0231D2KRFRF        | 3.79         | 231     | 4.36                | 175    | 413    | 1-1/2            | -          | M12    | 110    | 18     | 34.9        |
| A6N0347D2KRFRF        | 5.69         | 347     | 6.26                |        | 525    |                  |            |        |        |        | 41.3        |
| A6N0578D2KRFRF        | 9.47         | 578     | 10.0                |        | 749    |                  |            |        |        |        | 53.5        |
| A6N0924D2KRFRF        | 15.1         | 924     | 15.7                |        | 1084   |                  |            |        |        |        | 72.1        |
| A6N1155D2KRFRF        | 18.9         | 1155    | 19.5                |        | 1308   |                  |            |        |        |        | 84.4        |
| A6N1733D2KRFRF        | 28.4         | 1733    | 29.0                |        | 1867   |                  |            |        |        |        | 112         |
| A6N2310D2KRFRF        | 37.9         | 2310    | 38.4                |        | 2426   |                  |            |        |        |        | 147         |

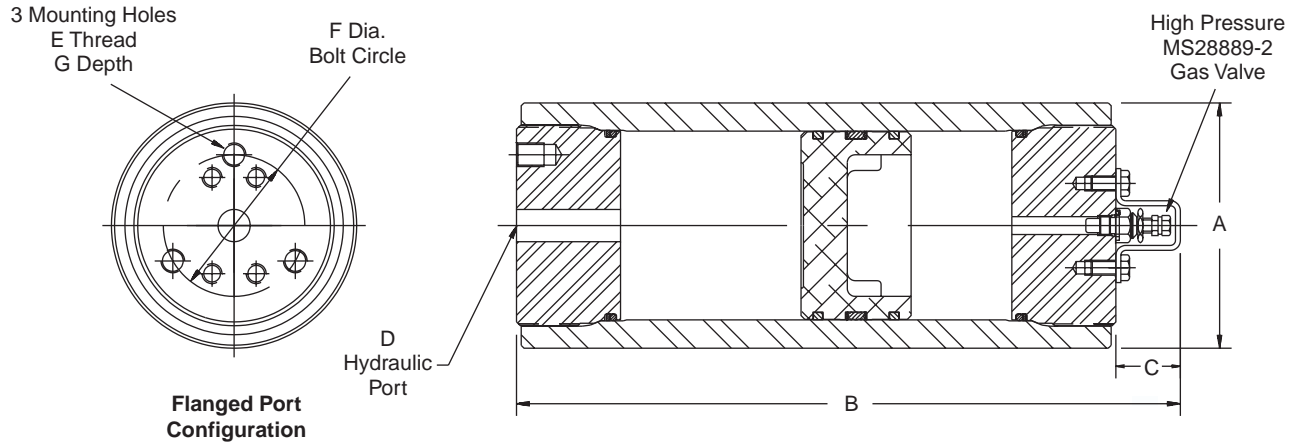
**207 Bar Metric Auxiliary Gas Bottles**



| Model No.  | Gas Volume |               | A (mm) | B (mm) | C (mm) | D-Hydraulic Port |             | E (mm) | F (mm) | G (mm) | Weight (Kg) |
|------------|------------|---------------|--------|--------|--------|------------------|-------------|--------|--------|--------|-------------|
|            | Gas Bottle | Nominal (gal) |        |        |        | Actual (liters)  | BSPP/G (in) |        |        |        |             |
| B4N0058D2K | 1 Quart    | 1.41          | 121    | 295    | 29     | 1                | -           | M12    | 82     | 18     | 14.5        |
| B4N0116D2K | 1/2 Gal.   | 2.36          |        | 411    |        |                  |             |        |        |        | 17.2        |
| B4N0231D2K | 1 Gal.     | 4.24          |        | 640    |        |                  |             |        |        |        | 23.1        |
| B4N0347D2K | 1-1/2 Gal. | 6.15          |        | 871    |        |                  |             |        |        |        | 29.0        |
| B4N0578D2K | 2-1/2 Gal. | 9.93          |        | 1330   |        |                  |             |        |        |        | 40.4        |
| B6N0231D2K | 1 Gal.     | 5.23          | 175    | 441    | 29     | 1-1/2            | -           | M12    | 110    | 18     | 34.9        |
| B6N0347D2K | 1-1/2 Gal. | 7.13          |        | 554    |        |                  |             |        |        |        | 41.3        |
| B6N0578D2K | 2-1/2 Gal. | 10.9          |        | 778    |        |                  |             |        |        |        | 53.5        |
| B6N0924D2K | 4 Gal.     | 16.6          |        | 1113   |        |                  |             |        |        |        | 72.1        |
| B6N1155D2K | 5 Gal.     | 20.4          |        | 1337   |        |                  |             |        |        |        | 84.4        |
| B6N1733D2K | 7-1/2 Gal. | 29.8          |        | 1896   |        |                  |             |        |        |        | 112         |
| B6N2310D2K | 10 Gal.    | 39.3          |        | 2454   |        |                  |             |        |        |        | 147         |



**3000 PSI Piston Accumulators for Oil and Water Service**

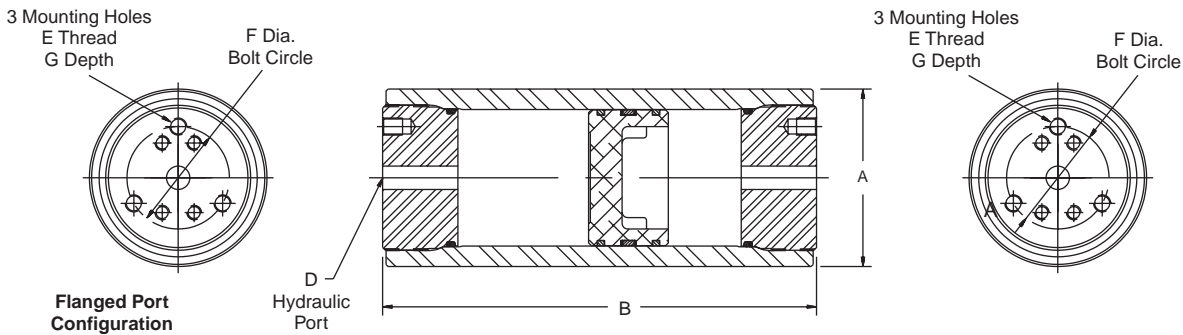


| Model No. <sup>1</sup> | Fluid Volume |       | Gas Volume (cu in) | A (in) | B (in) | C (in) | D-Hydraulic Port  |  |                  | E (in)   | F (in) | G (in) | Weight (lbs) |           |
|------------------------|--------------|-------|--------------------|--------|--------|--------|---|--|------------------|----------|--------|--------|--------------|-----------|
|                        | Oil Service  | (gal) |                    |        |        |        | (cu in)   | SAE No.  | Thread Size (in) |          |        |        |              | Tube Size |
| A7K0578D3K(PL)         | 2-1/2 Gal.   | 578   | 633                | 8.25   | 27.25  | 1.63   | 32  | 2-1/2 - 12<br>or<br>2" Code 61<br>Flange (PL) <sup>2</sup> | 2                | 5/8 - 18 | 5.75   | 0.94   | 184          |           |
| A7K1155D3K(PL)         | 5 Gal.       | 1155  | 1210               |        |        |        |   |  |                  |          |        |        |              | 42.25     |
| A7K1733D3K(PL)         | 7-1/2 Gal.   | 1733  | 1788               |        |        |        |   |  |                  |          |        |        |              | 57.25     |
| A7K2310D3K(PL)         | 10 Gal.      | 2310  | 2365               |        |        |        |   |  |                  |          |        |        |              | 72.25     |
| A7K3465D3K(PL)         | 15 Gal.      | 3465  | 3520               |        |        |        |   |  |                  |          |        |        |              | 102.25    |
| A7K5775D3K(PL)         | 25 Gal.      | 5775  | 5830               |        |        |        |   |  |                  |          |        |        |              | 162.25    |
| A9K2310D3K(PL)         | 10 Gal.      | 2310  | 2400               | 11.00  | 48.75  | 1.63   | 32  | 2-1/2 - 12<br>or<br>2" Code 61<br>Flange (PL) <sup>2</sup> | 2                | 3/4 - 16 | 7.00   | 1.13   | 506          |           |
| A9K3465D3K(PL)         | 15 Gal.      | 3465  | 3555               |        |        |        |   |  |                  |          |        |        |              | 66.94     |
| A9K4620D3K(PL)         | 20 Gal.      | 4620  | 4710               |        |        |        |   |  |                  |          |        |        |              | 85.06     |
| A9K6930D3K(PL)         | 30 Gal.      | 6930  | 7020               |        |        |        |   |  |                  |          |        |        |              | 121.37    |
| A12K5775D1K            | 25 Gal.      | 5775  | 5975               | 14.38  | 67.50  | 1.63   | 3" SAE Flange<br>Ports (Code 61)<br>See Page 18<br>for Dimensions | 7/8-9<br>(6X)  | 9.00             | 1.50     | 1335   |        |              |           |
| A12K6930D1K            | 30 Gal.      | 6930  | 7130               |        |        |        |   |  |                  |          |        | 76.31  |              |           |
| A12K9240D1K            | 40 Gal.      | 9240  | 9440               |        |        |        |   |  |                  |          |        | 98.88  |              |           |
| A12K11550D1K           | 50 Gal.      | 11550 | 11750              |        |        |        |   |  |                  |          |        | 119.62 |              |           |

**Notes:**

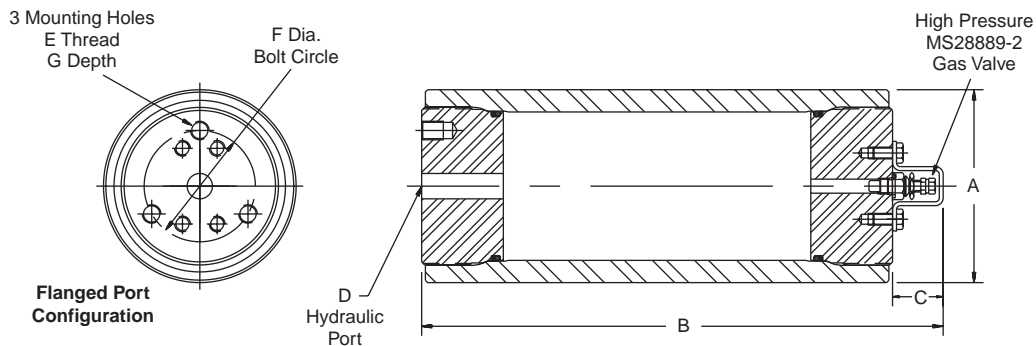
- 1) For Water Service add "W" after construction code, see "How to Order" information.
- 2) Most SAE #32 fittings are rated for 2000 PSI. If 2000 to 3000 PSI service is required, two options are available; order accumulator with optional standard 2" SAE Code 61 4-bolt flange port by specifying "PL" code when ordering or order the accumulator with a SAE #24 port or smaller, see "Port Options" for dimensions and "How to Order".
- 3) See Port Options for complete listing of optional ports.
- 4) ASME Certified accumulators and gas bottles are available. All 7", 9" and 12" bores comply with ASME material specifications as standard.
- 5) TÜV Certification available on 7" bores. Consult factory for other sizes.
- 6) When accumulators are to be used with gas bottles, order "Gas Bottle Accumulators".
- 7) Poppet type (military) gas valve standard.

**3000 PSI Accumulators for Use with Gas Bottles**



| Accumulator Model No. | Fluid Volume |         | Gas Volume (cu in) | A (in) | B (in) | D Port (Both Ends)   | E (in)       | F (in) | G (in) | Weight (lbs) |      |      |      |
|-----------------------|--------------|---------|--------------------|--------|--------|--|--------------|--------|--------|--------------|------|------|------|
|                       | (gal)        | (cu in) |                    |        |        |  |              |        |        |              |      |      |      |
| A7K0578D1K(PLPL)      | 2-1/2 Gal.   | 578     | 633                | 8.25   | 25.63  | 2" Code 61 Flange (PL) <sup>2</sup><br>or<br>#32 SAE Straight Thread | 5/8 - 18     | 5.75   | 0.94   | 184          |      |      |      |
| A7K1155D1K(PLPL)      | 5 Gal.       | 1155    | 1210               |        | 40.63  |  |              |        |        |              | 247  |      |      |
| A7K1733D1K(PLPL)      | 7-1/2 Gal.   | 1733    | 1788               |        | 55.63  |  |              |        |        |              |      | 310  |      |
| A7K2310D1K(PLPL)      | 10 Gal.      | 2310    | 2365               |        | 70.63  |  |              |        |        |              |      |      | 374  |
| A7K3465D1K(PLPL)      | 15 Gal.      | 3465    | 3520               |        | 100.63 |  |              |        |        |              |      |      |      |
| A9K2310D1K(PLPL)      | 10 Gal.      | 2310    | 2400               | 11.00  | 47.00  | 2" Code 61 Flange (PL) <sup>2</sup><br>or<br>#32 SAE Straight Thread | 3/4 - 16     | 7.00   | 1.13   | 506          |      |      |      |
| A9K3465D1K(PLPL)      | 15 Gal.      | 3465    | 3555               |        | 65.25  |  |              |        |        |              | 646  |      |      |
| A9K4620D1K(PLPL)      | 20 Gal.      | 4620    | 4710               |        | 101.50 |  |              |        |        |              |      | 786  |      |
| A9K5775D1K(PLPL)      | 25 Gal.      | 5775    | 5865               |        | 119.62 |  |              |        |        |              |      |      | 926  |
| A9K6930D1K(PLPL)      | 30 Gal.      | 6930    | 7020               |        | 137.75 |  |              |        |        |              |      |      |      |
| A12K5775D3KPNPN       | 25 Gal.      | 5775    | 5975               | 14.38  | 65.88  | 3" SAE Flange Ports (Code 61)<br>See Page 18<br>for Dimensions       | 7/8 - 9 (6X) | 9.00   | 1.50   | 1335         |      |      |      |
| A12K6930D3KPNPN       | 30 Gal.      | 6930    | 7130               |        | 74.69  |  |              |        |        |              | 1504 |      |      |
| A12K9240D3KPNPN       | 40 Gal.      | 9240    | 9440               |        | 97.25  |  |              |        |        |              |      | 1793 |      |
| A12K11550D3KPNPN      | 50 Gal.      | 11550   | 11750              |        | 118.00 |  |              |        |        |              |      |      | 2095 |

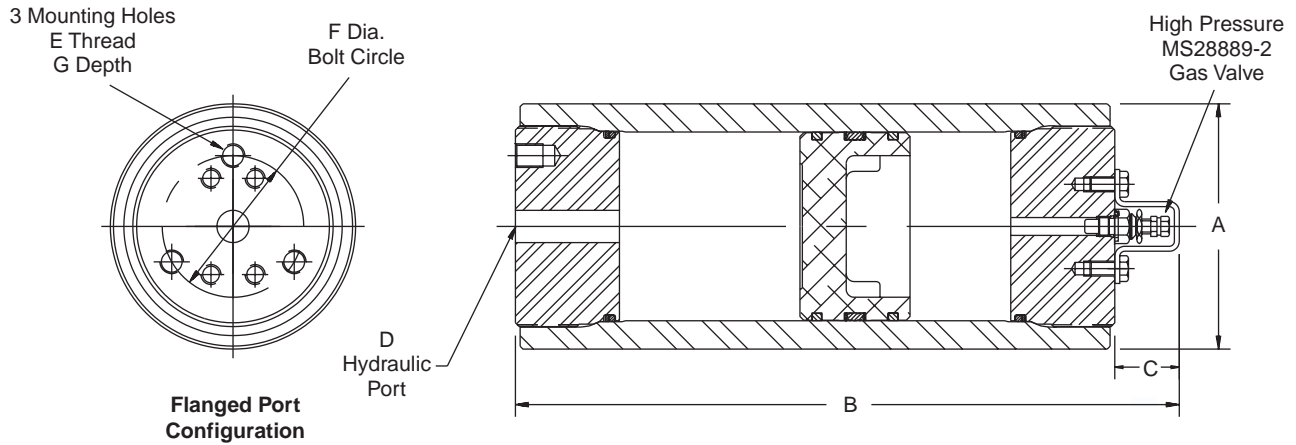
**3000 PSI Auxiliary Gas Bottles**



| Model No.      | Gas Volume    |                | A (in) | B (in) | C (in) | D Port   | E (in)       | F (in) | G (in) | Weight (lbs) |      |      |      |
|----------------|---------------|----------------|--------|--------|--------|--|--------------|--------|--------|--------------|------|------|------|
|                | Nominal (gal) | Actual (cu in) |        |        |        |  |              |        |        |              |      |      |      |
| B7K0578D3K(PL) | 2-1/2 Gal.    | 677            | 8.25   | 27.25  | 1.63   | 2" Code 61 Flange (PL) <sup>2</sup><br>or<br>#32 SAE Straight Thread | 5/8 - 18     | 5.75   | 0.94   | 166          |      |      |      |
| B7K1155D3K(PL) | 5 Gal.        | 1254           |        | 42.25  |        |  |              |        |        |              | 229  |      |      |
| B7K1733D3K(PL) | 7-1/2 Gal.    | 1832           |        | 57.25  |        |  |              |        |        |              |      | 292  |      |
| B7K2310D3K(PL) | 10 Gal.       | 2401           |        | 72.25  |        |  |              |        |        |              |      |      | 356  |
| B7K3465D3K(PL) | 15 Gal.       | 3556           |        | 102.25 |        |  |              |        |        |              |      |      |      |
| B9K2310D3K(PL) | 10 Gal.       | 2474           | 11.00  | 48.75  | 1.63   | 2" Code 61 Flange (PL) <sup>2</sup><br>or<br>#32 SAE Straight Thread | 3/4 - 16     | 7.00   | 1.13   | 479          |      |      |      |
| B9K3465D3K(PL) | 15 Gal.       | 3629           |        | 66.94  |        |  |              |        |        |              | 620  |      |      |
| B9K4620D3K(PL) | 20 Gal.       | 4620           |        | 85.06  |        |  |              |        |        |              |      | 760  |      |
| B9K5775D3K(PL) | 25 Gal.       | 5775           |        | 103.25 |        |  |              |        |        |              |      |      | 900  |
| B9K6930D3K(PL) | 30 Gal.       | 6930           |        | 121.37 |        |  |              |        |        |              |      |      |      |
| B12K5775D1K    | 25 Gal.       | 6288           | 14.38  | 67.50  | 1.63   | 3" SAE Flange Ports (Code 61)<br>See Page 18<br>for Dimensions       | 7/8 - 9 (6X) | 9.00   | 1.50   | 1020         |      |      |      |
| B12K6930D1K    | 30 Gal.       | 7443           |        | 76.31  |        |  |              |        |        |              | 1162 |      |      |
| B12K9240D1K    | 40 Gal.       | 9783           |        | 98.88  |        |  |              |        |        |              |      | 1400 |      |
| B12K11550D1K   | 50 Gal.       | 12093          |        | 119.62 |        |  |              |        |        |              |      |      | 1650 |



**207 Bar Metric Accumulators for Oil and Water Service**

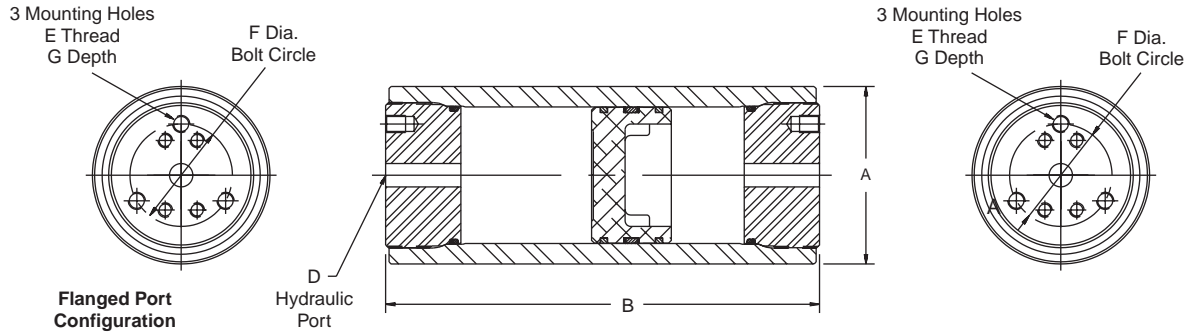


| Model No. <sup>1</sup> | Fluid Volume |          | Gas Volume (Liters) | A (mm) | B (mm) | C (mm) | D-Hydraulic Port |                          | E (mm)   | F (mm) | G (mm) | Weight (Kg) |
|------------------------|--------------|----------|---------------------|--------|--------|--------|------------------|--------------------------|----------|--------|--------|-------------|
|                        | Oil Service  | (Liters) |                     |        |        |        | (cu in)          | BSPP/G (in)              |          |        |        |             |
| A7K0578D2K             |              | 9.47     | 578                 |        |        |        |                  |                          |          |        |        | 83.5        |
| A7K1155D2K             |              | 18.9     | 1155                |        |        |        |                  |                          |          |        |        | 112         |
| A7K1733D2K             |              | 28.4     | 1733                | 210    | 1454   | 41     | -                | 2" Metric Code 61 Flange | M16      | 150    | 24     | 141         |
| A7K2310D2K             |              | 37.9     | 2310                |        | 1835   |        |                  |                          |          |        |        | 170         |
| A7K3465D2K             |              | 56.8     | 3465                |        | 2597   |        |                  |                          |          |        |        | 227         |
| A9K2310D2K             |              | 37.9     | 2310                |        | 1238   |        |                  |                          |          |        |        | 230         |
| A9K3465D2K             |              | 56.8     | 3465                |        | 1700   |        |                  |                          |          |        |        | 293         |
| A9K4620D2K             |              | 75.7     | 4620                | 279    | 2161   | 41     | -                | 2" Metric Code 61 Flange | M20      | 182    | 30     | 357         |
| A9K5775D2K             |              | 94.7     | 5775                |        | 2622   |        |                  |                          |          |        |        | 421         |
| A9K6930D2K             |              | 113.6    | 6930                |        | 3083   |        |                  |                          |          |        |        | 485         |
| A12K5775D2K            |              | 94.6     | 5775                |        | 1715   |        |                  |                          |          |        |        | 606         |
| A12K6930D2K            |              | 114      | 6930                |        | 1938   |        |                  |                          |          |        |        | 682         |
| A12K9240D2K            |              | 151      | 9240                | 365    | 2512   | 41     | -                | 3" Metric Code 61 Flange | M20 (6X) | 230    | 30     | 813         |
| A12K11550D2K           |              | 189      | 11550               |        | 3038   |        |                  |                          |          |        |        | 950         |

**Notes:**

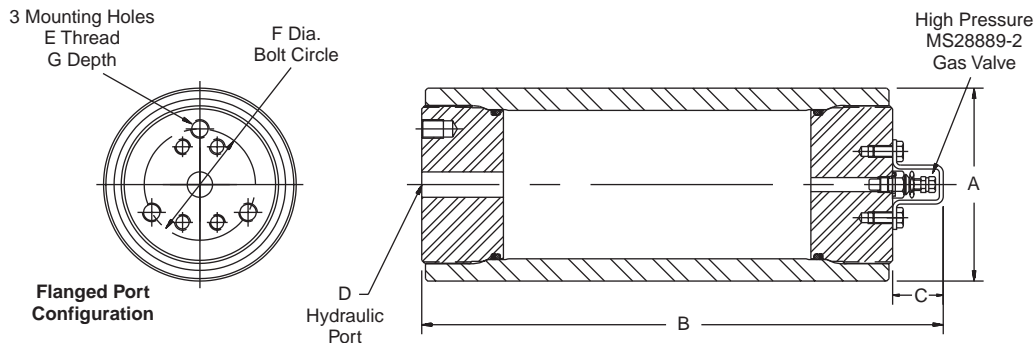
- 1) For Water Service add "W" after construction code, see "How to Order" information.
- 2) See Port Options for complete listing of port options.
- 3) ASME Certified accumulators and gas bottles are available. All 7", 9" and 12" bores comply with ASME material specifications as standard.
- 4) TÜV Certification available on 7" bores. Consult factory for other sizes.
- 5) When accumulators are to be used with gas bottles, order "Gas Bottle Accumulators", see next page.
- 6) Poppet type (military) gas valve standard.

**207 Bar Metric Accumulators for Use with Gas Bottles**



| Accumulator Model No. | Fluid Volume |         | Gas Volume (Liters) | A (mm) | B (mm) | D-Hydraulic Port |                          | E (mm)   | F (mm) | G (mm) | Weight (Kg) |
|-----------------------|--------------|---------|---------------------|--------|--------|------------------|--------------------------|----------|--------|--------|-------------|
|                       | (Liters)     | (cu in) |                     |        |        | BSPP/G (in)      | SAE Flange               |          |        |        |             |
| A7K0578D2KMLML        | 9.47         | 578     | 10.4                | 210    | 652    | -                | 2" Metric Code 61 Flange | M16      | 150    | 24     | 83.5        |
| A7K1155D2KMLML        | 18.9         | 1155    | 19.8                |        | 1032   |                  |                          |          |        |        | 112         |
| A7K1733D2KMLML        | 28.4         | 1733    | 29.3                |        | 1413   |                  |                          |          |        |        | 141         |
| A7K2310D2KMLML        | 37.9         | 2310    | 38.8                |        | 1794   |                  |                          |          |        |        | 170         |
| A7K3465D2KMLML        | 56.8         | 3465    | 57.7                |        | 2556   |                  |                          |          |        |        | 227         |
| A9K2310D2KMLML        | 37.9         | 2310    | 39.3                | 279    | 1194   | -                | 2" Metric Code 61 Flange | M20      | 182    | 30     | 230         |
| A9K3465D2KMLML        | 56.8         | 3465    | 58.3                |        | 1657   |                  |                          |          |        |        | 293         |
| A9K4620D2KMLML        | 75.7         | 4620    | 77.2                |        | 2118   |                  |                          |          |        |        | 357         |
| A9K3465D2KMLML        | 94.6         | 5775    | 96.1                |        | 2581   |                  |                          |          |        |        | 420         |
| A9K4620D2KMLML        | 113.6        | 6930    | 115.1               |        | 3044   |                  |                          |          |        |        | 485         |
| A12K5775D2KMMNMN      | 94.6         | 5775    | 97.9                | 365    | 1673   | -                | 3" Metric Code 61 Flange | M20 (6X) | 230    | 30     | 606         |
| A12K6930D2KMMNMN      | 114          | 6930    | 117                 |        | 1897   |                  |                          |          |        |        | 682         |
| A12K9240D2KMMNMN      | 151          | 9240    | 155                 |        | 2470   |                  |                          |          |        |        | 813         |
| A12K11550D2KMMNMN     | 189          | 11550   | 193                 |        | 2997   |                  |                          |          |        |        | 950         |

**207 Bar Metric Auxiliary Gas Bottles**



| Model No.    | Gas Volume |               | A (mm) | B (mm) | C (mm) | D-Hydraulic Port |                          | E (mm)   | F (mm) | G (mm) | Weight (Kg) |
|--------------|------------|---------------|--------|--------|--------|------------------|--------------------------|----------|--------|--------|-------------|
|              | Gas Bottle | Nominal (gal) |        |        |        | Actual (liters)  | BSPP/G (in)              |          |        |        |             |
| B7K0578D2K   | 2-1/2 Gal. | 11.1          | 210    | 692    | 41     | -                | 2" Metric Code 61 Flange | M16      | 150    | 24     | 83.5        |
| B7K1155D2K   | 5 Gal.     | 20.5          |        | 1073   |        |                  |                          |          |        |        | 112         |
| B7K1733D2K   | 7-1/2 Gal. | 30.0          |        | 1454   |        |                  |                          |          |        |        | 141         |
| B7K2310D2K   | 10 Gal.    | 39.3          |        | 1835   |        |                  |                          |          |        |        | 170         |
| B7K3465D2K   | 15 Gal.    | 58.3          |        | 2597   |        |                  |                          |          |        |        | 227         |
| B9K2310D2K   | 10 Gal.    | 40.5          | 279    | 1238   | 41     | -                | 2" Metric Code 61 Flange | M20      | 182    | 30     | 230         |
| B9K3465D2K   | 15 Gal.    | 59.5          |        | 1700   |        |                  |                          |          |        |        | 293         |
| B9K4620D2K   | 20 Gal.    | 78.4          |        | 2161   |        |                  |                          |          |        |        | 357         |
| B9K5775D2K   | 25 Gal.    | 98.0          |        | 2623   |        |                  |                          |          |        |        | 420         |
| B9K3465D2K   | 30 Gal.    | 117.6         |        | 3085   |        |                  |                          |          |        |        | 485         |
| B12K5775D2K  | 25 Gal.    | 103           | 365    | 1715   | 41     | -                | 3" Metric Code 61 Flange | M20 (6X) | 230    | 30     | 606         |
| B12K6930D2K  | 30 Gal.    | 122           |        | 1938   |        |                  |                          |          |        |        | 682         |
| B12K9240D2K  | 40 Gal.    | 160           |        | 2512   |        |                  |                          |          |        |        | 813         |
| B12K11550D2K | 50 Gal.    | 198           |        | 3038   |        |                  |                          |          |        |        | 950         |

**Water Service Option (W)**

Piston accumulators are available for use with water as the fluid media. Modifications include electroless nickel plating all surfaces and metal parts. Carboxylated Nitrile (J) piston seals should be specified for water service. Consult factory for details.

**Seals**

| Seal Code | Polymer                | Recommended Operating Temperature Range | Maximum Temperature with Reduced Life | General Application and Compatibility*   |
|-----------|------------------------|---|---------------------------------------|--|
| K         | Nitrile (Buna-N)       | -20°F to 165°F<br>-29°C to 74°C         | 200°F<br>93°C                         | Parker's Standard Compound – Compatible with most mineral oil-based fluids                                   |
| E         | Fluorocarbon Elastomer | -10°F to 250°F<br>-23°C to 121°C        | 400°F<br>204°C                        | Compatible with most mineral oil-based fluids at higher temperatures and some exotic fluids                  |
| D         | Ethylene Propylene     | -40°F to 250°F<br>-40°C to 121°C        | 300°F<br>149°C                        | Compatible with most phosphate ester fluids and some synthetic fluids  |
| H         | Hydrogenated Nitrile   | -45°F to 325°F<br>-43°C to 162°C        | 350°F<br>177°C                        | Compatible with most oil-based and biodegradable fluids, maintains sealing effectiveness at low temperatures |
| J         | Carboxylated Nitrile   | -20°F to 165°F<br>-29°C to 74°C         | 200°F<br>93°C                         | Compatible with most mineral oil-based fluids with added internal lubricity for water based fluids           |
| Q         | Low Temp. Nitrile      | -45°F to 160°F<br>-43°C to 71°C         | 200°F<br>93°C                         | Compatible with most mineral oil-based fluids and maintains sealing effectiveness at low temperatures        |

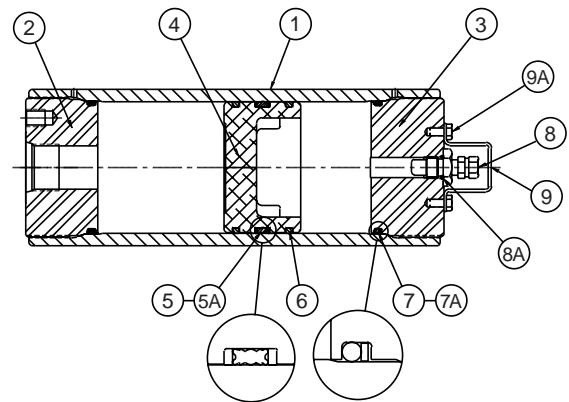
\*Note: Consult local distributor or factory for fluid compatibility information. Temperature ranges may vary depending upon fluid used in hydraulic system.

**Seal Kits**

Seal Kits are available for all piston accumulator models. When ordering seal kits, please supply the complete model and serial numbers from the name plate and specify fluid type and operating temperature.

**Parts List**

- |                        |                     |
|------------------------|---------------------|
| 1 Body                 | 7 O-ring            |
| 2 Hydraulic Cap        | 7A O-ring Backup    |
| 3 Gas Cap              | 8 Gas Valve         |
| 4 Piston               | 8A Gas Valve O-ring |
| 5 V-O-ring Piston Seal | 9 Gas Valve Guard   |
| 5A V-O-ring Backups    | 9A Screw            |
| 6 PTFE Glide Rings     |                     |



**3000 PSI Seal Kit Numbers (Includes items 5, 5A, 6, 7, 7A, 8A)**

| Material             | Bore Size  |            |            |            |            |            |            |
|----------------------|------------|------------|------------|------------|------------|------------|------------|
|                      | 2"         | 3"         | 4"         | 6"         | 7"         | 9"         | 12"        |
| Buna-N (Std.)        | RK0200K000 | RK0300K000 | RK0400K000 | RK0600K000 | RK0700K000 | RK0900K000 | RK1200K000 |
| Fluorocarbon         | RK0200E000 | RK0300E000 | RK0400E000 | RK0600E000 | RK0700E000 | RK0900E000 | RK1200E000 |
| EPR                  | RK0200D000 | RK0300D000 | RK0400D000 | RK0600D000 | RK0700D000 | RK0900D000 | CF*        |
| Hydrogenated Nitrile | RK0200H000 | RK0300H000 | RK0400H000 | RK0600H000 | RK0700H000 | RK0900H000 | RK1200H000 |
| Carboxylated Nitrile | RK0200J000 | RK0300J000 | RK0400J000 | RK0600J000 | RK0700J000 | RK0900J000 | CF*        |
| Low Temp Nitrile     | RK0200Q000 | RK0300Q000 | RK0400Q000 | RK0600Q000 | RK0700Q000 | RK0900Q000 | RK1200Q000 |

\*Consult Factory

### Optional Ports

The following ports are available as options on all piston accumulators (note standard ports above).

| SAE Straight Thd. |           |           | Code 61 Flange |           |    |           | Code 62 Flange |           |    |           | NPT       |           |           | BSPP      |           |           | ISO 6149-1 |           |           |
|-------------------|-----------|-----------|----------------|-----------|----|-----------|----------------|-----------|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|
| Port Size         | Port Code | Min. Bore | Port Size      | Port Code |    | Min. Bore | Port Size      | Port Code |    | Min. Bore | Port Size | Port Code | Min. Bore | Port Size | Port Code | Min. Bore | Port Size  | Port Code | Min. Bore |
|                   |           |           | Inch           | Metric    |    |           | Inch           | Metric    |    |           |           |           |           |           |           |           |            |           |           |
| #5                | TA        | 2"        | 1/2"           | PT        | MT | 3"        | 1"             | PG        | MG | 4"        | 3/8"      | UT        | 2"        | 3/8"      | RA        | 2"        | M14        | YA        | 2"        |
| #6                | TB        | 2"        | 3/4"           | PU        | MU | 3"        | 1 1/4"         | PH        | MH | 4"        | 1/2"      | UU        | 2"        | 1/2"      | RB        | 2"        | M18        | YB        | 2"        |
| #8                | TC        | 2"        | 1"             | PV        | MV | 3"        | 1 1/2"         | PP        | MV | 4"        | 3/4"      | UV        | 2"        | 3/4"      | RC        | 2"        | M22        | YC        | 2"        |
| #10               | TI        | 2"        | 1-1/4"         | PW        | MW | 3"        | 2"             | PQ        | MQ | 6"        | 1"        | UW        | 3"        | 1"        | RD        | 3"        | M27        | YD        | 2"        |
| #12               | TD        | 2"        | 1-1/2"         | PJ        | MJ | 4"        | 2 1/2"         | PR        | —  | 6"        | 1 1/4"    | UX        | 3"        | 1 1/4"    | RE        | 3"        | M33        | YE        | 3"        |
| #16               | TE        | 3"        | 2"             | PL        | ML | 4"        | 3"             | PS        | —  | 7"        | 1 1/2"    | UY        | 4"        | 1 1/2"    | RF        | 4"        | M42        | YF        | 3"        |
| #20               | TF        | 3"        | 2-1/2"         | PM        | MM | 6"        | —              | —         | —  | —         | 2"        | UZ        | 4"        | 2"        | RG        | 4"        | —          | —         | —         |
| #24               | TG        | 4"        | 3"             | PN        | MN | 7"        | —              | —         | —  | —         | —         | —         | —         | —         | —         | —         | —          | —         | —         |

**Note:**

- 1) 3000 PSI SAE Code 61 (ISO 6162) Flange dimensions are shown below.
- 2) 1" thru 2" flanges are to standard SAE Code 62 dimensions, 2-1/2" & 3" to "Socket Weld Flange Adapter Pattern", dimensions are shown below. Metric pattern supplied on 207 Bar Metric units unless otherwise specified.
- 3) BSPT and Metric ports available, consult factory.

### SAE 4-Bolt Flange Port Dimensions

#### Standard Pressure – SAE Code 61 (ISO 6162) – 3000 PSI (207 Bar)

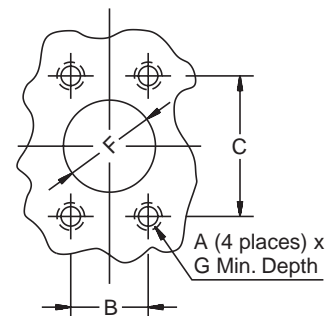
| Flange Size |    | SAE Flange Dimensions (in.) |       |       |       |       | Metric SAE Flange Dimensions (mm) |      |       |    |      |
|-------------|----|-----------------------------|-------|-------|-------|-------|-----------------------------------|------|-------|----|------|
| in          | mm | A                           | B     | C     | F     | G     | A                                 | B    | C     | F  | G    |
| 1 1/2"      | 38 | 1/2 - 13                    | 1.406 | 2.750 | 1 1/2 | 1.062 | M12                               | 35.7 | 69.9  | 38 | 26.9 |
| 2"          | 51 | 1/2 - 13                    | 1.688 | 3.062 | 2     | 1.062 | M12                               | 42.9 | 77.8  | 51 | 26.9 |
| 2 1/2"      | 64 | 1/2 - 13                    | 2.000 | 3.500 | 2 1/2 | 1.188 | M12                               | 50.8 | 88.9  | 64 | 30.1 |
| 3"          | 76 | 5/8 - 11                    | 2.438 | 4.188 | 3     | 1.188 | M16                               | 61.9 | 106.4 | 76 | 30.1 |

**Note:** Some flanges using this bolt pattern are not rated for 3000 PSI.

#### High Pressure – Code 62 (ISO 6162) (thru 2" diameter) – 6000 PSI (410 Bar)

| Flange Size |    | SAE Flange Dimensions (in.) |       |       |       |       | Metric SAE Flange Dimensions (mm) |      |      |    |      |
|-------------|----|-----------------------------|-------|-------|-------|-------|-----------------------------------|------|------|----|------|
| in          | mm | A                           | B     | C     | F     | G     | A                                 | B    | C    | F  | G    |
| 1 1/2"      | 38 | 5/8 - 11                    | 1.438 | 3.125 | 1 1/2 | 1.375 | M16                               | 36.5 | 79.4 | 38 | 34.9 |
| 2"          | 50 | 3/4 - 10                    | 1.750 | 3.812 | 2     | 1.500 | M20                               | 44.5 | 96.8 | 50 | 38.1 |
| 2 1/2"      | —  | 7/8 - 9                     | 2.312 | 4.875 | 2 1/2 | 1.625 | —                                 | —    | —    | —  | —    |
| 3"          | —  | 1-1/8 - 7                   | 2.812 | 6.000 | 3     | 1.750 | —                                 | —    | —    | —  | —    |

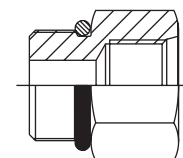
**Note:** Some flanges using this bolt pattern are not rated for 6000 PSI. 1-1/2" & 2" flanges are to standard SAE Code 62 dimensions, 2-1/2" & 3" to "Socket Weld Flange Adapter" Pattern.



### Port Adapters

A wide variety of port adapters are offered for those that wish to convert Parker's standard SAE port offerings to NPTF or smaller SAE port sizes.

For a complete listing, [see Accumulator Accessories](#).

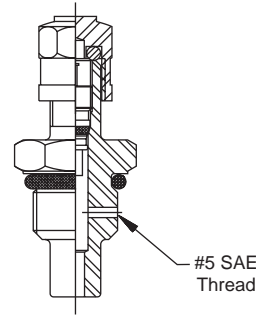


**Gas Valve Option (M)**

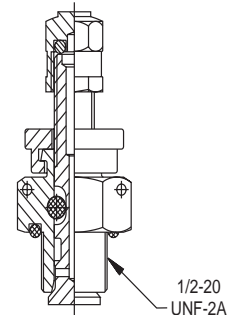
Two types of gas valves are available on Series 3000 piston accumulators and gas bottles. Units with 2" thru 6" bores, are offered with a cored gas valve cartridge (ISO-4570-8V1) as standard.

All 7" thru 12" bore units are supplied with a heavy duty (military) poppet-type gas valve cartridge (Mil. Spec. MS28889-2) as standard.

The military style (MS) gas valve is available on 2" thru 6" bores as an option (M), specify when ordering.



Standard Gas Valve



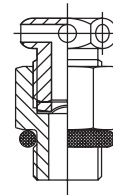
Military Gas Valve

**Safety Fuse Options (F)**

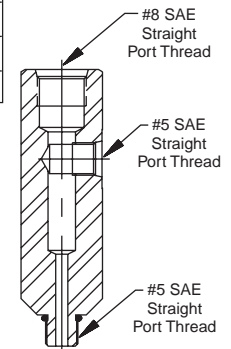
Safety Fuses are used as a safety device on accumulators and gas bottles to prevent over-pressurization of gas due to external heat or hydraulic pressure (set at 140% of maximum system pressure to avoid rupture disk fatigue and premature failure). The rupture disks are calibrated to rupture at a pre-determined pressure. Safety fuses are available on most sizes of piston and bladder accumulators and gas bottles. Safety fuses can be installed on all piston accumulators by using the "Fuse Adapter" as shown to the right. 4" bore units and above can be equipped with a fuse port machined in the gas cap by specifying the "Safety Fuse Option" (F) at the time of order in the model code, see "How to Order." The safety fuse assembly and/or fuse adapter must be ordered separately.

| Description                       | Part Number |
|-----------------------------------|-------------|
| Safety Fuse Assembly <sup>1</sup> | 086471xxxx  |
| Replacement Rupture Disks         | 756003xxxx  |
| Fuse Adapter                      | 1468970002  |

1) Assembly includes housing and rupture disk, xxxx = pressure setting in 100 psi increments, i.e., for an assembly with a 2000 PSI setting, order P/N 0864712000.



Fuse



Fuse Adapter

**Mounting, Charging & Gauging Accessories**

Parker offers a wide variety of mounting, charging and gauging accessories. See "Accumulator Accessories."



**Special Options**

If your application requires a piston accumulator, gas bottle, or special option that falls outside of Parker's broad offering, consult your local distributor, Parker representative, or the factory with your specific requirements. Parker has the manufacturing and engineering expertise to design and build piston accumulators to your exacting requirements, from simple modifications of standard units to complete designs. Some example of Parker's past special designs include:

- Special and Stainless Steel Materials
- Piston Position and Velocity Sensors and Switches
- Special Seals
- Non-Standard Capacities
- Tie Rod Construction
- Special Certifications
- Spring & Weight Loaded

***Consult the experts at Parker with your next piston accumulator requirement!***

### How to Order Piston Accumulators

Piston Accumulators and gas bottles can be specified by using the symbols in the chart below to develop a model number. Select only those symbols that represent the features desired, and place them in the sequence indicated by the example at the top of the chart.

| Series   | Nominal Bore Size | Type of Construction | Options  | Capacity    | Design Pressure | Design Number | Seal Compound | Hyd. Port Modification | Gas Port Modification |
|----------|-------------------|----------------------|----------|-------------|-----------------|---------------|---------------|------------------------|-----------------------|
| <b>A</b> | <b>7</b>          | <b>K</b>             | <b>-</b> | <b>2310</b> | <b>D</b>        | <b>1</b>      | <b>K</b>      | <b>-</b>               | <b>-</b>              |

**Series**

|                      |
|----------------------|
| <b>A</b> Accumulator |
| <b>B</b> Gas Bottle  |

**Nominal Bore Size**

|                     |
|---------------------|
| <b>2</b> 2 inches   |
| <b>3</b> 3 inches   |
| <b>4</b> 4 inches   |
| <b>6</b> 6 inches   |
| <b>7</b> 7 inches   |
| <b>9</b> 9 inches   |
| <b>12</b> 12 inches |

**Type of Construction**

|  |
|--|
| <b>N</b> Threaded both ends non-ASME mat'l standard on 2", 4", 6" (3000 PSI fatigue design tested) |
| <b>K</b> Threaded both ends A.S.M.E. mat'l standard on 7" & up                                     |
| <b>L</b> Same as K with A.S.M.E. approval stamp 7" & up. Available as special on smaller sizes     |
| <b>T</b> Threaded both ends TÜV approved 3", 4", 6" & 7" bores only                                |

**Options**

|  |
|--|
| <b>Blank</b> Standard Gas Cap                |
| <b>W</b> Water Service                       |
| <b>F</b> SAE Fuse Port *                     |
| <b>G</b> SAE Fuse Port * – Water Service     |
| <b>M</b> 5,000 PSI Gas Valve                 |
| <b>L</b> 5,000 PSI Gas Valve – Water Service |
| <b>P</b> Fuse and MS Valve                   |
| <b>R</b> Fuse and MS Valve – Water Service   |

\* Safety fuse assembly not included. Order fuse assembly separately.

**Bore Size/Capacity**

|                         |
|-------------------------|
| <b>0005</b> 5 cu. in.   |
| <b>0010</b> 10 cu. in.  |
| <b>0029</b> 29 cu. in.  |
| <b>0058</b> 58 cu. in.  |
| <b>0029</b> 29 cu. in.  |
| <b>0058</b> 58 cu. in.  |
| <b>0090</b> 90 cu. in.  |
| <b>0116</b> 116 cu. in. |
| <b>0183</b> 183 cu. in. |
| <b>0058</b> 58 cu. in.  |
| <b>0116</b> 116 cu. in. |
| <b>0231</b> 1 gal.      |
| <b>0347</b> 1½ gal.     |
| <b>0578</b> 2½ gal.     |
| <b>0231</b> 1 gal.      |
| <b>0347</b> 1½ gal.     |
| <b>0578</b> 2½ gal.     |
| <b>0924</b> 4 gal.      |
| <b>1155</b> 5 gal.      |
| <b>1733</b> 7½ gal.     |
| <b>2310</b> 10 gal.     |
| <b>0578</b> 2½ gal.     |
| <b>1155</b> 5 gal.      |
| <b>1733</b> 7½ gal.     |
| <b>2310</b> 10 gal.     |
| <b>3485</b> 15 gal.     |
| <b>4620</b> 20 gal.     |
| <b>6930</b> 30 gal.     |
| <b>5775</b> 25 gal.     |
| <b>6930</b> 30 gal.     |
| <b>3485</b> 15 gal.     |
| <b>4620</b> 20 gal.     |
| <b>6930</b> 30 gal.     |
| <b>5775</b> 25 gal.     |
| <b>6930</b> 30 gal.     |
| <b>9240</b> 40 gal.     |
| <b>11550</b> 50 gal.    |

*Consult factory for other available sizes.*

**Design Pressure**

|                                    |
|------------------------------------|
| <b>D</b> 3000 PSI (All Bore Sizes) |
| <b>K</b> 2000 PSI Special          |
| <b>X</b> Other                     |

**Design Number**

|   |
|---|
| <b>1</b> Standard*  |
| <b>2</b> Metric Mounting Holes & Hyd. Port (BSPP Standard*) Specify Special Ports |
| <b>3</b> Special Port (Hyd. or Gas, See Port Table)                               |
| <b>###</b> Special Design   |

**Hydraulic and Gas Port Modifications Designated by 2 Digits**

| 1st Digit    | Style                         | 2nd Digit                      | Description | Min. Bore Size   |                           |
|--------------|-------------------------------|--------------------------------|-------------|--|---------------------------|
| <b>Blank</b> | <b>Std.</b>                   | <b>Blank</b>                   | <b>Std.</b> |  |                           |
| <b>T</b>     | SAE                           | <b>Straight Thread Ports</b>   |             |  |                           |
|              |                               | <b>A</b> SAE #5 (1/2 - 20)     | 2"          |  |                           |
|              |                               | <b>B</b> SAE #6 (9/16 - 18)    | 2"          |  |                           |
|              |                               | <b>C</b> SAE #8 (3/4 - 16)     | 2"          |  |                           |
|              |                               | <b>D</b> SAE #12 (1 1/16 - 12) | 2"          |  |                           |
|              |                               | <b>E</b> SAE #16 (1 5/16 - 12) | 3"          |  |                           |
|              |                               | <b>F</b> SAE #20 (1 5/8 - 12)  | 3"          |  |                           |
|              |                               | <b>G</b> SAE #24 (1 7/8 - 12)  | 4"          |  |                           |
|              |                               | <b>H</b> SAE #32 (2 1/2 - 12)  | 7"          |  |                           |
|              |                               | <b>I</b> SAE #10 (7/8 - 14)    | 2"          |  |                           |
| <b>P</b>     | Flange                        | <b>3000 PSI (Code 61)</b>      |             |  | <b>6000 PSI (Code 62)</b> |
|              |                               | <b>Min. Bore</b>               |             | <b>Min. Bore</b>   |                           |
|              |                               | <b>J</b> 1 1/2"                | 4"          | <b>G</b> 1"  | 4"                        |
|              |                               | <b>L</b> 2"                    | 4"          | <b>H</b> 1 1/4"  | 4"                        |
|              |                               | <b>M</b> 2 1/2"                | 6"          | <b>P</b> 1 1/2"  | 6"                        |
|              |                               | <b>N</b> 3"                    | 6"          | <b>Q</b> 2"  | 6"                        |
|              |                               | <b>T</b> 1/2"                  | 3"          | <b>R*</b> 2 1/2"   | 6"                        |
|              |                               | <b>U</b> 3/4"                  | 3"          | <b>S*</b> 3"   | 7"                        |
|              |                               | <b>V</b> 1"                    | 3"          | <small>* For socket weld flange. Not available with metric flange.</small> |                           |
|              |                               | <b>W</b> 1 1/4"                | 3"          |  |                           |
| <b>U</b>     | NPTF (Not Recommended)        | <b>T</b> 3/8"                  | 2"          |  |                           |
|              |                               | <b>U</b> 1/2"                  | 10 gal.     |  |                           |
|              |                               | <b>V</b> 3/4"                  | 2"          |  |                           |
|              |                               | <b>W</b> 1"                    | 2"          |  |                           |
|              |                               | <b>X</b> 1 1/4"                | 2"          |  |                           |
|              |                               | <b>Y</b> 1 1/2"                | 4"          |  |                           |
|              |                               | <b>Z</b> 2"                    | 4"          |  |                           |
| <b>R</b>     | BSPP/BSPT Parallel Taper Port | <b>BSPP/BSPT</b>               |             |  | <b>Metric/ISO</b>         |
|              |                               | <b>A</b> 3/8 - 19              |             | <b>A</b> M14 x 1.5   |                           |
|              |                               | <b>B</b> 1/2 - 14              |             | <b>B</b> M18 x 1.5   |                           |
|              |                               | <b>C</b> 3/4 - 14              |             | <b>C</b> M22 x 1.5   |                           |
|              |                               | <b>D</b> 1 - 11                |             | <b>D</b> M27 x 2   |                           |
|              |                               | <b>E</b> 1 1/4 - 11            |             | <b>E</b> M33 x 2   |                           |
|              |                               | <b>F</b> 1 1/2 - 11            |             | <b>F</b> M42 x 2   |                           |
|              |                               | <b>G</b> 2 - 11                |             | <b>G</b> M48 x 2   |                           |

**Example of Special Port Accumulator**

**A 4 N 0231 D 3 K T C U V**

Non-std. Port      SAE #8 Hyd. Port      NPT 3/4" Gas Port

**\*Standard Ports Available (See Port Modifications Table if Using Other Than Standard Ports Shown Below)**

| Bore Size | Standard Port Sizes   | Metric Port Sizes |
|-----------|-----------------------|-------------------|
| 2"        | SAE #12               | 3/4               |
| 3"        | SAE#12                | 3/4               |
| 4"        | SAE #20               | 1                 |
| 6"        | SAE #24               | 1                 |
| 7"        | SAE #32               | 2" Code 61        |
| 9"        | SAE #32               | 2" Code 61        |
| 12"       | 3" SAE Flange Code 61 | 3" Code 61        |

**Seal Compound (See Catalog for Temperature Settings)**

|                                    |
|------------------------------------|
| <b>K</b> Buna N (Std)              |
| <b>E</b> Fluoroelastomer           |
| <b>D</b> EPDM                      |
| <b>H</b> Hydrogenated Nitrile      |
| <b>J</b> HWBF                      |
| <b>Q</b> Low Temp.                 |
| <b>S</b> Special (to be specified) |