HIPRES® ACCUMULATOR DESIGN DATA SHEET

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Contact: _____ **Company:** _____
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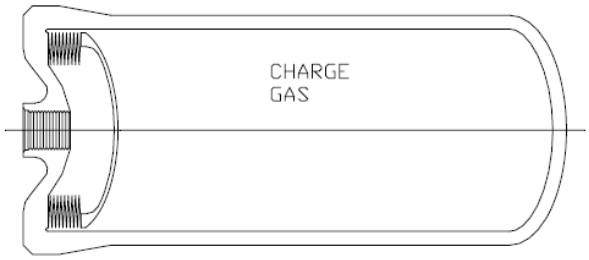
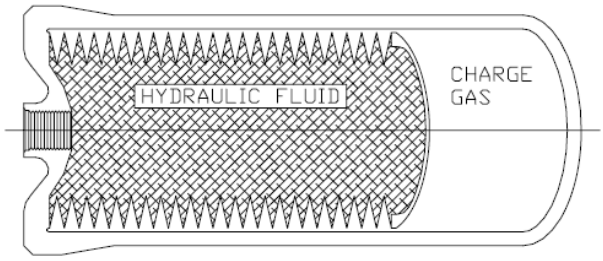
In order to properly size the accumulator, we must understand what displaced fluid volume is required from what high pressure to what low pressure, and over what temperature range.

Accumulator Empty Condition



Accumulator Full Condition



Fluid Pressure [PSIG] / [bar] _____
Fluid Temperature [F] / [C] _____
Fluid Volume [IN³] / [Liters] _____
This will be 0 unless you wish some fluid remaining in the accumulator

Fluid Pressure [PSIG] / [bar] _____
Fluid Temperature [F] / [C] _____
Fluid Volume [IN³] / [Liters] _____

For the pressure vessel design, we must understand proof and burst pressure requirements. Standard values are described below but the customer may allow for different values to suit specific applications. Further, we need to understand at what temperatures these pressures are to be measured. Standard temperature of 68F is typical.

From ARP4378:

Proof pressure = 1.5 x maximum operating pressure or 3 x precharge pressure (whichever is higher)
Burst pressure = 4 x maximum operating pressure or 5 x precharge pressure (whichever is higher)

Burst Pressure [PSIG] / [bar] _____ **At what temperature [F] / [C]** _____
Proof Pressure [PSIG] / [bar] _____ **At what temperature [F] / [C]** _____

Envelope Constraints _____
Maximum Diameter [IN] / [CM] _____
Maximum Length [IN] / [CM] _____

Miscellaneous _____
Hydraulic port requirement _____
Fluid type _____
Target Weight [LBS] / [KG] _____
Pressure indicator required? ☐ NO ☐ YES What type: _____
Fill Rate [IN³/Min] / [L/M] _____
Empty Rate [IN³/Min] / [L/M] _____
Number of fill/empty cycles _____
Application description _____
_____