

Accumulator Sizing Request

Please select from the following applications and fill out (type or print) the information required. We'll help you calculate the proper accumulator size you need.

Auxiliary Power Source

☐ The most common application of hydraulic accumulators is as an auxiliary power source. In this application, the accumulator stores the hydraulic fluid delivered by the pump during a portion of the work cycle; then, releases this stored fluid on demand to complete the cycle, thereby functioning as a secondary source of power and assisting the pump.

System maximum pressure, P_2 : _____

System minimum pressure, P_3 : _____

Pre-charge pressure of the accumulator, P_1 : _____

The volume of the fluid required to the system (from the accumulator), V_x : _____

Pump Pulsation Dampener

☐ Pressure pulsations are frequently caused by the reciprocating action of piston-type pumps which produce periodic pressure and flow variations at their discharge ports. Installing proper accumulators in the pumping equipment to reduce pulsations can greatly minimize the incidence of failure of vibration sensitive instruments, as well as damage of to pipelines, couplings and valves.

Pump displacement, V_1 ; or Bore size of the cylinder and length of stroke: _____

System mean pressure, P_2 : _____

Permissible fluctuation (5% by default), %: _____

Pump Type, select one:

- ☐ Simplex Single-Acting
- ☐ Simplex Double-Acting
- ☐ Duplex Single-Acting
- ☐ Duplex Double-Acting
- ☐ Triplex Single-Acting
- ☐ Triplex Double-Acting

Hydraulic Surge Suppressor

☐ Hydraulic line shock, or “water hammer” as it’s commonly called, is caused by the sudden stoppage or fast deceleration of fluid flowing in a pipe line that results from the quick closure of a valve in the line. The installation of a properly sized accumulator close to the source of shock can eliminate or significantly minimize the shock and vibration in the system.

I.D. of pipe (specify if different pipes), D:

Length of pipe line (with each I.D.), L:

Flow Rate, Q:

System pressure at normal flow rate: P_1 :

Maximum allowable shock pressure: P_2 :

Fluid Media:

Others in Comments