

FUNCTION: Quick closing electrical, pneumatic, spring loaded valves or devices, and the quick hand closure of fixture trim can cause destructive "water hammer". Engineered water hammer arresters ("Hydrotrols") employ a permanently sealed cushion of air or gas which absorbs the energy of water hammer and reduces pressure rise in the piping system to a safe level. Hydrotrol units, correctly sized and placed at specific locations in the water piping system will control the destructive shock of water hammer.

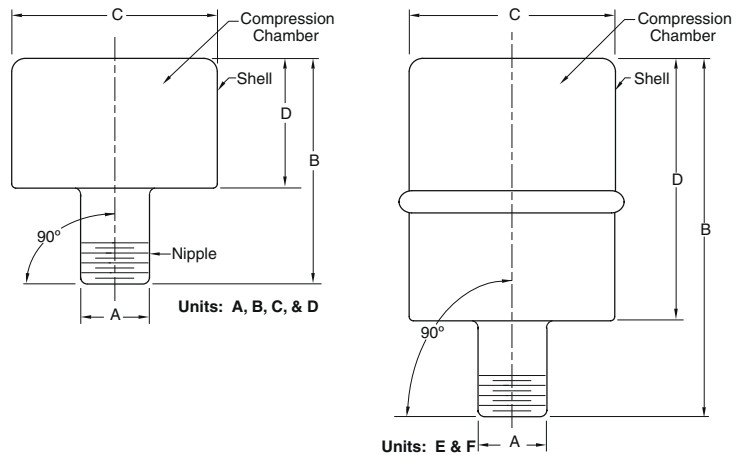
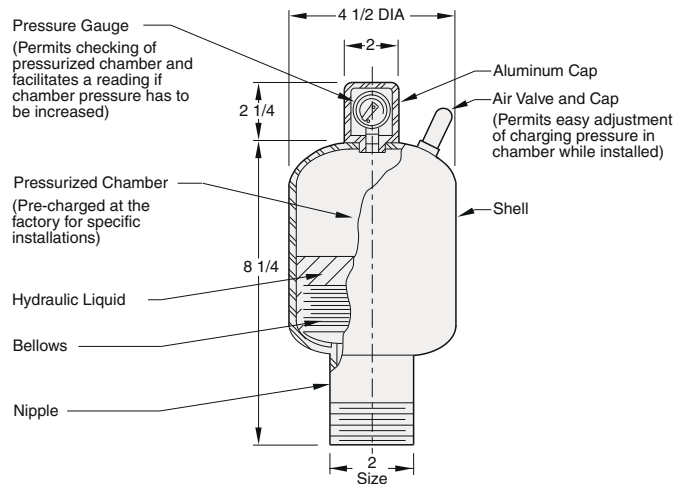
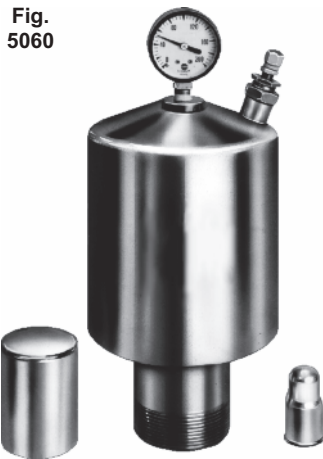


Fig. 5060 - "HY-DUTY" HYDROTROL



Hydrotrols Fig. 5005 to 5050 inclusive have been tested and certified in accordance with the Plumbing and Drainage Institute "Standard P.D.I. WH-201"

Hydrotrols are pre-charged and permanently sealed at the factory. All hydrotrols are constructed entirely of stainless steel.



The "Hy-Duty" HYDROTROL has been specially designed to absorb and control the extreme hydrostatic shock pressures that occur in applications such as commercial and institutional laundries, bus and truck washing stations, pumping systems and other large piping systems. Because of the special nature of this unit, all requests for sizing should be sent to the Smith Engineering Dept. for review. To enable the company to properly size units for specific jobs, the following information must be furnished.

1. Length of piping run from main to location of discharge valves for equipment.
2. Size of branch pipe and main.
3. Velocity (flow rate) through the branch and main.
4. Water pressure - both static and flowing.
5. Types of equipment served - name, number, flow rate.
6. Sketch or layout of the complete piping system related to the equipment to be protected. This is desirable so that a complete survey of the installation can be made.

FIG. NO.	PDI SIZE	FIXTURE UNIT CAPACITY	A PIPE SIZE	B HEIGHT	C DIA.	D	STAINLESS STEEL	APPROX WEIGHT LBS
5005	A	1-11	3/4" NPT	2 5/8"	3 1/4"	1 7/16"	549.00	1
5010	B	12-32	1" NPT	2 7/8"	3 1/4"	1 3/4"	1,119.00	2
5020	C	33-60	1" NPT	3 1/2"	3 1/4"	2 1/4"	1,671.00	3
5030	D	61-133	1" NPT	4 1/2"	3 1/4"	3 1/4"	4,191.00	3
5040	E	115-154	1" NPT	5 1/2"	3 1/4"	4 1/8"	4,731.00	4
5050	F	155-330	1" NPT	6 5/8"	3 1/4"	5 1/4"	5,814.00	4
5060	—	—	2" NPT	10 1/2"	4 1/2"	—	9,332.00	8

RECOMMENDED SPECIFICATION FOR HYDROSTATIC SHOCK CONTROL

Smith series 5000 "Hydrotrol" all stainless steel shock absorbers shall be installed at all solenoid, remote operated or quick closing valves and at each plumbing fixture or battery of plumbing fixtures. Install on both hot and cold water branch lines in an upright position as close as possible to the valve or valves being served. Sizes and locations as indicated on drawings.