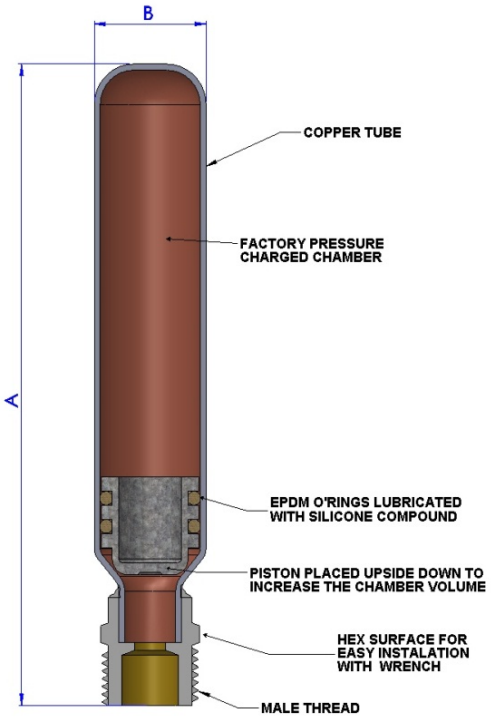
HYDROFLOW
WATER HAMMER ARRESTER VALVES

THE WATER HAMMER ARRESTER VALVE

A Water Hammer Arrester Valve is basically an engineered gas charged chamber. II works in a similar manner to a car shock absorber responding to an uneven road surface except it responds to uneven pipeline pressure. A Water Hammer Arrester always has either a piston or diaphragm separating the gas pre-charge from the fluid.



WATER HAMMER NOISE

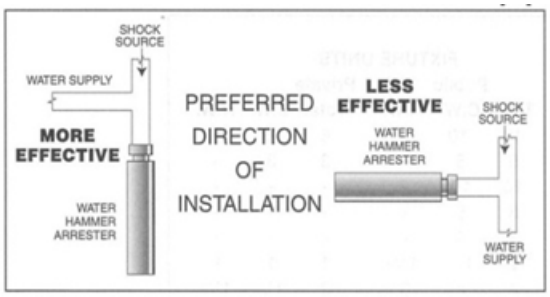
Although noise is generally associated with the occurrence of water hammer it can occur without audible sound. Quick closure always creates some degree of shock, with or without the noise.

SYSTEM PROTECTION

The installation of the correctly sized Water Hammer Arrester Valve drastically reduces the damage throughout the water distribution system, as well as alleviating the irritating banging and thumping noises.

MAX. WORKING TEMP. 120°C

MAX. WORKING PRESSURE 350psi



PDI SIZE	Diameter	Height	Thread Size
AA	24mm	145mm	½"
A	24mm	165mm	½"
B	32mm	200mm	¾"
C	32mm	300mm	¾"
E	53mm	275mm	1"
F	53mm	325mm	1"

ALL VALVES ARE PRE-LOADED AT 60PSI

ORDERING DETAILS	
PDI SIZE	Cu SERIES
AA	HA15AA
A	HA15A
B	HA20B
C	HA20C
E	HA25E
F	HA25F

WARRANTY

Hydroflow will warranty the Water Hammer Arrester for the purpose for which it is intended against defects in materials or workmanship for a period of 5 years from the date of original delivery. In the event of such defects within the warranty period, Hydroflow will at its option, replace the Water Hammer Arrester without charge. This shall constitute the exclusive remedy for the breach of warranty, and Hydroflow shall not be responsible for any incidental or consequential damages , including without limitation, damages or other costs resulting from labor charges, delays, vandalism, negligence , fouling caused by foreign material, damage from adverse water supply, chemicals, or any other circumstances over which Hydroflow has no control. This warranty shall be invalidated if the label is removed from the product or by any abuse, misuse, misapplication or improper use of the Water Hammer Arrester. Hydroflow makes no other warranties expressed or implied except as provided in this limited warranty.

WARRANTY VOID IF LABEL REMOVED FROM PRODUCT

INSTALLATION INSTRUCTIONS

- The correct size valve must be installed for the application. (see sizing information)
- The valve may be installed at any angle in a new or existing pipe system using a standard tee fitting.
- The Arrester should be installed as close to the source of the pressure surge (water hammer) as possible.
- Hot and cold water lines must be addressed separately.
- For maximum efficiency install the valve in the direction indicated. (i.e. directly facing the Source)
  WRENCH ONLY ON KNURLED SURFACE, FAILURE TO FOLLOW THESE INSTRUCTIONS WILL VOID ALL WARRANTIES

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SIZING INFORMATION

In order to select the correct size valve for a specific installation, it is necessary to consider ***four*** variables.

These are: FIXTURE UNITS: The total number of fixture units to be served by the Arrester. To calculate the total fixture units use the table below. Note hot and cold lines are to be calculated separately.

LENGTH OF RUN: As a general rule, for any branch line under 6 metres long the total number of fixture units will determine the PDI Size. For any branch line over 6 metres long the total fixture units will determine the PDI size to be installed at no greater than 6 metre intervals. (i.e. If the total fixture units equal 15 it is necessary to install 2 "A" Arresters.

SPEED OF VALVE CLOSURE: When an extremely fast closing valve (e.g. Solenoid Valve) is the cause of the pressure surge the next largest PDI size valve should be installed.

SIZE AND SCOPE OF ADJOINING PIPES: If a branch line is being sized and the installation is to be within 1.5 metres of a larger main pipe, the PDI Fixture Units must include all Fixture Units on the main adjoining line

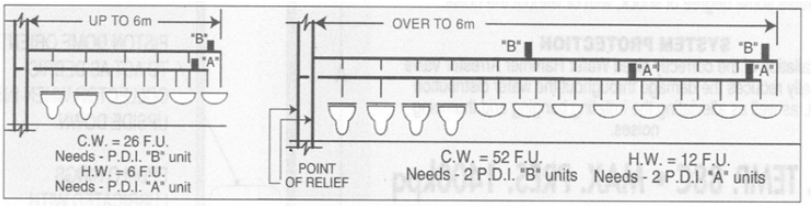

TABLE A

FIXTURE	TYPE OF SUPPLY CONTOL	FIXTURE UNITS Public Total	C.W.	H.W	Private Total	C.W.	H.W.
Water Closet	Flush Valve	10	10	-	6	6	-
Water Closet	Flush Tank	5	5	-	3	3	-
Pedestal Urinal	Flush Valve	10	10	-	-	-	-
Stall or Wall Unit	Flush Valve	5	5	-	-	-	-
Stall or Wall Unit	Flush Tank	3	3	-	-	-	-
Lavatory	Faucet	2	1½	1½	1	1	1
Bathtub	Faucet	4	2	3	2	1½	1½
Shower Head	Mixing Valve	4	2	3	2	1	2
Bathroom Group	Flush Valve Closet	-	-	-	8	8	3
Bathroom Group	Flush Tank Closet	-	-	-	6	6	3
Separate Shower	Mixing Valve	-	-	-	2	1	2
Service Sink	Faucet	3	3	3	-	-	-
Laundry Tubs (3)	Faucet	-	-	-	3	3	3
Combination Fixture	Faucet	-	-	-	3	3	3

APPLIANCES	Cold Water	Hot Water
Dishwasher	6	6
Washing Machine	6	6
Single Lever Mixer	4	4

Now apply the total fixture units to Table B to obtain your PDI Size Valve.

PDI SIZE ARRESTER	AA	A	B	C	E	F
Fixture Units	1 – 5	1 – 11	12 -	33 – 60	114 – 154	155 – 330
Thread Size	½"	½"	¾"	1"	1"	1"
Catalogue Number	HA15AA	HA15A	HA	HA25C	HA25E	HA25F

HYDROFLOW
LEADING WITH KNOWLEDGE

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