

# SPECIFICATION SUBMITTAL SHEET



#### **FEATURES**

Sizes: 

AA 

B 

C 

D 

E 

F

Temperature range 33° F to 180°F

End connections Threaded ANSI/ASME B1.20.1

#### **PRESSURE**

Maximum transient pressure surge, with arrester properly sized and placed in the water supply system, will not rise above 150 psi following quick valve closure. Maximum static pressure: 150 psi. For best performance, static line pressure should not exceed 85 psi; contact the factory for proper sizing if static pressure is greater.

## **APPLICATION**

Designed to protect residential, commercial and industrial water lines during pressure surges following quick valve closure. This excessive pressure surge is absorbed by the pre-charged cushion of air permanently sealed within the water hammer arrester. The water hammer arrester may be installed within a stud bay without the need for an access panel.

#### STANDARDS COMPLIANCE

- ASSE® Listed 1010
- ANSI A112.26.1

#### **MATERIALS**

Body Copper Tube (seamless, Type "L")

Tailpiece Brass, ASTM B 16

Piston Acetal (NSF Listed), Polycarbonate

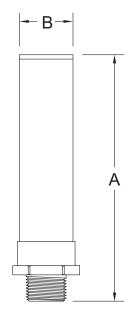
or Brass

O-rings Buna nitrile or EPDM (FDA approved)

Solder Lead Free

# **DIMENSIONS & WEIGHTS (do not include pkg.)**

MODEL	PDI SIZE	MNPT THREAD		DIMENSIONS (approximate)  A B				AIR CHAMBER VOLUME	FIXTURE UNIT CAPACITY	
		in.	mm	in.	mm	in.	mm	cubic in.	CAPACITT	
1250AA-3C	AA	CXC	15	4 7/8	123.8	7/8	22	1.9	1-3	
1250-A	Α	1/2	15	5 1/4	133	1 1/8	29	3.5	1-11	
1250-B	В	3/4	20	5 5/8	143	1 5/8	41	4.3	12-32	
1250-C	С	1	25	7 1/2	191	1 5/8	41	6.5	33-60	
1250XL-D	D	1	25	9 5/16	237	1 3/4	44	10.0	61-113	
1250XL-E	Е	1	25	10 1/4	260	2 1/2	64	22.4	114-154	
1250XL-F	F	1	25	10 7/8	276	2 7/8	73	34.4	155-330	



## **SPECIFICATIONS**

The Water Hammer Arrester shall consist of a copper body with a brass hexagonal male pipe threaded inlet, an acetal, polycarbonate or brass piston with Buna Nitrile or EPDM o-rings and lead free solder. The device shall be pre-charged and sealed at the factory. The Water Hammer Arrester shall be a WILKINS Model 1250.

DOCUMENT #:

REVISION: 3/11

#### **SIZING & PLACING DATA**

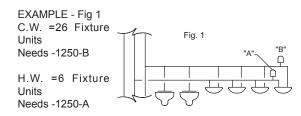
#### **TABLE I**

MODEL 1250 (SIZES)	AA	А	В	С	D	E	F
FIXTURE UNITS	1-3	1 TO 11	12 TO 32	33 TO 60	61 TO 113	114 TO 154	155 TO 330

TABLE II FIXTURE UNITS SIZING INFORMATION

	TYPES OF	FIXTURE-UNITS							
FIXTURE	SUPPLY	F	PUBLIC	;	PRIVATE				
	CONTROL	Total	C.W	H.W	Total	C.W	H.W		
Water Closet	Flush Valve	10	10	N/A	6	6	N/A		
Water Closet	Flush Tank	5	5	N/A	3	3	N/A		
Pedestal Urinal	Flush Valve	10	10	N/A	N/A	N/A	N/A		
Stall or Wall Urinal	Flush Valve	5	5	N/A	N/A	N/A	N/A		
Stall or Wall Urinal	Flush Tank	3	3	N/A	N/A	N/A	N/A		
Lavatory	Faucet	2	1 1/2	1 1/2	1	1	1		
Bathtub	Faucet	4	2	3	2	1 1/2	1 1/2		
Shower Head	Mixing Valve	4	2	3	2	1	2		
Bathroom Group	Flush Valve Closet	N/A	N/A	N/A	8	8	3		
Bathroom Group	Flush Tank Closet	N/A	N/A	N/A	6	6	3		
Separate Shower Mixing Valve		N/A	N/A	N/A	2	1	2		
Service Sink	Service Sink Faucet		3	3	N/A	N/A	N/A		
Laundry Tubs (1-3)	Laundry Tubs (1-3) Faucet		N/A	N/A	3	3	3		
Combination Fixture	Faucet	N/A	N/A	N/A	3	3	3		

The fixture unit valves shown in Table II represent the standard ratings used by engineers to size water distribution systems and are also used to size water hammer arresters. Match total fixture units to correct model of water hammer arresters required from Table I. All sizing data in this brochure are based on flow velocities of 10 F.P.S. or less. The sizing method was designed with a maximum velocity of 10 F.P.S. to offer assurance that the Water Hammer Arrester is capable of handling shock of maximum intensity that may be encountered.



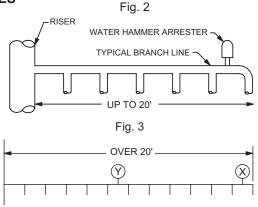
#### **MULTI-FIXTURE BRANCH LINES**

#### Rule 1 - Branch lines of 20 feet or less.

Water Hammer Arrester should be placed at the end of the branch line between the last two fixtures served, as shown at right. Select required model using fixture unit sizing.

# Rule 2 - Branch lines exceeding 20 feet.

An additional Water Hammer Arrester should be placed as shown at right. Select required models using fixture unit sizing. The sum of the fixture unit ratings of units X and Y shall be equal to or greater than the demand of the branches.



# LONG RUNS OF PIPING TO REMOTE EQUIPMENT

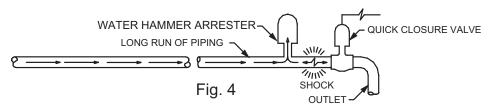
## TABLE III

FOR FLOW PRESSURES UP 85 PSIG												
LENGTH OF PIPE	Nominal Pipe Diameter											
	1/2"		3/4"		1"		1 1/4"		1 1/2"		2"	
	*	**	*	**	*	**	*	**	*	**	*	**
25'	Α	В	Α	В	В	С	С	D	D	Е	Е	F
50'	Α	В	В	С	С	D	D	Е	Е	F	F	CF
75'	В	С	С	D	D	Е	ΑE	F	F	CF	EF	FF
100'	С	D	D	Е	E	F	F	CF	CF	EF	FF	EFF
125'	С	D	D	Е	Е	CF	AF	DF	EF	FF	EFF	BFFF
150'	D	Е	E	F	F	CF	DF	FF	FF	DFF	FFF	FFFF

<sup>\*</sup>Flow Pressures up to 65 psig

When long runs of piping are employed to serve a remote item of equipment, the Water Hammer Arrester should be located as close as possible to the point of quick closure (see Fig. 4).

The size and quantity of Water Hammer Arrester to be installed in branch lines is shown in Table III. Ideally, the flow pressure in branch lines serving fixtures should never exceed 55 PSIG. Pressure reducing valves should be installed to maintain proper pressure. When, however, flow pressures of 65 to 85 PSIG are used, the next larger size Water Hammer Arrester should be selected (see Table III).



<sup>\*\*</sup>Flow Pressures over 65 psig and up to 85 psig