



LOCATION

INSTALLATION INSTRUCTIONS

Jay R. Smith Mfg. Co.® PISTON TYPE WATER HAMMER ARRESTER HYDROTROL JUNIOR

Maximum working pressure - Designed to keep residential, commercial, and industrial water lines @ 350 p.s.i. maximum working pressure during pressure surges following quick valve closure. Working TEMPERATURE RANGE - From 33° to 250° F.

INSTALLATION

The piston unit can be installed in new construction or renovation/remodel by threading into properly sized female I.P.S. fitting (wrench on hex). It can be installed at any angle to accommodate structural limitations, and should be placed as close to the shut-off valve as possible, one on each hot and cold line. The piston unit is seamless, factory charged and is maintenance free and does not require access panels. It cannot be charged in the field.

TYPICAL INSTALLATIONS

- Properly sized and placed (see tables below) the piston unit can be set in a multiple fixture branch for commercial/institutional/industrial/residential applications.
- As a tee configuration with stub outs in walls behind sinks, lavatories, and water closets.
- MIP Threaded model - Threaded into female I.P.S. connections in tub and shower valves.
- In supply lines of clothes washers and dishwashers (AA not recommended for these applications).
- Into cold inlet and hot outlet of water heater for general protection.

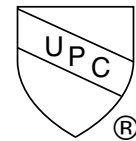
PISTON UNITS Comply with the following:
 ASSE/ANSI 1010 Water Hammer Arrester

NOTE: Systems exceeding 60 PSI(414 kPa) shall be installed with a pressure reducing valve upstream of the unit per ASSE Standard #1010.

Listed:



STD 1010



FILE NO. 4785

COMPLIES with LEAD PLUMBING LAW
 "CERTIFIED by IAPMO R & T"
 FILE NO. 8477
 (NSF/ANSI 372)

FIXTURE UNIT RATING TABLE GENERAL BUILDING AREAS

FIXTURE	TYPE OF SUPPLY CONTROL	WEIGHT IN FIXTURE - UNITS			
		PUBLIC		PRIVATE	
		C.W.	H.W.	C.W.	H.W.
Water Closet	Flush Valve - 1.6 GPF	8	-	5	-
Water Closet	Flush Tank - 1.6 GPF	5	-	3	-
Pedestal Urinal	Flush Valve - 1.06 GPF	4	-	-	-
Stall or Wall Urinal	Flush Valve - 1.06 GPF	4	-	-	-
Stall or Wall Urinal	Flush Tank	1	2	-	-
Lavatory	Faucet	1 1/2	1 1/2	1	1
Bath tub	Faucet	2	3	1 1/2	1 1/2
Shower head	Mixing Valve	2	3	1	2
Bathroom Group	Flush Valve Closet	-	-	8	3
Bathroom Group	Flush Tank Closet	-	-	6	3
Separate Shower	Mixing Valve	-	-	1	2
Service Sink	Faucet	3	3	-	-
Laundry Tubs (1-3)	Faucet	-	-	3	3
Combination Fixture	Faucet	-	-	3	3

Pipe Size	Sizing Symbol	Smith Fig. No.	Air Charge	Dimensions		Fixture Unit Capacity
				A	B (DIA)	
* 1/2 (13) IPS	AA	5201	60 psig	5.56(141)	.8750(22)	1 TO 3
1/2 (13) IPS	A	5205	60 psig	6.875(175)	1.125(29)	4 to 11
3/4 (19) IPS	B	5210	60 psig	8.69(221)	1.38(35)	12 to 32
1 (25) IPS	C	5220	60 psig	12.00(305)	1.38(35)	33 to 60
1-1/4(32) IPS	D	5230	60 psig	12.00(305)	2.13(54)	61 to 113
1-1/2(38) IPS	E	5240	60 psig	14.56(370)	2.13(54)	114 to 154
2 (50) IPS	F	5250	60 psig	16.38(416)	2.13(54)	155 to 330

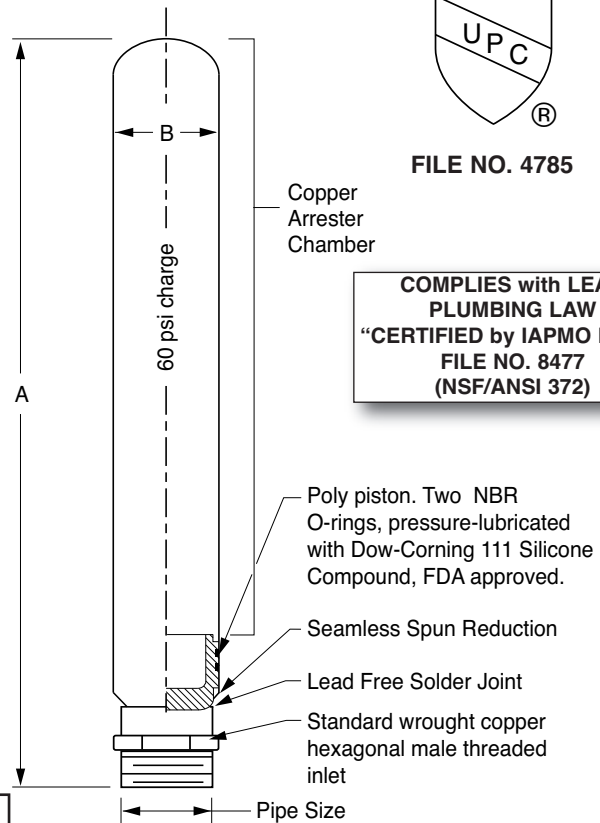
* For use in residential applications only.

ASSE/PDI WATER HAMMER ARRESTER SIZING CHART

Length of Pipe	Nominal Pipe Diameter						
	1/2"(13)	3/4"(19)	1"(25)	1 1/4"(32)	1 1/2"(38)	2"(51)	
25'(7.62m)	A	A	B	C	D	E	E
50'(15.24m)	A	B	C	D	E	F	F
75'(22.86m)	B	C	D	AE	F	EF	EF
100'(30.48m)	C	D	E	F	CF	FF	FF
125'(38.10m)	C	D	F	AF	EF	EFF	EFF
150'(45.72m)	D	E	F	DF	FF	FFF	FFF

NOTE: Dimensions shown in parentheses are in millimeters.

IMPORTANT
 INSTALL USING WRENCH ON HEX ABOVE THREADS PROTECT PRESSURE CHAMBER FROM DENTING.



NOTE: The wetted surface of the product contacted by consumable water contributes less than one quarter of one percent of lead by weight.

K	2-17-17	Revised Table	TBW	TWK
J	5-10-16	Revised Callout	TBW	TWK
H	10-25-13	Added File No. 8477 Note	TBW	JM
G	6-20-13	Rev. Table. Note, Added File No.	TBW	BW
REV.	DATE	DESCRIPTION	BY	CKD. BY

WEIGHT POUNDS

VOLUME CUBIC FEET

FIGURE NUMBER

5200 SERIES

DRAWING NUMBER
 S5200 Series

SIZE
 A

SCALE:
 NONE

DATE:
 4-28-92

APPROVED BY:
 SJM

CHECKED BY:
 JM

DRAWN BY:
 EMB

5200 SERIES

FIGURE NUMBER

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE