



AERCO AM SERIES – POTABLE APPLICATIONS Primary Loop Design Guidelines

International, Inc.

MINIMUM AND MAXIMUM FLOW RATES

	AM 399	AM 500	AM 750	AM 1000
Minimum Water Flow at Min. Fire (GPM)	4	4	4	4
Minimum Water Flow at Full Fire (GPM)	7	9	14	18
Maximum Water Flow (GPM)	40	40	60	80

The following primary/secondary piping design guidelines should be used for AERCO AM Series potable water applications. A 20 mesh strainer (or finer) is required at each inlet. Water flow rates and pressure drops shown below are for the primary loop. Flow rates vary with system design parameters. **The primary loop fittings and strainer pressure drops shown below are examples only – actual pressure drops will vary depending on actual piping layout and strainer size/type used.**

	AM 399	AM 500	AM 750	AM 1000
MAXIMUM Potable water hardness = 10 grains per gallon MAXIMUM Total dissolved solids = 200 ppm				
Water Flow (GPM)	20	20	34	40
Water Press. Drop (Ft. of Hd.) across AM Series	12	12	18	12
Strainer ΔP (Ft. of Hd.) – ('Y' Strainer, 20 mesh) plus ΔP (Ft. of Hd.) – (20' SCH.40, 4 x 90°, 2 x reducing couplings, 2 x Ball Valve)	2.15	2.15	1.65	2.25
Total Primary Loop ΔP (Ft. of Hd.)	14.15	14.15	19.65	14.25
Recommended AERCO Pump+Circuit Setter Kit for piping configurations not exceeding the above example	99237-1	99237-1	99237-2	99237-2
Kit includes: Pump Flange Size	1-1/4"	1-1/4"	1-1/2"	1-1/2"
Kit includes: Circuit Setter Size (NPT)	1-1/2"	1-1/2"	2"	2"
Recommended AERCO AM DHW Installation Kit (Installation Kit already includes above Pump/Circuit setter kit, plus Strainer, Isolation Valve, and pipe fittings).	58135-1	58135-1	58135-2	58135-2
Installation Kit designed for inlet/outlet piping diameter: Strainer and Isolation valves sizes (NPT):	1-1/2"	1-1/2"	2"	2"

	AM 399	AM 500	AM 750	AM 1000
MAXIMUM Potable water hardness = 18 grains per gallon MAXIMUM Total dissolved solids = 200 ppm				
Water Flow (GPM)	37	37	60	75
Water Press. Drop (Ft. of Hd.) across AM Series	34	34	50	41
Strainer ΔP (Ft. of Hd.) – ('Y' Strainer, 20 mesh) plus ΔP (Ft. of Hd.) – (20' SCH.40, 4 x 90°, 2 x reducing couplings, 2 x Ball Valve)	1.88	1.88	2.20	3.05
Total Primary Loop ΔP (Ft. of Hd.)	35.88	35.88	52.20	44.05
Recommended AERCO Pump+Circuit Setter Kit for piping configurations not exceeding the above example	99237-5	99237-5	99227-5	99227-5
Kit includes: Pump Flange Size	1-1/2"	1-1/2"	2"	2"
Kit includes: Circuit Setter Size (NPT)	2"	2"	2-1/2"	2-1/2"
Recommended AERCO AM DHW Installation Kit (Installation Kit already includes above Pump/Circuit setter kit, plus Strainer, Isolation Valve, and pipe fittings).	58135-3	58135-3	58135-4	58135-4
Installation Kit designed for inlet/outlet piping diameter: Strainer and Isolation valves sizes (NPT):	2"	2"	2-1/2"	2-1/2"

NOTE: Units with outlet connections matching pipe size do not include reducer.