



# Armstrong® Armstrong MS-6 Noiseless Heater



The use of hot water is indispensable in food processing, cleaning, and plating operations. Although the simplest and most efficient way to provide the water is by direct steam sparging, such a format often results in vibration and noise caused by steam blowing into the water tank. These problems can be greatly reduced by mounting an MS-6 noiseless heater at the end of the pipe.



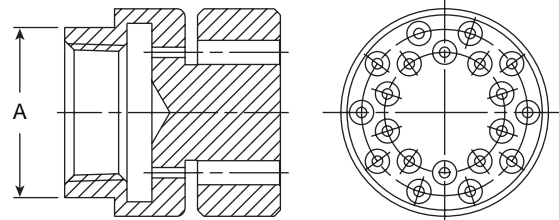
## Features

- Stainless steel construction for greater durability
- Mounting is simple and economical
- Maintenance free

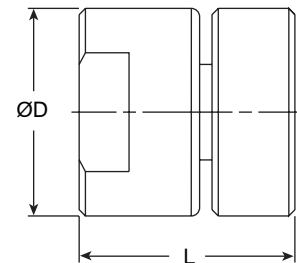
## Formula for Calculating Steam Load to Heat Water in Tank

$$\text{lbs/hr} = \frac{\text{Gal} \times \Delta T \times 8.3}{\text{Lat} \times T}$$

- Gal = Gallons of water to be heated  
 $\Delta T$  = Temperature rise °F  
 Lat = Latent heat of steam (Btu/lb)  
 T = Time in hours



Steam →



## Specifications

Fluid	Steam
Pressure Range	7 - 100 psi (0.5 - 7 bar)
Silencing Limit Temperature	190°F (90°C)
Material	304 Stainless Steel
Connection	NPT

## Dimensions and Weights

Connection Size	1/2"		3/4"		1"		1-1/4"		1-1/2"		2"	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
L "	1-15/16	49	1-15/16	49	2-1/16	52	2-3/16	55	2-5/16	59	2-9/16	65
"D"	1-3/8	35	1-3/4	45	2	50	2-3/8	60	2-3/4	70	4-1/8	105
"A"	1-3/16	30	1-7/16	36	1-5/8	41	2	50	2-3/8	60	3-9/16	90
Weights lb (kg)	0.55 (0.25)		0.88 (0.40)		1.15 (0.52)		1.70 (0.77)		2.54 (1.15)		6.59 (2.99)	

## Capacities—Steam lb/hr (kg/hr)

Inlet, psig (bar)	Connection Size											
	1/2"		3/4"		1"		1-1/4"		1-1/2"		2"	
	lb/hr	kg/hr	lb/hr	kg/hr	lb/hr	kg/hr	lb/hr	kg/hr	lb/hr	kg/hr	lb/hr	kg/hr
7 (0.50)	54	25	129	58	157	71	190	86	291	132	362	164
10 (0.70)	65	30	147	67	179	81	222	101	323	147	413	187
15 (1.00)	84	38	177	80	214	97	276	125	376	171	498	226
20 (1.38)	103	46	208	94	250	113	330	150	430	195	582	264
30 (2.00)	140	63	269	122	321	146	439	199	536	243	751	341
40 (2.76)	177	80	330	149	392	178	547	248	643	292	921	418
50 (3.45)	214	97	390	177	463	210	655	297	749	340	1,090	494
60 (4.14)	251	114	451	205	534	242	764	346	856	388	1,259	571
70 (4.83)	289	131	512	232	605	275	872	395	963	437	1,428	648
80 (5.52)	326	148	573	260	676	307	980	445	1,069	485	1,597	725
90 (6.20)	363	165	634	288	748	339	1,088	494	1,176	533	1,767	801
100 (6.90)	400	181	695	315	819	371	1,197	543	1,282	582	1,936	878

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.