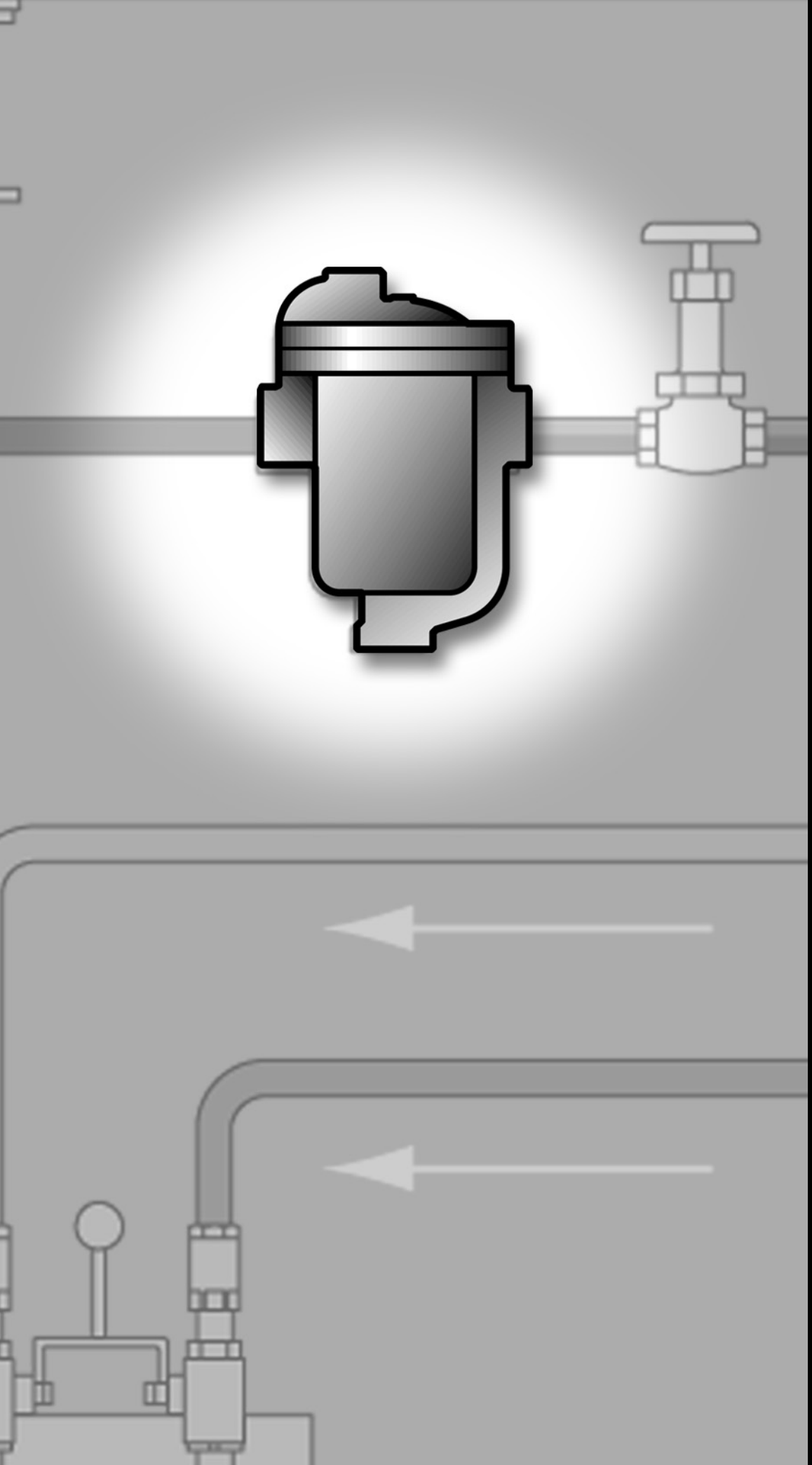


Steam Trapping and Steam Tracing Equipment

Armstrong

Armstrong®

Pay less money for energy— and more attention to the environment.

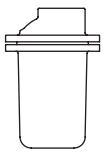
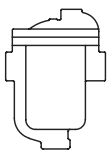
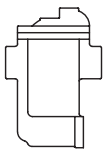
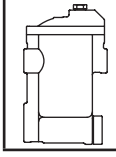
It's pretty obvious, really. An efficient steam trap wastes less energy, which means you burn less fuel and reduce emissions. The results are energy savings and a cleaner, healthier environment. By helping companies manage energy, Armstrong steam traps are also helping protect the world we all share.

As a steam trap wears, it loses efficiency and begins to waste energy. But Armstrong inverted bucket traps last years longer than other traps. They operate more efficiently longer because the inverted bucket is the most reliable steam trap operating principle known.

Clearly, the longer an efficient trap lasts, the more it reduces energy wasted, fuel burned and pollutants released into the air. It's an all-around positive situation that lets the environment win, too. Bringing energy down to earth in your facility could begin with a renewed focus on your steam system, especially your steam traps. Said another way: Zeroing in on your steam traps is an easy way to pay less money for energy—and more attention to the environment.

Companies around the world are beginning to realize that rather than being separate challenges, energy and the environment are and have always been a single mission. And that quality management in one area will surely impact the other.

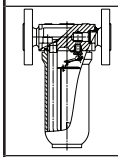
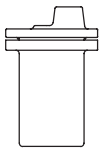
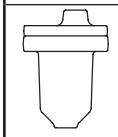
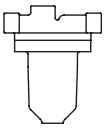
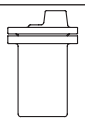
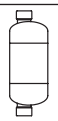
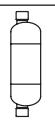
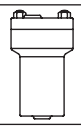
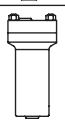
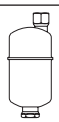
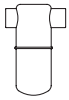
Armstrong Steam Trap ID Charts

Illustration	Type	Flow Direction	Connection Type	Max. Allow. Press. psig	TMA °F	Body Material	Model	Max. Oper. Press. psig	Connection Size							Located on Page
									1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	
	**Series 200** Inverted Bucket Capacities to **20,000** lb/hr	↑	Screwed	250	450	ASTM A48 Class 30 Cast Iron	**211** **212** **213** **214** **215** **216**	250 250 250 250 250 250	• • •	• •	• • •	• •	• •	• •		74
	**Series 800** Inverted Bucket Capacities to **20,000** lb/hr	→	Screwed	250	450	ASTM A48 Class 30 Cast Iron	**800** **811** **812** **813** **814** **815** **816**	150 250 250 250 250 250 250	• • •	• • • •	• • • •	• •	• •	• •	• •	76 78
	**Series 880** Inverted Bucket Capacities to **4,400** lb/hr	→	Screwed	250	450	ASTM A48 Class 30 Cast Iron	**880** **881** **882** **883**	150 250 250 250	• • •	• • • •	• • •	• •				80
	**Series 980** Inverted Bucket Capacities to **4,400** lb/hr	→	Screwed Socketweld Flanged †	600	650	ASTM A216 WCB Carbon Steel	**981** **983**	600 600	•	• •	• •					82

† Operating pressure and temperature may be limited depending on the class of flange selected.

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

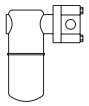
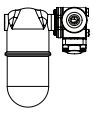
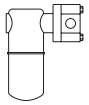
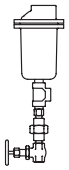
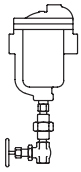
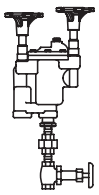
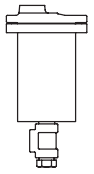
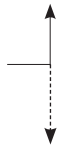
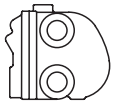
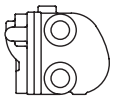
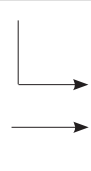
Armstrong Steam Trap ID Charts

Illustration	Type	Flow Direction	Connection Type	Max. Allow. Press. psig	TMA °F	Body Material	Model	Max. Oper. Press. psig	Connection Size							Located on Page
									3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	
	**Series EM** Inverted Bucket Capacities to **1,058** lb/hr	→	Screwed Socketweld Flanged †	464	482	Forged Carbon Steel	**EM**	464		•	•					84
	**Series 300** Inverted Bucket Capacities to **20,000** lb/hr	↑	Screwed Socketweld Flanged †	★★ 700 600 1,080 1,130 965 1,050	★★ 700	ASTM A105 Forged Steel	**310** **312** **313** **314** **315** **316**	400 600 650 650 650 650		• • •	• • •	• • • •	• •	• •	• •	86
	**Series 411G** Inverted Bucket Capacities to **1,300** lb/hr	↑	Screwed Socketweld Flanged †	★★ 1,000	★★ 700	ASTM A105 Forged Steel	**411G**	1,000		•	•					88
	**Series 421** Inverted Bucket Capacities to **1,300** lb/hr	→	Screwed Socketweld Flanged †	★★ 1,000	★★ 700	Body ASTM A105 Forged Steel Cap ASTM A216 WCB	**421**	1,000		•	•					88
	**Series 400** Inverted Bucket Capacities to **20,000** lb/hr	↑	Screwed Socketweld Flanged †	★★ 1,050 1,080 1,350	★★ 850	ASTM A182 F22 Forged Steel	**413** **415** **416**	1,000 1,000 1,000		•	•	• •	• •	• •	• •	90
	**Series 401-SH** Inverted Bucket Capacities to **770** lb/hr	↑	Screwed Socketweld Flanged †	1,000	800	Carbon Steel ASTM A106 Gr. B	**401-SH**	1,000		•	•					92
	**Series 501-SH** Inverted Bucket Capacities to **950** lb/hr	↑	Screwed Socketweld Flanged †	1,540	850	316L Stainless Steel ASTM A312	**501-SH**	1,540		•	•					92
	**Series 5000** Inverted Bucket Capacities to **5,150** lb/hr	↑	Socketweld Flanged †	★★ 1,730 ★★ 2,070	★★ 900	ASTM A182 F22 Forged Steel	**5133G** **5155G**	1,500 1,800		•	• •	• •	• •			94
	**Series 6000** Inverted Bucket Capacities to **6,500** lb/hr	↑	Socketweld Flanged †	★★ 3,090	★★ 900	ASTM A182 F22 Forged Steel	**6155G**	2,700					•	•		96
	**Series 1000** Inverted Bucket Capacities to **4,400** lb/hr	↑	Screwed Socketweld	400 400 650 450	800 800 600 800	304L Stainless Steel	**1010** **1011** **1022** **1013**	150 400 650 450		• •	• • •	• 				100
	**Series 1800** Inverted Bucket Capacities to **1,802** lb/hr	→	Screwed Socketweld	400 650	800 600	304L Stainless Steel	**1810** **1811** **1822**	200 400 650	•	• • •	 • •	 •	 	 	 	102

★★See tables on pages 86, 89 and 91 for complete temperature/pressure rating information.

† Operating pressure and temperature may be limited depending on the class of flange selected.

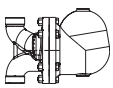
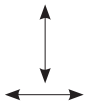
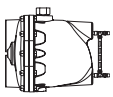
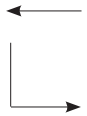
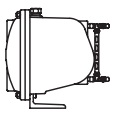
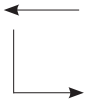
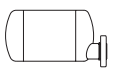
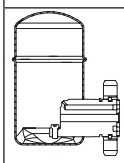
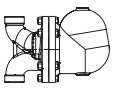
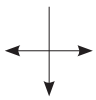
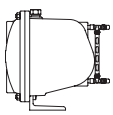
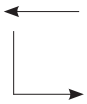
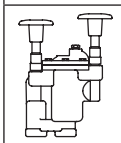
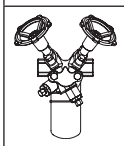
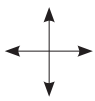
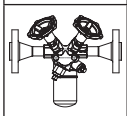
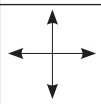
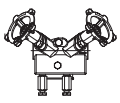
Steam Trap ID Charts

Illustration	Type	Flow Direction	Connection Type	Max. Allow. Press. psig	TMA °F	Body Material	Model	Max. Oper. Press. psig	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	Located on Page
	**Series 2000** Inverted Bucket Capacities to **1,300** lb/hr		Screwed Socketweld	400	800	304L Stainless Steel	**2010** **2011**	200 400	• •	• •	• •				104
				650	600		**2022**	650	•	•	•				
	**Series 4000** Inverted Bucket Capacities to **1,300** lb/hr		Screwed NPT Socketweld Flanged	400	800	ASTM-A 240 Grade 304L	**4010** **4011**	200 400	• •	• •	• •				106
				650	600		**4022**	650	•	•	•				
	**1811N and 2011N** Inverted Bucket non-metallic seat Capacities to **900** lb/hr		Screwed Socketweld	400	800	304L Stainless Steel	**1811N** **2011N**	200 200	• •	• •	 •				108
	**Series 20-DC** Automatic Differential Condensate Controllers Capacities to **20,000** lb/hr		Screwed	250	450	ASTM A48 Class 30 Cast Iron	**21-DC** **22-DC** **23-DC** **24-DC** **25-DC** **26-DC**	250 250 250 250 250 250	•	 • 	 • 	 • 	 • 	 •	110
	**Series 80-DC** Automatic Differential Condensate Controllers Capacities to **20,000** lb/hr		Screwed	250	450	ASTM A48 Class 30 Cast Iron	**81-DC** **82-DC** **83-DC** **84-DC** **85-DC** **86-DC**	250 250 250 250 250 250		• •	 • 	 • 	 	 • •	112
	**Series TVS 80-DC** Automatic Differential Condensate Controllers Capacities to **4,400** lb/hr		Screwed	250	450	ASTM A48 Class 30 Cast Iron	**TVS 81-DC** **TVS 82-DC** **TVS 83-DC**	250 250 250	• •	• • •	 •				114
	**Series 30-DC** Automatic Differential Condensate Controllers Capacities to **20,000** lb/hr		Screwed	1,080 1,130 1,015 1,100	700	ASTM A105 Forged Steel	**33-DC** **34-DC** **35-DC** **36-DC**	650 650 650 650			• 	 • 	 • 	 •	116
	**Series B & BI** F&T Capacities to **8,900** lb/hr		Screwed	125 175	353 377	ASTM A48 Class 30 Cast Iron	**B2, BI2** **B3, BI3** **B4, BI4** **B5** **B6** **B8**	30 30 30 30 30 30	•▲	 •▲ 	 •▲ 	 • 	 • 	 •	120
	**Series A & AI** F&T Capacities to **8,900** lb/hr		Screwed	175	377	ASTM A48 Class 30 Cast Iron	**AI2** **A3, AI3** **A4, AI4** **A5** **A6** **A8**	175 175 175 175 175 175	• •▲	 • •▲	 • •	 • •	 • •	 •	122

▲Series AI and BI for in-line connection.

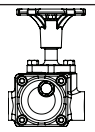
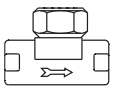
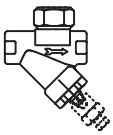
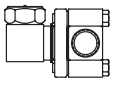
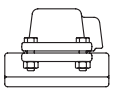
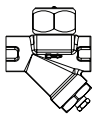
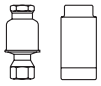
† Operating pressure and temperature may be limited depending on the class of flange selected.

Steam Trap ID Charts

Illustration	Type	Flow Direction	Connection Type	Max. Allow. Press. psig	TMA °F	Body Material	Model	Max. Oper. Press. psig	Connection Size								Located on Page
									1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	
	**Series AIC** F&T Capacities to **60,000** lb/hr		Screwed Flanged	580	572	ASTM A395 Ductile Iron	**AICV** **AICFH**	465					•	•			124
	**Series JD & KD** F&T Capacities to **142,000** lb/hr		Screwed Flanged	300	650	ASTM A395 Ductile Iron	**15-JD** **20-JD** **30-JD** **75-JD** **125-JD** **175-JD** **250-JD** **300-JD** **30-KD** **50-KD** **300-KD**	15 20 30 75 125 175 250 300 30 50 300						• • • • • • • • • •	• •	• •	126
	**Series L & M** F&T Capacities to **208,000** lb/hr		Screwed Flanged † (screw on)	250	450	ASTM A48 Class 30 Cast Iron	**L8** **L10** **M12**	250 250 250						•	•	•	128
	**Series FT-4000** F&T Capacities to **1,080** lb/hr		Screwed Socketweld	485	600	ASTM A240 Grade 304L	**FT-4075** **FT-4150** **FT-4225** **FT-4300** **FT-4465**	75 150 225 300 465	• • • • •	• • • • •	• • • • •						130
	**Series FF-4000** F&T Capacities to **1,050** lb/hr		Screwed Socketweld	600	800	ASTM A240 Grade 304L	**FF-4250** **FF-4450**	250 450	• •	• •							132
	**Series ICS** F&T Capacities to **60,000** lb/hr		Screwed Socketweld Flanged †	580	572	Carbon Steel	**ICS**	465	•	•	•	•	•	•			134
	**Series LS & MS** F&T Capacities to **280,000** lb/hr		Screwed Socketweld Flanged †	450	650	ASTM A216 WCB Carbon Steel	**LS8** **LS10** **MS-12**	450 450 450						•	•	•	136
	**TVS 800** Trap Valve Station Capacities to **4,400** lb/hr		Screwed	250	450	ASTM A48 Class 30 Cast Iron	**TVS 811** **TVS 812** **TVS-813**	250 250 250	• •	• • •	 •						138
	**TVS 4000** Trap Valve Station		Screwed Socketweld	650	600	ASTM A351 Gr. CF8M	**TVS 4000**	650	•	•							142
	**TVS 4000F** Trap Valve Station		Flanged †	650	600	ASTM A351 Gr. CF8M	**TVS 4000F**	650		•	•						145
	**TVS 5000** Trap Valve Station		Screwed Socketweld Flanged †	650	600	ASTM A350 LF2	**TVS 5000**	650	•	•							150

† Operating pressure and temperature may be limited depending on the class of flange selected.

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

Illustration	Type	Flow Direction	Connection Type	Max. Allow. Press. psig	TMA °F	Body Material	Model	Max. Oper. Press. psig	Connection Size								Located on Page
									1/4"	3/8"	1/2"	3/4"	1"	2"	2-1/2"	3"	
	**TVS 1100** Trap Valve Station	↔	Screwed Socketweld Flanged †	580	662	ASTM A105 Carbon Steel	**TVS 1100**	319			•	•					148
	**Series CD-33** Disc Capacities to **2,428** lb/hr	↔ ↕	Screwed	915	752	ASTM A743 Gr. CA40	**CD-33** **CD-33L**	600		 •	• •	• •	•				156
	**Series CD-33S** Disc w/Integral Strainer Capacities to **2,428** lb/hr						**CD-33S** **CD-33SL**				• •	• •	•				156
	**Series CD-3300** Disc Capacities to **800** lb/hr	↕ ↔	Screwed Socketweld	720	750	Stainless Steel	**CD-3300**	450			•	•	•				157
	**Series CD-40** Controlled Disc Capacities to **2,850** lb/hr	↔ ↕	Screwed	600	500	Carbon Steel	**CD-41** **CD-42** **CD-43**	600 600 600		•	• 	 •	 •				158
	**Series CD-60** Controlled Disc Capacities to **2,850** lb/hr	↔ ↕	Screwed Socketweld	600	750	Forged Carbon Steel	**CD-61** **CD-62** **CD-63**	600 600 600		•	• 	 •	 •				158
	**Series CD-72S/SL** Controlled Disc Capacities to **3,900** lb/hr	↔ ↕	Screwed NPT BSPT Socketweld Flanged †	1010	750	ASTM A105N/ A350 LF2 Cl.1	**CD-72S/SL**	600			•	•	•				159
	**Series WMT** Thermostatic Wafer Cold Water Start-Up Capacities to **1,000** lb/hr	↔	Screwed	250	400	304L Stainless Steel	**WMT-1**	250	•	•	•						160
	**Series WT** Thermostatic Wafer Cold Water Start-Up Capacities to **1,600** lb/hr	↔ ↕ ↕ ↔	Screwed	400	650	304L Stainless Steel	**WT-1**	400			•	•					162
			Screwed Socketweld	600	750	C1018 Carbon Steel	**WT-3**	600			•	•					
				400	650	304L Stainless Steel	**WT-2000**	400			•	•	•				
	**Model SH** Thermostatic Wafer	↔ ↕	Screwed NPT BSPT Socketweld Flanged †	580	662	ASTM A105	**SH-300**	319			•	•	•				164
			Screwed NPT BSPT Socketweld Buttweld Flanged †	900	900	Stainless Steel	**SH-900**	L=650* H=900*			•	•	 				
			Buttweld Flanged †										•				
	Cold Water Start-Up Capacities to **1,600** lb/hr		Socketweld Buttweld Flanged †	1,800	1,050	ASTM 217 Cer. C12A	**SH-1500**	1,800				•	•				

*L = low pressure

*H = high pressure

† Operating pressure and temperature may be limited depending on the class of flange selected.

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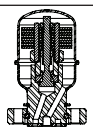
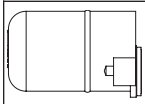
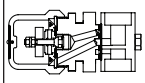
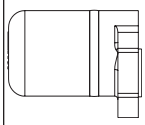
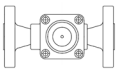
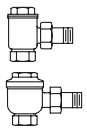
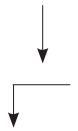
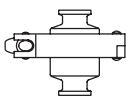
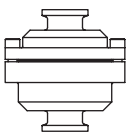
Steam Trap ID Charts

Illustration	Type	Flow Direction	Connection Type	Max. Allow. Press. psig	TMA °F	Body Material	Model	Max. Oper. Press. psig	Connection Size 1/2"	Connection Size 3/4"	Connection Size 1"	Located on Page
	**Model SH-2000** Cold Water Start-Up Capacities to **4,800** lb/hr		Screwed Socketweld	400	800	Stainless Steel	**SH-2000**	400	•	•	•	166
	**Model SH-2500** Cold Water Start-Up Capacities to **6,000** lb/hr		Screwed Socketweld	650	600	ASTM A351 Gr. CF8M	**SH-2500**	650	•	•	•	167
	**Model AB-3000** Bimetallic Capacities to **4,000** lb/hr		Screwed Socketweld Flanged †	319	650	ASTM - A240 304L	**AB-3000**	319	•	•	•	168
	**Model SH-4000** Cold Water Start-Up Capacities to **6,000** lb/hr		Screwed Socketweld	1,245	900	Stainless Steel	**SH-4000**	1,245		•	•	169
	**Model TC-300** Cold Water Start-Up Capacities to **1,000** lb/hr		Screwed Socketweld Flanged †	465	662	ASTM A15 Carbon Steel	**TC-300**	250	•	•	•	161
 	**Series TT** Thermostatic Bellows Capacities to **3,450** lb/hr		Screwed	300	450	304L Stainless Steel	**TTF-1**	300	•	•		170
							**TTF-1R**		•	•		
			Screwed Socketweld				**TT-2000**		•	•	•	
	**TAVB** Thermostatic Bellows w/Integral Vacuum Breaker		Straight-Thru Screwed	300	365	304L Stainless Steel	**TAVB-2** **TAVB-3**	150	•	•		172
	**Series TS-2/TS-3** Radiator Capacities to **1,600** lb/hr		Threaded	50	300	Bronze	**TS-2**	50	•	•		173
				65	315		**TS-3**	65	•	•	•	
	**Series TC** Thermostatic Clean Steam Clamped Capacities to **3,450** lb/hr		Sanitary	120	350	Stainless Steel	**TC-C**	100	•	•	•	174
	**Series TC** Thermostatic Clean Steam Sealed Capacities to **3,775** lb/hr		Sanitary	150	366	Stainless Steel	**TC-S**	120	•	•	•	
			Threaded						•	•		
			Tube End						•	•		
	**Series TC** Thermostatic Clean Steam Repairable Capacities to **3,775** lb/hr		Sanitary	120	356	Stainless Steel	**TC-R**	100	•	•	•	
			Threaded						•	•		
			Tube End						•	•		

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