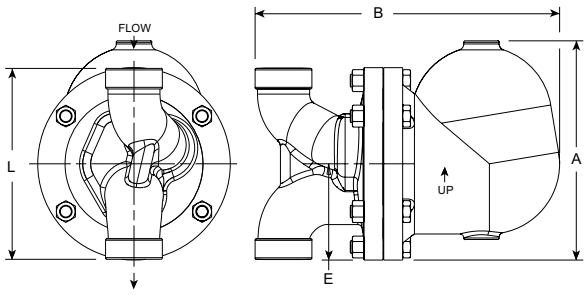
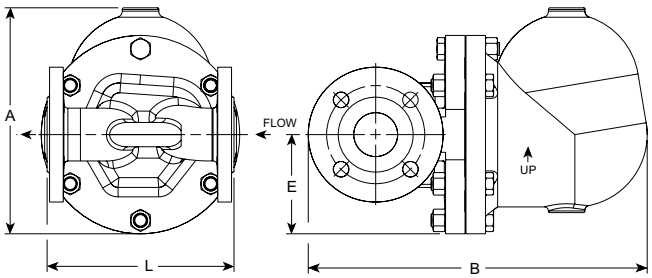
AIC Series DN40-50 Float & Thermostatic Steam Trap

Nodular Cast Iron (GS) for Horizontal & Vertical Installation, with Thermostatic Air Vent

For Pressures to 32 bar... Capacities to 27 250 kg/h



Model AIC Vertical



Model AICF Horizontal

Armstrong AIC Series F&T traps are designed for industrial service up to 32 bar. They feature all the benefits of Armstrong F&T traps, such as operation against back pressure, continuous drainage, high-capacity venting of air and CO_2, long life and dependable service and enjoys the convenience of in-line connections.

Armstrong AIC Series F&T traps are the perfect solution for applications where there is a need to vent air and non-condensable gases quickly at start-up.

Maximum Operating Conditions

Maximum allowable pressure (vessel design)†: 40 bar @ 300°C (screwed)
32 bar @ 300°C (EN1092-2 PN40)
Maximum Allowable Pressure: 40 barg (screwed)
32 barg (EN1092-2 PN40)
Maximum Allowable Temperature: 300°C
Maximum Operating Pressure: 32 barg
Note: Caution should be used when Float and Thermostatic steam traps are applied in systems where freezing or excessive hydraulic shock can occur.

Connections

Screwed BSPT and NPT
Flanged EN1092-2 PN40 or ANSI

Materials

Body & Cap	ASTM A395 Grade 60-40-18 EN1563 Grade EN-GJS-400-18U
Gasket	Graphite
Seat	Stainless Steel 17-4PH
Internals	Stainless Steel
Valve	Stainless Steel 17-4PH
Thermostatic Air Vent	Hastelloy Wafer
Hex Bolt	ASTM A193 Gr. B7 ASTM A194

Options

Integral vacuum breaker.
Add suffix VB to model number.

Flow Direction

Right to Left (Horizontal).
Top to Bottom (Vertical).

How to Order

Model	Flow Direction	Connection Size	Connection Type	Pressure	Option
AIC F+T	R/L	DN50	PN40	1-3/8"	VB
AIC F+T	VERT = Top to Bottom (Vertical)	1-1/2" 2"	Screwed Connec-tion	1-3/8" = 7 bar 1" = 14 bar 3/4" = 32 bar	VB = Vacuum Breaker (limited to 10 bar)
	R/L = Right to Left	DN40 DN50	Flanged Connec-tion		

Table 134-1. Table Available Connections and Face-To-Face Dimensions

Connection	1 1/2" DN40	2" DN50
«A» Height in mm	278	278
«B» (Length Screwed) in mm	326	333
«B» (Length Flanged EN1092-2 PN40) in mm	410	417
«L» (Face-to-face Screwed) in mm	270	300
«L» (Face-to-face Flanged EN1092-2 PN40) in mm	230	230
«E» (Bottom to centerline of inlet) in mm	122	122
Vacuum Breaker (optional) in inch	3/8"	3/8"
Weight in kg screwed	32	32
Weight in kg flanged	34	34

All are CE Marked according to the PED (2014/68/UE).
† May be derated depending on flange rating and type.

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

AIC Series DN40-50 Float & Thermostatic Steam Trap

Nodular Cast Iron (GS) for Horizontal & Vertical Installation, with Thermostatic Air Vent

For Pressures to 32 bar... Capacities to 27 250 kg/h

Table 135-1. Model AIC DN40 – Capacity Chart

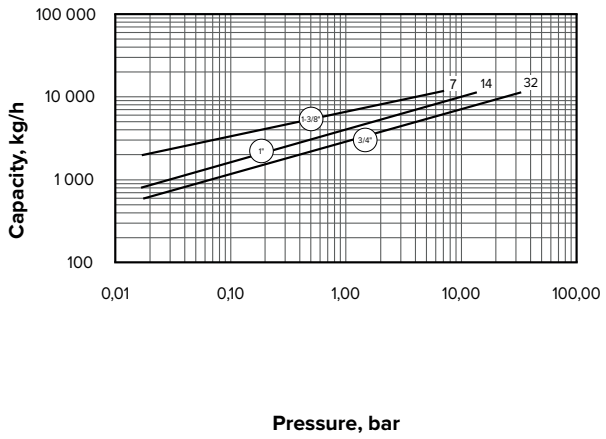
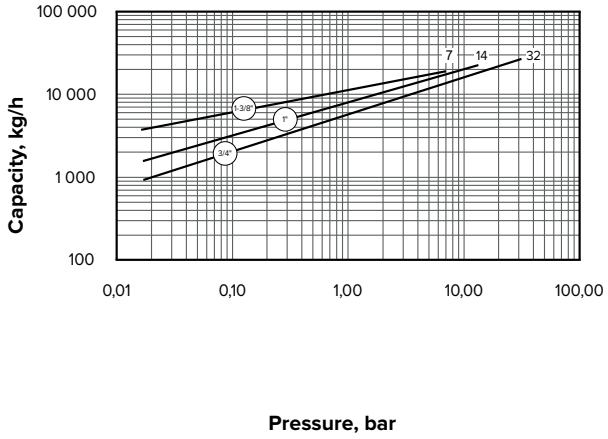


Table 135-2. Model AIC DN50 – Capacity Chart



Options

Vacuum Breaker

Many times, condensate will be retained ahead of steam traps because of the presence of a vacuum. To break a vacuum, air must be introduced into the system by means of a vacuum breaker.

For maximum protection against freezing and water hammer in condensing equipment under modulated control, vacuum breakers are recommended. Armstrong AIC Series F&T Traps are available with integral vacuum breakers. Maximum service pressure is 10 bar.

CAUTION: Do not use a conventional vacuum breaker open to the atmosphere in any system that incorporates a mechanical return system that carries pressure less than atmospheric pressure. This includes all return systems designated as vacuum returns, variable vacuum returns or subatmospheric returns. If a vacuum breaker must be installed in such a system, it should be of the type that is loaded to open only when the vacuum reaches a calibrated level well in excess of the design characteristics of the system.

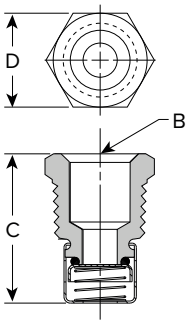


Table 135-3. Vacuum Breaker (dimensions in mm)

Size	1/2" NPT	3/8" NPT
«B» Pipe Connections	3/8"	1/4"
«C» Height	30	28
«D» Width	22 Hex	17 Hex

Specification

The steam trap shall be an Armstrong model AIC (AICF) float & thermostatic type. Cap and body shall be EN-GJS-400-15 (EN1563) Nodular Iron. Pipe connections shall be in the cap and the entire mechanism attached to the cap. Float and seat shall be stainless steel with heat-treated chrome steel valve. The float shall be Heliarc welded to avoid introduction of dissimilar metals. The thermostatic Air Vent shall be a balanced pressure Hastelloy wafer with chrome steel seat. Maximum allowable back pressure should be 99% of the inlet pressure.

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