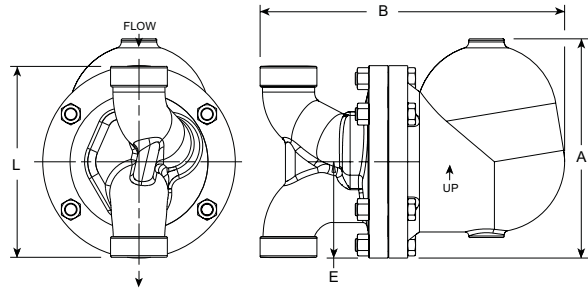




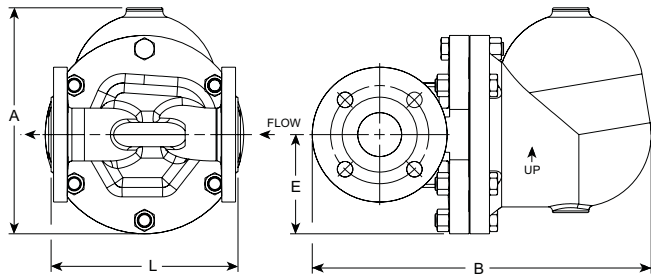
AIC Series DN40-50 Float & Thermostatic Steam Trap

Nodular Cast Iron (GS) for Horizontal & Vertical Installation, with Thermostatic Air Vent
For Pressures to 32 bar... Capacities to 27 250 kg/h

Steam Trapping and Steam Tracing Equipment



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 CO₂, 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 Connection | 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 Connection | | |

Table 130-1. 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 (97/23/EC).
† 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.

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Nodular Cast Iron (GS) for Horizontal & Vertical Installation, with Thermostatic Air Vent
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Table 131-1. Model AIC DN40 – Capacity Chart

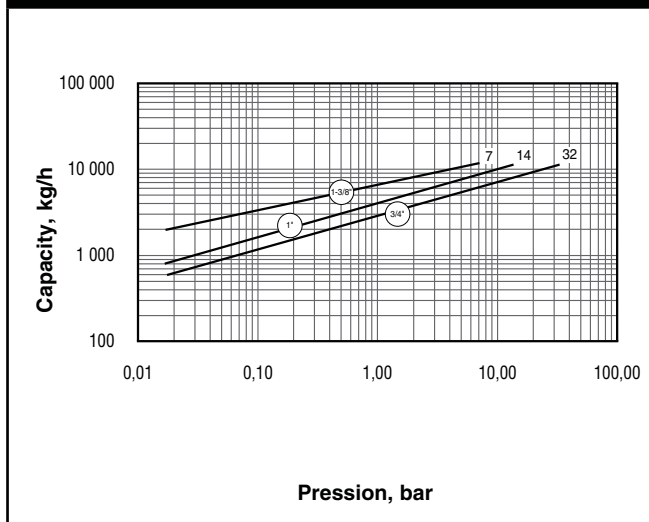
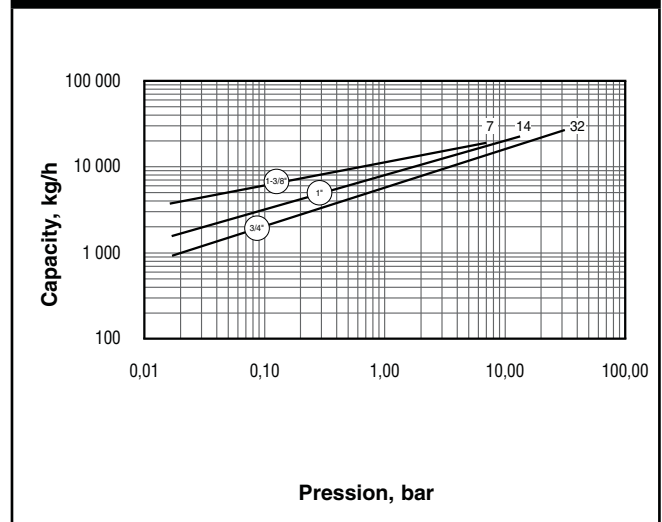


Table 131-2. Model AIC DN50 – Capacity Chart



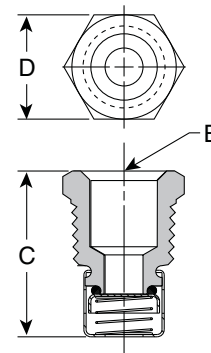
Options

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.



| 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.