

# AIC Series DN15-25 Float & Thermostatic Steam Trap Nodular Cast Iron (GS) for Horizontal Installation, with Thermostatic Air Vent

For Pressures to 14 bar...Capacities to 900 kg/h



## **Description**

Armstrong AIC Series F&T traps are designed for industrial service to 14 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): 17 bar @ 232°C Maximum Allowable Pressure: 17 barg (AICF model is limited to PN16)

Maximum Allowable Temperature: 232°C Maximum Operating Pressure: 14 barg

Note: Float & Thermostatic steam traps should not be used in systems where freezing or excessive hydraulic shocks can occur.

#### Connections

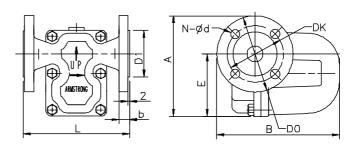
Screwed BSPT and NPT Flanged DIN PN16

# **Materials**

Body & Cap EN-GJS-400-15 (EN1563)

Gasket Graphite

Stainless Steel 303 Seat Internals Stainless Steel 304 Valve Stainless Steel 440 Thermostatic Air Vent Hastelloy Wafer Hex Bolt SAE Grade B2



## **Options**

Integral vacuum breaker. Add suffix VB to model number.

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.

#### **How to Order**

Pressure	Model	Connection Size	Option	
75	AIC	2	VB	
15 = 1 bar 30 = 2 bar 75 = 5 bar	AIC = Screwed Connection	2 = 1/2" 3 = 3/4" 4 = 1"	VB = Vacuum Breaker	
75 = 5 bar 125 = 8,5 bar 200 = 14 bar	AICF = DIN Flanged Connection	2 = DN15 3 = DN20 4 = DN25	(limited to 10 bar)	

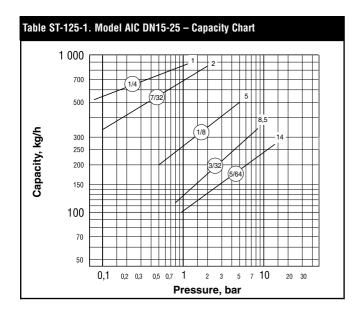
Table ST-124-1. Table Available Connections and Face-To-Face Dimensions			
Connection	1/2" DN15	3/4" DN20	1" DN25
"A" (Height Screwed) in mm	135	135	135
"A" (Height Flanged PN16) in mm	142	147	152
"B" (Length Screwed) in mm	175	175	175
"B" (Length Flanged PN16) in mm	175	180	185
"L" (Face-to-face Screwed) in mm	160	160	160
"L" (Face-to-face Flanged PN16) in mm	150	150	160
"b" (Flange width) in mm	16	16	18
"E" (Bottom to centerline of inlet) in mm	96	96	96
"D1" in mm	ø 48	ø 58	ø 68
"Do" in mm	ø 95	ø 105	ø 115
"Dk" in mm	ø 65	ø 75	ø 85
"N - ød" in mm	4 - ø 14	4 - ø 14	4 - ø 14
Vacuum Breaker (optional) in inch	1/4"	1/4"	1/4"
Weight in kg screwed	4,4 kg	4,4 kg	4,4 kg
Weight in kg flanged	6,2 kg	6,5 kg	7,0 kg

All the sizes comply with the Article 3.3 of the PED (97/23/EC)

# AIC Series DN15-25 Float & Thermostatic Steam Trap Nodular Cast Iron (GS) for Horizontal Installation, with Thermostatic Air Vent



For Pressures to 14 bar...Capacities to 900 kg/h



### **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.

### **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 A and Al Series F&T Traps are available with integral vacuum breakers. Maximum service pressure is 10 bar.



# AIC Series DN40-50 Float & Thermostatic Steam Trap Nodular Cast Iron (GS) for Horizontal Installation, with Thermostatic Air Vent

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



#### **Description**

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 Maximum Allowable Pressure: 40 barg Maximum Allowable Temperature: 300°C Maximum Operating Pressure: 32 barg

Note: Float & Thermostatic steam traps should not be used in systems where freezing or excessive hydraulic shocks can occur.

#### **Connections**

Screwed BSPT and NPT Flanged DIN PN40

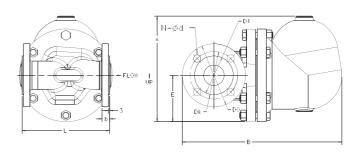
## **Materials**

Body & Cap EN-GJS-400-184 (EN1563)

Gasket Graphite

Seat Stainless Steel 17-4PH Steel A351 CF-8H Internals Valve Stainless Steel 17-4PH Thermostatic Air Vent Hastelloy Wafer

SAE Grade B2 Hex Bolt



### **Options**

Integral vacuum breaker. Add suffix VB to model number.

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.

#### **How to Order**

Pressure	Model	Connection Size		Option
75	Al	2		VB
100 = 7 bar 200 = 14 bar 300 = 21 bar 465HP = 32 bar	AICS = Screwed Connection	Horizontal	6 = 1-1/2" 8 = 2"	VB = Vacuum Breaker (limited to 10 bar)
	AICF = DIN Flanged Connection	Vertical	6 = DN40 8 = DN50	

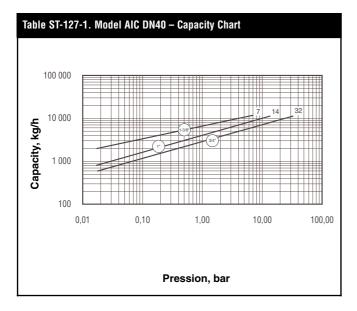
Table ST-126-1. Table Available Connections and Face-To-Face Dimensions			
Connection	1 1/2" DN40	2" DN50	
"A" Height in mm	278	278	
"B" (Length Screwed) in mm	326	333	
"B" (Length Flanged PN40) in mm	411	420	
"L" (Face-to-face Screwed) in mm	270	300	
"L" (Face-to-face Flanged PN40) in mm	230	230	
"b" (Flange width) in mm	19	19	
"E" (Bottom to centerline of inlet) in mm	122	122	
"D1" in mm	ø 84	ø 99	
"Do" in mm	ø 150	ø 165	
"Dk" in mm	ø 110	ø 125	
"N - ød" in mm	ø 19	ø 19	
Vacuum Breaker (optional) in inch	1/4"	1/4"	
Weight in kg screwed	32	32	
Weight in kg flanged	34	34	

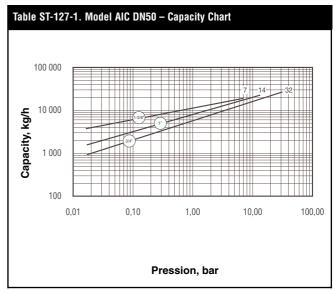
All the sizes comply with the Article 3.3 of the PED (97/23/EC)

# AIC Series DN40-50 Float & Thermostatic Steam Trap Nodular Cast Iron (GS) for Horizontal Installation, with Thermostatic Air Vent



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





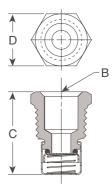
#### **Options**

#### 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 A and Al Series F&T Traps are available with integral vacuum breakers. Maximum service pressure is 10 bar.

Table ST-127-5. 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.