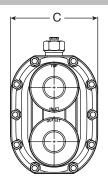
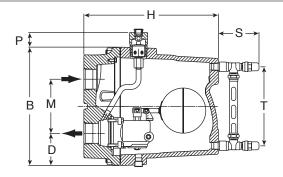
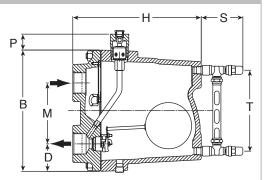


# JD & KD Series Ultra-Capacity Float & Thermostatic Steam Trap **Ductile Iron for Horizontal Installation, With Thermostatic Air Vent**

For Pressures to 300 psig (21 bar)...Capacities to 142,000 lb/hr (64,400 kg/hr)







Series JD & KD Cap

Series KD, F&T shown

Series JD, F&T shown

#### Description

The simple, yet rugged, ductile iron construction of the JD & KD Series Ultra-Capacity F&T steam traps offers long, trouble-free service. All floats, valves and seats, and lever mechanisms are constructed of stainless steel.

The integral thermostatic air vent is a balanced-pressure phosphor bronze bellows caged in stainless steel. It is designed especially for heavy-duty industrial applications where highly efficient, uninterrupted service is essential. This balanced-pressure-type air vent will respond to the pressure-temperature curve of steam at any pressure from zero to 300 psig (21 bar). Thus—up to 300 psig (21 bar)—air is vented at slightly below steam temperature.

### **Maximum Operating Conditions**

Maximum allowable pressure (vessel design):

Model JD: 300 psig @ 650°F (21 bar @ 343°C) Model KD: 300 psig @ 650°F (21 bar @ 343°C)

Maximum operating pressure:

Model 15-JD: 15 psig (1 bar) saturated steam Model 20-JD: 20 psig (1.4 bar) saturated steam Model 30-JD: 30 psig (2 bar) saturated steam Model 75-JD: 75 psig (5 bar) saturated steam Model 125-JD: 125 psig (8.5 bar) saturated steam Model 175-JD: 175 psig (12 bar) saturated steam Model 250-JD: 250 psig (17 bar) saturated steam Model 300-JD: 300 psig (21 bar) saturated steam Model 30-KD: 30 psig (2 bar) saturated steam Model 50-KD: 50 psig (3.5 bar) saturated steam Model 300-KD: 300 psig (21 bar) saturated steam

Maximum operating temperature bellows: 422°F (217°C)

# Connections

Screwed NPT and BSPT Flanged (screw on)

JD and KD Series Traps								
Trap Series	JD		KD					
Pipe Connection	in	mm	in	mm				
	2	50	2, 2-1/2, 3	50, 65, 80				
"B" (Height)	13-1/16	332	13-1/16	332				
"C" (Width)	9-11/16	246	9-11/16	246				
"D" (Bottom to Q)	2-15/16	75	3-9/16	90				
"H" (Length)	13-11/16	348	14-11/16	373				
"M" (₢ౖ to ₢̞)	6-5/8	168	6	152				
"P" (Trap Top to Bellows Cap Top)	1-13/16	46	1-13/16	46				
"S" (Gauge Glass width)	4-1/2	114	4-1/2	114				
"T" (Gauge Glass height)	8-3/4	222	8-3/4	222				
Weight lb (kg)	80 (39)		100 (45)					

#### **Materials**

Body and cap: ASTM A395 ductile iron Internals: All stainless steel Valve(s) and seat(s): Stainless steel Carbon steel Drain plug:

Stainless steel and bronze with phosphor Thermostatic air vent:

bronze bellows, caged in stainless steel

#### **Specification**

Float and thermostatic steam trap, type ... in ductile iron, with thermostatic air vent.

For a fully detailed certified drawing, refer to CD #1302.

#### **How to Order**

Pressure	Model	Connection Size	Option	
75	JD	8	VB	
15 20 30 75 125 175 250 300	JD	8 = 2"	VB = Vacuum Breaker LD = Liquid Drainer CC = Condensate Controller FLG = Specify type and class of flange GG = Gauge Glass	
30	KD	8 = 2"		
50	KD	10 = 2-1/2"		
300	KD	10 = 2-1/2", 12 = 3"		

#### **Special Configurations**

## Condensate controller with flash release for syphon drainage.

The condensate controller (CC) configuration was developed especially to meet very large capacity needs in applications where condensate must be lifted from the drain point to the trap. Under such conditions -often referred to as syphon drainage—the reduction in pressure that occurs when the condensate is elevated causes a portion of the condensate to flash into steam. Ordinary traps, unable to differentiate between flash steam and live steam, close and impede drainage.

The JD & KD Series condensate controllers (CC) are equipped with a fixed, restricted orifice near the top of the body to bleed off the flash steam (and all air present). This permits the trap to function properly on flashing condensate.

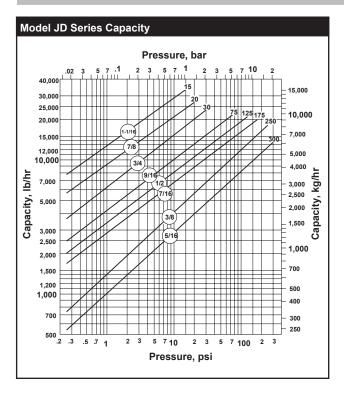
Liquid drainer with back vent for exceptionally high-capacity drainage of liquid from gas under pressure. The liquid drainer (LD) configuration was developed to meet very large capacity needs in draining water and other liquids from air or other gases under pressure. To prevent air or gas binding, the access port in the top of the body serves as a back vent connection to the equipment being drained. For capacity data, consult Armstrong International or your Armstrong Representative.

\*last updated 11/15



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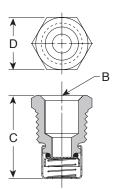


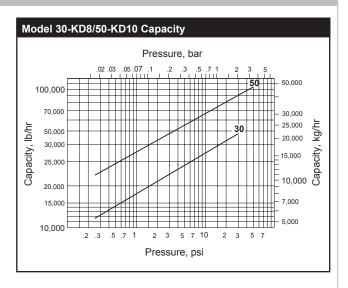
### Vacuum Breaker—1/2" (15 mm) NPT

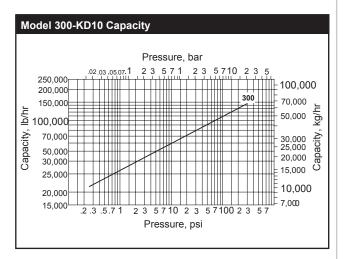
Many times, condensate will be retained ahead of steam traps because of the presence of a vacuum. To break a vacuum, air must be introduced into the system by means of a vacuum breaker.

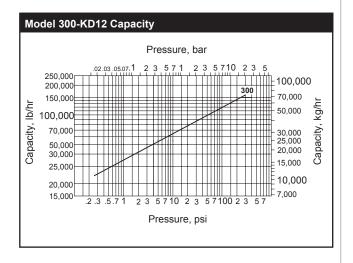
For maximum protection against freezing and water hammer in heating coils under modulated control, for example, vacuum breakers are recommended in conjunction with freeze protection devices.

Vacuum Breaker							
Size	in	mm	Max. allow. pres.				
	1/2 NPT	15					
"B" Pipe Connections	3/8 NPT	10	150 psig				
"C" Height	1-1/4	32	(10 barg)				
"D" Width	7/8 Hex	22 Hex					









\*last updated 11/15