



# 30-DC Series Automatic Differential Condensate Controllers

For Pressures to 650 psig (45 bar)...Capacities to 20,000 lb/hr (9,072 kg/hr)

Steam Trapping and Steam Tracing Equipment

## Description

Armstrong automatic differential condensate controllers (DC) are designed to function on applications where condensate must be lifted from a drain point or in gravity drainage applications where increased velocity will aid in condensate drainage.

When lifting from the drain point, often referred to as syphon drainage, the reduction in pressure that occurs when the condensate is elevated causes a portion of it to flash back into steam.

Ordinary steam traps, unable to differentiate between flash steam and live steam, close and impede drainage. Increased velocity with gravity drainage will aid in drawing the condensate and air to the DC. This increased velocity is caused by an internal steam by-pass, controlled by a manual metering valve, so the condensate controller will automatically vent the by-pass or secondary steam. This is then directed to the condensate return line or collected for use in other heat exchangers.

## Connections

Screwed NPT and BSPT

## Materials

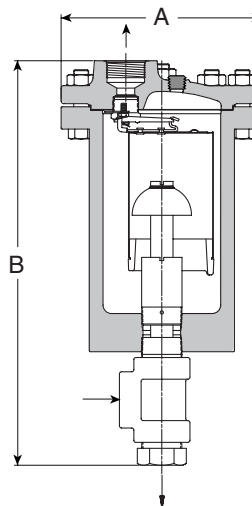
Body: ASTM A105  
 Internals: All stainless steel—304  
 Valve and seat: Hardened chrome steel—17-4PH  
 Fittings: 3000# Carbon steel

## Specification

Automatic differential condensate controller, type ... in carbon steel.

## How to Order

- Specify model number
- Specify size and type of pipe connection
- Specify maximum working pressure that will be encountered or orifice size
- Specify any options required



30-DC Series Differential Condensate Controllers								
Model No.	33-DC		34-DC		35-DC		36-DC	
	in	mm	in	mm	in	mm	in	mm
Inlet & Outlet Connections	1	25	1-1/4	32	1-1/2	40	2	50
Secondary Steam Conn.	1/2	15	3/4	20	1	25	1	25
"A" (Diameter)	8	203	8-5/8	219	9-3/4	248	11-7/8	302
"B" (Height)	16-9/16	420	19-1/4	489	21-7/16	544	23-7/8	607
Weight lb (kg)	53 (24)		73 (33)		102 (46)		184 (83)	
Maximum Operating Pressure, Sat. Steam, psi (bar)	650 (44)							
Maximum Allowable Pressure (Vessel Design)	1,080 psi @ 650°F (74 bar @ 343°C)		1,130 psi @ 650°F (78 bar @ 343°C)		1,015 psi @ 650°F (70 bar @ 343°C)		1,100 psi @ 650°F (76 bar @ 343°C)	

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit [armstronginternational.com](http://armstronginternational.com) for up-to-date information.

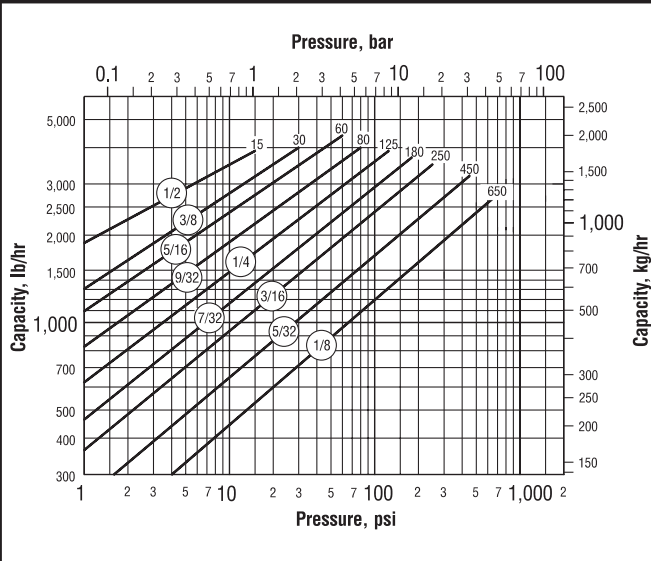
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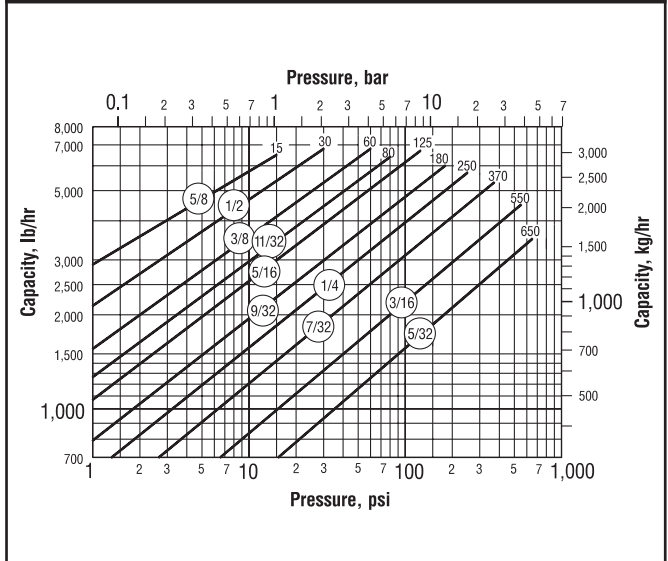


Steam Trapping and  
Steam Tracing Equipment

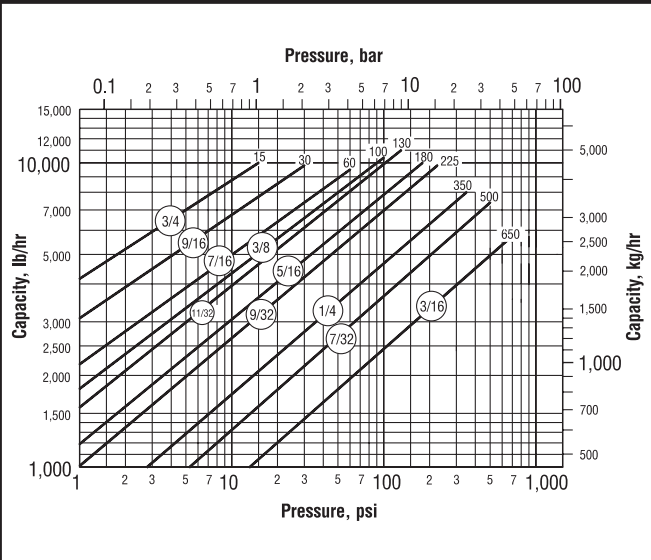
**Model 33-DC Capacity**



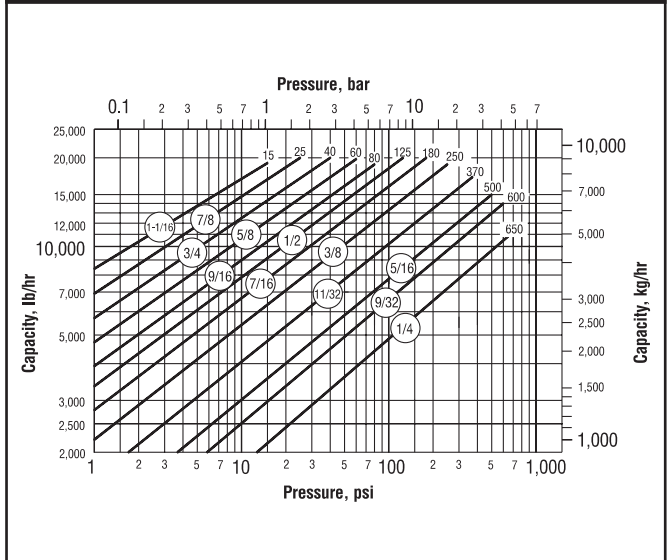
**Model 34-DC Capacity**



**Model 35-DC Capacity**



**Model 36-DC Capacity**



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