

# STEAM TRAPS

## WPN Series

### Bi-Metallic Steam Traps

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Model	WPN-40						WPN-63						
	1/2", 3/4", 1", 1 1/2", 2"						1/2", 3/4", 1"			1 1/2", 2"			
Sizes	1/2", 3/4", 1", 1 1/2", 2"						1/2", 3/4", 1"			1 1/2", 2"			
Connections	NPT, FLG, SW, Butt-weld						FLG, SW, Butt-weld			FLG, SW, Butt-weld			
Body & Cover Material	C22.8			SA105			SA182 F12			SA182 F12			
PMO Max Operating Pressure (PSIG)	470	325	220	520	470	420	825	690	660	590	825	735	660
TMO Max Operating Temperature (°F)	482	725	842	572	635	842	572	662	842	932	572	662	842
Max Press. Drop for Press. Controller (PSI)	470	325	190	470	325	190	680			825 470 470			
Pressure Controller	R32	R22	R13	R32	R22	R13	R46			R56 R32 R32			

Model	WPN-100			WPN-160				WPN-250			
	1/2", 3/4", 1"			1/2", 3/4", 1"				1/2", 3/4", 1"			
Sizes	1/2", 3/4", 1"			1/2", 3/4", 1"				1/2", 3/4", 1"			
Connections	FLG, SW, Butt-weld			FLG, SW, Butt-weld				FLG, SW, Butt-weld			
Body & Cover Material	SA182 F12			SA182 F22				SA182 F22			
PMO Max. Operating Pressure (PSIG)	1325	825	400	2250	1470	910	515	2700	2260	1580	1190
TMO Max. Operating Temperature (°F)	842	923	986	932	950	986	1022	932	950	986	1022
Max Press. Drop for Press. Controller (PSI)	1325	1325/880		1620				2260			
Pressure Controller	R90	R90/R60		R130				R154			

### TYPICAL APPLICATIONS

**DRIP, TRACER, PROCESS:** The WPN Series of Bi-Metallic Steam Traps are used in steam tracing, steam main drips and non-critical process equipment. They can be used in outdoor applications that are subject to freezing. Bi-Metallic traps will back up some condensate into the system and should only be used when this condition is permissible.

### HOW IT WORKS

When the system is cold the trap is wide open discharging air and cold condensate. When the bimetallic plates inside the trap heat up, they pull the seat closed and the flow becomes restricted. When steam temperature is reached the trap shuts off tightly.

### FEATURES

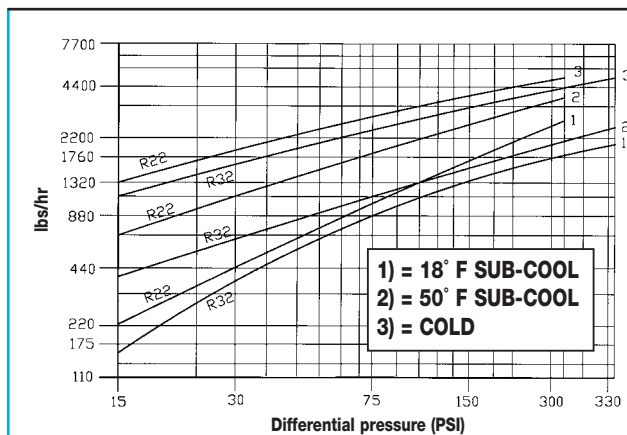
- Excellent for high pressure and superheated steam applications
- Freezeproof and resistant to water hammer
- Suitable for superheated steam with check valve installed at inlet
- In-line repairable
- Trap can be welded into line

### SAMPLE SPECIFICATION

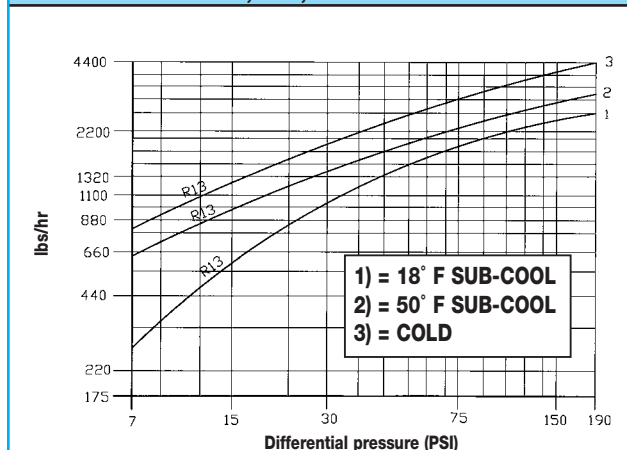
Steam trap shall be Watson McDaniel WPN Series Bi-Metallic Steam Trap. Trap must be capable of being completely serviced while still in line.

### INSTALLATION

The trap can be installed in a vertical or horizontal plane. See Installation and Maintenance Manual.

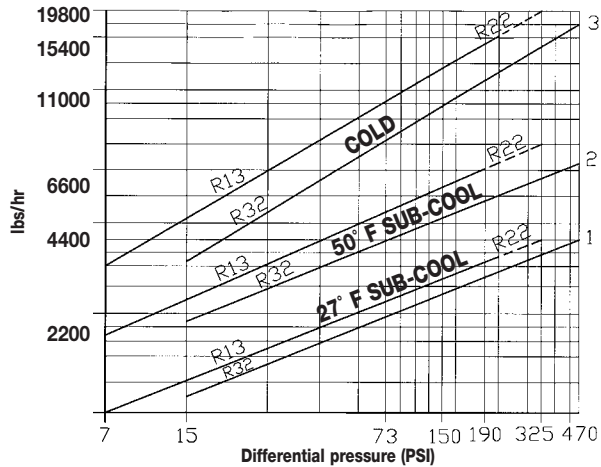


WPN-40 1/2", 3/4", 1" - R22 & R32 Controller

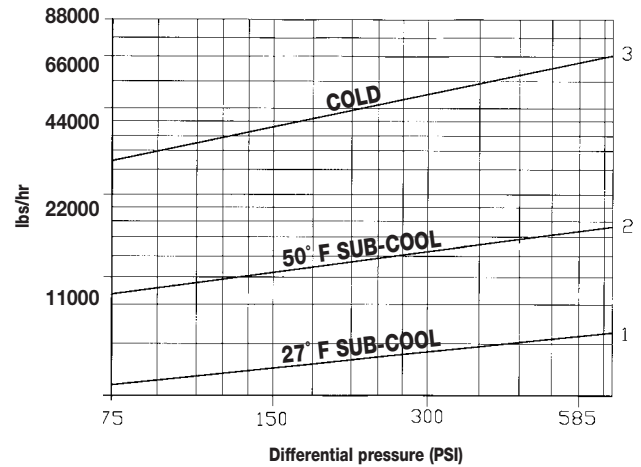


WPN-40 1/2", 3/4", 1" - R13 Controller

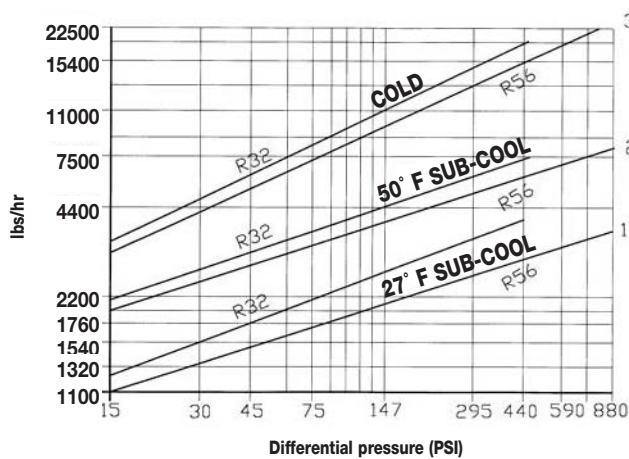
## WPN Series Bi-Metallic Steam Traps



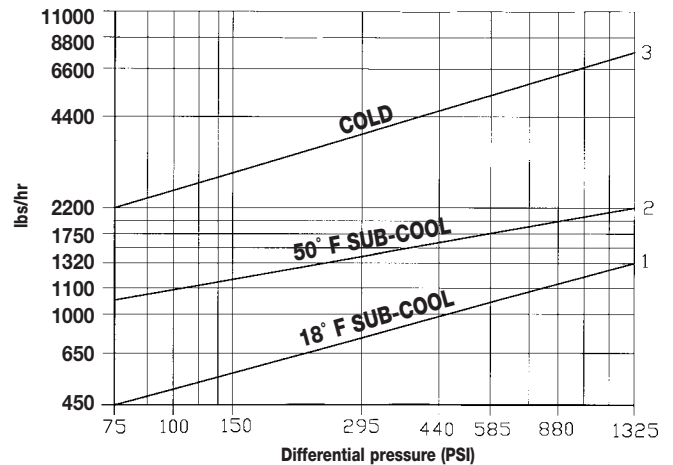
WPN-40 1 1/2", 2" R13, R22 & R32 Controller



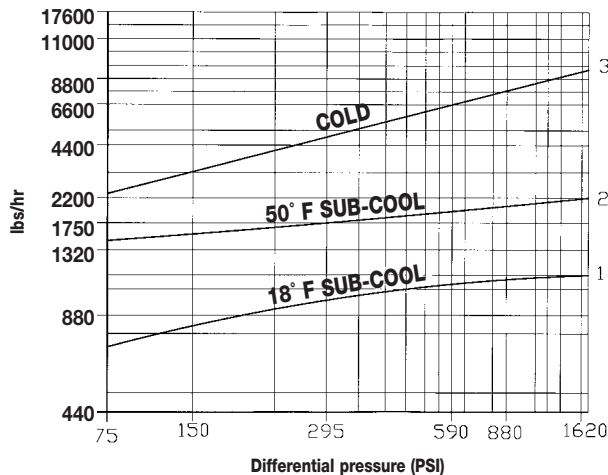
WPN-63 1/2", 3/4", 1"



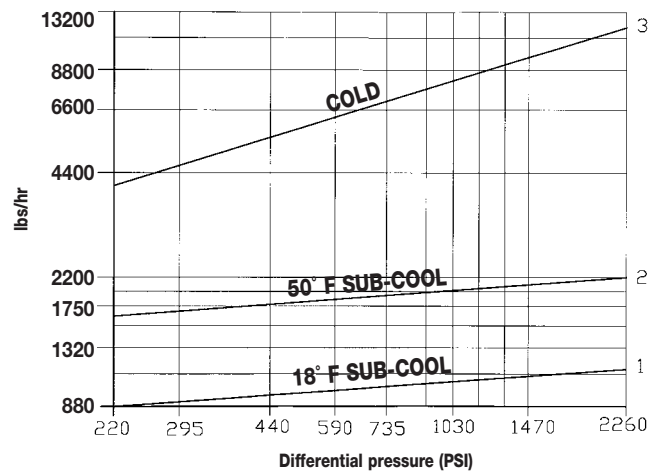
WPN-63 - 1 1/2", 2"



WPN-100 - 1/2", 3/4", 1"



WPN-160 1/2", 3/4", 1"



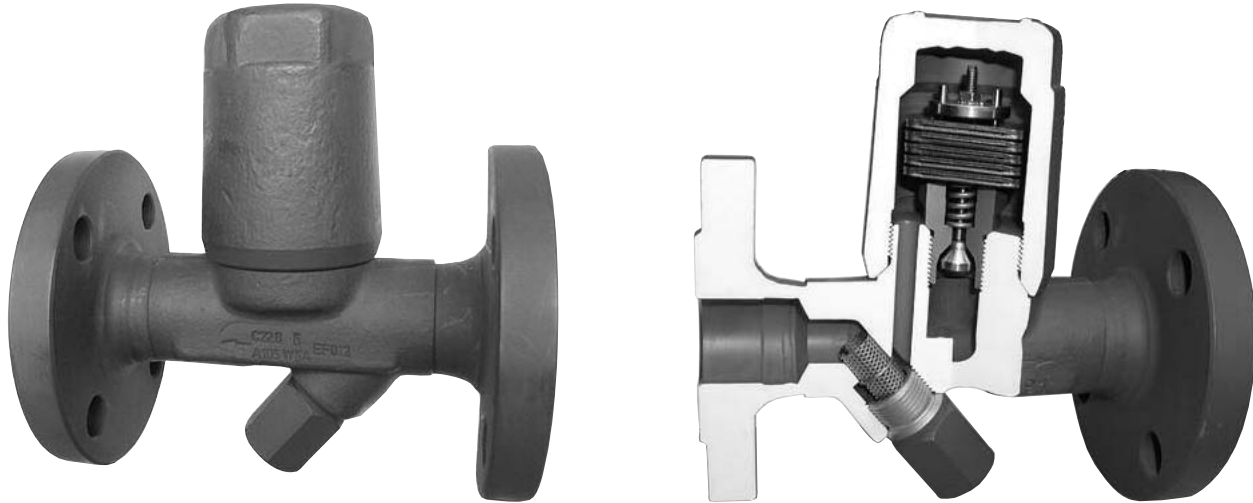
WPN-250 - 1/2", 3/4", 1"

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DIMENSIONS & WEIGHTS - inches/pounds								
Model	Size	Connection	L	H	H1	H2	H3	Weight (lbs)
WPN-40	1/2", 3/4"	FLG #150/300	6.0	3.92	2.48	.96	2.8	7.7
	1"	FLG #150/300	8.4	3.92	2.48	.96	2.8	9.2
	1 1/2", 2"	FLG #150/300	9.2	5.76	-	-	3.6	25.0
	1/2", 3/4"	NPT, SW	3.92	3.92	2.48	.96	2.8	3.7
	1"	NPT, SW	4.12	4.12	2.20	.52	2.8	4.6
	1 1/2"	NPT, SW	5.2	5.76	-	-	3.6	17.6
	2"	NPT, SW	8.4	5.76	-	-	3.6	17.6
	1/2", 3/4", 1"	Butt-weld	10.0	3.92	2.48	.96	2.8	5.0
	1 1/2", 2"	Butt-weld	10.0	5.76	-	-	3.6	21.0
WPN-63	1/2", 3/4", 1"	FLG #600	8.4	4.16	1.68	-	2.8	17.6
	1 1/2"	FLG #600	10.4	5.76	-	-	3.6	29
	2"	FLG #600	12.0	5.76	-	-	3.6	30.8
	1/2", 3/4", 1"	SW	6.4	4.16	1.68	-	2.8	10.0
	1 1/2"	SW	5.2	5.76	-	-	3.6	17.6
	2"	SW	8.4	5.76	-	-	3.6	17.6
	1/2", 3/4", 1"	Butt-weld	6.4	4.16	1.68	-	2.8	10.0
	1 1/2", 2"	Butt-weld	10.0	5.76	-	-	3.6	21
WPN-100	1/2", 3/4"	FLG #600	8.4	4.16	1.68	-	2.8	14.0
	1"	FLG #600	9.2	4.16	1.68	-	2.8	20.5
	1/2", 3/4", 1"	SW	6.4	4.16	1.68	-	2.8	10.0
	1/2", 3/4", 1"	Butt-weld	6.4	4.16	1.68	-	2.8	10.0
WPN-160 *	1/2", 3/4"	FLG #900/1500	8.4	4.16	1.68	-	2.8	14.0
	1"	FLG #900/1500	9.2	4.16	1.68	-	2.8	21.0
WPN-250 *	1/2", 3/4", 1"	SW	6.4	4.16	1.68	-	2.8	10.3
	1/2", 3/4", 1"	Butt-weld	6.4	4.16	1.68	-	2.8	10.3

\* WPN-160 FLG is 900#; WPN-250 FLG is 1500#.

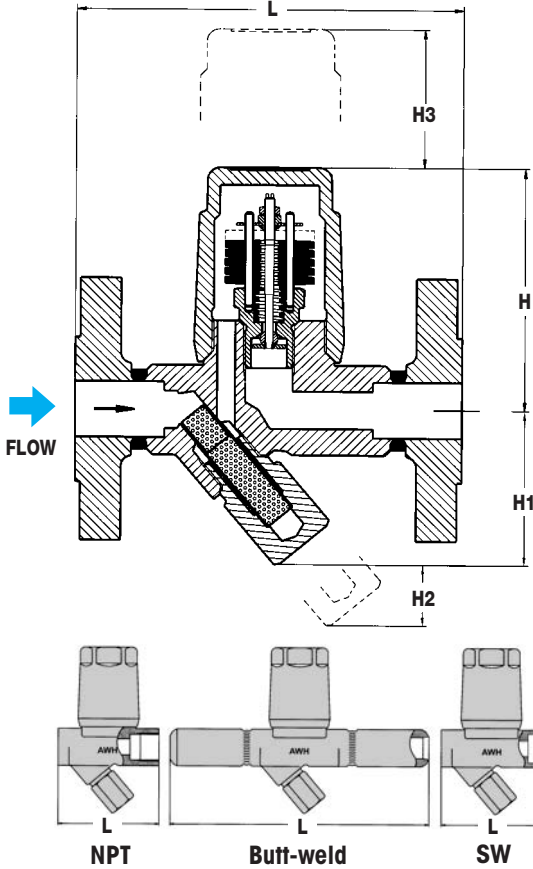
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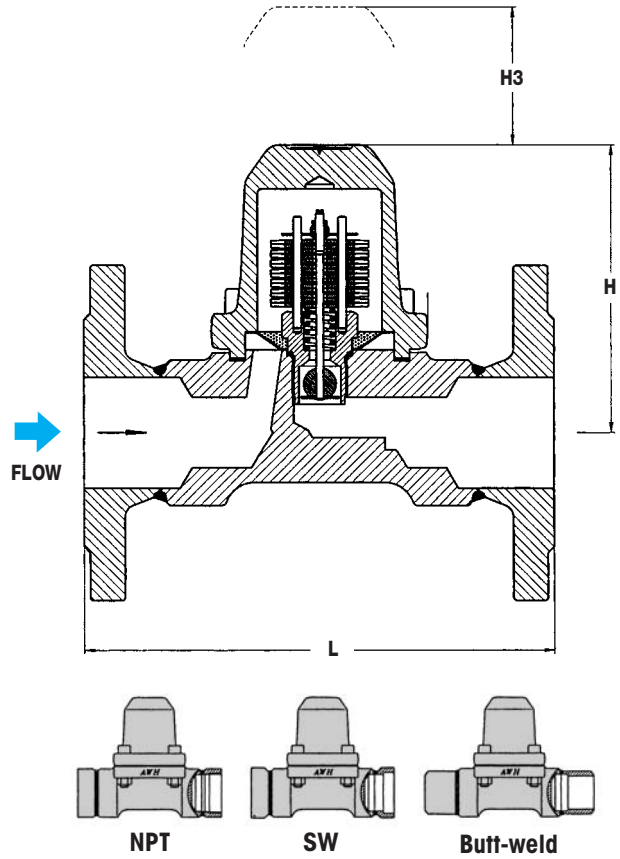
### WPN-40

1/2", 3/4", 1"



### WPN-40/63

1 1/2", 2"



### WPN-63/100/160/250

1/2", 3/4", 1"

