

STEAM TRAPS

WPN Series

Bi-Metallic Steam Traps

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Revised 7/2002

Model	WPN-40						WPN-63						
	1/2", 3/4", 1", 1 1/4", 1 1/2", 2"						1/2", 3/4", 1"			1 1/4", 1 1/2", 2"			
Sizes	1/2", 3/4", 1", 1 1/4", 1 1/2", 2"						1/2", 3/4", 1"			1 1/4", 1 1/2", 2"			
Connections	NPT, FLG, SW, Butt-weld						FLG, SW, Butt-weld			FLG, SW, Butt-weld			
Body & Cover Material	C22.8			15M03			15M03			15M03			
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	552	842	932	572	662	842
Max. Pressure Drop for Pres. Controller	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	15M03			13 CrMo44				10CrMo 9-10			
PMO Max. Operating Pressure	1325	825	400	2250	1470	910	515	2700	2260	1580	1190
TMO Max. Operating Temperature	842	923	986	932	950	986	1022	932	950	986	1022
Max. Pressure Drop for Pres. Controller	1325	1325/880		1620				2260			
Pressure Controller	R90	R90/R60	R60	R110				R154			

TYPICAL APPLICATIONS

DRIP, TRACER, PROCESS: The **WPN Series** of Bimetallic 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. Bimetallic 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

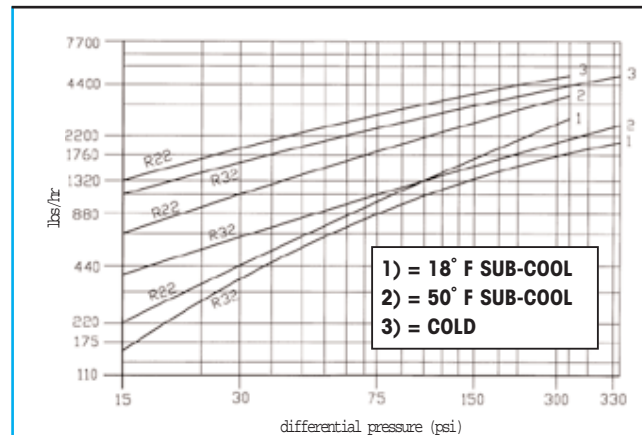
- Excellent for high pressure and superheated steam applications
- Freeze-proof and resistant to water hammer
- Handles superheated steam with check valve installed at inlet
- In-line repairable
- Trap can be welded into line

SAMPLE SPECIFICATION

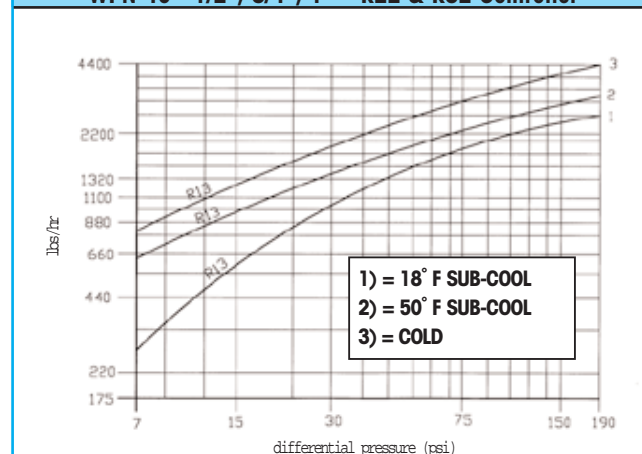
Steam trap shall be Watson McDaniel WPN Series Bimetallic steam trap. Trap must be capable of being completely serviced while still in line.

INSTALLATION

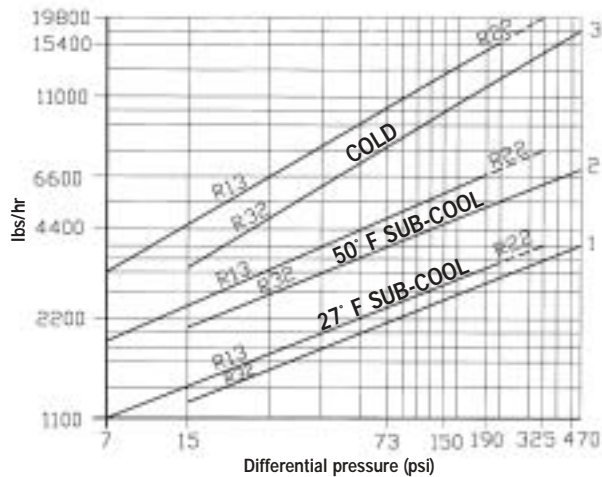
The trap can be installed in a vertical or horizontal plane. See Installation and Maintenance Manual.



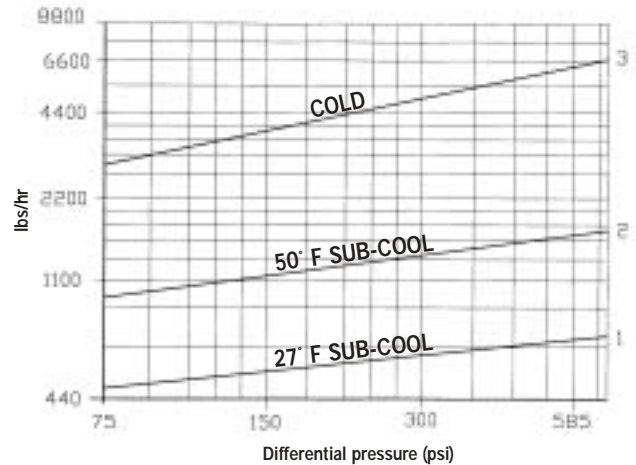
WPN-40 1/2", 3/4", 1" - R22 & R32 Controller



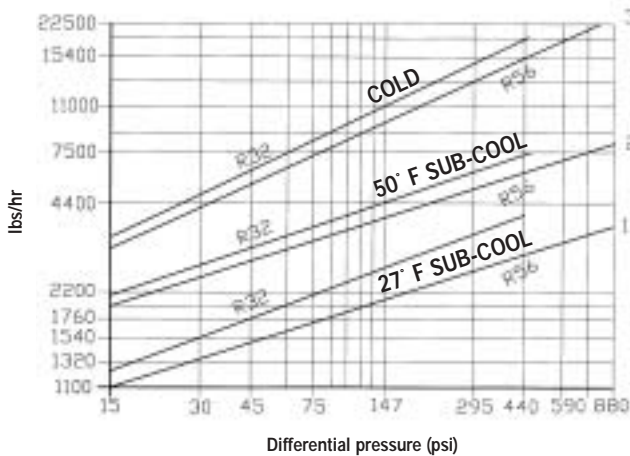
WPN-40 1/2", 3/4", 1" - R13 Controller



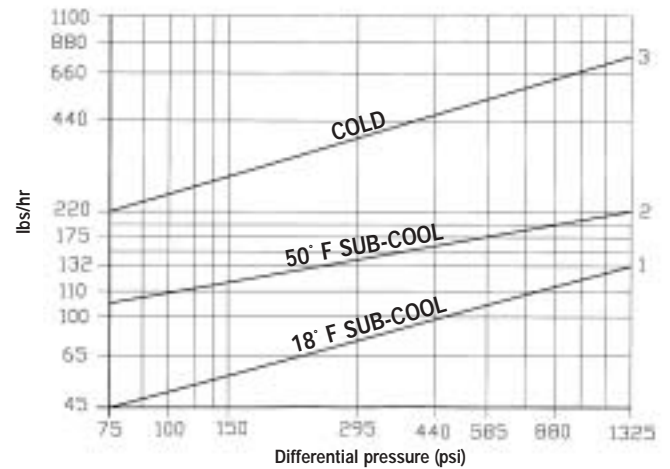
WPN-40 1-1/4", 1-1/2", 2" R13, R22 & R32 Controller



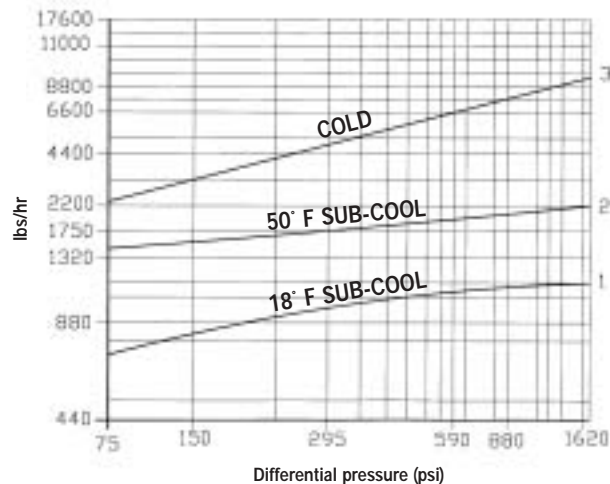
WPN-63 1/2", 3/4", 1"



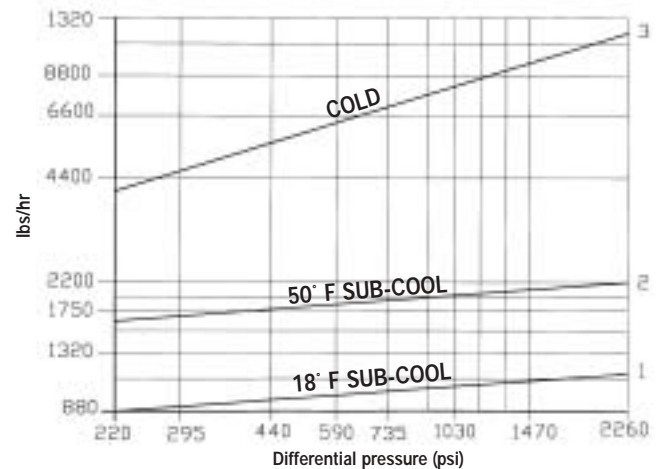
WPN-63 - 1-1/4", 1-1/2", 2"



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



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



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

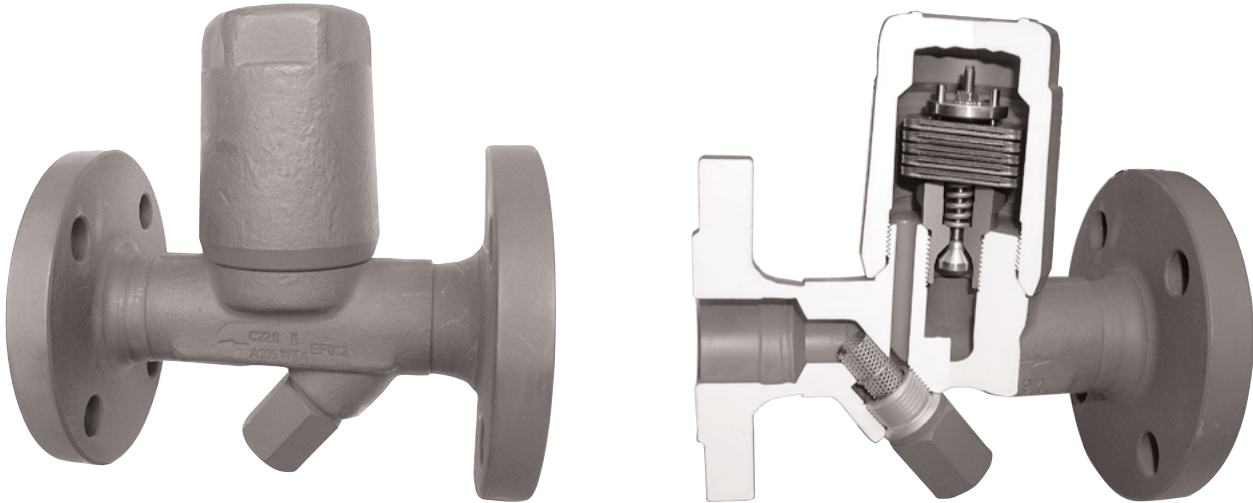
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DIMENSIONS & WEIGHTS – inches/pounds

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 1/4", 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 1/4", 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" 1 1/4", 1 1/2", 2"	Butt-weld Butt-weld	10.0 10.0	3.92 5.76	2.48 -	.96 -	2.8 3.6	5.0 21.0		
WPN-63	1/2", 3/4", 1" 1 1/4"	FLG #600 FLG #600	8.4 9.2	4.16 5.76	1.68 -	- -	2.8 3.6	17.6 28		
	1 1/2" 2"	FLG #600 FLG #600	10.4 12.0	5.76 5.76	- -	- -	3.6 3.6	29 30.8		
	1/2", 3/4", 1" 1 1/4", 1 1/2" 2"	SW SW SW	6.4 5.2 8.4	4.16 5.76 5.76	1.68 - -	- - -	2.8 3.6 3.6	10.0 17.6 17.6		
	1/2", 3/4", 1" 1 1/4", 1 1/2", 2"	Butt-weld Butt-weld	6.4 10.0	4.16 5.76	1.68 -	- -	2.8 3.6	10.0 21		
	WPN-100	1/2", 3/4" 1"	FLG #600 FLG #600	8.4 9.2	4.16 4.16	1.68 1.68	- -	2.8 2.8	14.0 20.5	
		1/2", 3/4", 1" 1/2", 3/4", 1"	SW Butt-weld	6.4 6.4	4.16 4.16	1.68 1.68	- -	2.8 2.8	10.0 10.0	
		WPN-160 * WPN-250 *	1/2", 3/4" 1"	FLG #900/1500 FLG #900/1500	8.4 9.2	4.16 4.16	1.68 1.68	- -	2.8 2.8	14.0 21.0
			1/2", 3/4", 1" 1/2", 3/4", 1"	SW Butt-weld	6.4 6.4	4.16 4.16	1.68 1.68	- -	2.8 2.8	10.3 10.3

* WPN-160 FLG #900, * WPN-250 FLG #1500

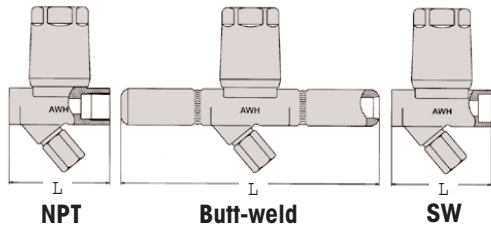
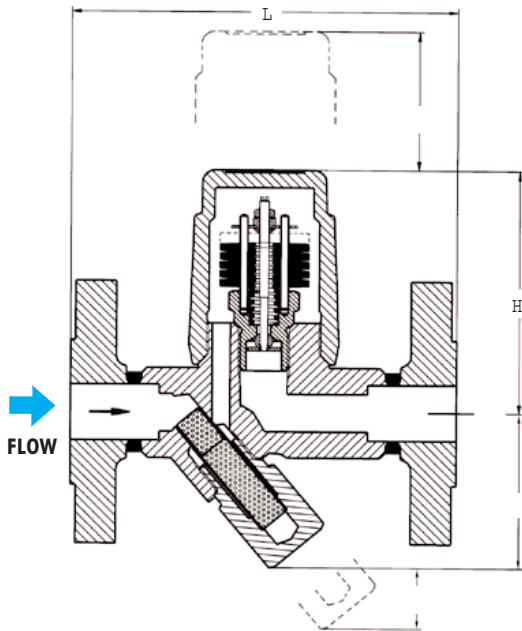
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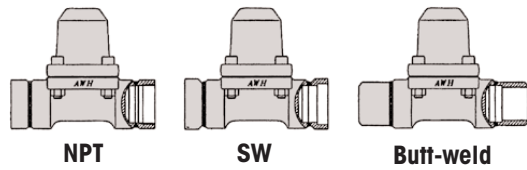
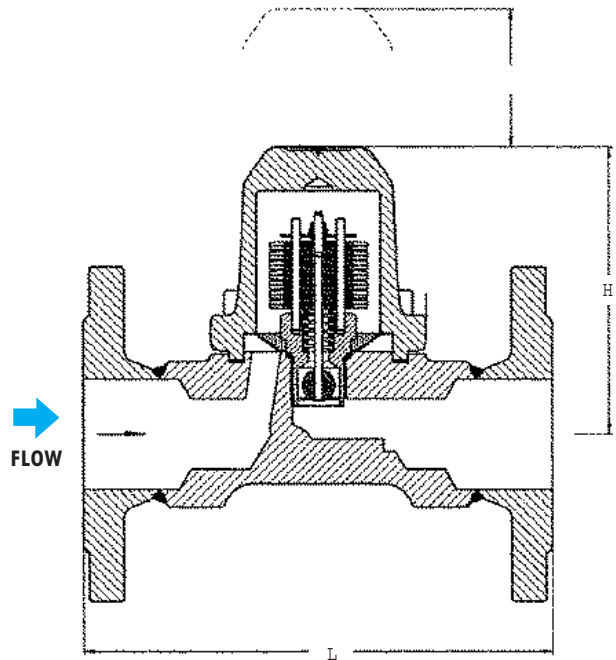
WPN-40

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



WPN-40/63

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



WPN-63/100/160/250

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

Butt-weld

