

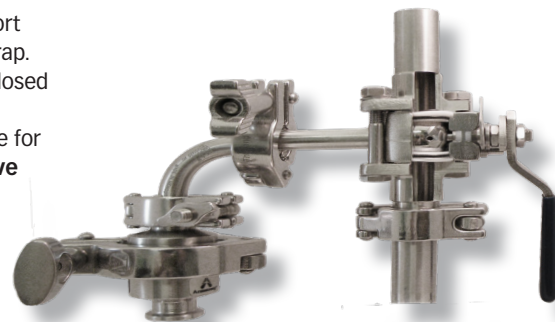
# PBM IGENIX® CLEAN STEAM TRAP VALVES

## CT Cast Series 9/Forged Series 8, 1/2" - 2"



### DESIGN FEATURES:

- Dual chamber seat design allows for a 1/2" Tri-Clamp® steam drain purge port positioned in the valve body to facilitate drainage of the body cavity to the trap.
- Two steam purge holes allows steam condensate to flow past seats in the closed position to the trap.
- Unique Adjust-O-Seal® feature allows in-line valve adjustment to compensate for normal wear on valve seats. Note: **CT Series Clean Steam Trap valves have o-rings.**
- Forged and cast valves are low-controlled ferrite.
- True-Bore® (valve bore same as connecting tubing) – no puddling
- ASME BPE compliant
- USP Class VI elastomers and FDA compliant materials
- Valves are rated to full vacuum.
- Certified Material Test Report (CMTRS) provided for wetted components.
- Surface finishes are achieved without the use of ADIS (Animal Derived Ingredients).



SPECIFICATIONS	2-Way Valves
Sizes	1/2" - 2" Series 8 & 9
Material	Low ferrite cast and forged 316L material. Castings (Series 9) comply with A351, Alloy CF3M and/or A479, Alloy S31603. Forgings (Series 8) comply with A182, Alloy F316L/1.4404 and/or A479, Alloy S31603. Also available are Hastelloy™, AL6XN™, others
End Connections	Extended tube, extended butt weld, hygienic clamp
Seats & Seals	White V-TEF™ standard, others available
O-rings	EPR O-ring energizer, FKM O-ring energizer, others available
Stem Packing Material	V-TEF™ and S-TEF®
Body Bolts & Nuts	18-8 Stainless Steel
Maximum Working Pressure	up to 900 psig CWP depending on valve series, size and temperature
Temperatures	up to 450°F depending on seat and seal material
Polish	Standard internal polish of 20 Ra ID Series 8, 30 Ra ID Series 9

CV Values (gpm), Series 8/Series 9		
Size	End Connections	
	F-	X-
1/2"	6.5	8
3/4"	23	28
1"	55	65
1-1/2"	160	193
2"	365	420

ID Surface Finish, Ra Readings for Valves per ASME BPE			
Surface Finish	PBM Polish Code	μ-in.	μ-m.
<b>Mechanical Polish</b>			
SF 1	A	20 Ra max	0.51
SF 2	A	25 Ra max	0.64
SF 3	-	30 Ra max	0.76
<b>Mechanical Polish and Electropolish</b>			
SF 4	G	15 Ra max	0.38
SF 5	F	20 Ra max	0.51
SF 6	F	25 Ra max	0.64

### How To Order:

PRODUCT (1-2) MATERIAL (3-4)		SIZE (5) SERIES (6)		END CONNECTIONS (7-8)		SEAT & SEAL (9)		PURGES (10-11)		BALL & STEM (12)		OPERATOR (13-14)		POLISH (15-16)	
CT	HL	Cast (Ser. 9) 316L S / S	C	1/2"	8	F -	Ext. Butt weld for Tube	G	V-TEF™ Seats / Seals FKM O-Rings	BG	Clamp on ctr opposite stem Holes in close downstr. Pos.	-	W/ Standard Lever Handle	-	30 Ra ID (Std. Series 9)
	HF	Forged 316L S / S	D	3/4"	9	FX	Ext. Butt weld for Tube by Hygienic Clamp	J	V-TEF Seats / Seals / VTFE Cav Fill / FKM O-Rings	F	Internal / External Grounding	02	W/O Handle W/ Stem Actuator Prep	A	20 Ra ID (Std. Series 8)
		Other material options available - Contact PBM.	E	1"		X-	Hygienic Clamp	Z	V-TEF Seats / Seals EPR O-Rings	G	17-4PH Stem	04	Locking Lever Handle	D	15 Ra ID
			G	1-1/2"				2	V-TEF Seats / Seals / VTFE Cav Fill / EPR O-Rings	DH	Clamp downstr. opposite stem Holes in open downstr. Pos.	71	Extended Handle	E	10 Ra ID
			H	2"				H	S-TEF® Seats / Seals FKM O-Rings	HG	BWTE on ctr opposite stem Holes in close downstr. Pos.	20	DA 80psig actuator	F	20 Ra ID after Electro Polish
								0	S-TEF Seats / Seals EPR O-Rings			27	DA 60psig actuator	G	15 Ra ID after Electro Polish
								9	V-TEF Seats / Seals FEP Encaps. FKM O-Rings		Other Purge Port & Ball Options - Contact PBM.	34	SR 80psig actuator	H	10 Ra ID after Electro Polish
												41	SR 60psig actuator		More polish available - Contact PBM.

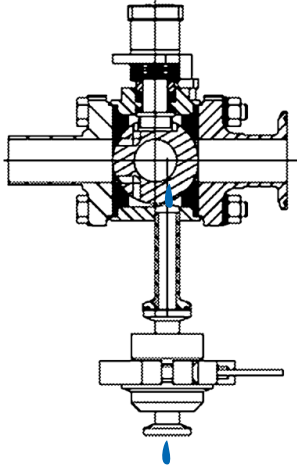
<http://pbmvalve.com/build-a-part-number>

# PBM Igenix® Clean Steam Trap Valves

Two-Way Sanitary Steam Trap valves use body purge port and ball purge holes to direct flow to the trap while shutting off flow downstream. Permits sampling of steam for purity and safely isolates trap for ease of maintenance.

Dead leg piping is reduced where condensate can cool and cause contamination. These valves perform three functions and also reduce costs by eliminating unnecessary welds, "T"s and piping. Valves can be installed in the vertical or horizontal position.

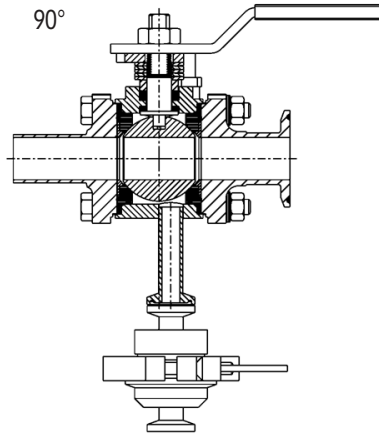
### Trap Position



Condensate draining through trap

The **Trap Isolated Position** allows condensate to flow past the ball purge holes during normal operation, bypassing the upstream seat. Condensate flows past the purge holes in the ball and out the side port of the valve to the steam trap, allowing the body cavity to remain hot. The point-of-use, or sampling connection, is isolated by the surface of the ball without the purge holes pressing against the downstream seat.

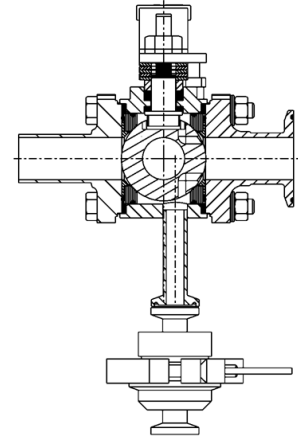
### Open Position



Clean Steam to Point of Use

The **Open Position** allows the flow of steam. Appropriate sampling piping or equipment connections are made at the point-of-use port, and the ball is turned 90° counter-clockwise, opening the valve. The trap is isolated from flow allowing full sterilization temperature to be quickly reached. The valve is then turned 90° clockwise to return the steam trap to service in the "Trap" position.

### Service Position



Trap can be removed for service

The **Closed or Service Position** allows steam trap maintenance by turning the ball 180° counter-clockwise from the normal "Closed" position to the "Trap Isolated" position. As the ball is closed toward the steam-in port, it isolates the steam trap. Maintenance can then be performed on the steam trap. To return the trap to service, the ball is turned 180° clockwise to the "Trap" position.

For dimensional information please refer to Clean Steam (CS) Series 8 and 9 Product Bulletin.



<http://www.pbmvalve.com/valves/clean-steam-trap-valves>

<http://www.pbmvalve.com/maintenance-instructions>

[www.PBMValve.com](http://www.PBMValve.com)

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