

USIB450

Universal Style Quick-Change Trap Module

Inverted Bucket Steam Trap Module (mounts to UC450 Universal Connectors)

Model	USIB450, USIB450H
Connections	Fits UC450 Series Universal Connectors
Body Material	Stainless Steel
PMO Max. Operating Pressure	450 PSIG*
TMO Max. Operating Temperature	800°F
PMA Max. Allowable Pressure	720 PSIG @ 100°F
TMA Max. Allowable Temperature	800°F @ 400 PSIG

*750°F @ operating pressures below 400 PSIG. See installation note regarding using trap in superheated applications.

Steam trap modules can be used with other manufacturers' Universal Connectors.

Typical Applications

DRIP, TRACER: The **USIB450** inverted bucket steam trap modules must be mounted to a universal connector. They are typically used for drip applications such as draining condensate from steam mains or steam supply lines as well as for steam tracing applications. **USIB450H** is the higher capacity model.

How It Works

The UC450 universal connector is permanently installed into the pipeline where the steam trap would normally be placed. The trap module, which functions like any standard inverted bucket steam trap, is fastened to the universal connector with two bolts. When a new trap module is needed, it can be easily removed and replaced with a standard open-end or socket wrench without disturbing the existing piping.

Sample Specification

The steam trap shall be an all stainless steel modular design, inverted bucket type with a frictionless valve lever assembly. The trap shall have a 360 degree swivel mount on a stainless steel Universal Connector that is available with integral strainer and blowdown valve options.

Options

Universal Connectors are available with an integral strainer and blowdown valve. Connector is purchased separately. See the UC450 Universal Connectors section for more information.



Installation and Maintenance

Universal connector is first permanently threaded or welded into piping system. The USIB trap module is attached to the universal connector with two bolts. When a new trap is needed, it can be easily removed and replaced with a standard open-end or socket wrench without disturbing the existing piping. Trap must be installed in upright position as shown to function properly. With superheated steam, a check valve must be installed at inlet of trap to prevent the loss of prime. In vertical piping installations with upward flow, use of a blowdown valve is not recommended because discharge would be in upward and possibly unsafe direction.

Features

- Trap module can be easily removed and replaced in minutes without having to disconnect any piping
- Hardened stainless steel valves and seat
- Freeze resistant
- Connectors available with integral strainers and blowdown valves
- 360° swivel design for convenient installation

MATERIALS

Body	Stainless Steel GR CF3
Cover	304L Stainless Steel
Internals	300 Series Stainless Steel
Valve Plug & Seat	420F Stainless Steel
Bolts	ASTM A193 GR B7
Gasket	Spiral-Wound 304 Stainless Steel with Grafoil Filler
Swivel Flange	303 Stainless Steel

CAPACITIES – Condensate (lbs/hr)

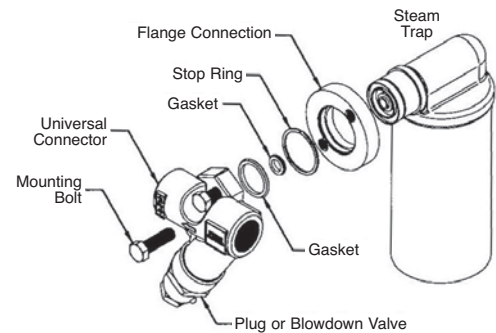
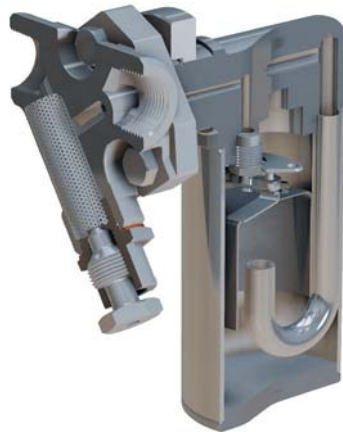
Model	Orifice Size	PMO (PSIG)	Differential Pressure (PSI)																		
			5	10	15	20	25	30	40	50	60	70	80	100	125	150	180	200	250	350	450
USIB450-20	3/16"	20	450	560	640	690															
USIB450-80	1/8"	80	300	350	400	440	460	500	550	580	635	660	690								
USIB450-150	#38	150	210	250	280	300	320	350	380	400	420	450	470	500	550	570					
USIB450-450	.057	450	31	50	70	84	95	105	120	133	145	152	160	174	187	198	208	215	228	248	263
USIB450H-15	1/4"	15	830	950	1060																
USIB450H-30	3/16"	30	530	700	820	880	950	1000													
USIB450H-70	5/32"	70	380	500	560	620	680	710	770	840	900	950									
USIB450H-125	1/8"	125	285	375	440	485	530	560	620	670	720	780	800	860	950						
USIB450H-200	7/64"	200	205	265	315	350	385	410	465	500	580	590	620	650	700	810	840	860			
USIB450H-250	#38	250	155	205	240	270	295	320	360	400	500	530	550	580	630	660	690	710	760		
USIB450H-450	.057	450	31	50	70	84	95	105	120	133	145	152	160	174	187	198	208	215	228	248	263

USIB450

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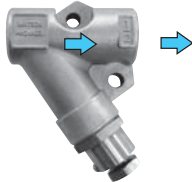
STEAM TRAPS

Inverted Bucket Steam Trap Module (mounts to **UC450** Universal Connectors)

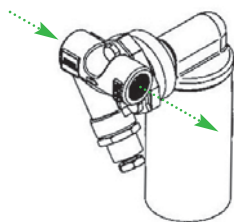


Horizontal Piping (Connector with Strainer)

Steam Flow to the Right (Standard)

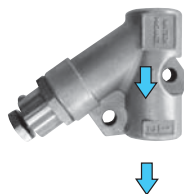


Trap shown with **UC450SR** Connector
(Use **L** Style if a Piping Constraint exists)

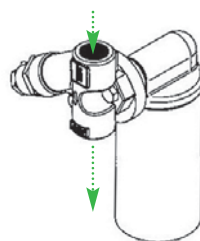


Vertical Piping (Connector with Strainer)

Steam Flow Downward

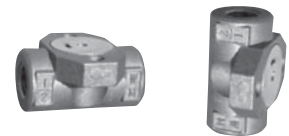


Trap shown with **UC450SR** Connector

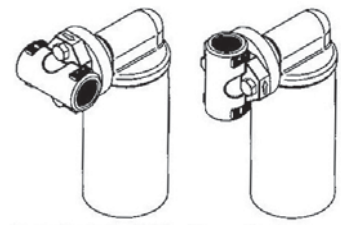


Vertical or Horizontal Piping (No Strainer)

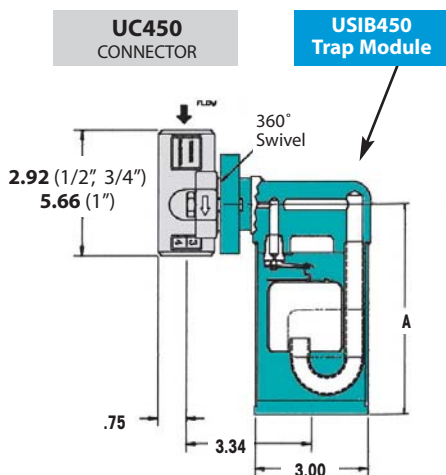
Steam Flow Any Direction



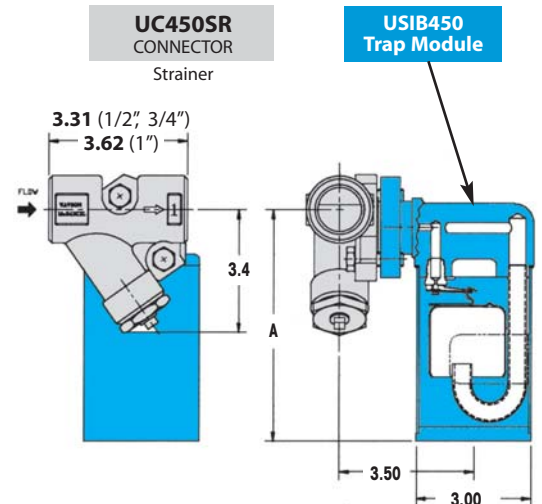
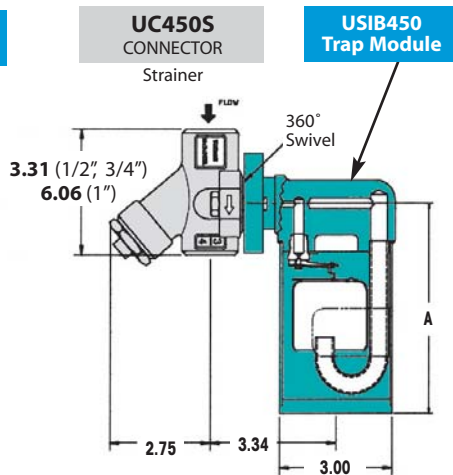
Trap shown with **UC450** Connector



Connectors available in 1/2", 3/4" and 1" sizes in NPT or Socket-Weld Connections



USIB450 A-Dimension = 5.81"
USIB450H A-Dimension = 6.81"



USIB450 A-Dimension = 6.12"
USIB450H A-Dimension = 7.12"