

QUICK-CHANGE TRAPS

Universal Style Steam Traps

(Universal Style Connectors and Universal Trap Modules)

Universal Style Steam Traps feature a permanent installation of the Universal Connector with a 2-bolt mounting arrangement for the Universal Steam Trap Module, allowing the Steam Trap to be removed and replaced in minutes

- ◆ without having to unthread piping
- ◆ by removing only 2-bolts with a socket or open-end wrench

7 different connectors • 6 different trap modules

Thermodynamic • Thermostatic • Inverted Bucket • Bi-Metallic • Float & Thermostatic

Any Universal Connector will work with any Universal Steam Trap Module

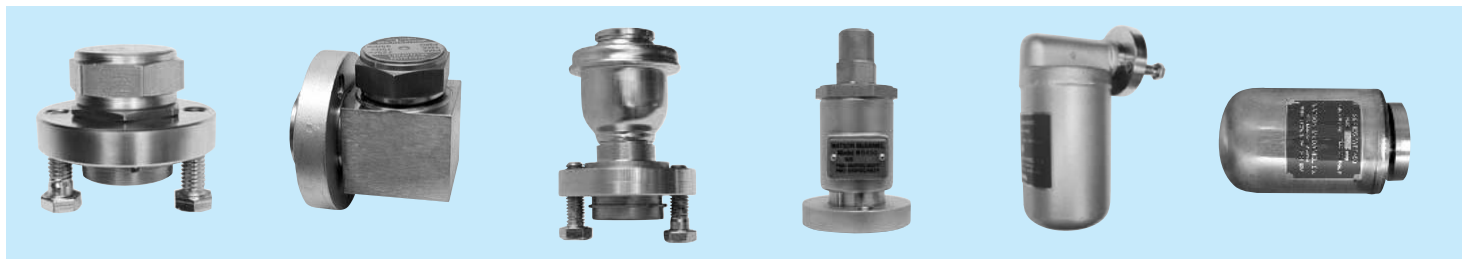
Model	WU450
Sizes	1/2", 3/4", 1"
Connections	NPT, SW, FLG
Body Material	Stainless Steel
PMO Max. Operating Pressure	(trap module dependent)
TMO Max. Operating Temperature	(trap module dependent)
PMA Max. Allowable Pressure	750 PSIG @ 100°F
TMA Max. Allowable Temperature	800°F @ 400 PSIG



see following page for connector variations.

Universal Style Steam Traps are recommended in any application, – particularly those which require simple and frequent replacement of steam traps

Select a **Trap Module** for your application



**WD450
WD450L**
Thermodynamic
"Top Mount"

**WD450SM
WD600LSM**
WD600LSM-HP
Thermodynamic
"Side Mount"

WT450
Thermostatic

WB450
Bi-Metallic

**WSIB450
WSIB450H**
Inverted Bucket

WFT450
Float & Thermostatic

QUICK-CHANGE TRAPS

Universal Style Steam Traps

(Universal Style Connectors and Universal Trap Modules)

It all adds up.... a Universal Style Connector + a Universal Trap Module = the most convenient, time-efficient & cost effective solution to maintaining your steam traps.

STEP 1: Select an appropriate Universal **STEAM TRAP MODULE** (shown below) for your application. Consult following pages for Steam Trap details.

STEP 2: Select appropriate Universal **CONNECTOR**. Any connector shown below will work with any Universal Steam Trap Module (including those of other manufacturers).

STEP 3: Order configured Universal Style Steam Traps.

UNIVERSAL TRAP MODULES



**WD450
WD450L
Thermodynamic
"Top Mount"**
*Only recommended for
Horizontal Piping
Installations*



**WD450SM
WD450LSM
WD600LSM-HP
Thermodynamic
"Side Mount"**



**WT450
Thermostatic**



**WB450
Bi-Metallic**



**WSIB450
WSIB450H
Inverted Bucket**



**WFT450
Float &
Thermostatic**

UNIVERSAL CONNECTORS



**WU450
No Strainer**



**WU450S
Strainer**



**WU450SB
Strainer &
Blowdown**



**WU450S-LR
Strainer**



**WU450SB-LR
Strainer &
Blowdown**



**WU450S-RL
Strainer**



**WU450SB-RL
Strainer &
Blowdown**

FEATURES

- 2-bolt mounting allows Trap Module to be removed and replaced without having to unthread piping
- Trap module can swivel 360° on the universal connector allowing proper orientation
- Compatible with other manufacturers trap modules
- All stainless steel construction
- Flange connections available for connector

Models WU450-LR
(left to right flow as viewed)
are Standard.

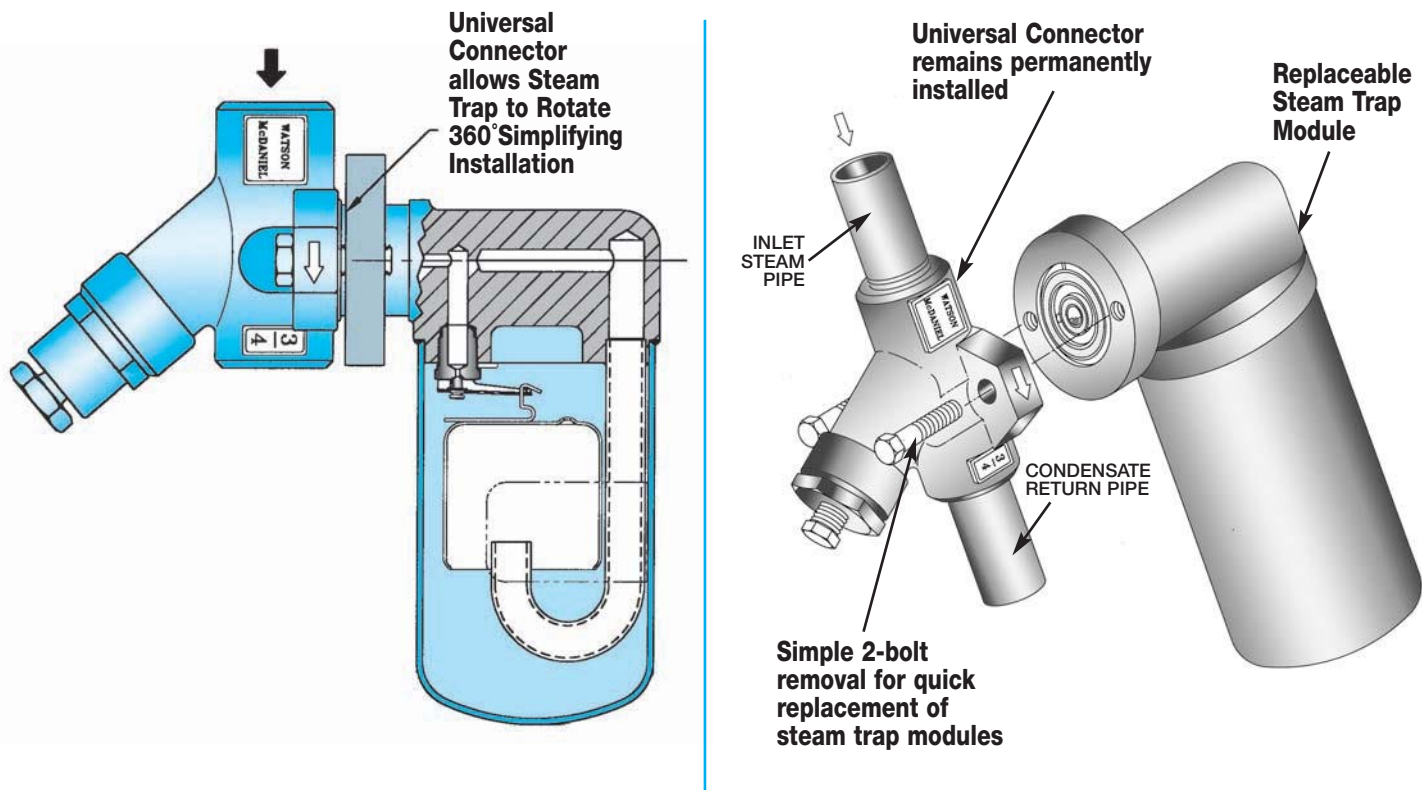
Models WU450-RL
(right to left flow as viewed)
Connectors were made
available for situations
where problems occur
due to obstructions or
trap mounting orientation.

UNIVERSAL STYLE STEAM TRAPS

Universal Style Steam Traps

(Universal Style Connectors and Universal Trap Modules)

Universal Connectors are used in steam systems to simplify the replacement and maintenance of Steam Traps.



Universal Connectors allow Steam Traps to be removed and replaced in minutes without having to unthread piping.

Two bolts connect the steam trap module to the permanently-installed universal connector, allowing the trap module to be quickly and easily removed and replaced using an open-end or socket wrench. **Universal Style Steam Traps** are commonly used in chemical plants, petrochemical refineries, paper mills and most other industrial facilities. Watson McDaniel's WU450 connectors conform to industrial standards, making them compatible with other manufacturers' universal steam trap modules.

Watson McDaniel recommends using the Universal Style Steam Traps in any application, in particular those which require frequent maintenance or replacement of steam traps.

- **Universal style steam traps with 2-bolt mounting allows for fast, easy replacement of trap module, making it more cost-effective than replacing conventional type steam traps**
- **All stainless steel construction**
- **Trap module can swivel 360° on the universal connector allowing any orientation during installation**
- **These universal connectors are compatible with most other manufacturer's trap modules**
- **Universal connectors are available with integral strainer and blowdown valve**

UNIVERSAL STYLE STEAM TRAPS

WU450 Series

Universal Connectors for Universal Steam Trap Modules

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Model	WU450, WU450S, WU450SB WU450S-LR, WU450SB-LR, WU450S-RL, WU450SB-RL
Sizes	1/2", 3/4", 1"
Connections	NPT, SW, FLG
Body Material	Stainless Steel
PMO Max. Operating Pressure	(trap module dependent)
TMO Max. Operating Temperature	(trap module dependent)
PMA Max. Allowable Pressure	750 PSIG @ 100°F
TMA Max. Allowable Temperature	800°F @ 400 PSIG

Steam Trap Modules that mount to Universal Connectors are shown on the following pages. Trap modules available in: Inverted Bucket, Float & Thermostatic, Thermodynamic, Thermostatic and Bi-metallic type.

TYPICAL APPLICATIONS

DRIP, TRACER: The **WU450 Series** Universal Connectors are used in steam systems where a simplified and economical maintenance program of steam traps is desired. These universal connectors can be used for drip service on steam mains and steam supply lines, tracing, or small process equipment. Industrial standard 2-bolt universal connectors are commonly used in chemical plants, petrochemical refineries, paper mills and other industrial facilities. The WU450 connectors conform to industrial standards, making them compatible with other manufacturers' universal steam trap modules.

Used with the following Watson McDaniel Steam Trap Modules:

- WSIB450** - Inverted Bucket
- WD450** - Thermodynamic
- WD450SM** - Thermodynamic
- WD600LSM** - Thermodynamic
- WT450** - Thermostatic
- WFT450** - Float & Thermostatic
- WB450** - Bi-Metallic

HOW IT WORKS

WU450 universal connectors remain permanently installed in the piping system. The convenient 2-bolt mounting system allows the trap module to be replaced quickly and easily using a socket or open-end wrench.

FEATURES

- Universal connector with 2-bolt mounting allows for fast, easy replacement of trap module making it more cost-effective than replacing conventional type steam traps
- All stainless steel construction
- Trap module can rotate 360° on the universal connector allowing any orientation during installation
- Compatible with most other manufacturers' trap modules
- Available with integral strainer and blowdown valve

SAMPLE SPECIFICATION

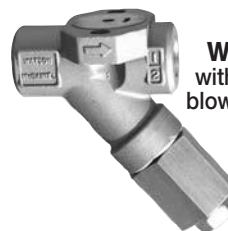
The Universal Connector shall be all stainless steel construction with a two-bolt 360 degree swivel mount flange design and available with integral strainer and blowdown valve.



WU450
no strainer



WU450S
with strainer



WU450SB
with strainer & blowdown valve



WU450S-LR
with strainer
(Flow direction
Left to Right)



WU450S-RL
with strainer
(Flow direction
Right to Left)



WU450SB-LR
with strainer & blowdown valve
(Flow direction
Left to Right)



WU450SB-RL
with strainer & blowdown valve
(Flow direction
Right to Left)

Note: Optional Flanged units available.

INSTALLATION

The universal connector can be installed in any position. Installation should include isolation valves.

MAINTENANCE

The strainer should be periodically cleaned by removal or use of the optional blowdown valve. For full maintenance details see Installation and Maintenance Manual.

MATERIALS

Body	Stainless Steel, AISI 316
Strainer	40 Mesh Stainless Steel, AISI 304
Blowdown Valve	Stainless Steel, AISI 303

HOW TO SIZE/ORDER

Specify universal connector. See following pages for Steam Trap Modules.

UNIVERSAL STYLE STEAM TRAPS

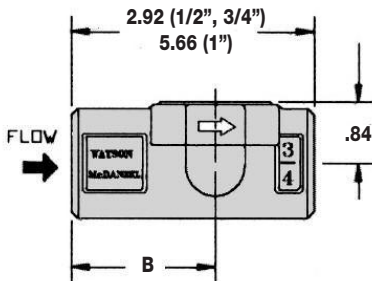
WU450 Series

Universal Connectors - Dimensions

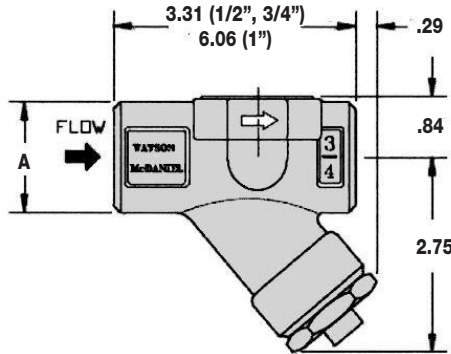
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WU450, WU450S, WU450SB, Universal Connectors
Connectors available in 1/2", 3/4" and 1" sizes in NPT or Socket-Weld Connections

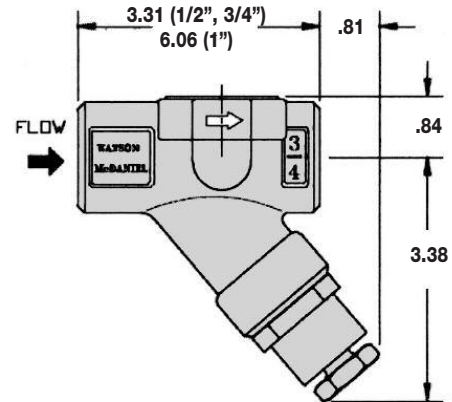
Note: Optional Flange units available.



WU450
(No Strainer)



WU450S
(Strainer)



WU450SB
(Strainer & Blowdown)

DIMENSIONS - inches		
Size	A	B
1/2"	1.50	1.97
3/4"	1.50	1.97
1"	1.75	3.35

UNIVERSAL STYLE STEAM TRAPS

WU450 Series

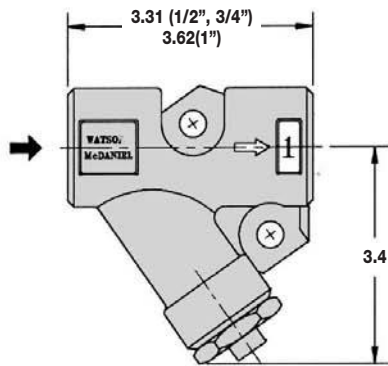
Universal Connectors - Dimensions

WU450S-LR & WU450SB-LR Universal Connectors

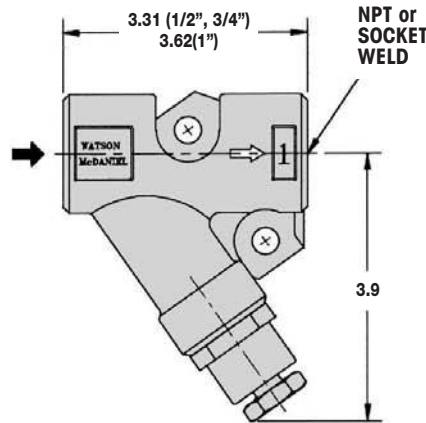
Connectors available in 1/2", 3/4" and 1" sizes in NPT or Socket-Weld Connections

Note: Optional Flange units available.

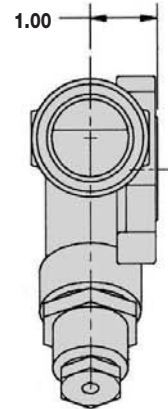
Flow Direction - LEFT TO RIGHT



WU450S-LR
(Strainer)



WU450SB-LR
(Strainer & Blowdown)

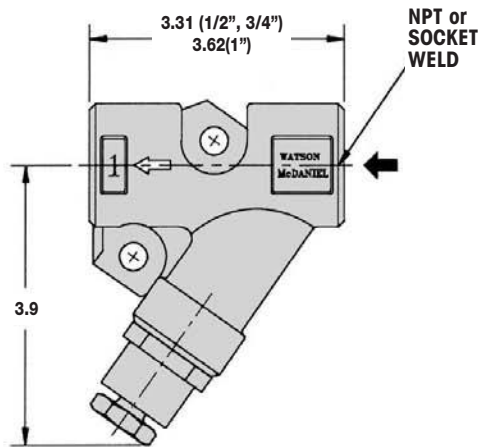
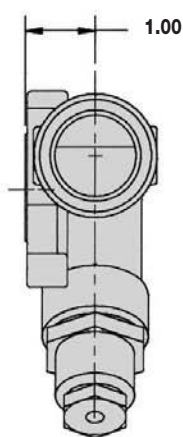


WU450S-RL & WU450SB-RL Universal Connectors

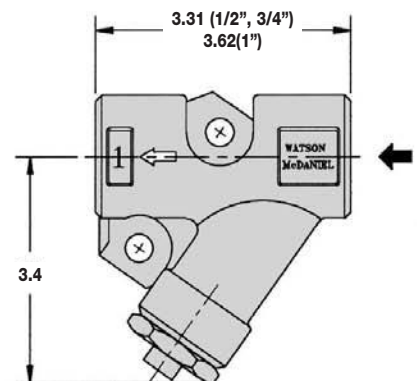
Connectors available in 1/2", 3/4" and 1" sizes in NPT or Socket-Weld Connections

Note: Optional Flange units available.

Flow Direction - RIGHT TO LEFT



WU450SB-RL
(Strainer & Blowdown)



WU450S-RL
(Strainer)