

All Stainless Steel Construction  
Hardened Stainless Disc & Seat  
Pressures to 600 psig

## Series WLD 1700 THERMODYNAMIC LIQUID DRAIN TRAPS

### Applications

The WLD 1700 Thermodynamic liquid drain traps are designed to remove condensate automatically from compressed air systems. The design is particularly suited for individual work stations. Typical uses are:

- Air Main Drips
- Air Main Risers
- Air Stations
- Air Filters
- Small Dryers
- Any application where petcock is presently used

### Features

- Stainless steel construction provided with NPT threaded connections and hardened seating surfaces for long wear and corrosion resistance
- Excellent capability for handling light to medium loads
- Works efficiently in any position
- Snap-opening provides purging action in unit being drained
- Compact for easy installation
- Operates as low as 2 psig

### How It Works

Initial pressure lifts the disc off the seating surface. With no condensate present, air pressure will quickly become trapped above the disc. This pressure (lower than line pressure) working on a large disc area will close on a small inlet area.

Opening occurs when pressure above the disc is lowered due to a minute controlled leakage. If condensate is present it will be discharged, if not, the disc will quickly close again.

The trap operates on a time cycle which is approximately once every two minutes. When the trap is first installed the cycle rate may be lower until internal parts are wetted giving a tighter seal.



WLD-1700S  
Optional Strainer &  
Blowdown

LIQUID DRAIN  
TRAPS

Watson McDaniel reserves the right to change the designs and/or materials of its products without notice



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Manufacturers of:

PRESSURE & TEMPERATURE REGULATORS - RELIEF VALVES - STEAM TRAPS - CLEAN STEAM PRODUCTS  
LIQUID DRAINERS - PRESSURE PUMPS - EJECTORS - SPECIALTY PRODUCTS



ASME Sect VIII Div I

LD-110

# WLD 1700 Thermodynamic Drain Trap Specifications

## Dimensions & Weights

Series	A	B	C	E	G	H	X	Y	Z	Shipping Weight (lbs)
1/2" WLD 1701							2.4	2.0	1.4	.75
1/2" WLD 1702S	3.2	1.4	1.7	.5	4.3	2.5				1.5
1/2" WLD 1703SB	3.2	1.4	1.7	.5	5	3.5				1.9

\* S = Strainer & SB = Strainer & Blowdown

## Pressure/Temperature Rating

Maximum Operating Pressure (PMO)..... 600 psig  
 Maximum Allowable Pressure (PMA).....600 psig  
 Maximum Allowable Temperature (TMA).....800° F

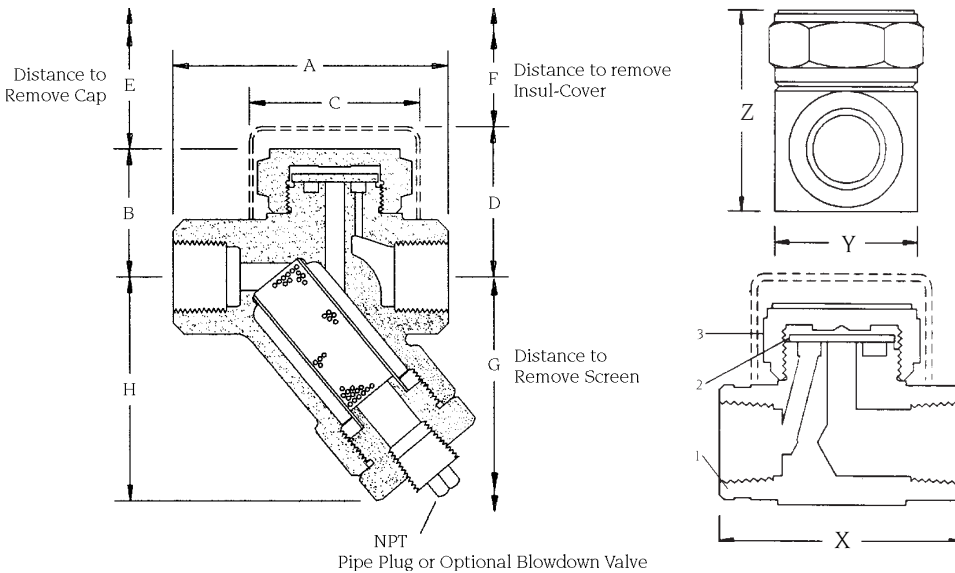
## Materials

(1)Body .....Stainless Steel, AISI 420F  
 (2)Disc .....Stainless Steel, AISI 420  
 (3)Cap .....Stainless Steel, AISI 416  
 Strainer Screen .....Stainless Steel, AISI 304  
 Blowdown Valve .....Stainless Steel, AISI 303

## Capacity Table -

Disc Type Drainers cold water capacities in lbs/hr at 60° F

Pressure (psig)	Capacity
2	90
5	130
10	190
25	300
50	425
80	530
100	600
125	670
150	715
180	790
200	835
250	955



## For GPM divide by 500

Note: Maximum back pressure not to exceed 80% of inlet pressure.

## Typical Installation

