

# SERIES WLDI500

## INVERTED BUCKET DRAINER

### INSTALLATION INSTRUCTIONS

INSTRUCTION PART NO. 2218800 REVISION 1

### INSTALLATION

Before installing the Watson McDaniel Inverted Bucket Drainer, blow down the piping that leads to the unit's inlet. Use full line pressure to remove all scale, chips, debris, etc. Be sure the traps differential pressure rating is adequate for the installation. The maximum pressure differential (the difference between the drainer's inlet and outlet pressures) the drainer will open against is stamped on the trap cover.

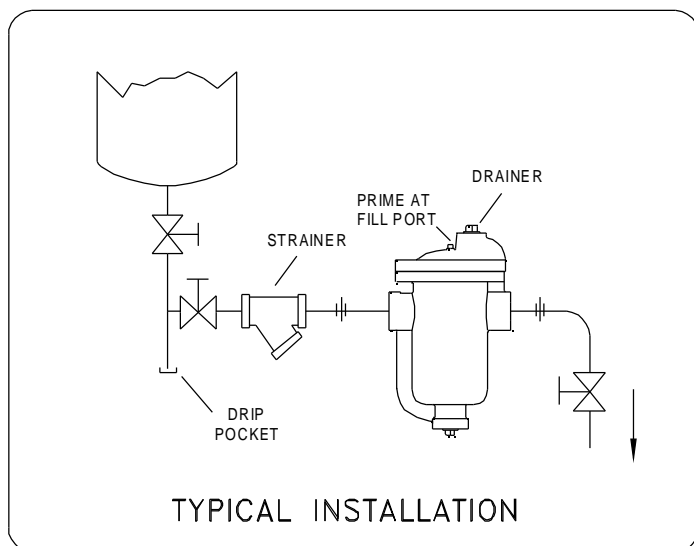
Install the drainer with the inlet below the liquid level of the equipment to be drained. A sketch of a recommended hook up arrangement is shown below. Make inlet piping as short as possible with a minimum of elbows and other restrictions. Install a dirt leg in the line ahead of the drainer.

**IMPORTANT:** Drainer must be primed with water before system start-up or unit will not open. Note fill port in cover.

To allow for maintenance, install a valve on each side of the drainer. All valves should be full port style to avoid restricted flow. Install strainer upstream of the drainer.

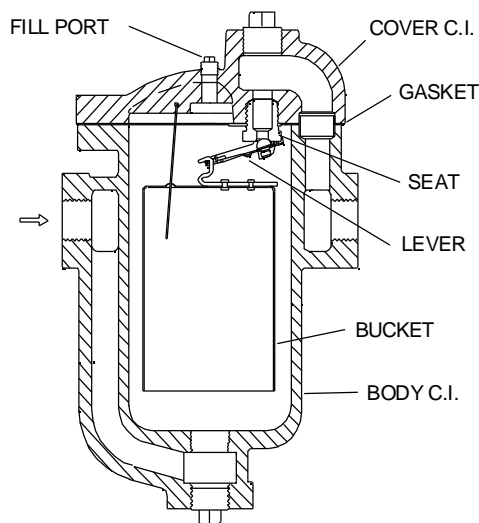
If the discharge piping is to be elevated, be sure that the differential pressure is adequate at all times to provide proper drainage. Install a check valve (optional) in the discharge piping near the drainer to prevent backflow when the system is not operational.

- PMO 200 PSIG
- TMO 450°F
- PMA 250 PSIG up to 450°F
- TMA 450°F @ 250 PSIG

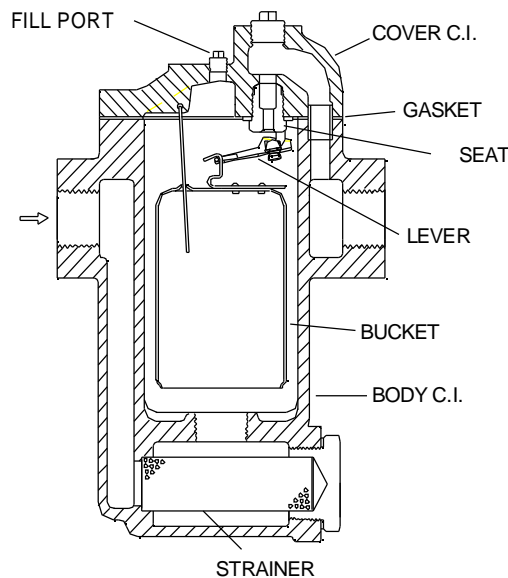


### MAX. OPERATING PRESSURES

1501 .....	150 psig
1502 .....	200 psig
1503 .....	200 psig
1521 .....	150 psig
1522 .....	200 psig
1523 .....	200 psig



WLD 1501 - 1502 - 1504



WLD 1521 - 1522 - 1524

Each Watson McDaniel Company Product is warranted against defects in material and workmanship for one year from date of shipment. This warranty extends to the first retail purchaser only. All defective material must be returned to the person from whom you purchased the Product, transportation prepaid, free of any liens or encumbrances, and if found to be defective will be repaired free of charge or replaced, at the warrantor's or seller's option. If the material is replaced, any replacement will be invoiced in the usual manner and after inspection of alleged defective material an adjustment will be made for depreciation caused by purchaser's use. In no event will Watson McDaniel Company be liable to do more than refund the original contract price. Incidental and consequential damages are excluded, whether under this warranty or otherwise. All implied warranties, including warranties of merchantability and fitness for a particular purpose, are disclaimed and excluded.

## HOW IT WORKS

Having only two moving parts, the valve lever assembly and bucket, these drainers will not stick, bind or clog since they do not have fixed pivots or complicated linkages. They operate on the difference in density between gas and liquid. During start-up, the bucket is submerged in the prime thus drainer is open and condensate flows out. When air or gases enter to fill the bucket, turning it into a float, drainer goes closed. As air weeps out the vent hole at the top of the bucket, condensate is displacing the air/gases inside the bucket until it loses buoyancy and completely submerges in the condensate to re-open the drainer and drain more condensate.

## MAINTENANCE

Isolate drainer from both supply and return lines.

Remove cover and discard gasket.

Unhook bucket from lever.

Inspect lever and seat assembly for dirt and wear. If worn install a new repair kit. If dirty, clean using method compatible with system.

Reinstall cover and bucket assembly using a new gasket.

Torque cover bolts and reactivate supply and return lines.

## ORDERING SPARE PARTS

Specify the description of the part. Indicate the drainer Series number and differential pressure which is stamped on the cover. Also indicate adjacent Part No.

Typical Specification: Series 1501 lever and seat assembly for 20 psig differential pressure. Part No. 5-9.

## MATERIALS

Body & Cover . . . . . Cast Iron, ASTM A-278 Class 30  
 Nuts & Bolts . . . . . High-tensile Steel  
 Gasket . . . . . Non-Asbestos Fiber  
 Bucket . . . . . Stainless Steel  
 Lever & Seat Ass'y . . . . . Stainless Steel  
 Valve & Seat . . . . . Heat Treated Stainless Steel  
 Strainer . . . . . Stainless Steel\*

\*1521, 1522, 1524 only

## REPAIR KITS

WLD 1501 & 1521  
 SCREEN . . . . . Part No. 9-1  
 GASKET . . . . . Part No. 3-7  
 BUCKET and CLIP . . . . . Part No. 4-6  
 \*\* LEVER and SEAT ASSEMBLY . . . Part No. 5-9

WLD 1504 & 1524  
 SCREEN . . . . . Part No. 9-2  
 GASKET . . . . . Part No. 3-7  
 BUCKET and CLIP . . . . . Part No. 4-7  
 \*\* LEVER and SEAT ASSEMBLY . . . Part No. 5-10

WLD 1503 & 1523  
 SCREEN . . . . . Part No. 9-3  
 GASKET . . . . . Part No. 3-8  
 BUCKET and CLIP . . . . . Part No. 4-8  
 \*\* LEVER and SEAT ASSEMBLY . . . Part No. 5-11

\*\* SPECIFY MAXIMUM OPERATING INLET PRESSURE WHEN ORDERING.