

Liquid Drainers

Inverted Bucket Type Liquid Drainer

WLD1500 Series

Inverted Bucket Type

Model	WLD1501, WLD1502, WLD1504, WLD1521, WLD1522, WLD1524
Sizes	3/4", 1"
Connections	NPT
Body Material	Cast Iron
PMO Max. Operating Pressure	200 PSIG
TMO Max. Operating Temperature	450°F
PMA Max. Allowable Pressure	250 PSIG up to 450°F
TMA Max. Allowable Temperature	450°F @ 250 PSIG



WLD1521/1522/1524
with Strainer

Typical Applications

The **WLD1500 Series** Inverted Bucket Liquid Drain Traps are recommended for the removal of liquids from compressed air systems. A scrubber wire is used to keep bleed hole on top of inverted bucket from clogging due to oil that may be present in the water being drained. Oil mixed with water is typically found on compressed air systems.

How It Works

When there is condensate in the system, the inverted bucket inside the liquid drain trap rests on the bottom due to its weight; with the valve in the open position. This allows liquid entering the trap to be discharged through the seat orifice located at the top. When air enters the trap, the bucket floats to the surface and closes off the discharge valve, containing the air in the system. Eventually, air is bled off through a small hole in the top of the bucket and the bucket sinks; repeating the cycle.

Features

- Hardened stainless steel valves and seat
- Only two moving parts
- Scrubber wire in air vent of bucket
- Discharge orifice at top of trap reduces potential for clogging
- In-line repairable

Sample Specification

Drain trap shall be an inverted bucket trap design with cast iron body, all stainless steel internals, hardened valve & seat, plus a scrubber wire. The unit shall be in-line repairable.

Installation

Installation should include isolation valves for maintenance purposes. Trap must be installed in upright position to function properly. It may be necessary to prime the bucket trap by filling it with water through the priming port prior to startup.

Maintenance

Close isolation valves prior to any maintenance. All working components can be replaced with the drain trap remaining in the pipeline. Repair kits include lever & seat assembly, strainer screen and gaskets. For full maintenance details see Installation and Maintenance Manual.

MATERIALS	
Body & Cover	Cast Iron, ASTM A-278 Class 30
Nuts & Bolts	High-Tensile Steel
Gasket	Non-Asbestos Fiber
Bucket	Stainless Steel
Scrubber	Stainless Steel
Lever & Seat Assembly	Stainless Steel
Valve & Seat	Hardened Stainless Steel
Integral Strainer*	Stainless Steel

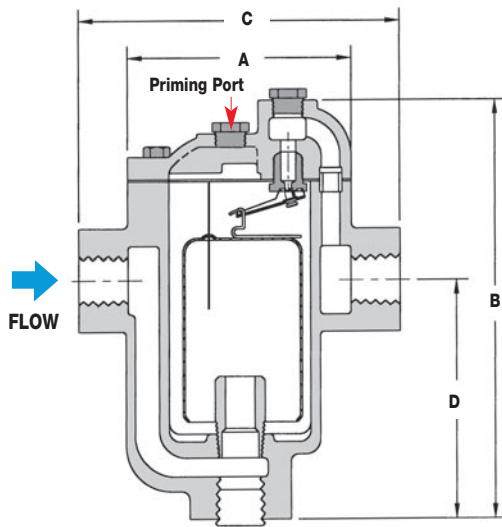
* WLD1521, WLD1522 & WLD1524 models only.

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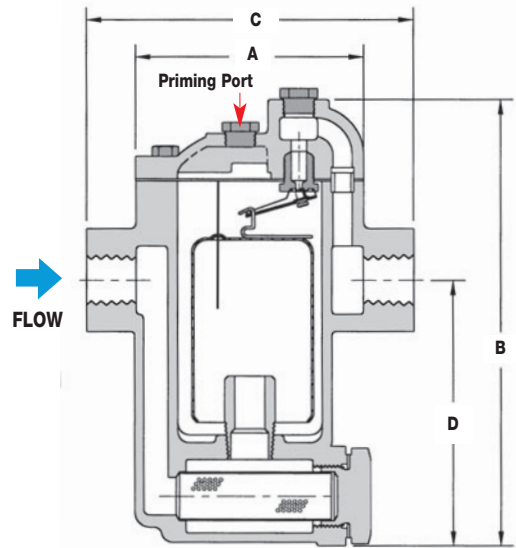
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WLD1501/1502/1504



WLD1521/1522/1524
with Strainer

DIMENSIONS & WEIGHTS – inches / pounds						
Model	Size	A	B	C	D	Weight
WLD1501-13-N	3/4"	3 ¹³ / ₁₆	5 ⁷ / ₁₆	5	2 ¹³ / ₁₆	5
WLD1502-13-N	3/4"	3 ¹³ / ₁₆	6 ¹⁵ / ₁₆	5	4 ⁵ / ₁₆	6
WLD1504-14-N	1"	7	11 ¹³ / ₁₆	7 ¹³ / ₁₆	7	27
WLD1521-13-N	3/4"	3 ¹³ / ₁₆	6 ¹ / ₈	5	3 ⁷ / ₁₆	5.5
WLD1522-13-N	3/4"	3 ¹³ / ₁₆	7 ¹ / ₈	5	4 ⁷ / ₁₆	6
WLD1524-14-N	1"	7	12 ⁷ / ₁₆	7 ¹³ / ₁₆	7 ⁷ / ₁₆	30

How to Size / Order

Determine the capacity (lbs/hr) required at the specified differential pressure. Locate differential pressure on capacity chart; move down column to capacity required. Make sure to select the correct model based on the maximum inlet pressure.

Example:

Required to drain 200 lbs/hr at a differential pressure of 5 PSI. The maximum inlet pressure is 30 PSIG.

Select Model: **WLD1521-13-N**, 3/4" NPT, with strainer, capacity up to 220 lbs/hr based on 5 PSI differential pressure.

Capacity in lbs/hr is based on differential pressure across the drainer. Select a model with an equal or higher PMO (max. operating pressure) than the maximum inlet pressure to the drainer. If the pressure to the drainer exceeds the PMO, the drainer may not open. If discharging to atmosphere, the differential pressure is equal to the inlet pressure.

CAPACITIES – Cold Water (lbs/hr)													
Model Code	PMO* (PSIG)	Size	Differential Pressure (PSI)										
			2	5	10	25	50	80	100	125	150	180	200
WLD1501-13-N	150	3/4"	145	220	325	510	720	900	1010	1130	1215		
WLD1521-13-N	150	3/4"	145	220	325	510	720	900	1010	1130	1215		
WLD1502-13-N	200	3/4"	170	260	380	595	835	1045	1175	1315	1410	1550	1645
WLD1522-13-N	200	3/4"	170	260	380	595	835	1045	1175	1315	1410	1550	1645
WLD1504-14-N	200	1"	500	760	1105	1740	2460	3065	3450	3865	4140	4555	4835
WLD1524-14-N	200	1"	500	760	1105	1740	2460	3065	3450	3865	4140	4555	4835

* PMO based on a liquid with a specific gravity of 1.0. Consult factory for the PMO of a liquid with specific gravity less than 1.0.