## **WLD1800/1800R** Series

**Guided Float Type** 

# LIQUID

### **Guided Float Type Liquid Drainer**

Model	WLD1800 Non-repairable WLD1800R Repairable
Sizes	1/2", 3/4"
Connections	NPT
Body Material	Stainless Steel
PMO Max. Operating Pressure	400 PSIG
TMO Max. Operating Temperature	500°F
PMA Max. Allowable Pressure	400 PSIG @ 500°F
TMA Max. Allowable Temperature	500°F @ 400 PSIG





WLD1800 (Non-Repairable)

WLD1800R (Repairable)

#### **Typical Applications**

The WLD1800/1800R Series are used on industrial air and gas applications for drainage of liquid from systems.

#### **How It Works**

The WLD1800 Series liquid drainers contain a float-operated valve. When liquid enters the drainer, the float rises opening the valve which allows liquid to be drained.

#### **Features**

- Stainless steel body
- All stainless steel internals for longer service life
- Guided float ensures proper valve seating on every cycle
- Repairable unit available (WLD1800R)

#### Sample Specification

The liquid drain trap shall have a guided-float operation with a tamper-proof seal-welded stainless steel body and all stainless steel internals. The unit shall be available with an in-line repairable version. All units to be equipped with FNPT threaded end connections.

#### Installation

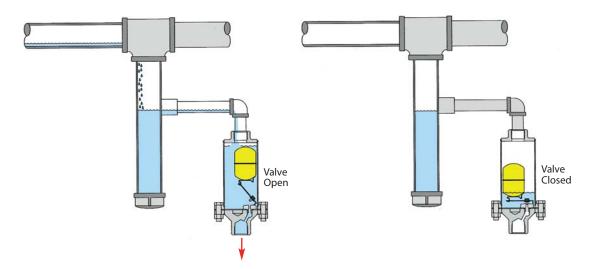
The installation should include an in-line strainer. The trap must be level and upright for the float mechanism to operate. Trap must be adequately sized and properly located in the system.

#### Maintenance

The WLD1800 is non-repairable. The WLD1800R is fully repairable and all working components can be replaced. Repair kits include float, lever & seat assembly, and gaskets. For full maintenance details see Installation and Maintenance Manual.

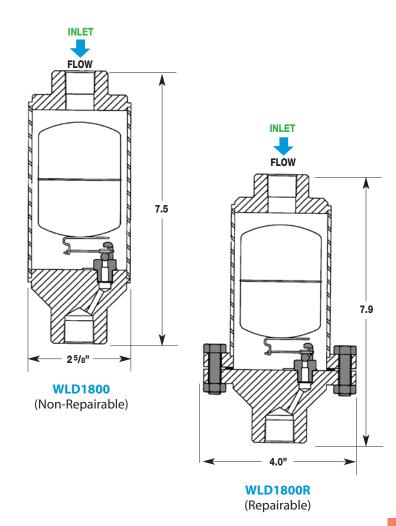
MATERIALS	
Body	Stainless Steel, AISI 304
Inlet & Outlet Fittings	Stainless Steel, AISI 304
Float Assembly	Stainless Steel, AISI 304
Valve & Lever Assembly	Stainless Steel, AISI 303
Seat	Hardened Stainless Steel
*Gasket (Repairable only)	Grafoil
Washer, Seat	302 Stainless Steel
*Bolt, Hex, HD	Stainless Steel, AISI 316
*Nut, Jam	Stainless Steel, 18-8

<sup>\*</sup> WLD1800R repairable models only.



## **Guided Float Type Liquid Drainer**

WLD1800 - N	lon-Repairable	,	Weight: 4 lbs			
Connection Inlet x Outlet	Model Code	PMO <b>PSI</b>	Orifice <b>Size</b>			
3/4" x 1/2"	WLD1811-N	400	.078"			
3/4" x 3/4"	WLD1812-N	400	.078"			
1/2" x 1/2"	WLD1813-N	400	.078"			
3/4" x 1/2"	WLD1821-N	255	.101"			
3/4" x 3/4"	WLD1822-N	255	.101"			
1/2" x 1/2"	WLD1823-N	255	.101"			
3/4" x 1/2"	WLD1831-N	175	.125″			
3/4" x 3/4"	WLD1832-N	175	.125″			
1/2" x 1/2"	WLD1833-N	175	.125″			
WLD1800R -	Repairable		Weight: 5 lbs			
Connection Inlet x Outlet	Repairable Full Model Code	PMO <b>PSI</b>	Weight: 5 lbs Orifice Size			
Connection	Full Model		Orifice			
Connection Inlet x Outlet	Full Model Code	PSI	Orifice <b>Size</b>			
Connection Inlet x Outlet 3/4" x 1/2"	Full Model Code WLD1811R-N	<b>PSI</b> 400	Orifice Size			
Connection Inlet x Outlet 3/4" x 1/2" 3/4" x 3/4"	Full Model Code WLD1811R-N WLD1812R-N	<b>PSI</b> 400 400	Orifice Size .078"			
Connection Inlet x Outlet 3/4" x 1/2" 3/4" x 3/4" 1/2" x 1/2"	Full Model Code WLD1811R-N WLD1812R-N WLD1813R-N	<b>PSI</b> 400 400 400	Orifice <b>Size</b> .078" .078" .078"			
Connection Inlet x Outlet 3/4" x 1/2" 3/4" x 3/4" 1/2" x 1/2" 3/4" x 1/2"	Full Model Code WLD1811R-N WLD1812R-N WLD1813R-N WLD1821R-N	PSI 400 400 400 255	Orifice Size .078" .078" .078" .101"			
Connection Inlet x Outlet 3/4" x 1/2" 3/4" x 3/4" 1/2" x 1/2" 3/4" x 1/2" 3/4" x 3/4"	Full Model Code WLD1811R-N WLD1812R-N WLD1813R-N WLD1821R-N WLD1822R-N	PSI 400 400 400 255 255	Orifice Size .078" .078" .078" .101" .101"			
Connection Inlet x Outlet  3/4" x 1/2"  3/4" x 3/4"  1/2" x 1/2"  3/4" x 1/2"  3/4" x 3/4"  1/2" x 1/2"	Full Model Code WLD1811R-N WLD1812R-N WLD1813R-N WLD1821R-N WLD1822R-N WLD1823R-N	PSI 400 400 400 255 255 255	Orifice Size .078" .078" .078" .101" .101" .101"			



#### 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 1,000 lbs/hr at a differential pressure of 200 PSI. The maximum inlet pressure is 250 PSIG.

Select Model: WLD1822-N 3/4" x 3/4" (non-repairable) or WLD1822R-N 3/4" x 3/4" (repairable); capacity up to 1,200 lbs/hr based on 200 PSI differential pressure.

	CAPACITIES - Cold Water (lbs/hr)																			
	Series	PMO* (PSIG)	Orifice Size	1	2	5	10	15	ifferenti 20	al Press 30	ure (PSI) 50	100	150	175	200	250	275	300	350	400
	WLD1810	400	.078″	60	80	120	130	180	260	315	400	570	700	750	800	900	940	1050	1050	1120
>(	WLD1820	255	.101″	90	120	175	195	275	385	470	610	860	1050	1125	1200	1350	1425			
	WLD1830	175	.125″	160	230	325	365	510	730	790	1150	1630	2000	2150						

<sup>\*</sup> 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.

CAPACITY CORRECTION FACTORS																	
Specific Gravity	1	.98	.96	.94	.92	.90	.88	.86	.84	.82	.80	.75	.70	.65	.60	.55	.50
Correction Factor	1	.99	.98	.97	.959	.949	.938	.927	.917	.906	.894	.866	.837	.806	.775	.742	.707

Note: To obtain capacity with a liquid other than water, multiply water capacity by correction factor.