

Liquid Drainers

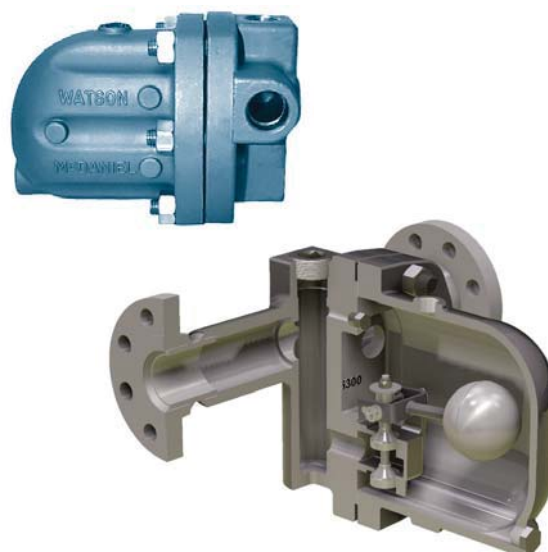
Float Type Liquid Drainer

WLD600 • Carbon Steel
WLD601 • 316 SS

| | |
|--------------------------------|------------------------------|
| Model | WLD600 & WLD601 |
| Sizes | 3/4", 1", 1 1/2", 2", 3", 4" |
| Connections | NPT, SW, Flanged |
| Body Material WLD600 | Carbon Steel |
| Body Material WLD601 | 316 Stainless Steel |
| PMO Max. Operating Pressure | 450 PSIG |
| TMO Max. Operating Temperature | 750°F |
| PMA Max. Allowable Pressure | *990 PSIG @ 100°F |
| TMA Max. Allowable Temperature | *750°F @ 670 PSIG |

* 3/4" - 2" only.

Note: For dimensions and capacities of 3" & 4" liquid drain traps, refer to model FT600 in the Steam Trap section.



Typical Applications

The **WLD600/WLD601 Series** are used in applications where immediate and continuous discharge of large amounts of liquid is required. Typically used in heavy industrial process applications for draining condensate from air or other gases.

How It Works

The WLD600/WLD601 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

- All stainless steel internals for long service life
- Body & cover available in Carbon Steel or 316 SS
- Rugged construction designed for heavy industrial applications
- In-line repairable

Sample Specification

The liquid drain trap shall be float operated with a cast steel body (or stainless steel body for WLD601) and all stainless steel internals. The unit shall be in-line repairable and equipped with a FNPT threaded connection for the use of a balance line.

Installation

The installation should include isolation valves to facilitate maintenance and 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. Installation may require an equalizing or balancing line connected from top of drainer body to the above piping, for proper drainage.

Maintenance

All working components can be replaced with the drain trap remaining in the pipeline. Repair kits include float, valve seat & disc and gaskets. For full maintenance details see Installation and Maintenance Manual.

Options

316 SS Body & Cover: use Model WLD601.

MATERIALS

| | |
|------------------------|------------------------------------|
| Body & Cover WLD600 | Cast Steel, ASTM A-216 WCB |
| Body & Cover WLD601 | Cast 316 SS |
| Cover Studs | Steel, SA 193, Gr B7 |
| Cover Nuts | Steel, SA 194, Gr 2H |
| Cover Gasket | Stainless Steel Reinforced Grafoil |
| Valve Assembly | Stainless Steel, AISI 431 |
| Gasket, Valve Assembly | Stainless Steel Reinforced Grafoil |
| Pivot Assembly | Stainless Steel, 17-4 PH |
| Mounting Screws | Stainless Steel Hex Head, 18-8 |
| Float | Stainless Steel, ASTM 240 TY 304 |

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.

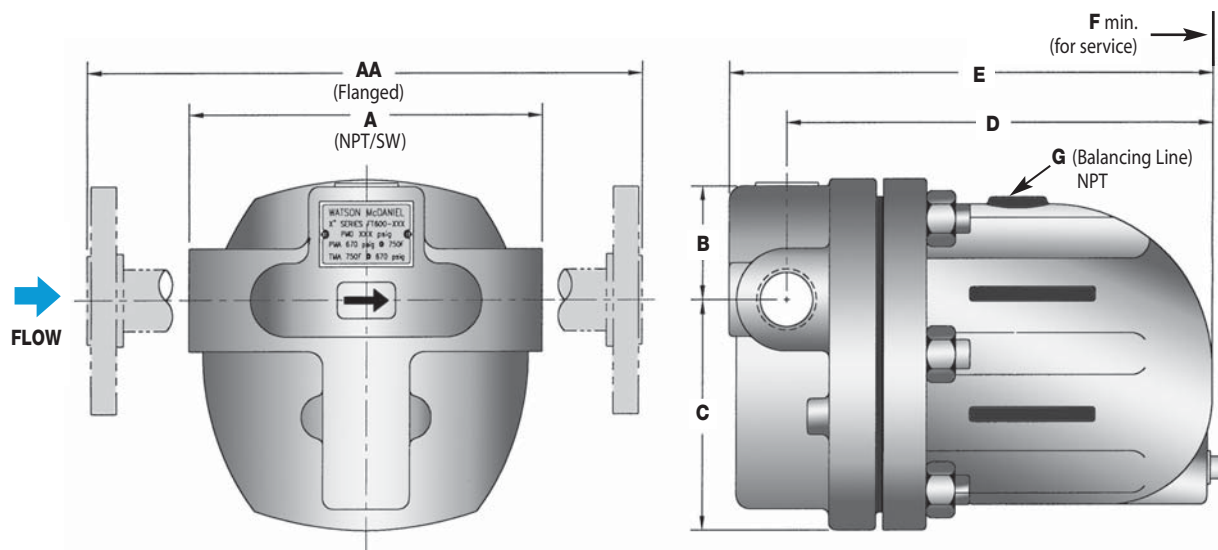
Example:

Required to drain 2,000 lbs/hr at a differential pressure of 300 PSI. The maximum inlet pressure is 325 PSIG.

Select Model: **WLD600-450-14-N**, 1" NPT, capacity up to 2,250 lbs/hr based on 300 PSI differential pressure

Connections: (N=NPT, SW=Socket Weld, F150=150# FLG, F300=300# FLG, F600=600# FLG)

Example Models: **WLD600-450-14-SW** = 1" Socket Weld
WLD600-450-14-F600 = 1" 600# FLG



| DIMENSIONS & WEIGHTS – inches / pounds | | | | | | | | | | |
|--|----------------------------------|---------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|---------------------------------|-----|--------------|-----|
| Size | A | AA | B | C | D | E | F | G * | Weight (lbs) | |
| | | | | | | | | | NPT/SW | FLG |
| 3/4" | 6 ¹ / ₈ | 10 ¹ / ₈ | 2 ¹ / ₈ | 3 ⁷ / ₁₆ | 7 ⁷ / ₁₆ | 8 ⁷ / ₁₆ | 5 ¹³ / ₁₆ | 3/8 | 25 | 31 |
| 1" | 6 ¹ / ₂ | 10 ⁷ / ₁₆ | 2 ¹ / ₂ | 5 ¹ / ₂ | 8 ⁷ / ₁₆ | 9 ¹ / ₂ | 6 ⁵ / ₁₆ | 3/8 | 31 | 36 |
| 1 1/2" | 9 ¹³ / ₁₆ | 14 | 3 ⁷ / ₁₆ | 9 | 10 ⁷ / ₁₆ | 11 ¹⁵ / ₁₆ | 7 ¹³ / ₁₆ | 1/2 | 82 | 91 |
| 2" | 11 ¹³ / ₁₆ | 16 | 3 ¹ / ₈ | 7 ⁷ / ₁₆ | 11 ¹ / ₈ | 13 ⁵ / ₁₆ | 6 ¹³ / ₁₆ | 1/2 | 93 | 107 |

* Balancing Port available with 1/2" flanged connection. Specify on order.

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) | | | | | | | | | | | | For WLD600 & WLD601 | | | | | | |
|----------------------------------|--------------|-----------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|-------|-------|-------|-------|-------|--|
| Model Code PMO (PSIG) | Pipe Size | Orifice Size | Differential Pressure (PSI) | | | | | | | | | | | | | | | |
| | | | 2 | 5 | 10 | 20 | 30 | 40 | 65 | 70 | 80 | 100 | 145 | 200 | 300 | 350 | 450 | |
| WLD600-65-13-N | 3/4" | .156 | 340 | 520 | 730 | 1010 | 1220 | 1440 | 1770 | | | | | | | | | |
| WLD600-65-14-N | 1" | .276 | 1390 | 2140 | 2970 | 4130 | 5000 | 5730 | 7210 | | | | | | | | | |
| WLD600-65-16-N | 1 1/2" | .689 | 4160 | 6430 | 8920 | 12380 | 15000 | 17190 | 21630 | | | | | | | | | |
| WLD600-65-17-N | 2" | 1.122 | 14730 | 22720 | 31540 | 43790 | 53060 | 60790 | 76500 | | | | | | | | | |
| WLD600-145-13-N | 3/4" | .126 | 210 | 320 | 450 | 620 | 760 | 870 | 1090 | 1130 | 1200 | 1340 | 1590 | | | | | |
| WLD600-145-14-N | 1" | .205 | 690 | 1070 | 1490 | 2060 | 2500 | 2870 | 3610 | 3740 | 3980 | 4420 | 5270 | | | | | |
| WLD600-145-16-N | 1 1/2" | .591 | 2360 | 3630 | 5050 | 7010 | 8490 | 9730 | 12240 | 12670 | 13500 | 15000 | 17890 | | | | | |
| WLD600-145-17-N | 2" | .807 | 5840 | 9010 | 12510 | 17370 | 21040 | 24110 | 30340 | 31420 | 33470 | 37200 | 44360 | | | | | |
| WLD600-200-13-N | 3/4" | .106 | 170 | 260 | 360 | 500 | 600 | 690 | 870 | 900 | 960 | 1060 | 1270 | 1480 | | | | |
| WLD600-200-14-N | 1" | .185 | 450 | 690 | 960 | 1330 | 1620 | 1850 | 2330 | 2410 | 2570 | 2860 | 3410 | 3970 | | | | |
| WLD600-200-16-N | 1 1/2" | .531 | 1650 | 2550 | 3540 | 4910 | 5950 | 6820 | 8580 | 8890 | 9470 | 10520 | 12540 | 14610 | | | | |
| WLD600-200-17-N | 2" | .657 | 2890 | 4460 | 6190 | 8590 | 10410 | 11930 | 15010 | 15540 | 16560 | 18400 | 21940 | 25540 | | | | |
| WLD600-300-13-N | 3/4" | .079 | 80 | 130 | 180 | 250 | 300 | 340 | 430 | 450 | 480 | 530 | 630 | 730 | 890 | | | |
| WLD600-300-14-N | 1" | .156 | 340 | 520 | 730 | 1010 | 1220 | 1400 | 1770 | 1830 | 1950 | 2160 | 2580 | 3010 | 3640 | | | |
| WLD600-300-16-N | 1 1/2" | .531 | 1650 | 2550 | 3540 | 4910 | 5950 | 6820 | 8580 | 8890 | 9470 | 10520 | 12540 | 14610 | 17700 | | | |
| WLD600-300-17-N | 2" | .657 | 2890 | 4460 | 6190 | 8590 | 10410 | 11930 | 15010 | 15540 | 16560 | 18400 | 21940 | 25540 | 30950 | | | |
| WLD600-450-13-N | 3/4" | .063 | 50 | 70 | 100 | 140 | 160 | 190 | 240 | 250 | 260 | 290 | 350 | 400 | 490 | 530 | 590 | |
| WLD600-450-14-N | 1" | .126 | 210 | 320 | 450 | 620 | 760 | 870 | 1090 | 1130 | 1200 | 1340 | 1590 | 1860 | 2250 | 2420 | 2720 | |
| WLD600-450-16-N | 1 1/2" | .531 | 1650 | 2550 | 3540 | 4910 | 5950 | 6820 | 8580 | 8890 | 9470 | 10520 | 12540 | 14610 | 17700 | 19040 | 21440 | |
| WLD600-450-17-N | 2" | .657 | 2890 | 4460 | 6190 | 8590 | 10410 | 11930 | 15010 | 15540 | 16560 | 18400 | 21940 | 25540 | 30950 | 33290 | 37490 | |

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