



# PACKAGED AUTOMATIC BOILER FEEDWATER RETURN SYSTEM

For Steam Boilers 1-1/2 to 300 HP, 15 to 250 PSI

## THE PARKER DESIGN

The Parker Automatic Return System provides a quality, heavy duty packaged unit fully assembled and ready to install. The system consists of a durable tank with automatic water make-up valve, suction stop valve, strainer, discharge check valve and heavy duty boiler feed pump with motor.

## ADVANTAGES

Float valve above top of tank with air gap eliminates expensive backflow device.

Heavy 3/16" thick steel tank with protective coating and painted with a durable, baked enamel finish. (1/4" construction optional)

Adequate storage capacity and convenient openings for easy installation.

Mounted and assembled with complete trim for easy, inexpensive installation.

Solid heavy steel, all welded construction and frame for extra strength and protection against vibration.

Automatic float valve assembly, accessible and adjustable.

Tank is easy to clean and provides convenient drain and clean out openings.

Heavy duty pumps with mechanical seal eliminate troublesome leakage and packing and provide reliable and long life service.

## Return Systems R7 to R10

70 to 300 HP



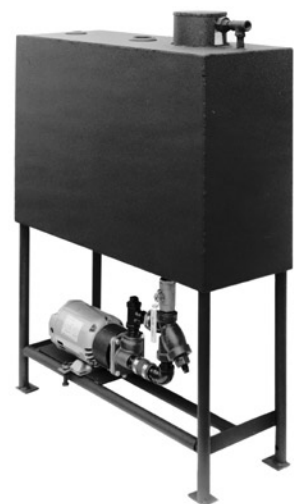
## Return Systems R5 and R6

30 to 50 HP



## Return Systems R1 to R4

1-1/2 to 25 HP



Burks Turbine Pumps feature external impeller adjustment without disturbing piping, disassembling piping or replacing parts. Gives up to 40% longer service life than turbine pumps of other designs.

Return Systems for boilers 70 to 150 HP furnished with dual pumps each of sufficient capacity to supply the required feed water to the boiler.

Optional models available with nonelectric feedwater pre-heater, electric water fill system, motor starters, disconnects, anodes, stainless steel, 1/4" thick carbon steel pump relief valve, Grund-

fos Multistage Centrifugal, and MTH turbine pumps and electrical panels.

The return system is standardly recommended with high pressure steam boilers to supply water with a boiler feed pump that operates on demand from the boiler water level control.

The tank provides storage for water make-up and return condensate from the system when available with the advantage of pre-heated water. The tank is also used for convenience of feeding water treatment to the boiler.

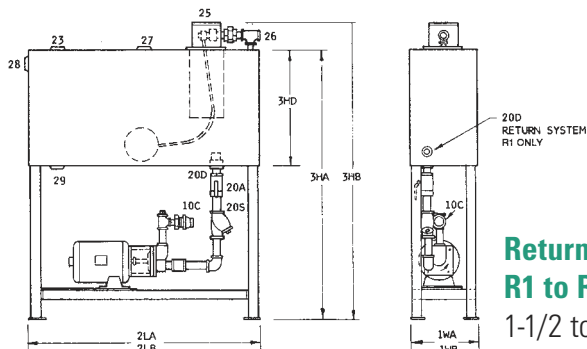
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**"Never a Compromise for Quality or Safety"**



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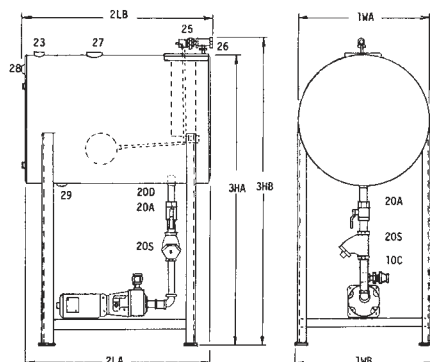


## Return Systems R1 to R4

1-1/2 to 25 HP

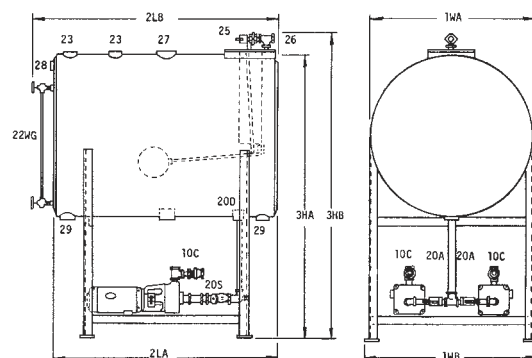
## Return Systems R7 to R10

70 to 300 HP



## Return Systems R5 and R6

30 to 50 HP



| NO.  | ITEM                              | HP   | RETURN SYSTEM NUMBER |         |         |         |            |            |           |
|------|-----------------------------------|------|----------------------|---------|---------|---------|------------|------------|-----------|
|      |                                   |      | R1                   | R3      | R4      | R5-6    | R7         | R8         | R9        |
|      | BOILER SIZE, MAXIMUM              | HP   | 3 HP                 | 16 HP   | 25 HP   | 50 HP   | 70 HP      | 100 HP     | 150 HP    |
|      | TANK MODEL                        |      | ORR1020              | ORR1036 | ORR1336 | WRH3036 | WRH3648    | WRH3660    | WRH4260   |
|      |                                   |      |                      |         |         |         |            |            |           |
| 1WA  | WIDTH                             | IN.  | 10                   | 10      | 13      | 30      | 36         | 36         | 42        |
| 1WB  | WIDTH OVERALL                     | IN.  | 10                   | 10      | 13      | 32      | 38         | 38         | 44        |
| 2LA  | LENGTH                            | IN.  | 20                   | 36      | 36      | 36      | 48         | 60         | 60        |
| 2LB  | LENGTH OVERALL                    | IN.  | 28                   | 36      | 36      | 38      | 53         | 65         | 65        |
| 3HA  | HEIGHT                            | IN.  | 35                   | 42      | 46      | 58      | 63         | 63         | 69        |
| 3HB  | HEIGHT OVERALL                    | IN.  | 38                   | 45      | 49      | 62      | 67         | 67         | 73        |
| 3HD  | DEPTH                             | IN.  | 12                   | 18      | 24      |         |            |            |           |
|      |                                   |      |                      |         |         |         |            |            |           |
| 10C  | DISCHARGE CHECK VALVE             | IN.  | 1/2                  | 3/4     | 3/4     | 1       | (2) 1      | (2) 1      | (2) 1-1/4 |
| 20D  | SUCT. STOP VALVE & STRAINER       | IN.  | 1                    | 1       | 1       | 1-1/4*  | (2) 1-1/4* | (2) 1-1/4* | (2) 1-1/2 |
| 20D  | TANK PUMP CONNECTION              | IN.  | 1                    | 1       | 1       | 2       | (2) 2      | (2) 2      | (2) 2     |
| 22WG | WATER GAUGE GLASS (1/2" FIXTURES) | IN.  | NF                   | NF      | NF      | NF      | 5/8 X 24   | 5/8 X 24   | 5/8 X 24  |
| 23   | CONDENSATE RETURN                 | IN.  | 3/4                  | 1-1/2   | 1-1/2   | 2       | (2) 2      | (2) 2      | (2) 2     |
| 25   | FLOAT VALVE                       | IN.  | 1/2                  | 1/2     | 1/2     | 3/4     | 3/4        | 3/4        | 1         |
| 26   | WATER INLET                       | IN.  | 1/2                  | 1/2     | 1/2     | 3/4     | 3/4        | 3/4        | 1         |
| 27   | VENT OUTLET                       | IN.  | 1-1/2                | 2       | 2       | 2-1/2   | 3          | 3          | 3         |
| 28   | RETURN TANK OVERFLOW              | IN.  | 1                    | 1       | 1-1/4   | 1-1/4   | 1-1/4      | 2          | 2         |
| 29   | RETURN TANK DRAIN                 | IN.  | 1-1/2                | 1-1/2   | 1-1/2   | 1-1/2   | (2) 2      | (2) 2      | (2) 2     |
|      |                                   |      |                      |         |         |         |            |            |           |
|      | FULL TANK WATER CAPACITY          | GAL. | 11                   | 28      | 49      | 110     | 211        | 264        | 360       |
|      | WEIGHT-LESS PUMP & FIT. APRX.     | LBS. | 87                   | 160     | 210     | 365     | 580        | 660        | 815       |
|      | WEIGHT-WITH PUMP & FIT. APRX.     | LBS. | 132                  | 205     | 265     | 440     | 710        | 790        | 1000      |
|      | CRATED SHIPPING WEIGHT APRX.      | LBS. | 185                  | 290     | 355     | 540     | 850        | 940        | 1250      |

\* 1 1/2" SIZE FURNISHED WITH 5G5-1.25TI CENTRIFUGAL PUMP



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