

Style "WA" Valve Assembly

FEATURES

- Sizes 1/2" through 1 1/2"
- Three-way Type
- Rubber U-cup maintenance-free stem packing
- Quick-disconnect stem

GENERAL DESCRIPTION

These valves are especially suited for Temperature Regulators for applications requiring opening one line and closing another by operation of the regulator actuator to which it is attached. Typical service is bypass, diverting, blending and alternating hot-cold service

Valve stems of highly finished type 316 stainless steel feature the quick-detach valve stem construction which permits removal of the valve from the regulator without disturbing the valve stem stroke adjustment in the upperworks.

SPECIFICATIONS

Type: Three-way

Sizes: 1/2" through 1 1/2"

Action: Modulating. Opens one line, closes another.

Connections:

Ports A and C Female threaded Unions
 (Sil-braze unions available).

Port B Bottom cap threaded female, NPT.

Materials:

Valve Trim Stainless steel

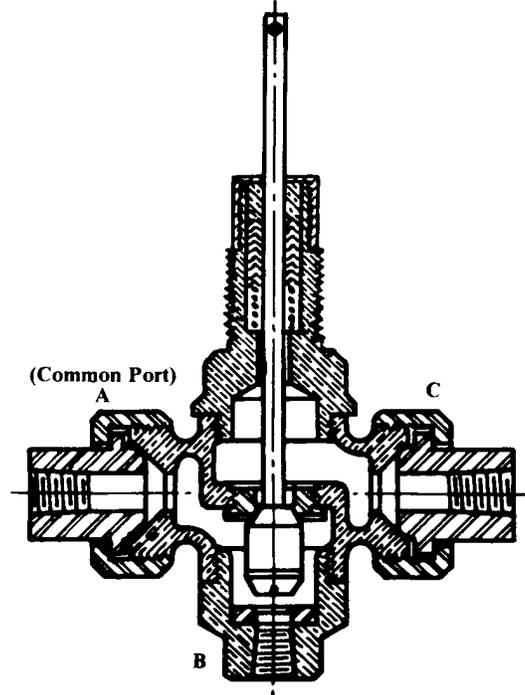
Valve Stem Type 316 St. St. Quick detach type.

Stem Packing Rubber U-cup

Body Brass

Unions Bronze

Other Parts Bronze



With stem up, port B is open. With stem down, port C is open.

Capacity, C _v					
Size	1/2"	3/4"	1"	1 1/4"	1 1/2"
A to B	4.2	7.8	11.1	23.5	31.7
A to C	3.1	5.6	8.8	18.1	25.0

Note: Maximum factory test allowable leakage: 1/2" to 1" sizes 0.05% of rated valve capacity @ 50 PSI; 1/4" and 1 1/2" sizes -0.05% of rated valve capacity @ 20 PSI.

Maximum Valve Design Ratings:

(Supply Pressure and Allowable

Pressure Drop)

Max. supply pressure: 225 psi @ 100° F.

Max. temperature: 400° F. @ 150 PSI.

Max. pressure drop:

1/2", 3/4" sizes ..100 PSI. 1" size - 75 PSI.

1 1/4", 1 1/2" sizes 50 PSI.

The supply pressure should not exceed the above ratings. The recommended pressure drops in the chart consider the unbalanced area of the valve port, the valve design and the power limit of the thermal element.

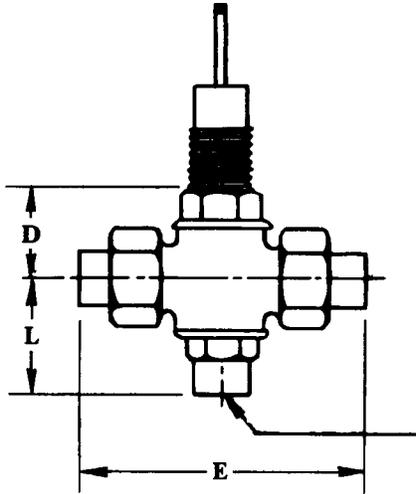
Type "WA" used with self-actuated temperature regulator series.

Maximum Recommended Pressure Drops, PSI*

Valve Size, In.	SATR SERIES							
	RT-1001	RT-1003	RT-1004	RT-1006	RT-1007	RT-1008	RT-1009	RT-1011
1/2	65	100	100	90	100	100	100	100
3/4	30	75	100	40	50	75	75	75
1	15	40	75	20	30	40	40	40
1 1/4	10	25	45	-	20	25	25	25
1 1/2	7	20	30	-	10	20	20	20

* Supply pressure to valve less any back pressure to the valve.

DIMENSIONS



Installation Dimensions:

Valve Size, In.	1/2	3/4	1	1 1/4	1 1/2
D*	1-9/16	1-7/8	1-7/8	2-43/64	3-1/16
L	2-1/8	2-7/16	2-7/16	3-15/64	3-3/4
E	4-3/4	6-3/16	6-1/4	7-13/16	8-11/16

* Subject to change without notice.

INSTALLATIONS

Alternating:

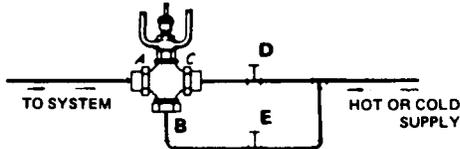


Figure 1. Showing how connections would be made where it is desired to shift from heating service to cooling service by manually opening and closing proper valves in the supply line.

Blending:

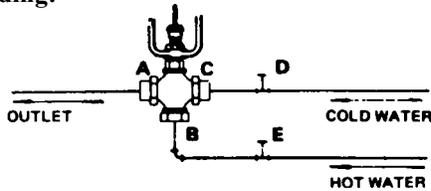


Figure 2. Illustrating a simple means for blending hot and cold water where a rough mixing is suitable.

Diverting:

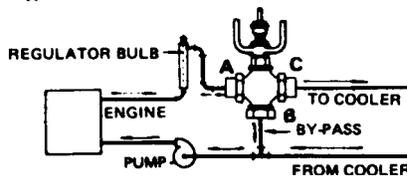


Figure 3. The drawing above illustrates the most widely used method of cooling water control for internal combustion engines.

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