



TENNESSEE  
A SIEBE COMPANY

Sales Manual Section 160  
Product Specification Style "CSS"  
(for Temperature Regulator Service)

## Style "CSS" Valve Assembly

### Features:

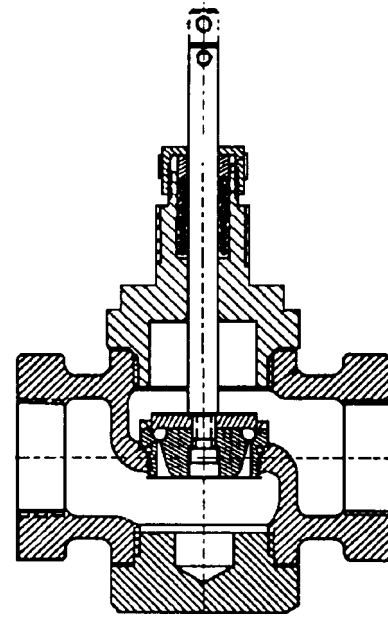
- Sizes 1/2", 3/4", 1"
- Single-Seated (Teflon Seal)
- Direct Acting, Reverse Acting
- Stainless Steel Construction

### General Description

These valves are especially suited for Temperature and Pressure Regulators where single-seated construction is desired.

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

Stainless steel body and trim make this valve ideal for most any process material and ambient conditions.



### Specifications

Type: .....Single Seated. Direct or Reverse Acting.

Sizes: ..... 1/2", 3/4", 1"

#### Materials:

Stem .....316 SS

Plug ..... 316 SS w/Teflon Seal

Seat Ring .....316 SS

Body: .....CF8M (316 SS)

Packing: ..... Teflon Chevrons with 316 SS Spring

Ends: ..... Female Threaded

Other Parts: ..... Stainless Steel

Maximum Leakage..... (Factory Test): 0.05% of rated flow at 50 psig Δ P (pressure drop) for Direct or Reverse Acting.

#### Maximum Pressure/Temperature:

Press: ..... 450 psig @ 100°F

Temp: ..... 450°F @ 450 psig

#### Flow (Preliminary)

| Size | End Connection | Port Size | Action | Max. Pres. Drop | Cv       | Max. Seat Leakage @ 50 ΔP | Flow          |
|------|----------------|-----------|--------|-----------------|----------|---------------------------|---------------|
| 1/2" | 1/2" NPT       | 1/4"      | DA     | 100 psig        | .3 or .6 |                           | Linear        |
| 1/2" | 1/2" NPT       | 1/2"      | DA     | 100 psig        | 2.3      | 31 cc/min.                | Quick Opening |
| 1/2" | 1/2" NPT       | 1/2"      | RA     | 100 psig        | 2.3      | 31 cc/min.                | Quick Opening |
| 3/4" | 3/4" NPT       | 3/4"      | DA     | 100 psig        | 7.3      | 98 cc/min.                | Quick Opening |
| 3/4" | 3/4" NPT       | 3/4"      | RA     | 100 psig        | 7.3      | 98 cc/min.                | Quick Opening |
| 1"   | 1" NPT         | 1"        | DA     | 100 psig        | 9.5      | 127 cc/min.               | Quick Opening |
| 1"   | 1" NPT         | 1"        | RA     | 100 psig        | 9.5      | 127 cc/min.               | Quick Opening |

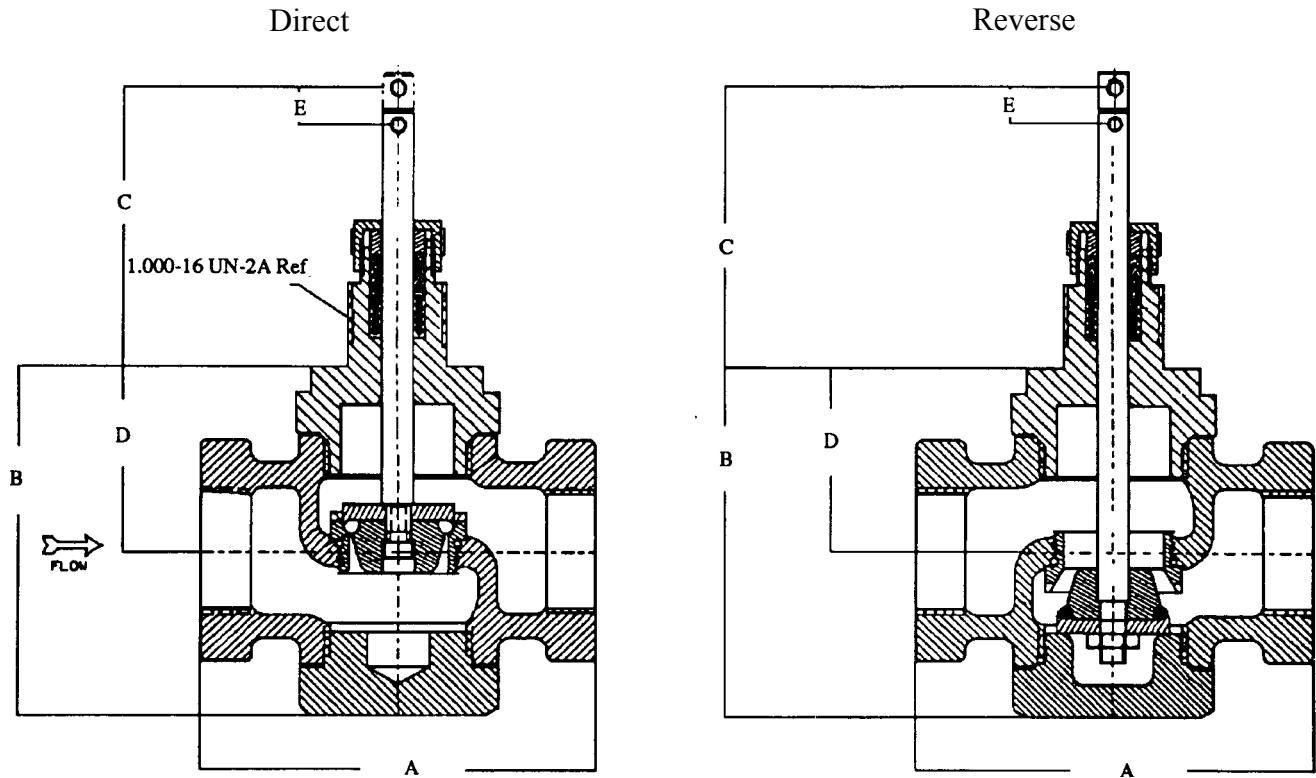
## Style CSS used with self-actuated temperature regulator -

The maximum supply pressure should not exceed the valve rating on front page. Maximum allowable pressure drop is limited by the unbalanced area of the valve port and the power developed by the regulator thermal assembly. Pressure drop figures shown in the following chart apply when the CSS valve is used with the self-actuated temperature regulator series.

### Maximum Recommended Pressure Drops, PSI

| Valve Size In. | SATR Series |         |         |         |         |         |
|----------------|-------------|---------|---------|---------|---------|---------|
|                | RT-1001     | RT-1003 | RT-1004 | RT-1007 | RT-1009 | RT-1011 |
| 1/2"           | 65          | 100     | 100     | 100     | 100     | 100     |
| 3/4"           | 30          | 75      | 100     | 50      | 75      | 75      |
| 1"             | 15          | 40      | 75      | 30      | 40      | 40      |

### DIMENSIONS:



| TYPE    | A    | B      | C      | D      | E     |
|---------|------|--------|--------|--------|-------|
| Direct  | 4.0" | 3.616" | 2.875" | 1.906" | .375" |
| Reverse | 4.0" | 3.619" | 2.875" | 1.906" | .375" |

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