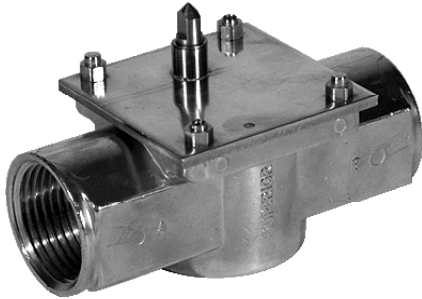


## SUPERIOR VALVE BODIES

### 2 PORT - HIGH PRESSURE

Forged Brass Body For Use With *Astral* & *Corvus* Actuators



**Superior™ 2-port  
High Pressure Body**



#### BENEFITS & SPECIAL FEATURES

- Corrosion resistant 1-piece stainless steel stem
- Brass high pressure bearing plate
- Heavy brass high quality forging
- Also available in a 3-port version
- Available in CXC, NPT, BSP, JIS, and compression fittings
- Double ZOLAST™ rubber "O" ring seal on stem
- Compatible with chilled or hot water
- 600 PSI (41.3 bar) static operating pressure limit
- UL certification: 300 PSI (20.7 bar) continuous duty, 1500 PSI (103.4bar) burst pressure.

#### Description

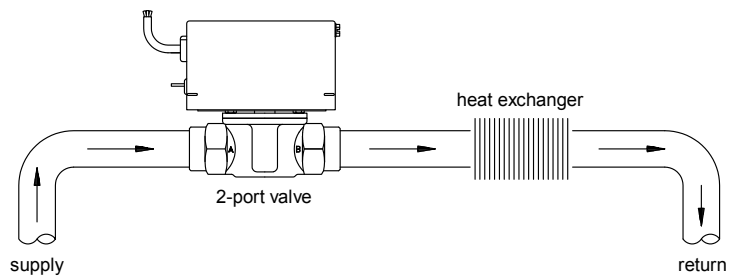
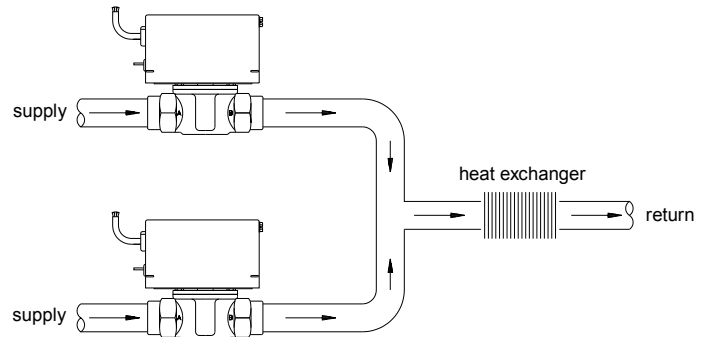
Every Superior body is compatible with all Superior actuators and the ☆Star Astral and Corvus actuators. ☆Star valves are designed primarily for use on chilled or hot water. The valves are compatible with hundreds of other fluids in many environments. The low pressure bodies are incompatible with steam systems; high pressure body and plate are required.

#### Operation

The Superior bodies utilize a paddle that swings between two orifices, or seats. The paddle, stem and bearing plate are removable for cleaning or replacement. Since the plate forms a water-tight seal with the forging, the actuator may be removed without draining the system.

#### Application

Applications include, but are not limited to: zone control on hydronic systems, fan coils, control of domestic heating loops and storage tanks, humidity control, and industrial process control.



Typical Piping Diagrams

## SPECIFICATIONS

### PRESSURE

Static Pressure - water ..... 600 PSIG / 41.3 bar

### MAXIMUM TEMPERATURE LIMITS

#### Valve w/ Actuator

##### Fluid:

Standard ..... 195°F / 91°C

High temp. option ..... 250°F / 121°C

##### Ambient:

Standard ..... 110°F / 43°C

High temp. option ..... 165°F / 74°C

#### Body only

##### Fluid:

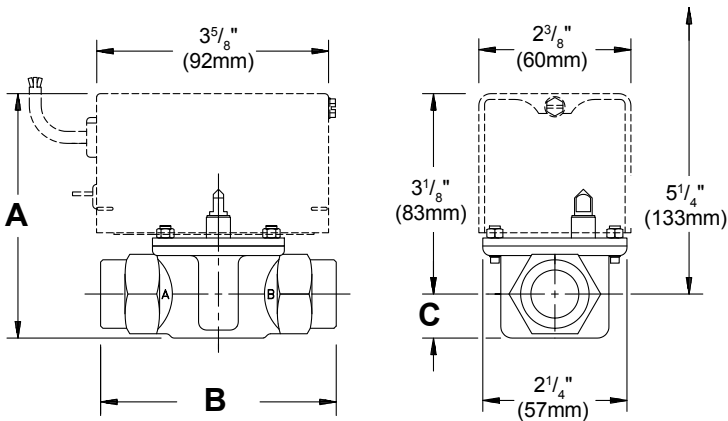
Standard and

High temp. option ..... 375°F / 191°C

## MATERIALS

1. STEM ..... STAINLESS STEEL
2. SEAT ..... BRASS
3. STEM O-RINGS ..... ZOLAST™ RUBBER
4. THREADED POST .... BRASS
5. PRESSURE PLATE ... BRASS
6. PADDLE ..... ZOLAST™ RUBBER
7. BODY O-RING ..... ZOLAST™ RUBBER
8. BODY ..... BRASS

## DIMENSIONS



## INSTALLATION

Valves are labelled with "A" and "B" symbols for port identification. 2-port valves are directional, i.e. flow must be from A to B port. Care should be taken when soldering valve bodies so that the paddle is away from the seat. Actuators need not be removed prior to soldering or installed prior to filling system, however, care should be taken to protect actuator from open flame.

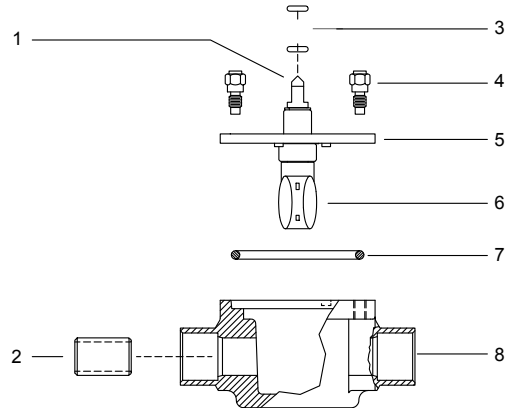
## RATINGS

Orifice	Diameter		Standard or Option	Flow		Pressure	
	in.	cm		C <sub>v</sub>	K <sub>v</sub>	PSI	BAR
Low	3/16	.476	Option	0.8	11.4	50	3.4
Med	5/16	.794	Standard	2.9	41.4	25	1.7
High	7/16	1.11	Option	4.8	68.5	10	.68
Special High	8/16	1.27	Option	7.1	101.3	6	.40

Kv based on Litres per minute flow, with pressure drop of 1kg/cm<sup>2</sup> at 20°C.

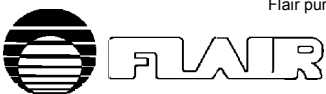
14.504 PSI = 1 BAR

## EXPLODED VIEW



Body	Size	A	B	C
C X C Sweat	1/2"	3 3/4"	3 1/8"	11/16"
		95mm	79mm	17mm
	3/4"	3 3/4"	3 3/4"	11/16"
		95mm	95mm	17mm
	1"	3 7/8"	4 1/8"	13/16"
		98mm	105mm	21mm
NPT BSP JIS	1/2"	3 3/4"	3 5/8"	11/16"
		95mm	92mm	17mm
	3/4"	3 3/4"	3 5/8"	11/16"
		95mm	92mm	17mm
	1"	3 7/8"	4"	13/16"
		98mm	102mm	21mm
Union Flare	1/2", 3/4", 1"	3 3/4"	3 1/2"	11/16"
		95mm	89mm	17mm
Comp- ression	1/2", 15mm	3 3/4"	3 1/4"	11/16"
		95mm	83mm	17mm
	3/4", 22mm	3 3/4"	3 11/16"	11/16"
		95mm	84mm	17mm
	1", 28mm	3 13/16"	3 7/8"	3/4"
		97mm	98mm	19mm

Flair pursues a policy of constant improvement. For this reason, all specifications are subject to change without notice.



FLAIR INTERNATIONAL CORPORATION

600 Old Willets Path • Hauppauge, New York 11788 • Tel: (516) 234-3600 • Fax: (516) 234-3610 • E-mail: Flair.International@juno.com