

## Soft Seated 400 psi (28 bar) 2-Way Valves

### Tapped 1/2", 3/4", 1", 1-1/4", 1-1/2"

#### SPECIFICATIONS

**Media:** Steam • Hot or Cold Water • Air & Inert Gases

**Pressure:** Maximum Operating Pressure: 400 psi (28 bar)

**Temperature Range:** -40° TO 400°F (-40° TO 204°C)

These soft seated valves were designed for applications where bubble-tight seal is required. This is done through stainless steel reinforced PTFE rings on the stem. Valve bodies are machined from the highest quality Navy-M bronze with stainless steel stem and seats, spring-loaded packers and stainless steel spiral-wound gaskets. The body, adapter and yoke are of cast bronze. The exclusive swivel stem design reduces side load on the stem packer for longer packer life. Diaphragm springs are high quality spring steel and a proprietary coating is applied for maximum corrosion resistance.

These valves are available with a choice of large or small diaphragm actuators. The large actuator permits operation of the valve at maximum rated pressure at any port with 30 to 40 PSI (2.1 to 2.8 bar). The small actuator provides some savings in space, but their use reduces the usable operating pressure of the valve to the limits shown in the Model Selection Charts. The large and small diaphragm actuators are interchangeable within a given basic size. The actuator may be replaced with the valve under pressure but de-energized.

2WNO & 2WNC Valves may be ported backwards with the media pressure piped to Port No. 2. This brings the pressure under the seat, removing the stem packing from continuous pressure. For vacuum service, 2WNO & 2WNC Valves should be piped backwards with the vacuum to Port No. 2. This brings the vacuum under the seat and has no affect on the stem packing, which is designed to be pressurized from within. Internal areas in the valves are designed for higher Cv ratings. Higher Cv ratings offer faster recovery times for temperature and faster cycle rates.

To order valves with Molded PTFE diaphragms, change the fourth digit in the Model number to (6). Example: C286-20011

For dimensional data, see page 39.

Use 35 to 40 psi  
(2.4 - 2.8 bar)  
Air Pressure on Top



#### Model Selection Chart

Basic Valve Size	Port Tap (NPTF)	Description		Large Top		Small Top		Cv			
								Port 1 to Port 2	Port 2 to Port 1		
				psi	bar	psi	bar				
1/2"	1/2"	2WNC	Model No.	C284-20011		C284-20051		6.9	6.9		
			Pressure Rating	400	28.0	270 (1)	18.6				
	3/4"		2WNO	Model No.	C284-20021		C284-20061		7.5	7.1	
				Pressure Rating	400	28.0	270 (1)	18.6			
	1/2"	2WNO		Model No.	C284-20031		C284-20071		6.9	6.6	
				Pressure Rating	400	28.0	135 (2)	9.3			
	3/4"		2WNO	Model No.	C284-20041		C284-20081		8.0	8.4	
				Pressure Rating	400	28.0	135 (2)	9.3			
1"	1"	2WNC		Model No.	C284-40011		C284-40051		15.2	13.5	
				Pressure Rating	400	28.0	230 (1)	15.9			
			1¼"	2WNO	Model No.	C284-40021		C284-40061		16.8	16.0
					Pressure Rating	400	28.0	230 (1)	15.9		
	1"	2WNO	Model No.		C284-40031		C284-40071		14.8	16.0	
			Pressure Rating		400	28.0	105 (3)	7.2			
	1¼"		2WNO	Model No.	C284-40041		C284-40081		15.8	17.2	
				Pressure Rating	400	28.0	105 (3)	7.2			
1½"	1½"	2WNC		Model No.	C284-60021		C284-60061		35.0	33.5	
				Pressure Rating	400	28.0	165 (1)	11.3			
	1½"	2WNO	Model No.	C284-60041		C284-60081		33.0	35.0		
			Pressure Rating	400	28.0	60 (4)	4.1				

(1) Pressure rating shown is for use with inlet at Port 2. If inlet is piped to Port 1, line pressures up to 400 psi are permissible.

(2) Pressure rating shown is for use with inlet at Port 2. If inlet is piped to Port 1, line pressures up to 210 psi are permissible.

(3) Pressure rating shown is for use with inlet at Port 2. If inlet is piped to Port 1, line pressures up to 175 psi are permissible.

(4) Pressure rating shown is for use with inlet at Port 2. If inlet is piped to Port 1, line pressures up to 140 psi are permissible.