

Index

Model No.	Pg.	Model No.	Pg.	Model No.	Pg.	Model No.	Pg.	Model No.	Pg.
C244-2001	6	C264-20062	26	C264-6010	30	C284-20021	16	C284-6008	24
C244-2002	6	C264-2007	26	C264-6011	30	C284-20022	24	C284-60081	16
C244-2003	8	C264-2008	26	C264-6012	30	C284-2003	24	C294-2001	22
C244-3001	6	C264-2009	26	C264-6013	30	C284-20031	16	C294-2002	22
C244-3002	6	C264-2010	26	C264-60131	18	C284-20032	24	C294-2003	22
C244-3003	8	C264-2011	26	C264-6014	30	C284-2004	24	C294-2004	22
C244-4001	6	C264-2012	26	C264-60141	18	C284-20041	16	C294-2005	22
C244-4002	6	C264-2013	26	C264-6015	30	C284-20042	24	C294-2006	22
C244-4003	8	C264-20131	18	C264-6016	30	C284-2005	24	C294-2007	22
C244-5001	6	C264-2014	26	C264-6017	30	C284-20051	16	C294-2008	22
C244-5002	6	C264-20141	18	C264-6018	30	C284-2006	24	C294-4001	22
C244-5003	8	C264-2015	26	C264-6019	30	C284-20061	16	C294-4002	22
C244-6001	6	C264-2016	26	C264-60191	18	C284-2007	24	C294-4003	22
C244-6002	6	C264-4001	28	C264-6020	30	C284-20071	16	C294-4004	22
C244-6003	8	C264-4002	28	C264-60201	18	C284-2008	24	C294-4005	22
C244-7001	6	C264-4003	28	C264-6021	30	C284-20081	16	C294-4006	22
C244-7002	6	C264-4004	28	C264-6022	30	C284-4001	24	C294-4007	22
C244-7003	8	C264-4005	28	C264-6023	30	C284-40011	16	C294-4008	22
C244-9001	6	C264-40051	18	C264-60231	18	C284-40012	24	C294-6002	22
C244-9002	6	C264-40052	28	C264-6024	30	C284-4002	24	C294-6004	22
C244-9003	8	C264-4006	28	C274-2001	26	C284-40021	16	C294-6006	22
C264-0009	20	C264-40061	18	C274-20012	26	C284-4003	24	C294-6008	22
C264-00091	14	C264-4009	28	C274-2002	26	C284-40031	16	C304-2009	35
C264-0010	20	C264-4010	28	C274-2003	26	C284-40032	24	C304-20091	32
C264-00101	14	C264-4011	28	C274-2004	26	C284-4004	24	C304-2011	35
C264-0011	20	C264-4012	28	C274-4001	28	C284-40041	16	C304-20111	32
C264-0012	20	C264-4013	28	C274-4002	28	C284-40042	24	C304-2012	35
C264-0013	20	C264-40131	18	C274-4003	28	C284-4005	24	C304-20121	32
C264-00131	14	C264-4014	28	C274-4004	28	C284-40051	16	C304-4019	35
C264-0014	20	C264-40141	18	C274-6001	30	C284-4006	24	C304-40191	32
C264-00141	14	C264-6001	30	C274-6002	30	C284-40061	16	C304-4021	35
C264-0015	20	C264-6002	30	C274-6003	30	C284-4007	24	C304-40211	32
C264-0016	20	C264-6003	30	C274-6004	30	C284-40071	16	C304-4022	35
C264-2001	26	C264-6004	30	C274-6005	30	C284-4008	24	C304-40221	32
C264-20012	26	C264-6005	30	C274-6006	30	C284-40081	16	C374-2001	6
C264-2002	26	C264-60051	18	C284-0007	20	C284-6002	24	C374-2002	6
C264-2003	26	C264-60052	30	C284-00071	14	C284-60021	16	C374-2003	6
C264-2004	26	C264-6006	30	C284-0008	20	C284-60022	24	C374-2004	6
C264-2005	26	C264-60061	18	C284-00081	14	C284-6004	24	C374-2005	6
C264-20051	18	C264-60062	30	C284-2001	24	C284-60041	16	L204-0003	12
C264-20052	26	C264-6007	30	C284-20011	16	C284-60042	24		
C264-2006	26	C264-6008	30	C284-20012	24	C284-6006	24		
C264-20061	18	C264-6009	30	C284-2002	24	C284-60061	16		

Quality from the Start

Sinclair Collins is an ISO 9001 registered facility. Bronze and stainless steel components are machined in our own facility. All components must meet our high performance specifications and quality control standards.

After assembly, each valve is fully tested at rated pressure prior to shipment and all material and workmanship are covered by a two-year warranty.

**WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure, and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the full "Offer of Sale".

Valve Design

Sinclair Collins valves are designed and quality-built to provide long, trouble-free performance. They combine economical automatic operation with precision control and maximum dependability.

THE SERIES C264, C274, C284, C294 VALVES. These diaphragm-operated valves are produced in two basic types, hard-seat and soft-seat. The 500 psi (34 bar) hard-seat has a metal-to-metal seat and can be used in a majority of applications. In lower pressure applications where a hard-seated valve is not acceptable, the 400 psi (28 bar) soft-seated valve is recommended. This valve utilizes stainless steel-filled PTFE rings in the stems to provide bubbletight seal. Both of these valve types employ an exclusive swivel-stem design that reduces side load on the packer to assure smoother, faster operation and longer packer life. The chevron-packer is spring loaded and self-adjusting to reduce maintenance. The heat-treated stainless steel seat rings used in the hard-seat valves are skirted to provide minimum fluid by-pass and minimum shock during valve shift. In all 3-way valves, upper and lower seat rings are identical and interchangeable to simplify inventory and maintenance. Standard bodies are Navy-M bronze with stainless steel trim. Stainless steel/filler material spiral-wound gaskets are used. The valves are equipped with large or small size diaphragm actuators. The large actuator permits operation of the valve at maximum rated pressure at any port with recommended actuated air pressure of 40 psi (2.8 bar). (If lesser line pressures are handled, lesser actuating air pressure can be used). The small actuator provides some savings in space but its use reduces the usable operating pressure of the valve to the limits shown in the Model Selection Chart included on the individual catalog sheets. The large and small diaphragm actuators are interchangeable within a given size. The diaphragm assembly may be replaced with the valve under pressure but de-energized.

THE SERIES C244 VALVES. These diaphragm-operated 200 psi (14 bar) valves employ a single piece stem, as well as a new fixed height stem seal. The seal design has an integral spring which compensates for packer wear. Because only one seal is used, the cavity for the seal in the body is shallow and the bearing length in the body is correspondingly longer. The stainless steel upper seat cage, in addition to being drop-in, also serves as a diverter to help direct the flow through the valve. Standard bodies are cast bronze and the trim is of stainless steel. A spiral wound gasket consisting of stainless steel and filler material is also utilized to seal the upper seat. These valves are equipped with a single size diaphragm actuator per basic size. The actuator permits operation of the valve at a maximum rated pressure at any port with recommended actuating air pressure of 35 psi (2.4 bar). (If lesser line pressures are handled, lesser actuating air pressure can be used). The two piece top construction allows the diaphragm assembly to be changed in areas where head space is at a premium.

THE SERIES C304 VALVES. These 500 psi (34 bar) manifold mounted valves combine many of the features from the 500 psi (34 bar) hard-seated line-mounted valves with the numerous advantages of manifold mounting. These valves have spring-loaded stem packers, self-aligning stems, skirted stainless-steel seats, and bronze bodies. A cylinder operator is used for space savings. Manifold mounting simplifies original installation, reduces labor costs and saves energy by allowing piping to be insulated. The design allows for multiple valve manifolding as well as single-station installations. For in-service maintenance, the manifold valve is simply unbolted, removed and replaced in minutes.

LUBRICATION

1. Coat Packing Rings and Packer Bore with Dow Corning III Compound.

DIAPHRAGM REPLACEMENT

- Clean old rubber from surfaces.
- Insert all screws in cover and through diaphragm, do not elongate or re-punch holes in diaphragm.
- Assemble ring and install nuts loosely.
- Use valve piston to deform diaphragm against the cover and clamp in place.
- Tighten all nuts moderately.
- For more detailed instructions, see Bulletin H101.

"If it is possible that the ambient temperature may fall below freezing, the medium must be moisture free to prevent internal damage or unpredictable behavior."

Torque Requirements for 400 PSI & 500 PSI End Caps & Adapters			
Basic Valve Size	Thread	Torque	
		lb - ft	N - M
400 & 500	1-3/8 - 12	22±2	30±3
1/2"	1-3/4 - 12	95±5	129±7
1"	2-1/4 - 12	200±10	271±14
1½"	2-7/8 - 12	300±15	407±20

HOW TO ORDER

Refer to the Model Selection Charts and recommended Piping Connection charts on the following pages to order valves suitable for your Cv and pipe size requirements. If a 3-way valve is desired for 2-way service, it is necessary to plug the unused port. Refer to the Piping Connection chart as a guide. Complete Parts Data Charts are included for your convenience in ordering parts.

Valves for Steam and Hot & Cold Liquids



**500 psi
3-Way Valve**



**500 psi
Offset
2-Way Valve**



**200 psi
2-Way Valve**



**200 psi
3-Way Valve**



**400 & 500 psi
3-Way Valve**



**400 & 500 psi
3-Way Manifold Valve**



**400 & 500 psi
3-Way Valve**



**400 & 500 psi
Inline
2-Way Valve**