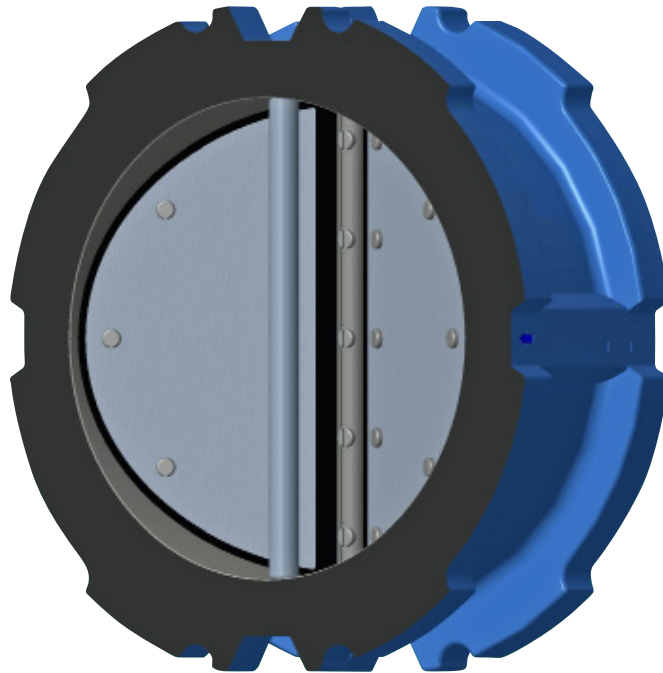




SERIES 871

ElastoTITE™ SHORT FORM WAFER ELASTOMER HINGED CHECK VALVE



General Description

Process Development & Control's ElastoTITE™ Full Port Elastomer Hinged Check Valves have low pressure loss, lightweight design and a compact construction. Our Patented Flexible Anti-Fatigue Reinforcement Layer design **increases** the life of the valve and reduces the need for replacement of the elastomer sealing member during routine maintenance. The elastomer hinge check valve design eliminates a restrictive valve seat and increases the valve's open area and flow coefficient significantly. The ElastoTITE™ Short Form Wafer Check Valve is perfect for blower applications, compressed air and gas systems, water systems and vacuum pumps.

BOTH 125 lb and 150 lb Short Form Wafers feature a choice of body materials of Cast Iron, Carbon Steel or 316 Stainless Steel. The available internals materials are Aluminum and 316 Stainless Steel. Buna-N is the standard seal with optional seal materials of EPDM, Silicone or Viton.

Materials can be configured to a Maximum Working Pressure of 150 PSI. Operating temperatures range from -40° F to 500° F with available sizes 2" thru 24". If your application requires unique size and material configurations, please contact the factory for assistance with your special requirements.



AIS COMPLIANCE

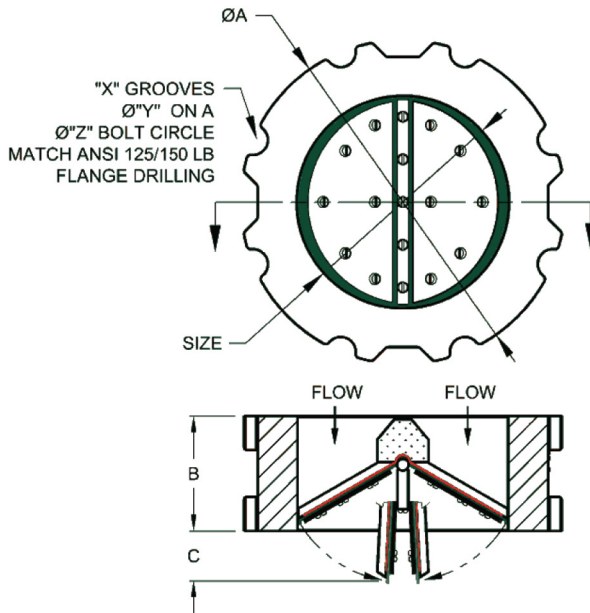
PDC is pleased to supply products that are in compliance with "American Iron and Steel (AIS)" provided that the AIS compliance requirement is made known to PDC during the quoting and ordering processes.



Process Development & Control, LLC

www.pdcvalve.com

SERIES 871 ElastoTITE™ SHORT FORM WAFER ELASTOMER HINGED CHECK VALVE



Valve Size	XXX=	A	B	C	X	Y	Z
2	002	4.75	1.38	0.50	4	0.75	4.75
2-1/2	250	5.50	1.63	0.56	4	0.75	5.50
3	003	6.00	1.88	0.69	4	0.75	6.00
4	004	7.50	2.38	0.88	8	0.75	7.50
5	005	8.50	2.88	1.13	8	0.88	8.50
6	006	9.50	3.38	1.50	8	0.88	9.50
8	008	11.75	4.38	2.25	8	0.88	11.75
10	010	14.25	5.38	2.50	12	1.00	14.25
12	012	17.00	6.38	3.00	12	1.00	17.00
14	014	18.75	7.38	3.25	12	1.13	18.75
16	016	21.25	8.38	3.75	16	1.13	21.25
18	018	22.75	9.38	4.25	16	1.25	22.75
20	020	25.00	10.38	4.75	20	1.25	25.00
24	024	29.50	12.38	5.75	20	1.38	29.50

If your application requires different size and material configurations, Please contact the factory for assistance with your special requirements.

Body Materials
Cast Iron Flat Face (FF)
Carbon Steel Raised Face (RF)
316 Stainless Steel Raised Face (RF)
Internal Materials
Aluminum
316 Stainless Steel
Stainless Steel Spring Option

Sealing Member Materials	
Material	Temperature
Buna-N	-60° F to 225° F
EPDM	-40° F to 300° F
Silicone	-100° F to 500° F
Viton	-20° F to 400° F
Temperature ranges are for general guidance. Range may vary with application.	

GENERAL DIMENSIONS (in inches)
A = Outside Diameter
B = Face-to-Face
C = Clearance
Alignment Grooves match 125/150 lb ANSI Flanges;
X number of ØY Holes on a ØZ Bolt Circle

Standard Models & Materials				
Model	Body	Internals	Seal	Max. Working Pressure (PSI)*
871-XXX-CIAL-BN	Cast Iron (FF)	Aluminum	Buna-N	125
871-XXX-CI6S-BN	Cast Iron (FF)	316 Stainless Steel	Buna-N	125
871-XXX-CSAL-BN	Carbon Steel (RF)	Aluminum	Buna-N	150
871-XXX-CS6S-BN	Carbon Steel (RF)	316 Stainless Steel	Buna-N	150
871-XXX-6SAL-BN	316 Stainless Steel (RF)	Aluminum	Buna-N	150
871-XXX-6S6S-BN	316 Stainless Steel (RF)	316 Stainless Steel	Buna-N	150

Note: Process Development & Control's ElastoTITE Check Valves are designed to work without the assistance of a spring.

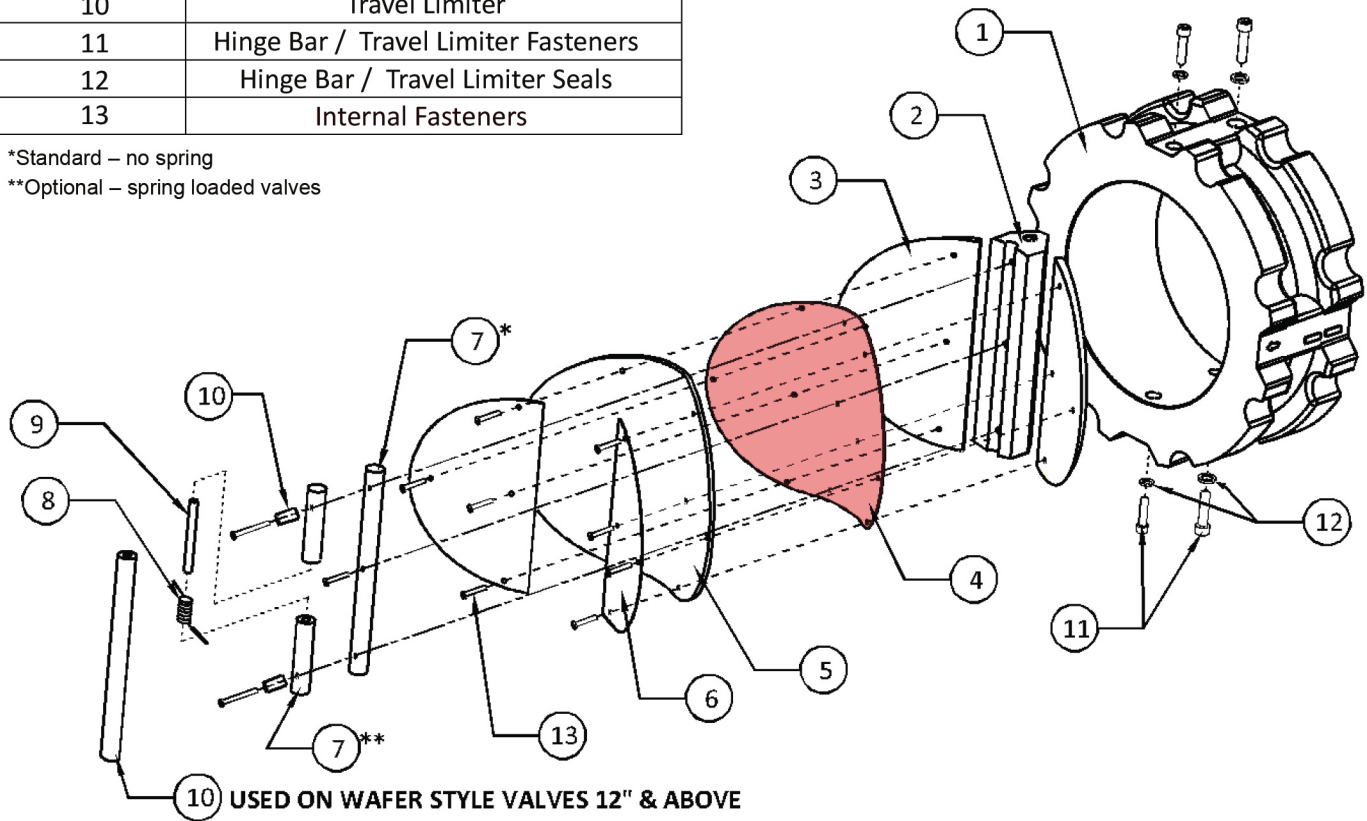
A spring option is available.

XXX = SIZE (to be for all sizes)

*Cold Working Pressure (CWP) from -20° F to 100° F for 2" thru 14" valve sizes can be up to 200 PSI. Valve sizes 16" and larger CWP is 150 PSI.

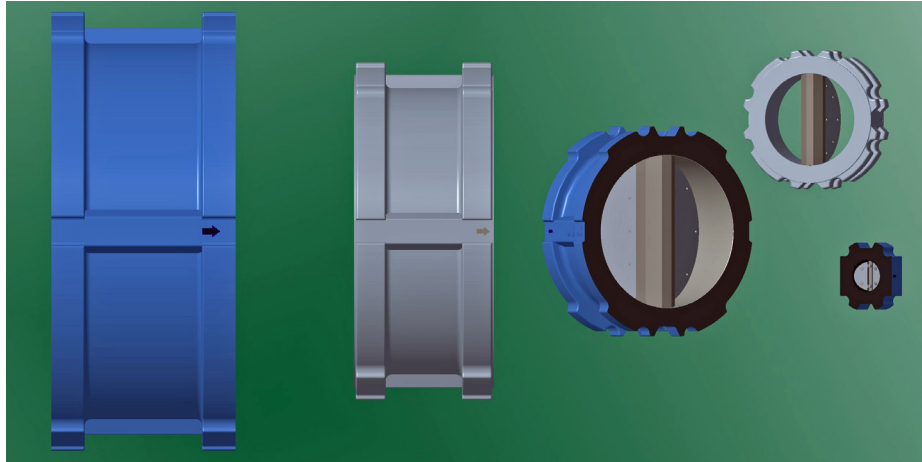
SERIES 871 – VALVE COMPONENTS

Item No.:	Description:
1	Short Form Body
2	Hinge Bar
3	Valve Plate
4	Anti-Fatigue Layer
5	Valve Seal
6	Seal Retainer Plate
7*	Seal Clamp
7**	Seal Clamp End
8	Spring (optional)
9	Spring Shaft
10	Travel Limiter
11	Hinge Bar / Travel Limiter Fasteners
12	Hinge Bar / Travel Limiter Seals
13	Internal Fasteners



Series 871 - Design Features

- **PDC's Patented Anti-Fatigue Reinforcement Layer** – Our **ElastoTITE™** Check Valve's New Patented Anti-Fatigue Reinforcement Layer is substantially unstretchable and capable of resisting abrasion forces that are encountered while the valve is in operation, increasing the life of the valve significantly.
- **Solid Cast Valve Body** – Solid, cast wafer, 4-rib cage structure resists against transfer of adverse pipe stresses to the body.
- **Alignment Grooves** – PDC's Wafer Style Short Form Series 871 has double flanges that match ANSI 125/150 lb Flanges which aid alignment and installation.
- **NO Metal-to-Metal Rotating Parts** – The motionless Hinge Bar and Seal Clamp design decreases wear of Hinges, Shafts, Valve Plates, and Springs slashing maintenance requirements and costs.
- **Full Port Seatless Design** – Provides the largest flow area possible with the smallest pressure loss.
- **Fast Closure Feature** – The closing time is reduced by the valve plate's minimum travel from an open to a fully closed position.
- **Springless Design** – Our valves operate without the assistance of a spring in the majority of all applications. With the assistance of a spring, the "slamming" action of the plates is all but eliminated. A spring is recommended when the valve is placed in a vertical downward flow pipeline position.
- **Reinforced Valve Seal** – Tolerant to liquids, gases, steam, chemical, oil, and fuel. The strength and durability of these elastomers ensure the prolonged life of the valves. The seals provide a tight shutoff.
- **Valves can be installed in a pipeline in any position.**
- **Competitive Pricing** – PDC offers competitive pricing, excellent customer service and quick turnaround to meet your needs.



Process Development & Control, LLC

1075 Montour West Industrial Park
Coraopolis, PA 15108 USA

P: 1.800.PDC.4070 | 724.695.3440

F: 724.695.8635 • E: sales@pdcvalve.com

www.pdcvalve.com



DISTRIBUTED BY:

--	--