



CHAMPION VALVES INC

MODEL NZW AXIAL STYLE NOZZLE CHECK VALVE IRON DESIGN

FEATURES

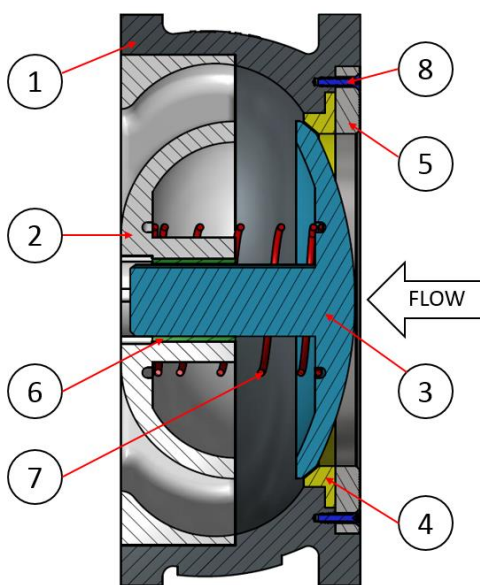
- Unique, patent-pending laminar flow design of our NZW combines optimal C_v with minimal slam characteristics.
- The NZW axial flow pattern, developed through Computational Fluid Dynamics (CFD), creates a disc contour that provides minimal energy loss and low ΔP .
- Easy face-mounted seat assembly allows full maintenance access to all components with no leak paths in the valve body.
- Dynamically engineered molded seat design provides secure, bubble-tight seal using a variety of elastomer materials, along with a 316 SS option that is integral to the valve face.
- Internally mounted compression spring is designed for reliable operation for the lifetime of the valve.
- The uniquely engineered valve disc shaft and replaceable bushing allow pass through of potentially damaging particulates.
- Suitable for Liquid, Steam and Gas Service
- Economical Design with High Quality Performance



SELECTION CHART

Size	Body	Disc	Seals	Pressure Class
2" – 12"	Ductile Iron	304 SS	316 SS EPDM Viton® PTFE Others	150

PARTS DESCRIPTION



Materials of Construction

Component	Material	Grade
(1) Body	Ductile Iron	ATSM A395 Gr. 60-40-18
(2) Guide	Ductile Iron	ATSM A395 Gr. 60-40-18
(3) Disc	304 Stainless	ASTM A351 Gr. CF8
(4) Seat	25% Glass Filled PTFE or Other	ASTM D4745
(5) Retainer	316 SS	ASTM A351 Gr. CF8M
(6) Bushing	PTFE/Sintered Bronze/Steel	ASTM D3294
(7) Spring	302 Stainless Steel	ASTM A313
(8) Screw	18-8 Stainless Steel	

FIGURE NUMBER INFORMATION

Order Example: Specifications for 10" Champion Valves Model NZW Axial Flow Nozzle Wafer Check Valve, ASME Class 150, Ductile Iron Body with 304 Stainless Steel Disc; Teflon® Seat; 302 Stainless Steel Spring; Plain Face End Connection

SIZE	MODEL	PRESSURE CLASS		BODY	DISC	SEAT	SPRING		END CONNECTION
10	NZW	15	-	L	T	T	S	-	P

ORDER SYMBOL	SIZE	BODY & DISC	ORDER SYMBOL	SPECIFICATION				ORDER SYMBOL	SPRING	OPERATING TEMPERATURE																																																				
2	2"	Ductile Iron	L	ASTM A395 Gr. 60-14-18				S	302 SS	260	500																																																			
2 ½"	2.5	304 Stainless Steel	T	ASTM 351 Gr. CF8				W	Inconel® X750	593	1100																																																			
3	3"	<table border="1"> <thead> <tr> <th rowspan="3">ORDER SYMBOL</th> <th rowspan="3">SEAT</th> <th colspan="4">OPERATING TEMPERATURE</th> </tr> <tr> <th colspan="2">°C</th> <th colspan="2">°F</th> </tr> <tr> <th>MIN</th> <th>MAX</th> <th>MIN</th> <th>MAX</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>Buna-N</td> <td>-57</td> <td>120</td> <td>-70</td> <td>250</td> </tr> <tr> <td>E</td> <td>EPDM</td> <td>-18</td> <td>135</td> <td>0</td> <td>300</td> </tr> <tr> <td>H</td> <td>Silicone</td> <td>-40</td> <td>204</td> <td>-40</td> <td>400</td> </tr> <tr> <td>N</td> <td>Neoprene®</td> <td>-40</td> <td>120</td> <td>-40</td> <td>250</td> </tr> <tr> <td>S</td> <td>316 SS</td> <td>-40</td> <td>260</td> <td>-40</td> <td>500</td> </tr> <tr> <td>T</td> <td>Teflon®</td> <td>-40</td> <td>149</td> <td>-40</td> <td>300</td> </tr> <tr> <td>V</td> <td>Viton®</td> <td>-40</td> <td>204</td> <td>-40</td> <td>400</td> </tr> </tbody> </table>	ORDER SYMBOL	SEAT	OPERATING TEMPERATURE				°C		°F		MIN	MAX	MIN	MAX	B	Buna-N	-57	120	-70	250	E	EPDM	-18	135	0	300	H	Silicone	-40	204	-40	400	N	Neoprene®	-40	120	-40	250	S	316 SS	-40	260	-40	500	T	Teflon®	-40	149	-40	300	V	Viton®	-40	204	-40	400				
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ORDER SYMBOL	SPRING	OPERATING TEMPERATURE	
S	302 SS	260	500
W	Inconel® X750	593	1100
ORDER SYMBOL	END CONNECTION		
P	Plain Face		



CLASS A1 REFRIGERANT SERVICE
PER ASHRAE 34

RATINGS AND DIMENSIONS

Dimensions						Ratings	
ID		Face to Face		Weight		C _v	P _c
NPS/IN	DN/MM	IN	MM	LBS	KGS	GPM	PSI
2	50	2 ¾	60	5	2	55	0.252
2 ½	6	2 ¾	67	7	3	85	0.266
3	80	2 ¾	73	10	4	120	0.226
4	100	2 ¾	73	15	6	210	0.251
5	127	3 ¾	86	24	11	330	0.250
6	150	3 ¾	98	34	15	475	0.201
8	200	5	127	47	21	840	0.195
10	250	5 ¾	146	73	33	1315	0.288
12	300	7 ¾	181	105	82	1890	0.285

QUALITY SYSTEM

Champion Valves, Inc. is dedicated to the goal of total quality management to provide industry-best products and services to our customers.



SAI GLOBAL
ISO 9001
Quality

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