Serie W6

Disc wafer spring check valve

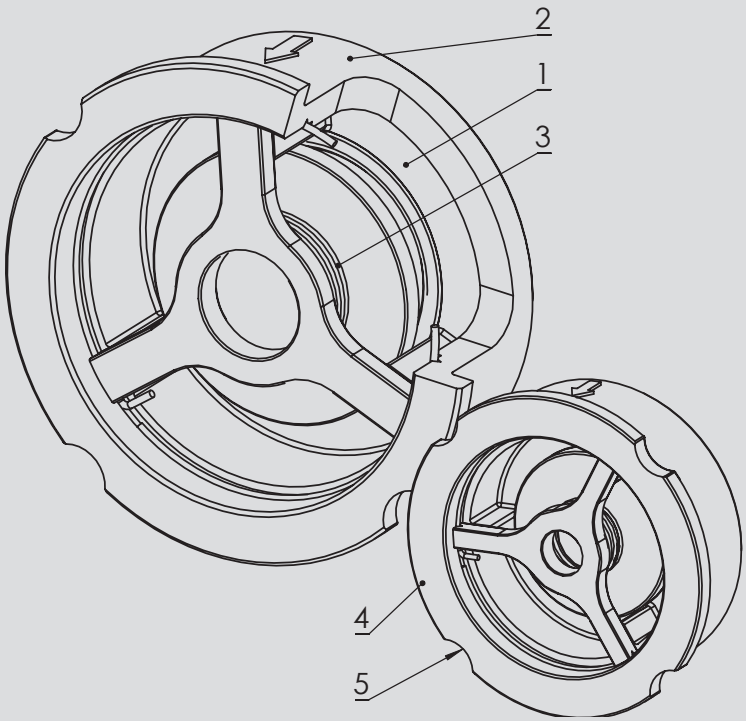
Application fields

WATER CONDITIONING INDUSTRY HEATING

The valves in series W6 are disc wafer spring check valves, which are manufactured in accordance with the most severe product norms, and in conformity with the quality requirements of EN ISO 9001.
They are available in the following versions:
W6.020 > with cast iron body and soft seal, suitable for heating and conditioning (HVAC), water treatment and distribution, pumping stations and industrial applications.
W6.626 > in stainless steel CF8M and metal/metal seal, suitable also for chemical plants, food processing and steam.
(Please ensure the choice of the corresponding item)

YES: for installing in a horizontal or vertical position.

1. Art. W6.020: internal and external epoxy coating.
2. Face to face dimensions -standardized - EN 558-49.
3. Mounting between flanges, reduced dimensions.
4. The stainless steel spring allows the valves to be assembled in all positions.
5. Profile suitable for assembly between flanges:
   W6.0: PN6 -16 - ANSI150
   W6.6: PN6 -16 - 40 - ANSI 150.

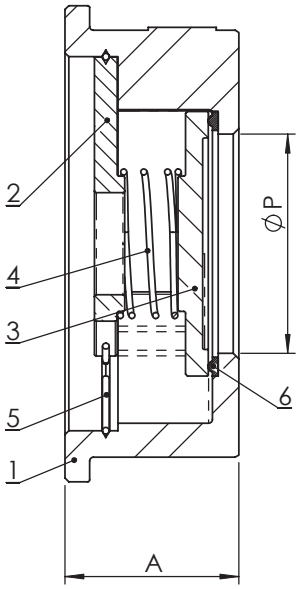


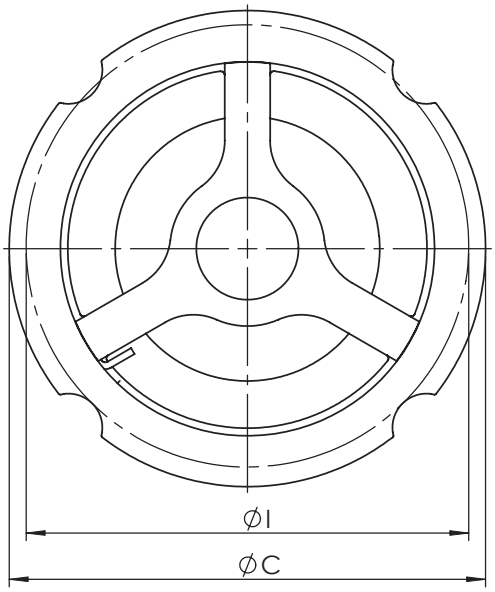
CE In conformity with directive 97/23/CE PED

Construction and testing norms (correspondences) :

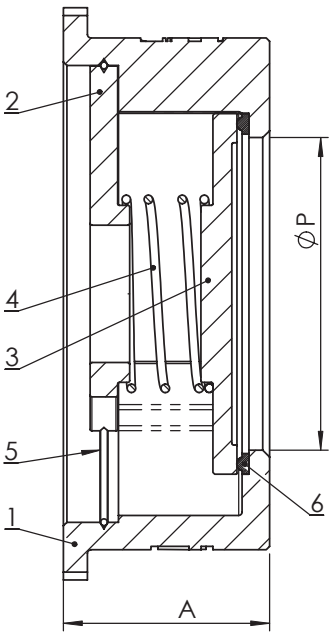
Face-to-face: EN558
Flanges: EN 1092, ANSI B16.5
Design: EN13445, EN12334
Marking: EN19
Testing: 100% testing in accordance with EN 12266

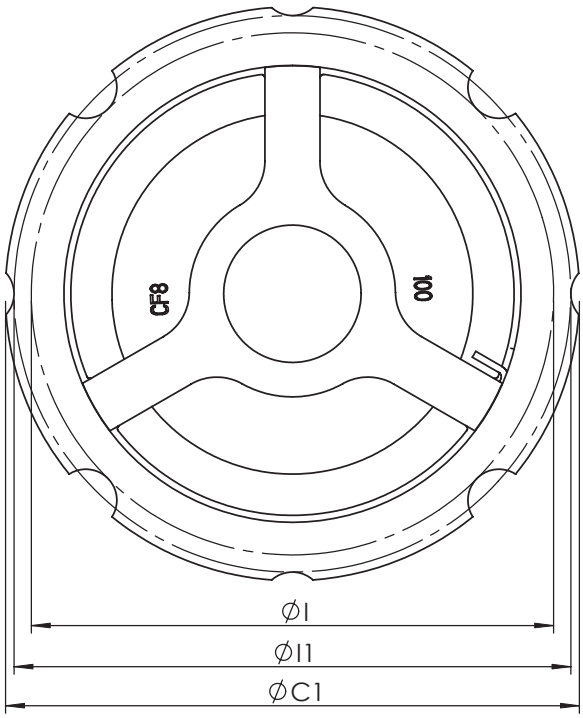
W6.0





W6.6





Materials

	Component	Material	
		W6.020	W6.626
1	Body	EN GJL 250	ASTM A351 gr. CF8M
2	Disc	ASTM A351 gr. CF8M	ASTM A351 gr. CF8M
3	Star	ASTM A351 gr. CF8M	ASTM A351 gr. CF8M
4	Spring	AISI 316	AISI 316
5	Retaining ring	AISI 316	AISI 316
6	Seat	NBR	metal/metal

Dimensions (mm)

DN		15	20	25	32	40	50	65	80	100	125	150
P		15	20	25	32	33	43	58	70	91	102	120
A	EN 558-1/ 49	16	19	22	28	31,5	40	46	50	60	90	106
C		-	-	-	81	91	106	126	141	162	192	218
I		-	-	-	75	85	96	116	132	152	182	207
C1		51	61	67	81	91	106	126	141	167	192	224
I1		-	-	-	-	-	-	-	-	162	-	218

Weight (kg)

W6.0		-	-	-	0,49	0,64	1,06	1,59	2,30	3,30	6,9	10,0
W6.6		0,13	0,20	0,29	0,55	0,66	1,08	1,59	2,36	3,38	7,1	10,4

Cracking pressure (mmH2O)

DN		15	20	25	32	40	50	65	80	100	125	150
mmH2O		674	648	649	685	549	565	565	600	600	380	320

Disc wafer spring check valve

Maximum pressure

Fluids *	W6.0	W6.6
Hazardous gases	NO	NO
Non-hazardous gases	16 bar	40 bar DN15-125
Hazardous liquids	16 bar DN15-125 10 bar DN150	40 bar
Non-hazardous liquids	16 bar	40 bar

*: Hazardous gas, liquids (explosive, inflammable, toxic) in accordance with 97/23/CE PED and 67/548/EEC

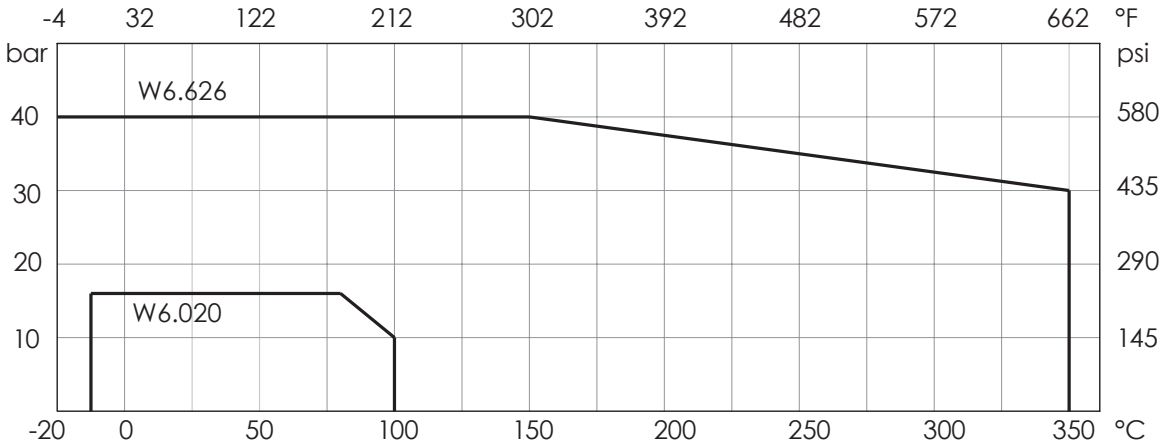
Minimum pressure	**refer to chart**
Minimum counterpressure	**0,1 bar**

Temperature

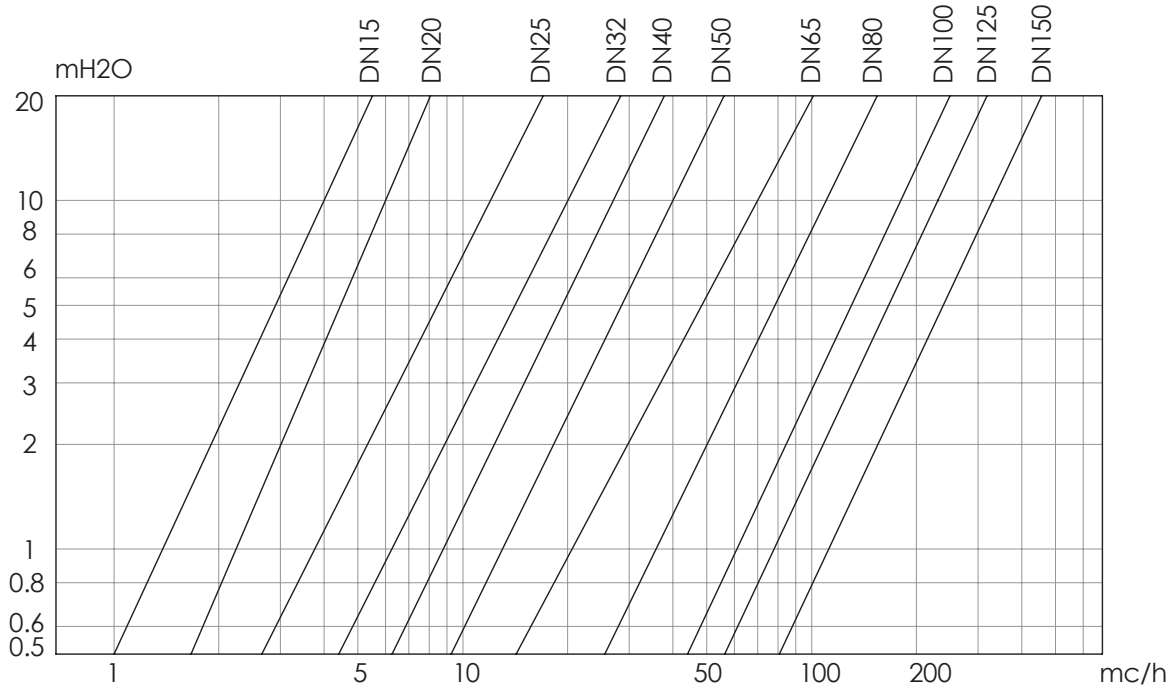
Temperature	min °C	Max°C	
		continuous	peak
W6.020	-10	100	110
W6.626	-20	350	-

NB: *the maximum working pressure decreases while the temperature increases; please refer to "pressure/temperature" chart*

Pressure/temperature chart



Head loss **Fluid: water** (1m H2O = 0,098bar)



Kv-DN chart

DN		15	20	25	32	40	50	65	80	100	125	150
Kv	mc/h	4	6	12	20	27	40	75	110	180	230	330

Versions

Cast iron body

W6.020

Body: EN GJL 250
Disc: CF8M
Seat: NBR
Temp: -10 +100°C

Coating: **RAL 5002** colour

CF8M body

W6.626

Body: CF8M
Disc: CF8M
Seat: metal/metal
Temp: -20 +350°C

Instruction and Recommendations

The information provided here is delivered with each product, and contains "Instructions for use and maintenance"; it is also available on our website: www.brandoni.it (download section)

STORING
Keep in a closed and dry place.

MAINTENANCE
The valve does not require maintenance.

RECOMMENDATIONS
Before carrying out maintenance or dismantling the valve: ensure that the pipes, valves and fluids have cooled down, that the pressure has decreased and that the lines and pipes have been drained in case of toxic, corrosive, inflammable and caustic liquids.
Temperatures above 50°C and below 0°C might cause damage to people.

INSTALLATION
- Handle with care.
- Do not weld the flanges to the piping after installing the valve.
- Water hammers might cause damage and ruptures. Inclination, torsions and misalignments of the piping may subject the installed valve to excessive stresses. It is recommended that elastic joints be used in order to reduce such effects as much as possible.

Art. W6.0 for mounting between flanges (PN 16/10/6 EN 1092 – ANSI B 16.5 class 150).
Art. W6.6 for mounting between flanges (PN 40/16/10/6 EN 1092 - ANSI B 16.5 class 150).
Refer to chart for mounting diameters.
- Suitable for mounting in a horizontal or vertical position.
- The spring does not all a full seal if the valve is installed vertically, with a descending flow.
- Place the valve as far away as possible from bends, elbows and pumps, in any case, from any source of turbulence.
- Remove welding residuals before installing the valve.
- Tighten the bolts crosswise.

NOTE. This valve is unidirectional: install in accordance with the flow direction arrow indicated on the body.

DN	15	20	25	32	40	50	65	80	100	125	150
PN6	43	53	61	75	85	96	116	132	152	182	207
PN10/16	51	61	67	81	91	106	126	142	162	192	218
PN25	51	61	67	81	91	106	126	142	167	192	224
PN40	51	61	67	81	91	106	126	142	167	192	224
ANSI 150	43	53	61	75	85	96	116	132	167	192	218