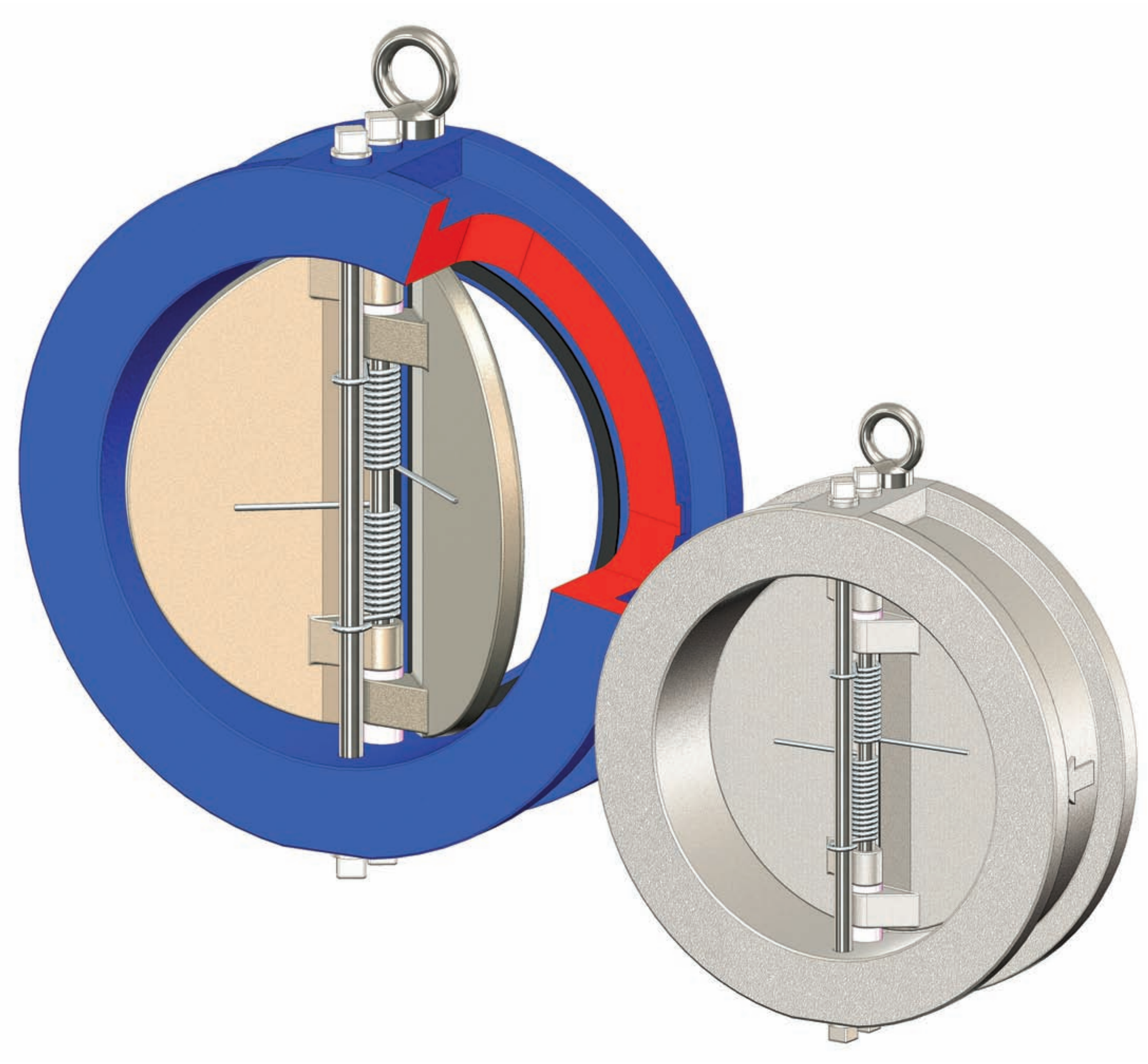
Serie D6

Dual-plate wafer check valve



Application fields

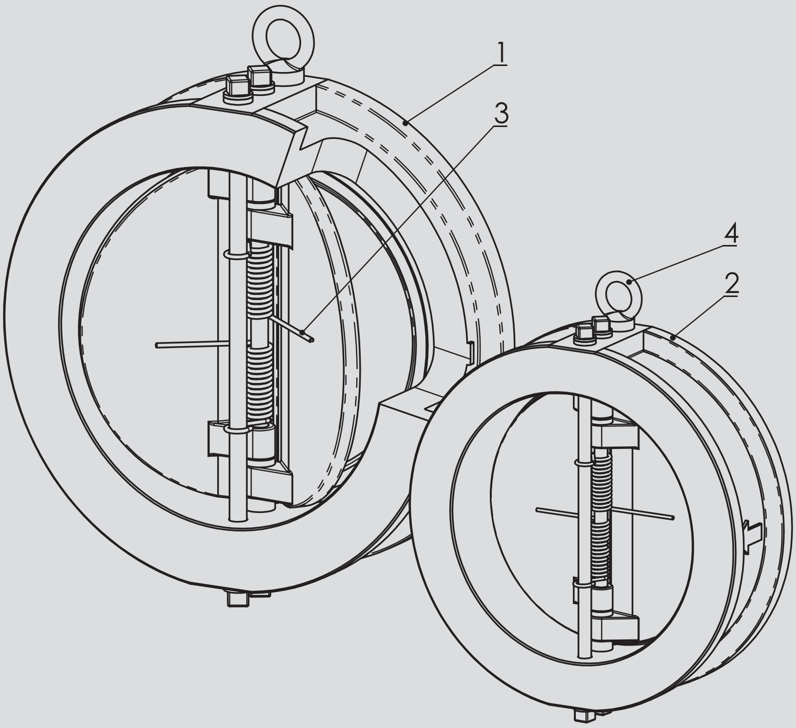
WATER CONDITIONING INDUSTRY HEATING FIRE FIGHTING

Serie D6

The valves in series D6 are dual-plate wafer 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:
D6.0 > with cast iron body, suitable for heating and conditioning (HVAC), water treatment and distribution, pumping stations and industrial applications.
D6.6 > in stainless steel CF8M, suitable also for chemical plants.
(Please ensure the choice of the corresponding item)

YES: for installing in horizontal or vertical position.

1. Mounting between flanges, reduced dimensions.
2. Face to face dimensions - standardized - EN 558-49.
3. The stainless steel spring allows the disc to close; consequently, the valve may be mounted in all positions.
4. Easy positioning and mounting, thanks to the eyebolt.

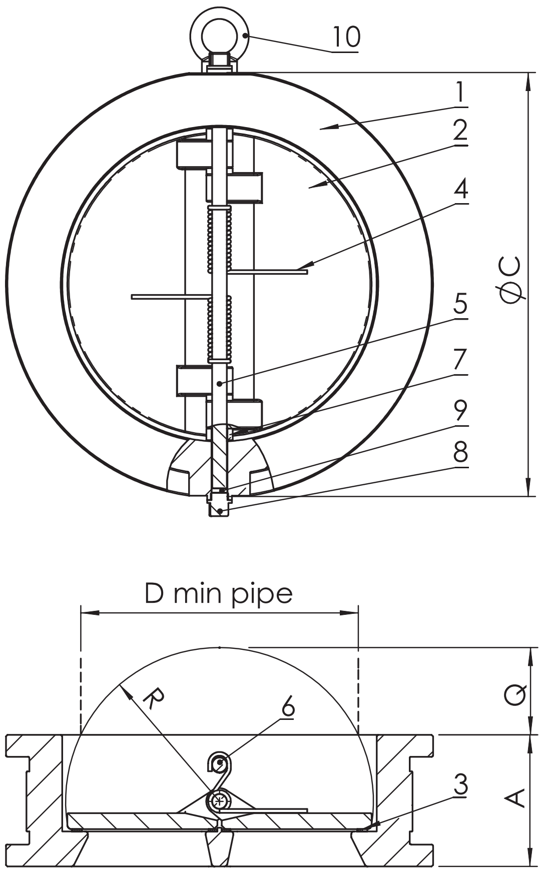


Construction and testing norms (correspondences):

Face-to-face: EN558
Flanges: EN 1092
Marking: EN19
Testing: 100% testing in accordance with EN 12266

Check valves

Dual-plate wafer check valve



Materials

	Component	Material	
		D6.0	**D6.6**
1	Body	EN GJL 250	ASTM A351 gr. CF8M
2	Disc	EN GJS 400, AISI 304, Aluminium-bronze	ASTM A351 gr. CF8M, Aluminium-bronze
3	Seal	EPDM	FKM (Viton®)
4	Spring	AISI 316	AISI 316
5	Hinge pin	AISI 316	AISI 316
6	Stop pin	AISI 316	AISI 316
7	Sliding washer	PTFE	PTFE
8	Plug	Carbon steel	Stainless steel
9	Plug seal	PTFE	PTFE
10	Eyebolt	Carbon steel	Stainless steel

Dimensions (mm)

DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
A	43	43	46	64	64	70	76	89	114	114	127	140	152	152	178
C PN16	91	107	127	142	162	192	218	273	328	378	437	488	555	618	733
C PN10	-	-	-	-	-	-	-	-	-	-	437	488	539	594	695
R	25,8	27	35	42	50	64	77	102,5	125	146	170	195	215	238	292
Q	6,8	8,6	15,2	14,3	22,3	33,7	45,4	69,6	74,5	102,7	124,7	142,7	156,8	179,7	217,4
D min pipe	36	42	60	66	86	115	143	197	231	281	330	378	416	464	567

Weight (kg)

kg	1,2	1,5	2,4	3,6	5,7	7,3	9	17	26	42	55	75	101	111	172

Serie D6

Maximum pressure

Fluids *	D6.0	D6.6
Hazardous gases Non-hazardous gases	NO	NO
Hazardous liquids	NO	16 bar DN40-125 10 bar DN150-200 6 bar DN250-300
Non-hazardous liquids	16 bar DN40-300 10 bar DN350-600	16 bar DN40-300 10 bar DN350-600

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

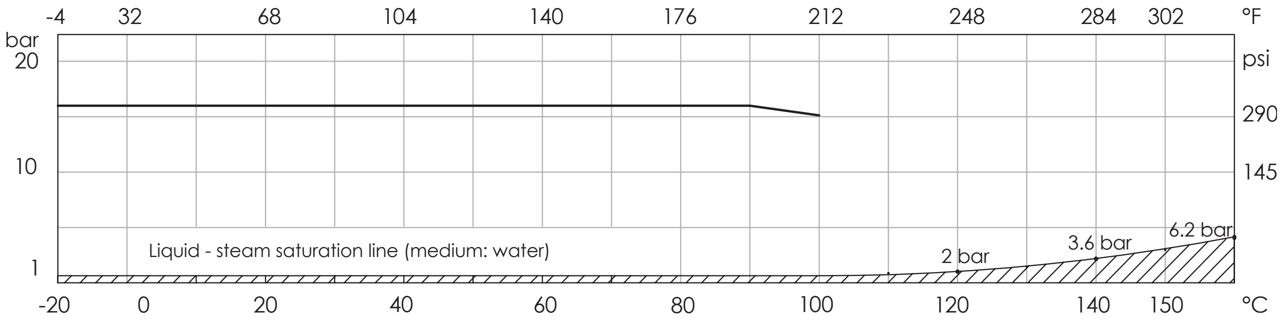
Minimum pressure	**refer to chart**
Minimum counterpressure	**0,1 bar**

Temperature

Temperature	min °C	Max°C	
		continuous	peak
D6.021, D6.031	-10	100	110
D6.622	-20	100	110

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

Pressure/temperature chart



RANGE NOT SUITABLE FOR STEAM. DO NOT use in case temperature and pressure are below the saturation line liquid-steam (hatched area)

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

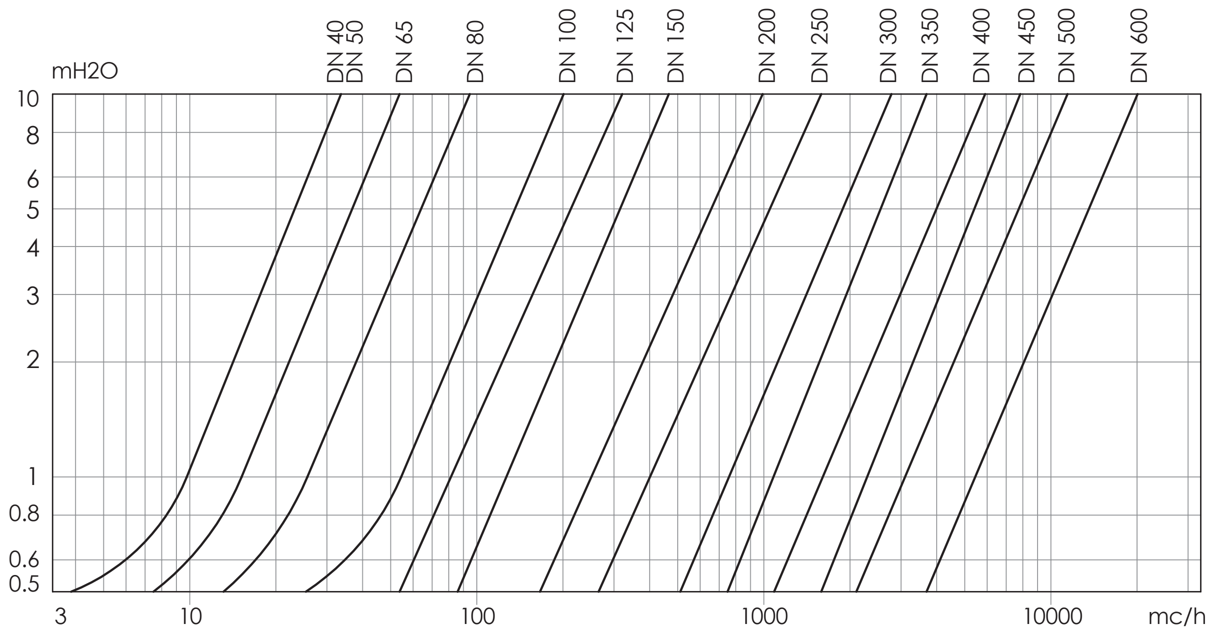


Tabella Kv - DN

DN		40 - 50	65	80	100	125	150	200	250	300	350	400	450	500	600
Kv	mc/h	34	54	95	200	320	467	990	1584	2783	3689	5900	7825	11400	20030

Cracking pressure - DN 40/600	**1020 mmH2O**

Dual-plate wafer check valve

Check valves

Versions

Cast iron body

D6.021

Body: EN GJL 250
Shutter: AISI 304
Seal: EPDM
Temp: -10 +100°C

D6.031

Body: EN GJL 250
Shutter: EN GJS 400-15
Seal: EPDM
Temp: -10 +100°C

D6.071

Body: EN GJL 250
Shutter: Aluminium/bronze
Seal: EPDM
Temp: -10 +100°C

Coating: **RAL 5002** colour

Body in ASTM A351 gr. CF8M

D6.622

Body: ASTM A351 gr. CF8M
Shutter: ASTM A351 gr. CF8M
Seal: FKM
Temp: -20 +100°C

D6.626

Body: ASTM A351 gr. CF8M
Shutter: ASTM A351 gr. CF8M
Seal: metal/metal
Temp: -20 +300°C
Pressure: PN 40

While stocks last

D6.672

Body: ASTM A351 gr. CF8M
Shutter: Aluminium/bronze
Seal: FKM
Temp: -20 +100°C

Instruction and Recommendations

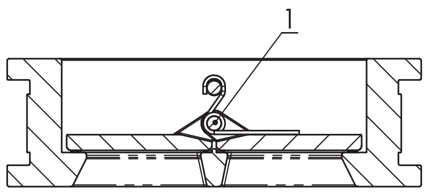
The information provided here is delivered with each product, and contains “Instructions for use and maintenance”; it is also available on our website: www.brandoni.it (download section)

STORING

Keep in a closed and dry place.

MAINTENANCE

- Remove the valve from the pipe and lean it on a plane surface
- Remove the plugs that close the housing of hinge pin 1
- Push the pin and extract it from the body
- Keep the springs fixed during the operation
- Clean the components and control the status of the seats and plate
- Replace the plate and insert the hinge pin.



RECOMMENDATIONS

Before going to maintain or dismounting:
- be sure that pipes, valves and fluids are cooled down,
- decrease pressure and drain lines and pipes in case of presence of toxic, corrosive, inflammable and caustic liquids.

Temperatures above 50°C and below 0°C might cause damage to people.

INSTALLATION

- Handle with care.
- Use the supplied eyebolt to lift the valve.
- the internal minimum diameter of the flanges has to be chosen to enable the correct opening of the plates (fig. 1)
- The springs of the 2 plates do not grant the closure in the absence of pressure when the valve is vertically installed in descendent fluid direction.
- For mounting in horizontal position the hinge pin has always to be in vertical position (fig. 2)
- Do not install in the presence of intermittent flow
- Place the valve in straight part of the piping , most possible far away from bends, elbows and pumps avoiding in any case the rising of turbulences next to the valve.

NOTE. This valve is unidirectional: install according to the flow direction marked on the body.

FIG. 1

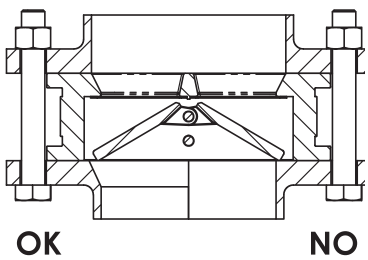


FIG. 2