

DOUBLE PLATE CHECK VALVE



Certificate 3.1

Size : DN 40 to 600
Ends : Between flanges PN10/16 or PN25
Min Temperature : - 10°C
Max Temperature : + 90°C for NBR, 110°C for EPDM, 180°C for FKM
Max Pressure : 10 to 16 Bars (according to DN)
Specifications : Vulcanized gasket
Horizontal or vertical position
Between flanges

Materials : Cast iron or stainless steel body

DOUBLE PLATE CHECK VALVE

SPECIFICATIONS :

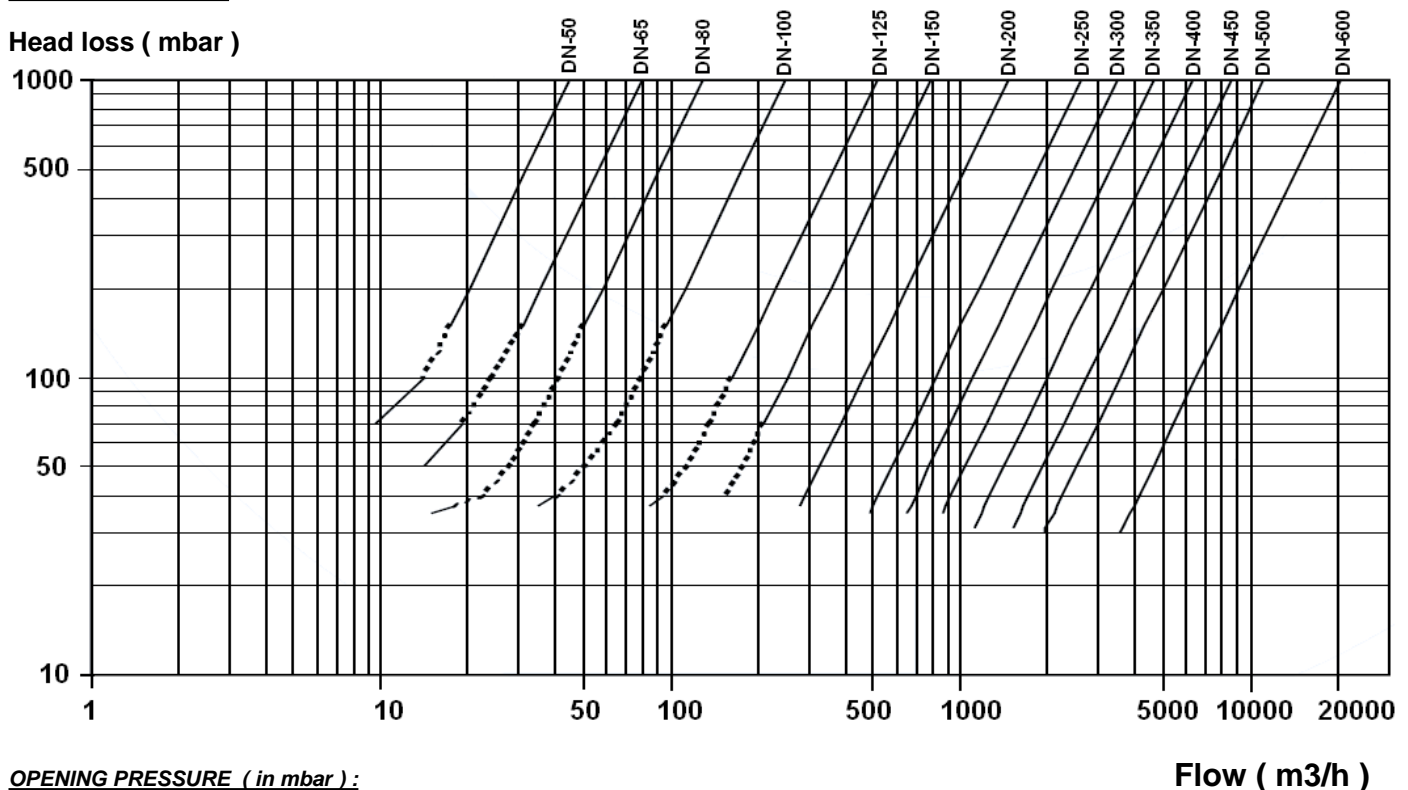
Vulcanized gasket
 Hoisting eye from DN200 to 600
 Short length
 Anti-corrosion stainless steel spring
 PTFE bushing
 Weak head loss
 Vertical position with ascendant fluid or horizontal position (respect the flow direction indicated by the arrow)
 Between flanges PN10/16 or PN25
 Anti-corrosion epoxy painting RAL003 50-100 microns thickness for body of 370 and 371 types

USE :

Heating, water distribution for **Ref. 370-371**
 Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation for **Ref. 372**
 Min and max Temperature Ts : - 10°C to + 90°C (110°C temporarily) for cast iron body with NBR gasket type **Ref.370**
 Min and max Temperature Ts : - 10°C to + 110°C for cast iron body with EPDM gasket type **Ref.371**
 Min and max Temperature Ts : - 10°C to + 180°C for stainless steel body with FKM gasket type **Ref.372**
 Max Pressure Ps : 16 bars up to DN300 included and 10 bars over
Do not use with pulsatory speed

HEAD LOSS GRAPH :

Head loss (mbar)



OPENING PRESSURE (in mbar) :

Flow (m3/h)

DN	40	50	65	80	100	125	150	200	250	300
Horizontal position	150	230	94	190	280	160	79	41	38	31
Vertical position ascend. fluid	190	260	114	230	320	180	95	57	58	56

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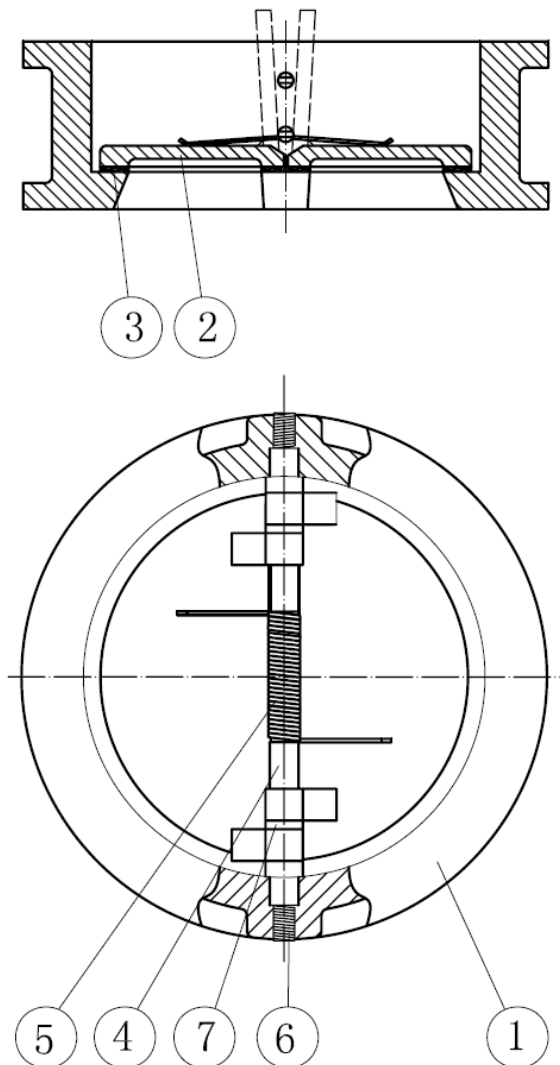
RANGE :

Double plate check valve with cast iron body and ductile iron disc between flanges PN10/16 **Ref. 370** From DN40 to DN 600

Double plate check valve with cast iron body and stainless steel disc between flanges PN10/16 **Ref. 371** From DN50 to DN 300

Double plate check valve with Stainless steel body and disc between flanges PN25 from DN 50 to 200 and PN10/16 from DN 250 to DN 600 **Ref. 372** From DN50 to 600

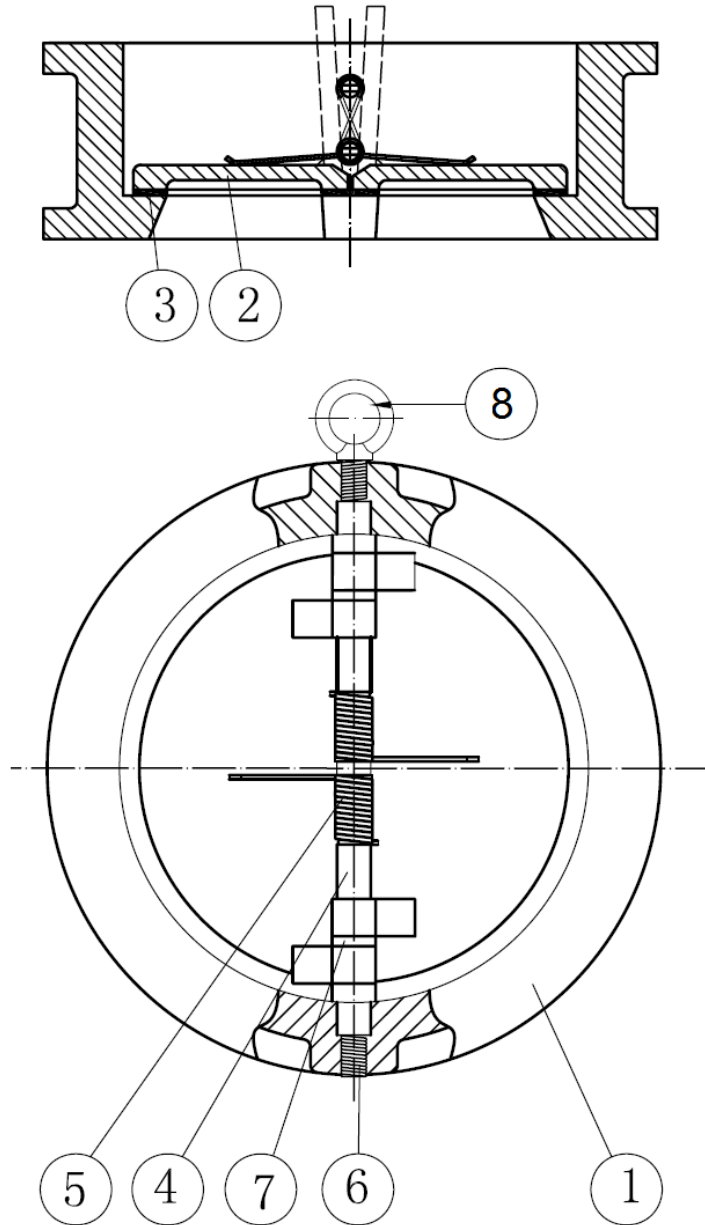
MATERIALS DN40-80 :



Item	Designation	Materials 370	Materials 371	Materials 372
1	Body	Cast iron EN-GJL 250	Cast iron EN-GJL 250	SS ASTM A351 CF8M
2	Disc	Nickel ductile iron EN-GJS 400-15	SS ASTM A351 CF8M	SS ASTM A351 CF8M
3	Seat	NBR	EPDM	FKM
4	Shaft	SS 304	SS 316	SS 316
5	Spring	SS 304	SS 316	SS 316
6	Screw	Galvanized carbon steel	Galvanized carbon steel	SS 316
7	Spacer	PTFE	PTFE	PTFE

DOUBLE PLATE CHECK VALVE

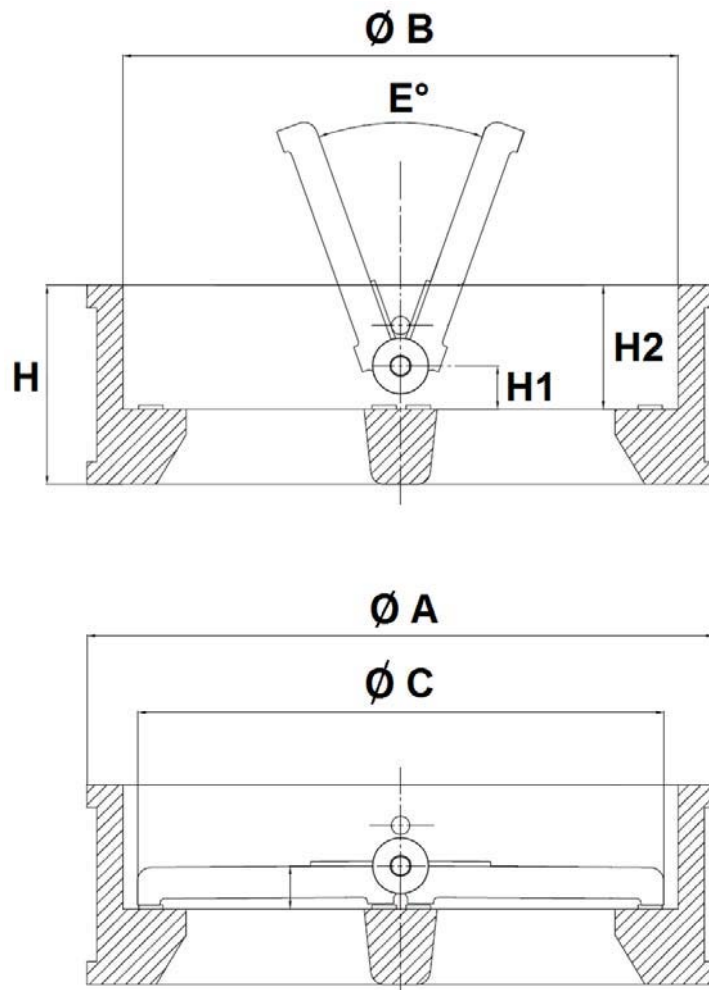
MATERIALS DN100 - 600 :



Item	Designation	Materials 370	Materials 371	Materials 372
1	Body	Cast iron EN-GJL 250	Cast iron EN-GJL 250	ASTM A351 CF8M
2	Disc	Nickel ductile iron EN-GJS 400-15	ASTM A351 CF8M	ASTM A351 CF8M
3	Seat	NBR	EPDM	FKM
4	Shaft	SS 304	SS 316	SS 316
5	Spring	SS 304	SS 316	SS 316
6	Screw	Galvanized carbon steel	Galvanized carbon steel	SS 316
7	Spacer	PTFE	PTFE	PTFE
8	Hoisting eye (from DN200 to 600)	SS 304	SS 304	SS 304

DOUBLE PLATE CHECK VALVE

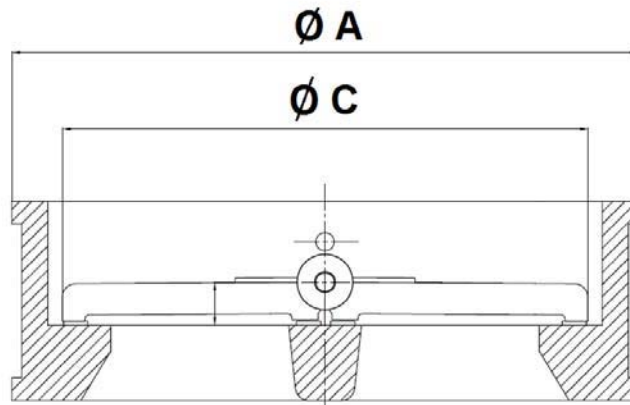
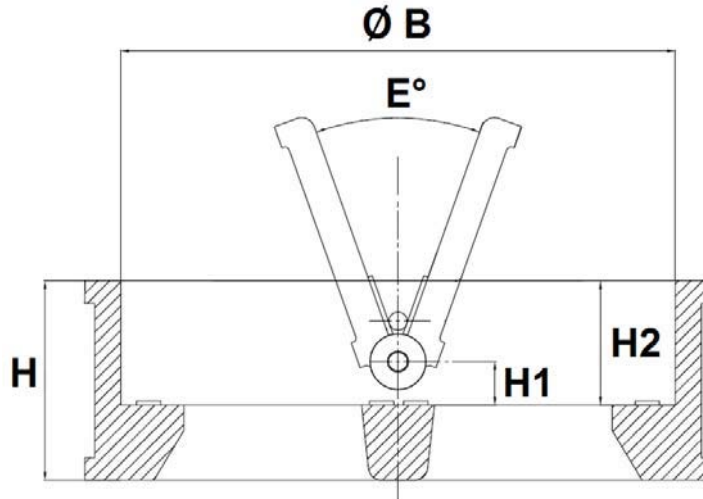
SIZE REF.370/371 (in mm):



Ref.	DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
370/371	H	43	54	54	57	64	70	76	95	108	144	184	191	203	213	222
	H1	12	14.4	16.9	19.9	21	22.3	22.5	28	34	37	35	37.5	42.2	39.5	48.5
	H2	33	43	43	45	47	51	54	69	71	100	120	123	122.6	132	138.5
	Ø A	82	109	129	144	164	194	220	275	330	380	440	491	541	596	697
	Ø B	56.5	70.5	83.5	91.5	115.5	142.5	169.5	220.5	275.5	325.5	356	406	467	514	616
	Ø C	52	60.5	75.8	80.5	104.5	130.3	155.9	201.2	257.2	303.3	345.9	388.6	431.2	486.8	607.6
	E°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	20°	20°	20°	25°	25°
	Weight (Kg)		1.6	1.62	2.3	3.14	4.5	6.7	9.05	16	26.9	38.9	80	106	128	158

DOUBLE PLATE CHECK VALVE

SIZE REF.372 (in mm) :



Ref.	DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
372	H	54	54	57	64	70	76	95	108	144	184	191	203	213	222
	H1	14.4	16.9	19.9	21	22.3	22.5	28	34	37	35	37.5	42.2	39.5	48.5
	H2	43	43	45	47	51	54	69	71	100	120	123	122.6	132	138.5
	Ø A	109	129	144	170	196	226	285	330	380	440	491	541	596	698
	Ø B	70.5	83.5	91.5	115.5	142.5	169.5	220.5	275.5	325.5	356	406	467	514	616
	Ø C	60.5	75.8	80.5	104.5	130.3	155.9	201.2	257.2	303.3	345.9	388.6	431.2	486.8	607.6
	E°	0°	0°	0°	0°	0°	0°	0°	0°	0°	20°	20°	20°	25°	25°
	Weight (Kg)		1.84	2.4	3.35	5.05	6.68	9.6	18.07	26.9	38.9	80	106	128	158

DOUBLE PLATE CHECK VALVE

STANDARDS :

Fabrication according to ISO 9001 : 2015

DIRECTIVE 97/23/CE : CE N° 0035
Risk Category III Module H

Certificate 3.1 on request

Designing according to API 594

Pressure tests according to API 598, table 6

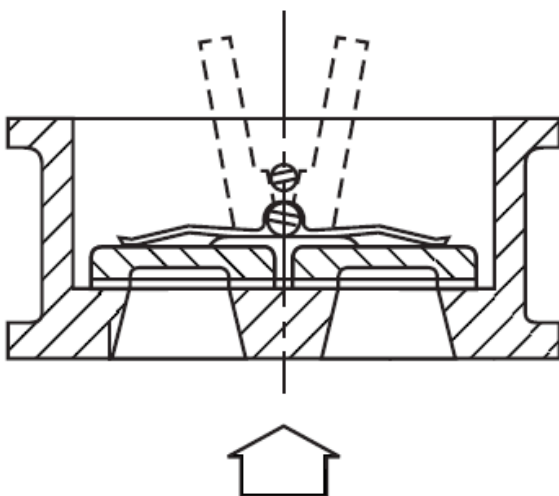
Length according to EN 558 Series 50

Between flanges according to EN 1092-1 PN10/16 for cast iron check valves Ref.370- 371

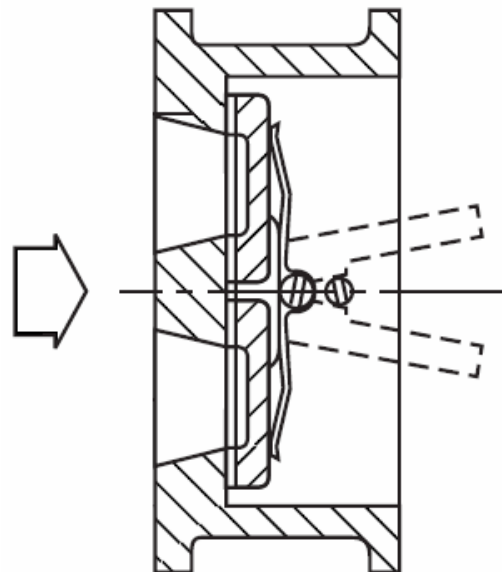
Between flanges according EN 1092-1 PN10/16/25 for stainless steel check valves Ref.372

INSTALLATION POSITIONS :

Vertical position (ascendant fluid)



Horizontal position



ADVICE : Our opinion and our advice are not guaranteed and SFERACO shall not be liable for the consequences of damages.
The customer must check the right choice of the products with the real service conditions.

DOUBLE PLATE CHECK VALVE

INSTALLATION INSTRUCTIONS

GENERAL GUIDELINES :

Ensure that the check valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).

Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.

Ensure that the valves to be installed are of correct strength to be able to support the capacity of their usage.

INSTALLATION INSTRUCTIONS :

Before installing the check valves, clean and remove any objects from the pipes (in particular bits of sealing and metal) which could obstruct and block the valves.

Ensure that both connecting pipes either side of the check valve (upstream and downstream) are aligned (if they're not, the valves may not work correctly).

Make sure that the two sections of the pipe (upstream and downstream) match, the check valve unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the check valve and can even cause a rupture. To be sure, place the kit in position to ensure the assembling will work.

Make sure there is enough space so that the disc can be opened totally in the pipe.

If there is a direction changing or if there's another material, it's better to take away the check valve so that it is outside the turbulence area (**between 3 and 5 times the ND before and after**).

After a pump please refer to **FD CEN/TR 13932** to install the check valve :

If it is essential to keep priming the pump, a non-return check valve can be fitted to the suction pipe at a distance **L1 (straight length suction) > 10xD1 (diameter suction)**

The check valve is designed to meet the maximum flow rate in service

In other cases, the non-return check valve is mounted on the discharge pipe at a distance of **L2 (straight length at discharge) > 3xD2 (diameter at discharge)**

Respect the flow direction indicated by the arrow