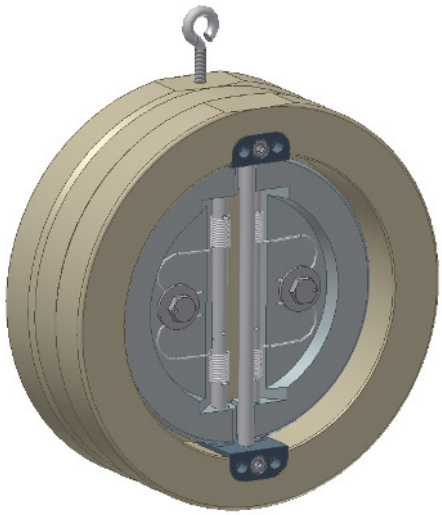
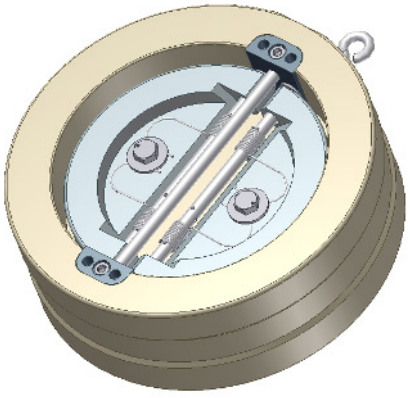
Double-Disc Check Valve Type DDC
DN050 - 600



Designation	Material
Body	see table
Disc	see table
Closing spring	1.4401
Stop pin	1.4435
Pin	1.4435
Centre ring	See page 2/2

Technical specifications
Placement between flange according to DIN EN 1092-1, PN10-16
Recommended gaskets:
- Spiral wound gasket according to EN 1514-2 or ASME B16.20
- Flat gasket according to EN 1514-1 or ASME B16.21

Nominal pressure max. PN40
Overall lengths according to DIN EN 558-1, Gr. 16
Tightness according to DIN EN 12266-1, Leakage Rate G (Sealing M, T) and Leakage Rate A (Sealing E, P, V)



Utilisation
For liquids, gases and steams in all process technology.

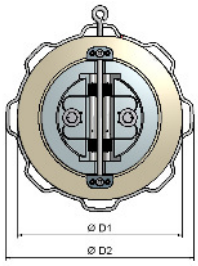
Constructional Features
- Centering by the outside diameter of the body or centring ring (see "Special Types")
- Excentric disc for wide opening angle and minimum pressure drop
- The stems are fixed on the inside of the valve. The body/the pressure bearing component has no drilling against the outside!
- The construction of the springs avoids an interdependency of the two discs
- Longer lifetime of the springs thanks to the design of an overlong spring bellow.

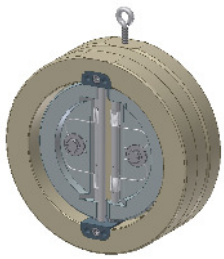
Special Types
Placement between flange according to DIN EN 1092-1, PN25-40 and ANSI B16.5 CL.150-300 with centring ring according to the following page

Designation:

DDC- 6 4 6 4 - E - 1 5 0
DDC- ❑❑ - ❑❑ - ❑ - ❑❑❑ → DN050 - 600

Body			Disc			Soft sealing		
Material	Nr.	Code	Material	Nr.	Code	Material	Temperatur	Code
Stainless steel	1.4301	11	Stainless steel	1.4301	11	EPDM	-50 bis 130°C	E
Steel	1.0038	27	Steel	1.0038	27	NBR	-30 bis 120°C	P
Bronce	2.1090	33	Bronce	2.1090	33	VITON	-20 bis 200°C	V
Austenit	1.4404	64	Austenit	1.4404	64	PTFE	-200 bis 200°C	T
						metallic		M





DN (mm)	**050**	**065**	**080**	**100**	**125**	**150**	**200**	**250**	**300**	**350**	**400**	**450**	**500**	**600**
DN (zoll)	2"	2 ½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L	43	46	64	64	70	76	89	114	114	127	140	152	152	178
Ø D1,PN10	107	127	142	162	192	218	273	328	378	438	489	539	594	695
Ø D1,PN16	107	127	142	162	192	218	273	328	378	444	495	555	617	731
Ø D1,D2,PN25	107	127	142	170	192	226	283	338	400	457	514	564	624	731
Ø D1,D2,PN40	107	127	142	170	192	226	290	352	417	474	546	571	628	747
Ø D1,D2,ANSI150	101	120	133	170	192	218	273	338	400	447	511	546	603	714
Ø D1,D2,ANSI300	107	127	142	177	212	247	304	352	417	482	536	593	650	771
Gewicht (Kg)	2.4	3.6	5.7	7.4	10.7	15.2	28.2	51	66	95	132	178	200	270

The pressure rates marked in blue are indicating the use of a centre ring. (See extra charges on the price list).
D2 shows the outer diameter of the centre ring.

Opening pressures (mbar)

DN (mm)	**050**	**065**	**080**	**100**	**125**	**150**	**200**	**250**	**300**	**350**	**400**	**450**	**500**	**600**
DN (Zoll)	2"	2 ½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
po ↑	17	15	15	14	14	17	19	21	22	24	26	29	30	32
po →	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Kv Value in m3/h	35	66	120	208	368	580	1180	1975	3120	5350	8250	10550	14500	2400

Pressure drop Diagram

Pressure drop diagram for water at 20°C with opened valve and horizontal flow.
For calculating the pressure drop of the medium the equivalent water flow volume has to be calculated.

$$\dot{V}w = \dot{v}\sqrt{\frac{\rho}{1000}}$$

$\dot{V}w$ = Equivalent water flow volume in m3/h
ρ = Density of the medium (in use) kg/m3

$\dot{v}$ = Flow volume of the medium (in use) in m3/h