

WAFER DISC CHECK VALVE CV-86

Pmax: 40bar | Tmax: +400°C | DN15 – DN200

WAFER DISC CHECK VALVE WITH SPRING



APPLICATION

Wafer disc stainless steel check valve for water, chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air.

FEATURES

Stainless steel type with spring, all positions. Metal/metal tightness (leakage rate according to API 598 standard). Compatible with explosive atmosphere, ATEX Zone 1&21 and Zone 2&22.

GENERAL CHARACTERISTICS

Range from DN15 – DN200
Connection Between flanges PN10/16/25/40
Wafer spring check valve
Short length

Metal / metal tightness

Assembling: All positions

Respect the flow direction indicated by the arrow

STANDARDS

Manufacturer certified ISO 9001 : 2015 and ISO 14001 : 2015

Pressure tests according to API 598, table 6

DIRECTIVE 2014/68/EU :

- a) DN15-25 : Article 4, §3 (SEP), no CE marking for liquids and gas of Group 1
- b) DN32-100 : Risk Category II, CE 0035 marking for liquids and gas of Group 1
- c) DN125-200 : Risk Category III, CE 0062 marking

Designing according to EN 12516-1

Pressure tests according to API 598, table 6

Length according to EN 558 series 49 (DIN 3202 K4)

On request:

Certificate 3.1

ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 (marking)

Drinking water compatibility (marking)

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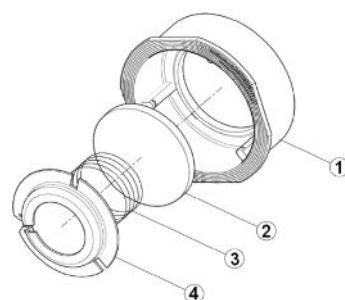
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WORKING CONDITIONS

Maximum Working Pressure: 40 bar / Steam: max 14 bar
 Working Temperature:- 20°C / +400°C.

CONSTRUCTION

item	Part	Material
1	Body	EN 1.4408
2	Disc	ASTM A240-316
3	Spring	AISI 316
4	Spring holder	ASTM A240-316
Id marking		CV86-xxx.177Z7 PN10/40



xxx – dimension type f.g. 1/2" = 015, 1 1/4" = 032

NOTE! „id marking” is not complete. In case of fully id please send the inquiry to email: info@mixflow.com.pl

OPENING PRESSURE (in mbar) :

DN	Vertical Position Ascending Fluid	Horizontal Position	DN	Vertical Position Ascending Fluid	Horizontal Position
DN 15	25 ↑	23 →	DN 65	31 ↑	25 →
DN 20	25 ↑	23 →	DN 80	32 ↑	26 →
DN 25	25 ↑	23 →	DN100	33 ↑	27 →
DN 32	27 ↑	24 →	DN 125	60 ↑	51 →
DN 40	29 ↑	25 →	DN 150	60 ↑	50 →
DN 50	29 ↑	25 →	DN200	62 ↑	49 →

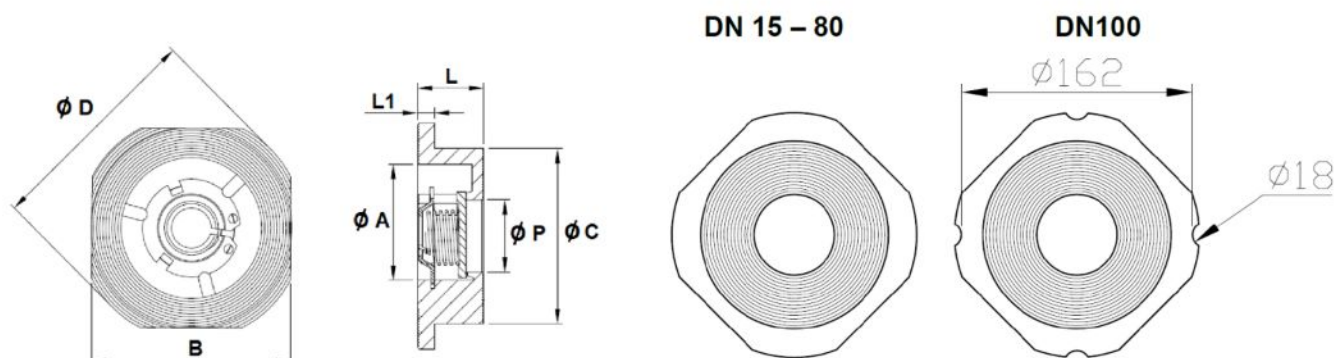
FLOW COEFFICIENT Kvs (m³/h)

DN	15	20	25	32	40	50	65	80	100	125	150	200
Kvs (m ³ /h)	2.1	5.76	9.6	14.5	21.9	24.2	57.1	64.97	90.2	228	342.5	647.8

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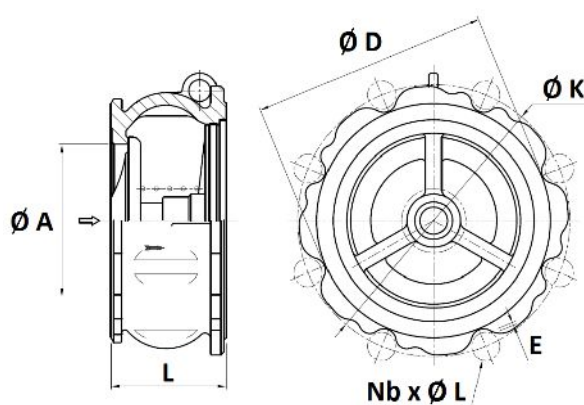
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Overall dimensions [mm] for DN15 – DN100



Dim	Ø A	B	Ø C	Ø D	L	L1	Ø P	Weight (Kg)
15	34	44.6	40.5	54	16	3.5	12.5	0.1
20	39	54	47	62	19	3.5	20	0.15
25	46	65	56	73	22	4	25	0.24
35	60	78	70	83	28	5	32	0.5
40	70	88	80	93	31.5	5	38	0.55
50	79	101.6	90	107	40	5	49	0.83
65	101	120.4	113	126.5	46	5.5	64	1.4
80	109	133	123	141.2	49	5.5	78	1.77
100	134	164	150	171.4	60	6.5	98	2.97

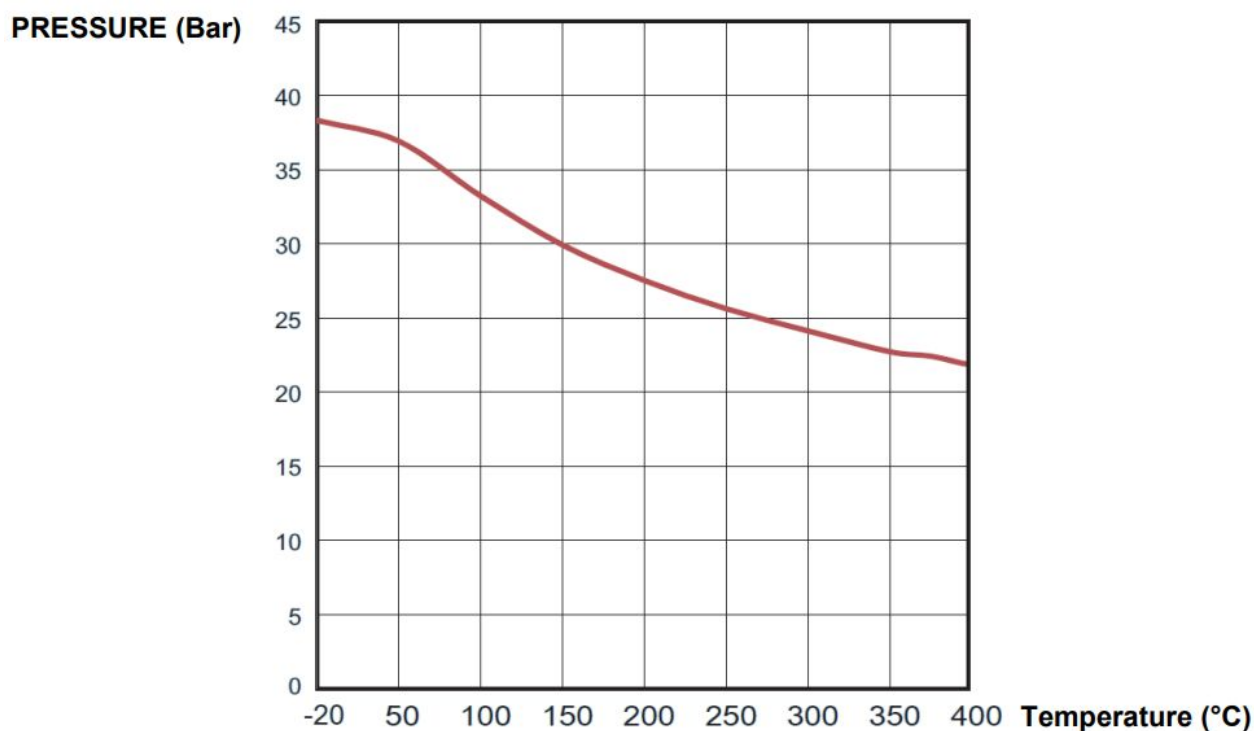
Overall dimensions [mm] for DN125 – DN200



Dim	L	Ø A	Ø D	Ø K	Nb x Ø L	E	Weight (Kg)
125	90	120	186	220	8 x 26	3	8.34
150	106	140	216	250	8 x 26	2.7	13.4
200	140	184	267	320	12 x 30	10	24.2

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PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) DN15 – 100:



LEAKAGE RATE ACCORDING TO API 598 (DURING 60s excepted for DN200: 120s)

DN	15	20	25	32	40	50	65	80	100	125	150	200
Liquid Test (cc/min)	6						7.5	9	12	15	18	24
Gas Test (m3/h)	0.08						0.11	0.13	0.17	0.21	0.25	0.34

