BECK

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HORIZONTAL CHECK VALVE

The innovation for horizontal flow patterns

be reliable.

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NEW

The first of its type

The Beck horizontal check valve is the **first check valve on the market with a round design** and **a round damper blade** that was especially developed and built for the installation in plastic pipelines for the ventilation of chemical process air. As an integrated component for pipe systems, it is installed directly in the pipe and reliably secures the closure with the fan switched off. In customary **Beck quality,** with the highest precision and constant wall thickness, the horizontal check valve seamlessly fits in the Beck product line.

Intelligent construction, simple principle

The distinctive feature of our check valve lies in the unique design of the damper blade:

- Geometrically optimised damper blade with a tear drop shape
- Comprised of two blade halves connected with each other by means of a shaft
- Tilted at an angle of 15° for an optimal centre of gravity
- Opens and closes solely due to its own weight and the force of the flow
- Functions completely without technical or electrical drives

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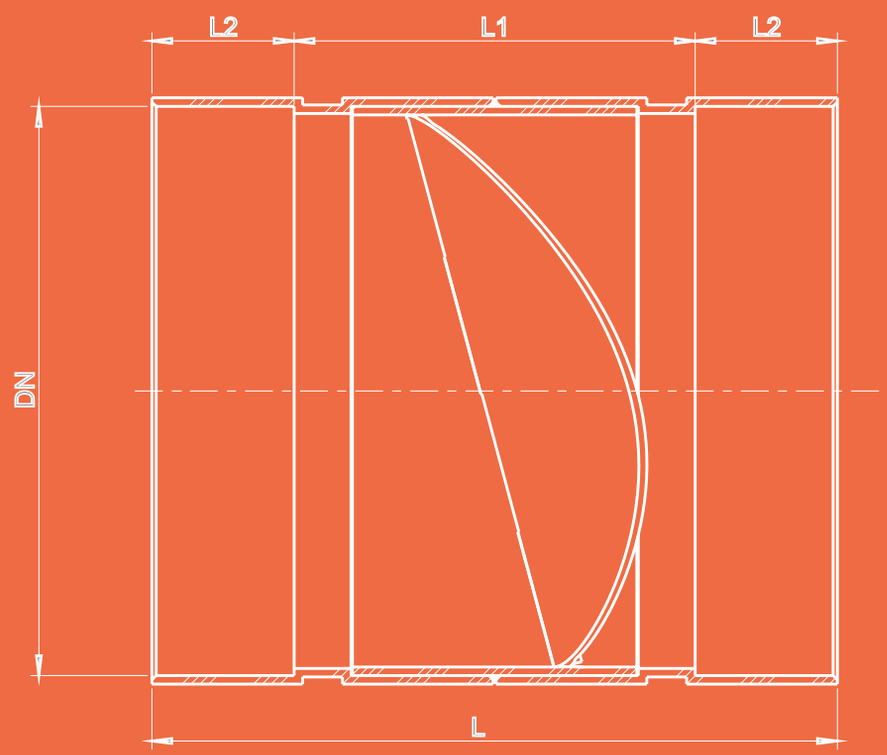
Superior operating principle

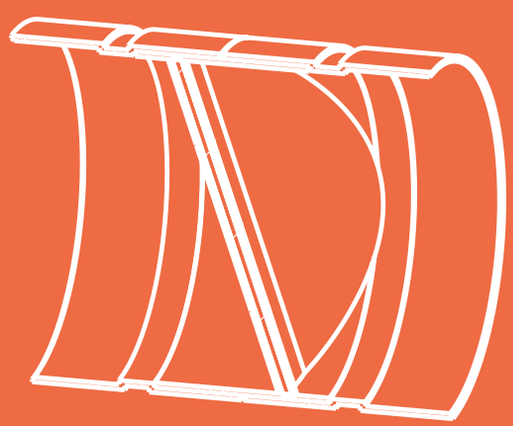
The damper blade arranged at an angle of 15° responds to even the slightest of air flows and in this manner facilitates an especially efficient mode of operation. The specific geometry of the damper blade and its installation position ensure a minimum loss of pressure. Here, the construction requires no additional auxiliary energy such as springs, electric or pneumatic drives. Due to the flow-optimised shape, the pressure loss is extremely low, while the pipe is sealed off virtually completely in the closed state. Furthermore, the system features a compact construction with a short installation length and a reliable tightness due to precise, injection-moulded components.

Area of use and function

The horizontal check valve has a clearly defined task: It closes the pipe in the event of a switched off fan and as a result prevents flow occurring generated by convection.

Important to note: The check valve does not have the function of a throttle – it cannot be used to set volume flows.





Simple construction

The check valve consists of the following:

- A fully closed housing as a receptacle for the functional pipe
- A functional pipe with integrated damper blade halves and a guide shaft
- Unique identification of the installation position for fault-free installation

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Materials and sizes

The Beck horizontal check valve is available in a variety of high-quality materials: **PVC, PVC-UV, PPs, PPs-el, PP, PE, PVDF.**

Available sizes:

Ø 110 mm
Ø 125 mm
Ø 160 mm
Ø 200 mm
Ø 315 mm

Maximum safety without auxiliary energy

Foregoing auxiliary energy offers two decisive benefits:

1. **Higher resistance:** We solely use materials that are resistant to chemicals. Auxiliary energies provided by springs would corrode in continuous operation and lead to the failure of the damper function.

2. **Optimal response behaviour:** Pneumatic and electric auxiliary drives require a type of mechanism that would prevent a sensitive response behaviour that has been designed to react to even the slightest of flows.

You can find our product range with all variants and prices in our price list.

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Radiated noises

Nominal width DN	w in m/s	V in m³/h	A-evaluated sound power level in dB(A) in the frequency interval in Hz								L_{WA} in dB (A)
			63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
110	12	424	*	*	*	*	*	*	*	*	*
	16	565	*	*	*	*	*	*	*	*	*
	20	707	*	*	*	*	*	*	*	*	*
	24	848	*	*	*	*	*	*	*	*	*
	29	990	*	*	*	*	*	*	*	*	*
160	10	724	*	*	*	*	*	*	*	*	*
	12	869	*	*	*	*	*	*	*	*	*
	16	1158	*	*	*	*	*	*	*	*	*
	20	1448	*	*	*	*	*	*	*	*	*
	24	1737	*	*	*	*	*	*	*	*	*
	30	2171	*	*	*	*	*	*	*	*	*
200	8	905	*	*	*	*	*	*	*	*	*
	10	1131	*	*	*	*	*	*	*	*	*
	12	1357	*	*	*	*	*	*	*	*	*
	15	1696	*	*	*	*	*	*	*	*	*
	20	2262	*	*	2	17	19	18	11	*	23
	24	2714	*	*	16	21	25	25	20	*	29
250	6	1060	*	*	*	*	*	*	*	*	*
	8	1414	*	*	*	*	*	*	*	*	*
	10	1767	*	*	*	*	*	*	*	*	*
	12	2121	*	*	*	*	*	*	*	*	*
	15	2651	*	*	*	17	19	18	11	*	23
	20	3534	*	*	*	21	25	25	20	*	39
315	6	1683	*	*	*	*	*	*	*	*	*
	8	2244	*	*	*	*	*	*	*	*	*
	10	2806	*	*	*	20	21	18	18	*	26
	12	3367	*	*	*	21	24	24	11	*	28
	15	4208	*	*	13	17	30	30	21	*	33
	20	5611	*	16	25	34	36	36	29	*	41

Definitions:

f_m in Hz: Mid-frequency of the octave band

L_W in dB/ octave: Sound power level determined in the reverberant chamber

L_{WA} in dB (A): Overall sound level A-evaluated

V in m³/h: Volume flow

W in m/s: Flow rate

***** no significant value measurable

Flow noises

Nominal width DN	w in m/s	V in m^3/h	A-evaluated sound power level in dB(A) in the frequency interval in Hz								L_{WA} in dB (A)
			63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
110	12	424	*	*	*	*	*	*	*	*	*
	16	565	*	*	*	*	*	*	*	*	*
	20	707	*	*	*	*	*	*	*	*	*
	24	848	*	*	*	*	*	*	*	*	*
	29	990	12	18	22	19	23	10	*	*	26
160	10	724	*	*	*	*	*	*	*	*	*
	12	869	11	14	18	20	21	*	*	*	25
	16	1158	14	18	22	22	24	21	12	*	28
	20	1448	17	22	25	26	25	17	14	*	31
	24	1737	20	24	29	30	29	26	20	*	35
	30	2171	25	31	35	36	36	30	24	*	42
200	8	905	*	*	*	*	*	*	*	*	*
	10	1131	*	*	*	*	*	*	*	*	*
	12	1357	18	20	24	22	24	16	*	*	30
	15	1696	22	24	30	26	26	20	16	14	34
	20	2262	26	30	34	35	34	29	20	16	40
	24	2714	29	34	37	38	40	36	27	18	45
250	6	1060	*	*	*	*	*	*	*	*	*
	8	1414	*	*	*	*	*	*	*	*	*
	10	1767	*	*	*	*	*	*	*	*	*
	12	2121	*	*	*	*	*	*	*	*	*
	15	2651	*	*	*	*	*	*	*	*	*
	20	3534	*	*	*	*	*	*	*	*	*
315	6	1683	*	*	*	*	*	*	*	*	*
	8	2244	25	31	32	29	27	25	23	17	37
	10	2806	28	34	36	36	35	28	23	17	42
	12	3367	30	37	40	41	42	33	27	29	47
	15	4208	33	44	44	46	47	42	32	23	52
	20	5611	39	46	50	52	54	51	44	33	59

Price list
horizontal check valve

	RSKH1-	RSKH2-	RSKH3-	RSKH4-	RSKH5-	RSKH6-	RSKH9-
d	PVC	PPs	PP	PE	PPs-el	PVDF	PVC-uv
0110	112,21 €	116,67 €	116,67 €	116,67 €	431,46 €	780,72 €	151,50 €
0125	125,13 €	131,77 €	131,77 €	131,77 €	462,87 €	837,56 €	169,12 €
0160	159,87 €	164,07 €	164,07 €	164,07 €	611,74 €	1.083,24 €	215,73 €
0200	185,88 €	198,10 €	198,10 €	198,10 €	660, 79 €	1.161,47 €	250,82 €
0250	223,40 €	235,80 €	235,80€	235,80 €	705,99 €	1.277,43 €	301,60 €
0315	245,03 €	260,93 €	260,93 €	260,93 €	1.004,11 €	1.764,93 €	330,74 €

Contact for additional information

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