

Concrete Production

Spring-Loaded Pressure Relief Valves VCP

22/A



Description ▼

VCP Pressure Relief Valves consist of a cylindrical casing with a bottom flange to be connected with a spigot welded on the silo roof, a disc shape inner steel lid for negative pressure operation held in position by a central spring rod, an outside steel ring for excess pressure kept in position by three spring rods, gaskets, and a weather protection cover.

Function ▼

In the VCP Pressure Relief Valve, helical springs keep the valve lids closed when the pressure value remains within the preset limits. The three outside spring rods keep the external ring-shaped lid firmly closed as long as the force generated by the pressure inside the silo does not overcome the spring force. Once the pressure exceeds the preset value the lid is pushed up and the pressure can escape. The smaller lid covers the central circular opening of the external lid from below. It is held in the middle by a single spring rod and is pressed onto the external lid by the normal air pressure inside the silo. In the event of suction pressure, the spring is compressed and allows the lid to drop. The air entering the silo from outside ensures rapid pressure balance and pushes the central lid back up into the "closed" position.



Application ▼

VCP Pressure Relief Valves are the last resort when abnormal pressure conditions endanger the silo structure. This is why sudden excess or suction pressure inside the silo must be dealt with instantaneously.

Even though ideally a Pressure Relief Valve should never have to go into action, it must be efficient and reliable if needed.

With tens of thousands of units installed worldwide, VCP Pressure Relief Valves have given evidence of being totally reliable under the most different conditions.

Benefits ▼

- ✓ **Used with different materials in the same configuration;**
- ✓ **Easy to handle and fit thanks to lightweight design and reduced overall dimensions;**
- ✓ **Maintenance-friendly thanks to small numbers of components.**

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Spring-Loaded Pressure Relief Valves VCP

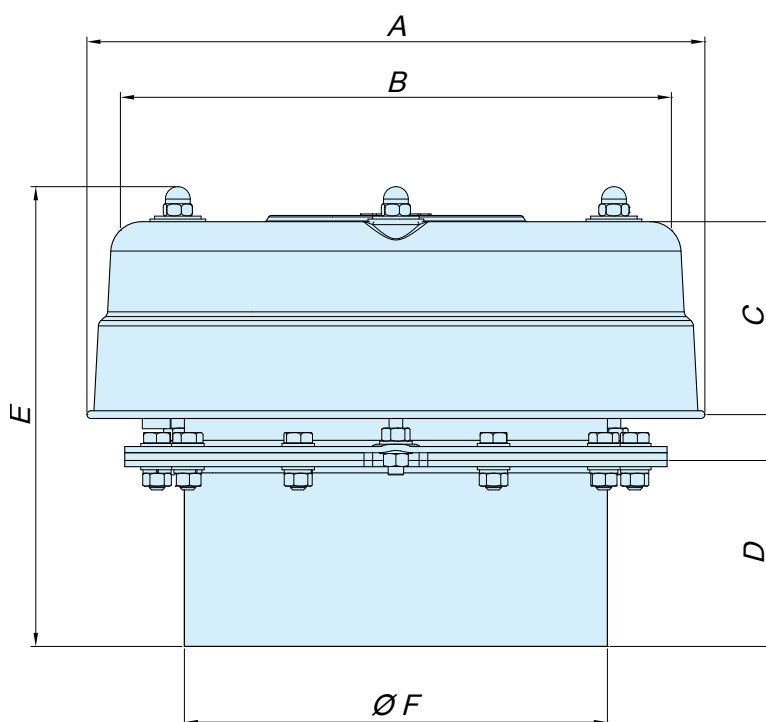


Technical Features / Performance ▼

- ▶ Carbon steel body (VCP...1C) painted RAL 7001
- ▶ Size 273mm (11 in) or 375mm (14 in)
- ▶ Weather protection cover in stainless steel
- ▶ Air volume up to 13,000 m³/h (7,650 cfm)
- ▶ Setting range: excess pressure from 300mm H₂O (0.44psi) up to 800mm H₂O (1.16 psi)
- ▶ Setting range: negative pressure from -50mm H₂O (0.07psi) up to -100mm H₂O (0.15psi)
- ▶ No welding seams inside
- ▶ Equipped for inductive signalling sensors
- ▶ Protective bellows for springs

Overall Dimensions ▼

	TAMANHO [mm]	
	273	375
A	400	525
B	356	468
C	125	175
D	120	120
E	325	400
Ø F	273	356
kg	11	23



Spring-loaded Pressure Relief Valves

VCP



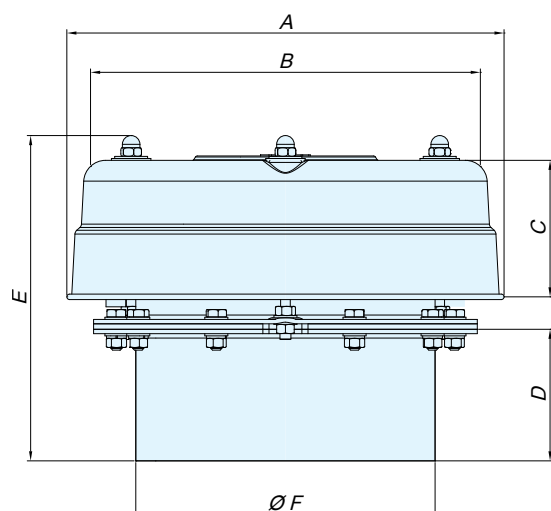
THE ULTIMATE SILO SAFEGUARD

VCP Pressure Relief Valves are the last resort when abnormal pressure conditions endanger the silo structure. This is why sudden excess or suction pressure inside the silo must be dealt with instantaneously. Even though a Pressure Relief Valve should ideally never have to come into action, it must work efficiently and reliably when needed.

Hundreds of thousands of VCP Pressure Relief Valves in use worldwide are proof of absolute reliability under a wide range of conditions. For applications in the food industry, a version in accordance with European Regulation (EC) No. 1935/2004 is available.



Overall Dimensions



	SIZE 273 mm	SIZE 375 mm
A	400	525
B	356	468
C	125	175
D	120	120
E	325	400
Ø F	273	356
kg	9.5	23.0

Factory setting	Excess Pressure	Negative Pressure
	500 mm H ₂ O	-50 mm H ₂ O*

Benefits



Lightweight and compact overall dimensions



Time-saving maintenance



Easy to fit



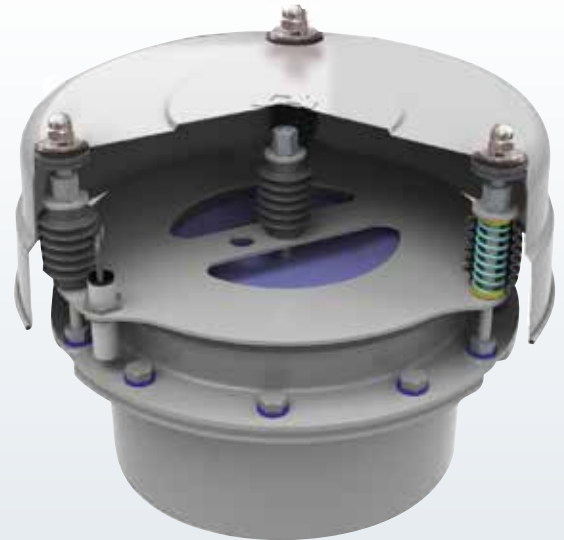
Short delivery time



Technical support and worldwide availability of spare parts thanks to the WAMGROUP® subsidiary network

Technical Features

- Two sizes available
- Flow rate: up to 13,000 Nm³/h (7,650 cfm)
- Painted mild-steel or 304 stainless-steel casing
- Stainless-steel weather protection cover
- Mechanical set-up for inductive signalling sensor
- Preset for maximum negative pressure of -0.005 bar (-0.07 psi) and maximum excess pressure of 0.05 bar (0.72 psi)



Industries



Animal Feed Milling



Plastics Processing



Dry-Mix Processing



Food Processing



Flour Milling



Cosmetics



Detergents Processing



Chemicals



Ceramics



Glass Processing

Options

- ATEX-certified version
- Compliance with European Regulation (EC) No. 1935/2004
- Different settings
- Inspection hatch
- Inductive sensors
- Bird net

Application



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WAM VALVES



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