

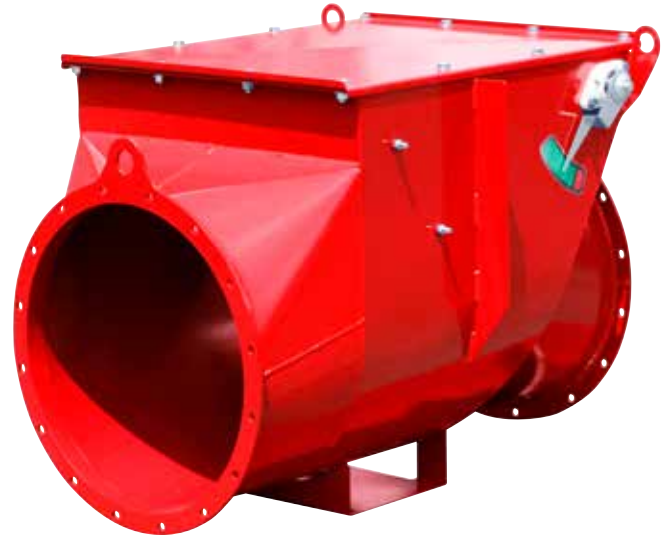
EV-VF VigiFlap

APPLICATIONS

The **VigiFlap** is an explosion isolation valve designed to prevent propagation of overpressure or flame front caused by an explosion downstream in vessels such as dust collectors, cyclones, and filters.

The valve is held open either by air flow or proprietary locking mechanism. As a result, the **VigiFlap** valve can be used as an explosion isolation device for both the inlet and outlet of a vessel.

The **VigiFlap Explosion Isolation Valve** complies with **NFPA** guidelines and is an **ATEX Certified** device for the containment of explosion.



CERTIFICATIONS & STANDARDS

EN 16447
NFPA 69



STANDARD FEATURES

- Body : painted steel
- 100% stainless steel AISI 304
- Diameters : $\phi 6''$ to $\phi 52''$ / $\phi 160$ mm to $\phi 1320$ mm
- Gasket : EPDM (Silicone FDA 392°F/200°C option)
- Pressure drop : Lower pressure drop with round domed flap

OPTIONAL FEATURES

The EV-VF is 100% NFPA 69 compliant with the following optional features :

- **Body** : Galvanized steel
- **Body** : Stainless steel
- **Frame silicone FDA** : 392°F/200 °C
- **Accumulated dust level** : Dust level sensor to prevent dust accumulation
- **Connection box** installed on the body, according to the ATEX zone (opposite side of the locking mechanism)





PRODUCT CODE: 50200

DIMENSIONS

DIMENSIONS				
DN [inch]	DN [mm]	Door gasket	Body gasket	Body
ø 6	ø 160	EPDM	EPDM	Mild steel
ø 7	ø 180	EPDM	EPDM	Mild steel
ø 8	ø 200	EPDM	EPDM	Mild steel
ø 10	ø 250	EPDM	EPDM	Mild steel
ø 12	ø 300	EPDM	EPDM	Mild steel
ø 14	ø 350	EPDM	EPDM	Mild steel
ø 16	ø 400	EPDM	EPDM	Mild steel
ø 18	ø 450	EPDM	EPDM	Mild steel
ø 20	ø 500	EPDM	EPDM	Mild steel
ø 22	ø 550	EPDM	EPDM	Mild steel
ø 24	ø 600	EPDM	EPDM	Mild steel
ø 26	ø 650	EPDM	EPDM	Mild steel
ø 28	ø 700	EPDM	EPDM	Mild steel
ø 30	ø 750	EPDM	EPDM	Mild steel
ø 32	ø 800	EPDM	EPDM	Mild steel
ø 34	ø 850	EPDM	EPDM	Mild steel
ø 36	ø 900	EPDM	EPDM	Mild steel
ø 38	ø 950	EPDM	EPDM	Mild steel
ø 40	ø 1000	EPDM	EPDM	Mild steel
ø 42	ø 1050	EPDM	EPDM	Mild steel
ø 44	ø 1100	EPDM	EPDM	Mild steel
ø 46	ø 1150	EPDM	EPDM	Mild steel
ø 48	ø 1200	EPDM	EPDM	Mild steel
ø 50	ø 1250	EPDM	EPDM	Mild steel
ø 52	ø 1300	EPDM	EPDM	Mild steel

** Units in inches rounded to the closest whole number*

MINIMUM INTERNAL DUST ACCUMULATION

The VigiFlap's unique inlet & outlet "Straight Through" design ensures very low static resistance and reduces dust accumulation.



FREE FLOW DESIGN

Explosion Isolation Valve EV-VF VigiFlap

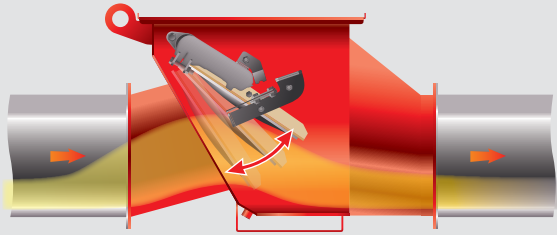
PROCESS FLOW POSITIONS

PROCESS FLOW

FLOW POSITIONS :

1 Flap is held open by process flow

Installation with floating flap



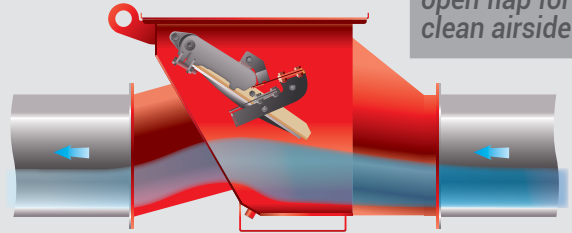
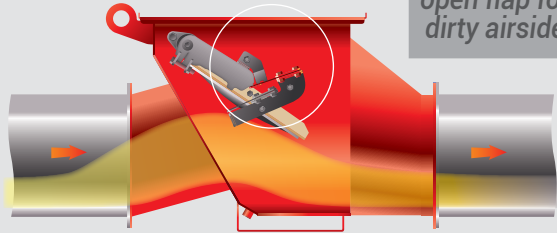
2 Flap locked in open position

Locked open flap for dirty airside

or

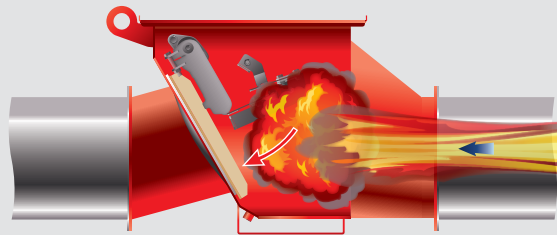
Locked open flap for clean airside

Installation with flap locked open



EXAMPLE DURING AN EXPLOSION EVENT

Explosion isolation is achieved by flap closure independent of being in free floating or locked open position



Manual locking mechanism reset is required

TECHNICAL INFORMATION

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KST MAX	ST3 > 250 bar.m/s	AMBIENT TEMPERATURE	-4°F... +140°F -20°C... +60°C	FLUX	Overpressure or vacuum
PMAX	145 psi ≤ 10 bar	SPEED FLOW	2950-6890 fpm 15m/s... 30m/s	INTERIOR	ATEX zone 20
MESG	1/16" 1.5 mm (ex: sulfur)	DUST CONCENTRATION	No limit	OPERATING TEMPERATURE	EPDM gasket : -30° C + 70° C
DUST	Any kind of dust	POSITION OF THE DEVICE	Vertical / Horizontal		Silicon gasket : -10° C + 180° C

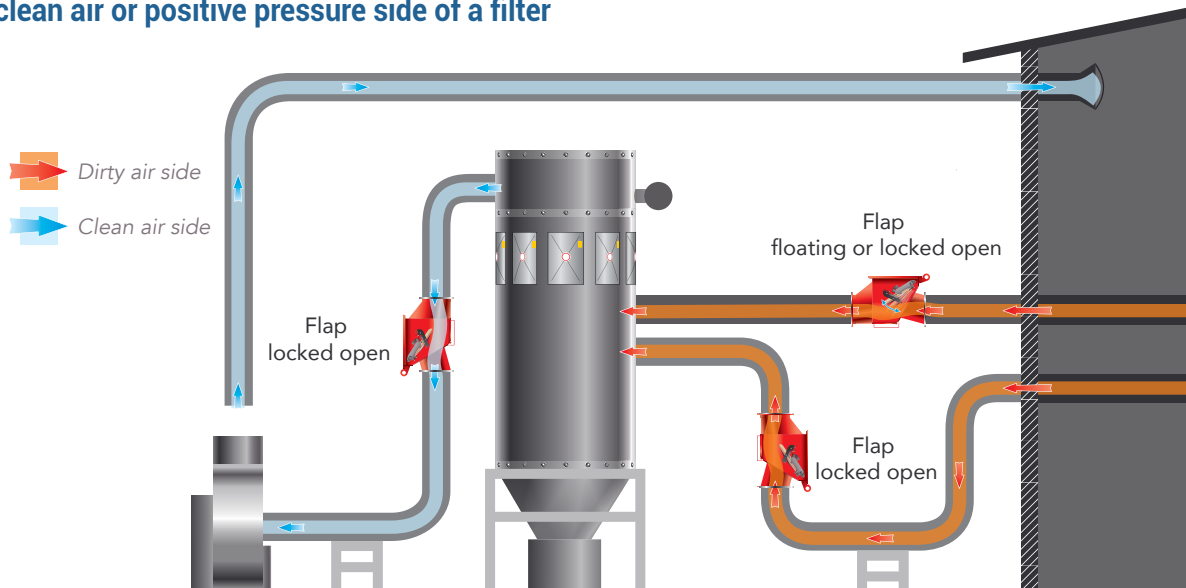


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EV-VF VigiFlap TYPICAL INSTALLATION EXAMPLES

THE VigiFlap EXPLOSION ISOLATION VALVE IS DESIGNED FOR USE ON THE INLET AND OUTLET SIDES OF A FILTER OR VESSEL

PROCESS FLOW (Flap is always set in the open locked position when installed on the clean air or positive pressure side of a filter)



DEFLAGRATION EXPLOSIVE EVENT

