DATA SHEET

VALVEX® PASSIVE EXPLOSION ISOLATION VALVE

DESCRIPTION

The ValvEx® is designed to prevent flame and pressure propagation through pipes, ducts or conveying lines to interconnected process equipment or operating locations. Several years of dedicated research has resulted in unique insights into mechanisms of explosion propagation and efficiency of passive explosion isolation.

SAFETY FUNCTION

The ValvEx® consists of a heavy duty coated steel body containing a high strength, formed stainless steel flap. Air flow will open the flap to allow normal process conveyance conditions. When an explosion occurs in the adjacent vessel, the flow will reverse causing the flap to close onto its field replaceable seal, stopping explosion pressure and flame propagation.

FEATURES AND BENEFITS

- High Efficiency - minimal dust drop out, aerodynamic design
- Minimal pressure drop
- Integrated seal
- Self-resetting
- Easy to maintain
- Compact, small installation dimensions
- Designed for low cost of ownership
- ATEX certified
- NFPA 69 compliant
- Formed stainless steel flap (high strength)

APPROVALS:

- INERIS 14ATEX0026X according to EN16447

SPECIFICATIONS

Type	**ValvEx® Passive Explosion Isolation Valve**
Available sizes	DN100 (4”), DN150 (6”), DN200 (8”), DN250 (10”), DN300 (12”), DN355 (14”), DN400 (16”)
Process Connection	Bolted flanges (DIN 24154 – RII T2)
Explosion hazard	K_{St} ≤ 200 bar.m/s P_{max} ≤ 10 bar (145 psig)
$P_{red\ max}$	1 bar (14.5 psig)
Explosion Pressure Resistance	2.5 bar (36.3 psig)
Temperature range	-20°C to 60°C (-4°F to 140°F)
Body Material	Carbon-steel coated RAL 5000
Operating Pressure	+/- 0.5 bar (+/- 7.3 psig)
Wetted Parts	Coated carbon steel, 303 SST, 304 SST, EPDM

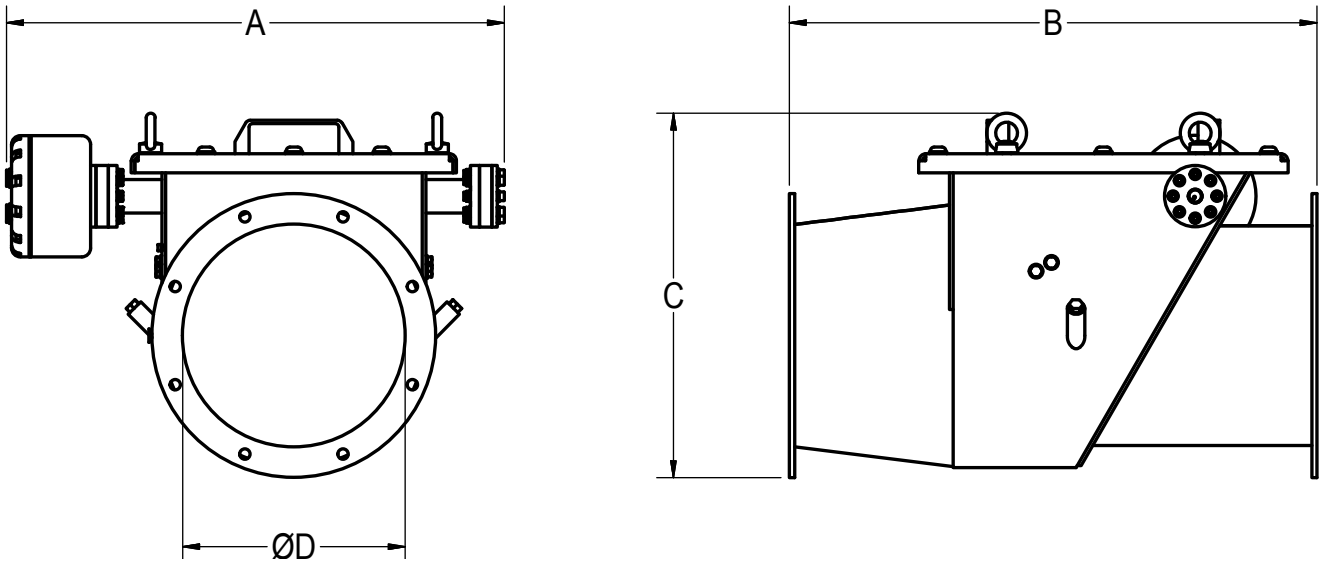
Proximity Switch	
Ingress Protection Degree	IP67
Approvals	ATEX, CSA, CE, FM
Hazardous Area Classification	ATEX II category 1D/1G
Electrical Specification	15V – 50mA – 120mW

Air Pulse Cleaning (Optional)		
	ATEX & IECEx	**CSA & IECEx**
Ingress Protection Degree	IP67	IP65
Hazardous Area Classification	ATEX/IECEx II 2D	ATEX/IECEx II 2D
Electrical Specification (Solenoid)	24VDC - 5W	24VDC - 5W
Air Supply Pressure	6.5 +/- 1 bar (94.3 +/- 14.5 psig)	6.5 +/- 1 bar (94.3 +/- 14.5 psig)

Form No. X.1.50.01

704 SW 10th Street • P.O. Box 610 • Blue Springs, Missouri 64013-0610 U.S.A.
Phone: 816•229•3405 • www.fike.com

DIMENSIONS



ValvEx®	Dimensions				Bolts			Mass kg (lb)
NominalSize	A mm (in)	B mm (in)	C mm (in)	Ø D mm (in)	Size	Qty.	Torque	
DN100 (4”)	415 (16.3)	400 (15.7)	269 (10.6)	99 (3.9)	M8	4	20 Nm (15 ft-lb)	20 kg (44 lb)
DN150 (6”)	465 (18.3)	450 (17.7)	289 (11.4)	149 (5.9)	M10	8	40 Nm (30 ft-lb)	25 kg (55 lb)
DN200 (8”)	517 (20.4)	550 (21.7)	379 (14.9)	197 (7.8)	M10	8	40 Nm (30 ft-lb)	32 kg (70 lb)
DN250 (10”)	565 (22.2)	600 (23.6)	404 (15.9)	249 (9.8)	M10	8	40 Nm (30 ft-lb)	36 kg (79 lb)
DN300 (12”)	615 (24.2)	650 (25.6)	454 (17.9)	299 (11.8)	M10	8	40 Nm (30 ft-lb)	48 kg (106 lb)
DN355 (14”)	667 (26.3)	700 (27.6)	537 (21.1)	346 (13.6)	M10	8	40 Nm (30 ft-lb)	57 kg (125) lb)
DN400 (16”)	822 (32.4)	744 (29.3)	604 (23.8)	400 (15.7)	M10	12	40 Nm (30 ft-lb)	72 kg (158 lb)

AIR PULSE CLEANING

The ValvEx® explosion isolation valve can be equipped with an optional air pulse cleaning system to remove dust settlement on the gate seat which could stop the gate from fully closing in the event of an explosion.

Form No. X.1.50.01, May 2015. Specifications are subject to change without notice.