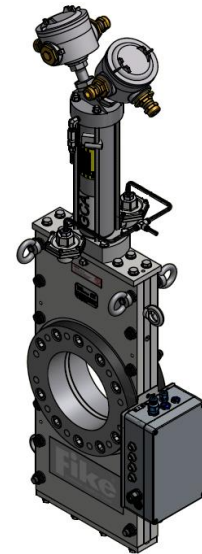


FAST ACTING VALVE - FAV

DESCRIPTION

Explosion venting and explosion suppression are designed to protect process vessels from over pressurization. Explosion isolation is intended to keep explosions from spreading throughout a process. By isolating the explosion, the effect is limited to the equipment where the explosion initially occurred.

The Fike Explosion Isolation System proceeds through 3 basic sequences to provide successful activation: detection, initiation and closure of the valve. The Fike explosion isolation valve is the critical element in the sequence of successful explosion isolation. The rapid closure provides the physical barrier which prevents flame propagation beyond the isolating valve location.



FEATURES AND BENEFITS

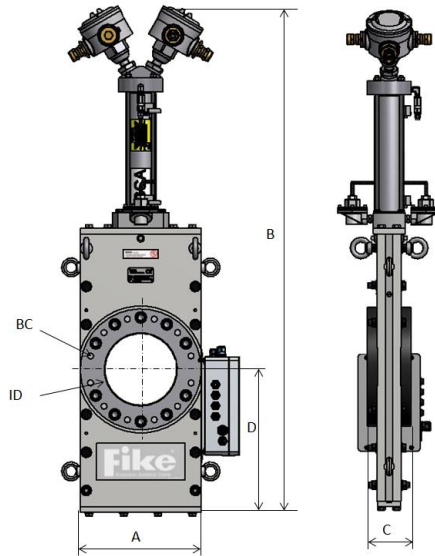
- Bi-directional design makes one valve applicable for stopping explosions from both directions
- Horizontal or vertical use
- Free, non-restricting passage; no pressure drop
- The integrated soft sealing results in a clean, leak tight seat
- All parts are designed for low maintenance and easy service
- The Fike explosion isolation valve provides protection against the propagation of dust explosions (including ST3 applications), gases and hybrid mixtures
- Equipped with an open position indication
- Can be equipped with a manually operated pneumatic open/close module, and an close position indication



SPECIFICATIONS

Type		Fast Acting Valve FAV								
Available Sizes	DN	DN50	DN80	DN100	DN150	DN200	DN250	DN300	DN350	DN400
	INCH	2"	3"	4"	6"	8"	10"	12"	14"	16"
Explosion hazard		Combustible dusts (incl. ST3) gases and hybrid mixtures								
Response time (closure)		50 ms maximum (typically 5 ms/inch)								
Initiator		Valve Actuator Assembly (GCA)								
Operating Temperature¹		-20°C to +60°C								
Maximum Process Temperature		200°C								
P_{EX}		13 barg (tested)								
Enclosure protection indices		IP66								
Hazardous area classification		Atex II ½ G/D EEx d IIC T6 / IP 66 T85°C								
System performances tested at		FSA, Mannheim / DMT, Dortmund / Ciba Geigy, Basel / Fike								
Painting specifications		Valve body: Black high-build 2-component coating								
Material specification		Valve body: carbon steel Gate: 1.4003 (SST) Flanges (wetted parts): 1.4404 (316L SST) O-ring: teflon coated silicone (2 pieces) Piston actuator: aluminium								
Options		Gate: 1.4404 (316L SST) Closed Position indication Pneumatic open/close module								

(1) With open/close module is the operating temperature -10°C to 60°C.



Valve Size	Valve Actuator Assembly Qty	ANSI bolting	Bolt diameter	Max. torque (Nm)	ID (mm)	BC (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Weight (kg)
		DIN Bolting									
2"	1	150	5/8 – 11 UNC	190	50.8	120.6	165	786	112	122	45
DN50		PN10/16	M16 x 2	195	50.8	120.6					
3"	1	150	5/8 – 11 UNC	190	78.6	180.0	229	994	111	238	80
DN80		PN10/16	M16 x 2	195	82.5	180.0					
4"	1	150	5/8 – 11 UNC	190	101.6	180.0	229	994	111	238	80
DN100		PN10/16	M16 x 2	195	101.6	180.0					
5"	1	150	¾ - 10UNC	360	131.7	210.0	285	1271	126	329	80
DN125		PN10/16	M20 x 2.5	380	152.4	240.0					
6"	1	150	¾ - 10 UNC	360	152.4	241.4	285	1271	126	329	100
DN150		PN10/16	M20 x 2.5	380	152.4	240.0					
8"	2	150	¾ - 10 UNC	360	202.7	298.4	343	1481	126	405	180
DN200		PN16	M20 x 2.5	380	203.2	295.0					
10"	2	150	7/8 – 9 UNC	640	254.0	361.9	406	1679	126	483	220
DN250		PN16	M24	660	254.0	355.0					
12"	2	150	7/8 - 9 UNC	640	304.8	410.0	533	1924	195	608	350
DN300		PN16	M24	660	304.8	410.0					
14"	2	150	1 – 8 UNC	809	356.0	476.2	584	2209	209	692	450
DN350		PN16	M24	617	356.0	470.0					
16"	2	150	1 – 8 UNC	809	356.0	476.2	635	2350	209	784	500
DN400		PN16	M27	960	406.4	525.0					
20"	2	150	1 1/8 - 8UNC	1426	406.4	635.0	777	2939	210	942	700
DN500		PN16	M30	1200	492.0	650.0					

REMARK: Valve sizes **DN125** and **DN500** are outside the ATEX certification and do not bear CE marking. Therefore these sizes may not be installed within the EU.

U.S. Patent 6,131,594 and Foreign Patents