

Containment of an explosion

NOVEX™ FILTER ISOLATION VALVE DN71-DN100

APPLICATION

The Novex valve is an explosion-proof flap valve certified as a protection system according to Directive 94/9/EC and according to EN16447: 2014. It is completely autonomous and must be installed on a horizontal piping, at a certain distance from the protected volume.

OPERATION

When stopped and in normal operation, the valve blade is held open by two magnets. If during operation of the process, an explosion occurs behind the valve, the airflow is immediately reversed by the rise in pressure and the rest of the installation upstream of the valve is effectively isolated from the propagation of the explosion. The blade remains locked in the closed position. A hinged inspection hatch at the top of the valve allows easy access for critical point checks such as dust accumulation or seal condition.

MAIN FEATURES OF THE NOVEX VALVE

- Available from DN71 to DN1000.
- Automatic locking of the valve in the closed position in case of explosion.
- Painted carbon steel (MS) or stainless steel (SS) 304 finish
- Pred max 1 or 2 bar, depending on DN and type of dust
- Organic or metal dust St3 Kst max 440 bar.m / s

POSSIBLE OPTIONS

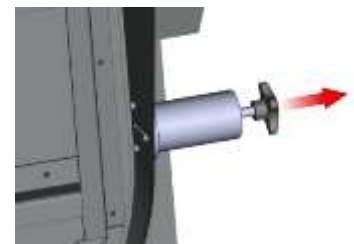
- Open position sensor
- Locked signalling sensor
- Dust accumulating sensor
- Pneumatic cleaning system



Suitable for use with
METAL dust
(K_{st} 440 bar.m/s)
P_{red} max 1 to 2 bars
depending upon the
diameter



NOVEX DN200MS



UNLOCKING SYSTEM





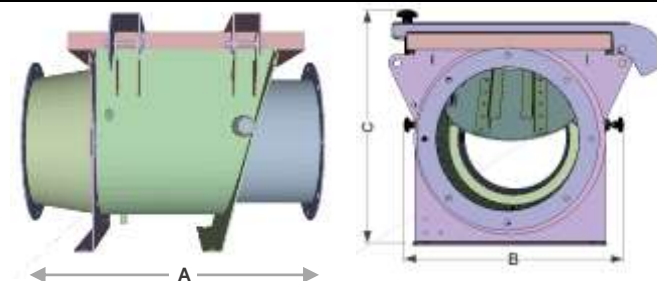
Main Characteristics																							
Application	Dust explosion compartmental valve according EN16447:2014																						
Types of Dusts	Organic and metallic dust. Toxic dust excluded																						
Dust Class	St3 / Kst max 440 bar.m/s (Pmax. 9.5 barg)																						
Dust Load	Maximum 500 g/m ³																						
Mounting	Horizontal, on vacuum line (pull assembly)																						
Bends before Filter	2 bends maximum (bend curvature radius / diameter ≥ 1)																						
Flange	DIN24154 /R2 (counter flanges optionally available)																						
Construction	Painted carbon steel (RAL3020) or stainless steel AISI304																						
Temperature limits	≤ 85°C (peak 100°C) for steel version ≤ 230° for stainless steel version																						
Atex Marking	CE 0080 Ex D EN16447 LOM11 ATEX 7047X																						
Maximum Air Speed	30 m/s																						
Diameter DN	71	80	100	125	150	180	200	250	280	300	315	355	400	450	500	560	600	630	710	800	900	1000	
Length A (mm)	440	449	469	494	519	549	569	619	649	669	684	724	769	819	869	928	969	1000	1079	1169	1269	1369	
Width B (mm)	349	358	386	403	428	458	486	600	647	650	703	742	788	837	888	1000	1040	1074	1153	1243	1343	1443	
Height C (mm)	265	274	294	319	344	374	394	486	523	536	555	589	637	684	745	827	863	902	1007	1097	1197	1297	
Opening radius (mm) *								488	518	538	553	593	638	688	738	833	873	903	985	1075	1174	1274	
Weight (kg±10)	17	18	20	23	28	30	32	45	51	53	64	77	82	93	102	140	155	162	195	225	265	303	
Air Loss (mm CE) **	10	10	10	10	15	15	15	20	20	25	25	30	35	35	35	35	35	40	40	45	50	50	
Organic Dust	MESG 1.6 (mm)																						
Pred max	2 bar													1 bar									
Mounting Distance ***	3 to 10 metres													5 to 13 metres									
Metal Dust	MESG 1.6 (mm)																						
Pred max	2 bar													1 bar									
Mounting Distance	2 to 9 m													4.5 to 12 metres									

*) Opening the top cover at 120°

**) Pressure drop for organic dusts at 20 m / s, approx. values. For other applications, consult StuvEx.

***) For organic dusts with a Kst value above 300 then the mounting distances shall be the same as for metal dusts

NOTE: The angle of the internal flap is different for both organic and metal dusts



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