



Safety is for life.™

PRODUCT INFORMATION



ECONOMIC ISOLATION OF RAW GAS LINES TO FILTERS AND DUST COLLECTORS

Applications

In the event of an explosion, the Q-Flap RX™ explosion isolation flap valve effectively isolates plant components in almost all industrial sectors. The Q-Flap RX™ is also perfectly suited, for the aspiration lines of filtering dust collectors, and for the suction intake lines of mills.

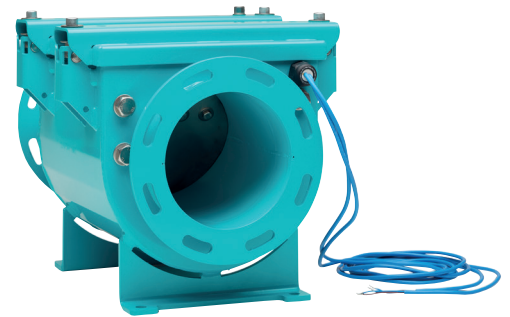
The nominal pipe sizes up to DN 400 are primarily used for decentralised extraction systems in the pharmaceutical and chemical industries, whereas nominal pipe sizes between DN 450 and DN 710 are also used for centralised dust extractors in the grain and food industry. Nominal pipe sizes from DN 800 to DN 1250 are used in the wood and heavy industry.

In order to meet the highly diverse requirements for the individual industries, the Q-Flap RX™ product range offers three different design versions. The nominal pipe sizes up to DN 710 feature an inspection flap, and the larger nominal pipe sizes have a modular design. This ensures that a maintenance and servicing of any pipe size can be carried out easily.

Your advantages

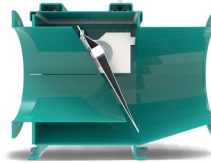
- **Quick maintenance without the need for a complete dismantling of the device**, simply by completely opening the inspection flap on pipe sizes up to DN 710.
- **Optionally: longer maintenance intervals** by integrating a supervision function.
- **Flexible use:** The Q-Flap RX™ is available for all common nominal pipe sizes up to DN 1250.

Made in Germany



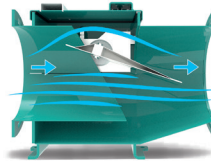
Mechanism (DN 140 to DN 710)

Basic position



When the system is shut down, the valve blade rests in an inclined position.

In operation



During normal operation, the explosion isolation flap valve is kept open by the air flow of the system.

In case of an explosion



In the event of an explosion, the valve blade is closed by the pressure wave of the explosion.



Meets the requirements of NFPA 69 (Option)

You can find detailed information and contact details for enquiries relating to Q-Flap RX™ at www.rembe.de. Give us a call on: T +49 2961 7405-0 or contact us via email: info@rembe.de





Technical data**

Diameter nominal***		140	160	200	250	280	315	355	400	450
Dimensions [mm]	Length L	420	440	440	590	620	620	620	620	810
	Width W	314	334	374	466	496	531	571	616	730
	Height H	324	335	372	468	497	532	574	619	740
	Pivoting range S	230	251	291	369	398	434	473	518	700
	LK Ø	182	200	241	292	332	366	405	448	497
	nxM	8xM10	8xM10	8xM10	8xM10	8xM10	8xM10	8xM10	12xM10	12xM10
Weight	kg	21	22	23	48	55	59	65	71	100
Max. recoil forces	kN	11	12	15	19	21	24	17	19	22
Pressure loss at 20 m/s	Pa	290	270	250	250	260	280	310	360	O.R*
Dust explosion class		St1 and St2								
Max. K _{st} value	bar × m/s	up to 300			230				265	
Max. reduced explosion overpressure (Max. p _{red}) in the vessel	bar	1.9			1.5				0.95	
Explosion pressure resistance of the explosion isolation flap valve***	bar	3.4			2.0				1.46	
Min. mounting distance with St1	m	1.0			2.5				3.5	
Min. mounting distance with St2	m	2.5			-				3.5	
Max. mounting distance with St1	m	8.0			7.0				9.5	
Max. mounting distance with St2	m	8.0			-				9.5	

Diameter nominal***		500	560	630	710	800	900	1000	1120	1250
Dimensions [mm]	Length L	870	930	1090	1190	1320	1470	1625	O.R*	O.R*
	Width W	790	850	1100	1180	1260	1360	1460	O.R*	O.R*
	Height H	800	850	975	1080	1170	1280	1410	O.R*	O.R*
	Pivoting range S	760	820	880	950	1060	1190	1310	O.R*	O.R*
	LK Ø	551	629	698	775	861	958	1067	O.R*	O.R*
	nxM	12xM10	16xM12	16xM12	16xM12	24xM12	24xM12	24xM12	O.R*	O.R*
Weight	kg	115	132	242	283	321	377	439	O.R*	O.R*
Max. recoil forces	kN	24	27	30	35	40	45	50	O.R*	O.R*
Pressure loss at 20 m/s	Pa	O.R*	O.R*	O.R*	O.R*	500	500	500	O.R*	O.R*
Dust explosion class		St1 and St2							O.R*	
Max. K _{st} value	bar × m/s	265			265				O.R*	
Max. reduced explosion overpressure (Max. p _{red}) in the vessel	bar	0.95			0.9				O.R*	
Explosion pressure resistance of the explosion isolation flap valve****	bar	1.02			1.1				O.R*	
Min. mounting distance with St1	m	3.5								
Min. mounting distance with St2	m	3.5								
Max. mounting distance with St1	m	9.5								
Max. mounting distance with St2	m	9.5								

Typ	Q-Flap RX™ without switch	Q-Flap RX™ monitored with switches	Q-Flap RX™ stainless steel with switches
Certification	EU Directive 2014/34/EU (ATEX 114)	EU Directive 2014/34/EU and US Fire Protection Ordinance NFPA Standard 69	EU Directive 2014/34/EU and US Fire Protection Ordinance NFPA Standard 69
Mounting position	Horizontal, suction side (fan after flap) (Pull Flow)		
Flow velocity	12 – 35 m/s		
Temperatures	-20 bis +80 °C (+100 °C without switch)		
Materials	Housing: S235 JR (1.4301 optional), valve blade: Stainless steel (1.4301)		
Raw gas dust concentration	max. 100 g/m ³ /aspiration only		
Paint	RAL Design 190 60 45		

*On Request

**Our specialists will gladly consult you personally in case of deviating operating conditions.

***Other nominal pipe sizes upon request

****Overpressure