



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 1000 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:** Q-Flap RX™ available up to DN 1000. Further sizes on request.



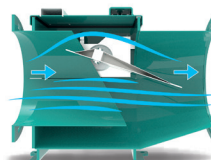
Mechanism (DN 140 to DN 710)

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.



NFPA 69
optional



ATEX
EU-type examination certificate no.
DNV 25 ATEX 68995X
(DN 140 to 1000)

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: hello@rembe.de



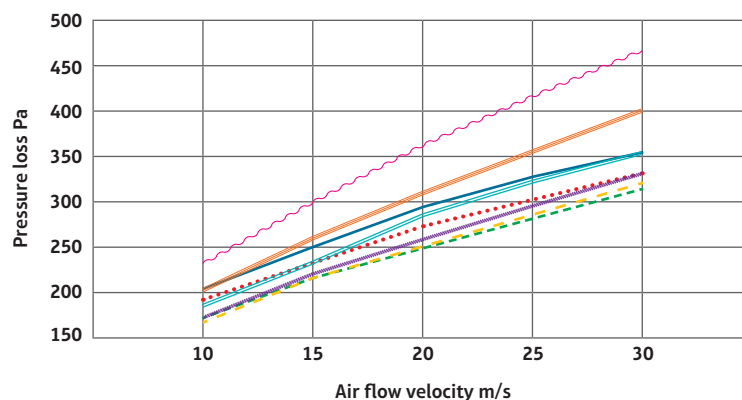
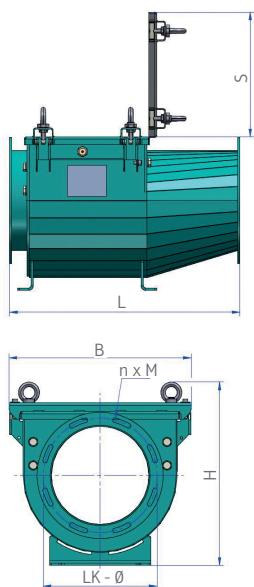
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PRODUCT INFORMATION

Technical data DN 140 to DN 400*

Diameter nominal		140	160	200	250	280	315	355	400
Dimensions [mm]	Length L	420	440	440	590	620	620	620	620
	Width W	314	334	374	466	496	531	571	616
	Height H	324	335	372	468	497	532	574	619
	Pivoting range S	230	251	291	369	398	434	473	518
	Bolt circle LK - Ø	182	200	241	292	332	366	405	448
	Bore nxM	8xM10	8xM10	8xM10	8xM10	8xM10	8xM10	8xM10	12xM10
Weight	kg	21	22	23	48	55	59	65	71
Dust explosion class		St1 and St2							
Max. reduced explosion pressure (P _{red} max.) in the vessel	bar g	1.9			1.5				
Pressure shock resistance of the flap valve (P _{ex})	bar g	3.4			2.0				
Max. K _{St} -value	bar*m/s	230							
Installation distance @ V ≥ 1 m³	m	1.0-8.0			3.5-7.0				
Installation distance @ V ≥ 4.4 m³	m				2.5-7.0				
Max. K _{St} -value	bar*m/s	300							
Installation distance @ V ≥ 4.4 m³	m	2.5-8.0			-				

MZT (W) = 380 °C, MZE - 4 mJ, MESG ≥ 1.44 mm



DN 140 —
DN 160
DN 200 - - -
DN 250 - - -
DN 280 —
DN 315 —
DN 355 —
DN 400 —

All values in the diagram were determined empirically.

Technical data DN 140 to DN 400*

Type	With switch/without switch (please indicate on order)**	Steel/stainless steel (please indicate on order)
Certification	According to EU guideline 2014/34/EU (ATEX 114) and NFPA 69***	
Mounting position*	Horizontal, suction side (fan after flap "pull flow")	
Operating air flow velocity	12 to 35 m/s	
Temperature*	Ambient temperature: -20 °C up to +80 °C (without switch max. +100 °C) Process temperature: +1 °C up to +80 °C (without switch max. +100 °C)	
Material	Housing: steel/stainless steel**, flap blade: stainless steel, sealing: EPDM/silicone, PTFE	
Connection flange	DIN 24154 part 2	
Raw gas dust concentration	max. 100 g/m ³	
Paint	RAL Design 190 60 45	

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

**On request

***Optional



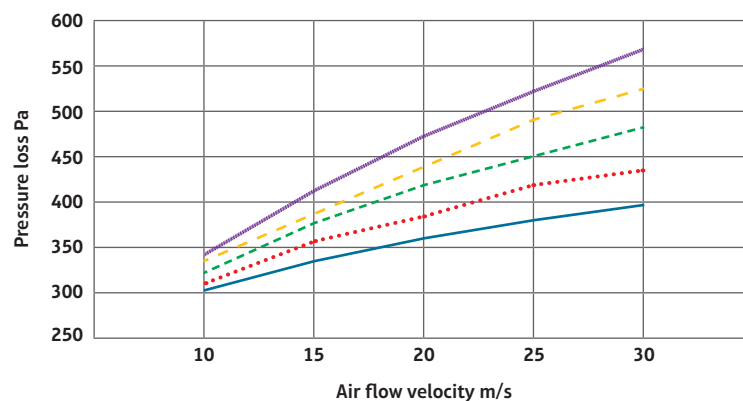
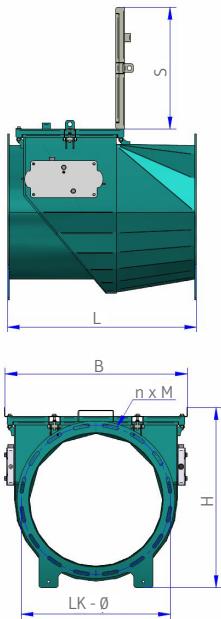
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PRODUCT INFORMATION

Technical data DN 450 to DN 710*

Diameter nominal		450	500	560	630	710
Dimensions [mm]	Length L	661	714	796	826	856
	Width W	642	707	772	837	902
	Height H	635	700	760	845	925
	Pivoting range S	303	323	363	393	422
	Bolt circle LK - Ø	497	551	629	698	775
	Bore nxM	12xM10	12xM10	16xM12	16xM12	16xM12
Weight	kg	90	100	120	140	150
Dust explosion class		St1 and St2				
Max. reduced explosion pressure (P _{red} max.) in the vessel	bar g	0.95	0.77			
Pressure shock resistance of the flap valve (P _{ex})	bar g	1.46	1.03			
Max. K _{St} -value	bar*m/s	250				
Installation distance @ V ≥ 0.7	m	3.5-9.5	-			
Installation distance @ V ≥ 2.77	m	3.5-9.5				

MZT (W) = 380 °C, MZE - 3 mJ, MESG ≥ 1.37 mm



DN 450 —
DN 500
DN 560 - - -
DN 630 - - -
DN 710 —

All values in the diagram were determined empirically.

Technical data DN 450 to DN 710*

Type	With switch/without switch (please indicate on order)**	Steel/stainless steel (please indicate on order)
Certification	According to EU guideline 2014/34/EU (ATEX 114) and NFPA 69***	
Mounting position*	Horizontal, suction side (fan after flap "pull flow")	
Operating air flow velocity	12 to 35 m/s	
Temperature*	Ambient temperature: -20 °C up to +80 °C (without switch max. +100 °C) Process temperature: +1 °C up to +80 °C (without switch max. +100 °C)	
Material	Housing: steel/stainless steel**, flap blade: stainless steel, sealing: EPDM/silicone	
Connection flange	DIN 24154 part 2	
Raw gas dust concentration	max. 100 g/m ³	
Paint	RAL Design 190 60 45	

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**On request

***Optional



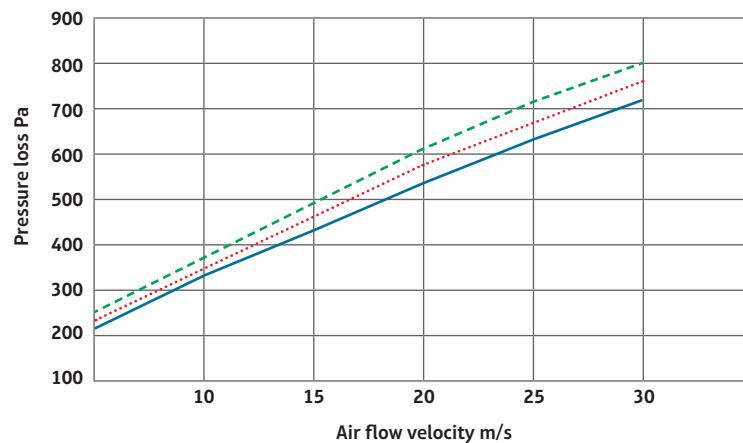
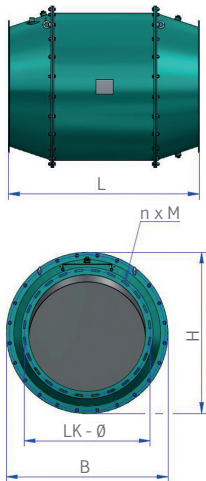
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PRODUCT INFORMATION

Technical data DN 800 to DN 1000*

Diameter nominal		800	900	1000
Dimensions [mm]	Length L	1303	1413	1551
	Width W	1105	1245	1375
	Height H	1105	1245	1375
	Pivoting range S	–	–	–
	Bolt circle LK - Ø	861	958	1067
	Bore nxM	24xM12	24xM12	24xM12
Weight	kg	264	347	410
Dust explosion class		St1 and St2		
Max. reduced explosion pressure (P _{red} max.) in the vessel	bar g	0.95	0.92	
Pressure shock resistance of the flap valve (P _{ex})	bar g	0.99	1.09	
Max. K _{St} -value	bar*m/s	265		
Installation distance @ V ≥ 1 m³	m	3.2-9.2		

MZT (W) = 380°C MZE - 3 mJ, MESG ≥ 1.37 mm



DN 800 —
DN 900
DN 1000 - - -
All values in the diagram were determined empirically.

Technical data DN 800 to DN 1000*

Type	With switch/without switch (please indicate on order)**	Steel/stainless steel (please indicate on order)
Certification	According to EU guideline 2014/34/EU (ATEX 114) and NFPA 69***	
Mounting position*	Horizontal, suction side (fan after flap "pull flow")	
Operating air flow velocity	12 to 35 m/s	
Temperature*	Ambient temperature: -20°C up to +80°C (without switch max. +100°C) Process temperature: +1° C up to +80°C (without switch max. +100°C)	
Material	Housing: steel/stainless steel**, flap blade: stainless steel, sealing: EPDM/silicone	
Connection flange	DIN 24154 part 2	
Raw gas dust concentration	max. 250 g/m ³	
Paint	RAL Design 190 60 45	

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

**On request

***Optional

Sustainability

Not only do we provide professional protection for your plant and machinery and protect human life, but our products also avoid harmful emissions sustainably eliminate leaks and/or reduce noise pollution. You can find more information on sustainability at www.rembe-green.de.