

Explosion Isolation Flap Valve CARZ-NS - protective system for combustible dust applications





Explosion Isolation Flap Valve type CARZ-NS prevents a transmission of explosion pressure wave and flames front from the filter to your workplace. By using our CARZ-NS Explosion Isolation Flap Valve, you reduce the risk from dust explosion for both people and equipment.

#### Function

During normal operation, the valve is kept open, and large opening angle ensure low pressure drop. In case of an explosion in the filter, the pressure wave will force to close the flap plate and lock in position. When flap plate is closed it makes an effective barrier against approaching flame front. This prevent the explosion from being transmitted from the filter to upstream work areas.

No matter what industry you are in or what type of dust is generated in your factory, we can provide the complete dust explosion protection solution of filters, and explosion isolation flap valves.

- Independently tested to latest and most stringent standards and regulations
- Compliant with international dust explosion protection codes (ATEX, NFPA69, IECEx)
- Widest range of sizes, applications and filter system configurations on the market (e.g. approval for positive and negative pressure systems, approval for metal dust, approval for St2 dust)
- Manufactured fully by Nederman under certified quality assurance system, ensuring highest level of quality and reliability

Product name	Explosion Isolation Flap Valve CARZ-NS Ø160-250mm
Material	Welded carbon steel, painted RAL5009
Operating temperature range	-20 - +70°C (0 - 160 F)
Ambient temperature range	-20 - +60°C (0 - 140 F)
Note	Organic dust - PUSH & PULL; metal dust - PULL only
Explosion Class ATEX	St2
Dust Concentration in duct	organic dust: Any; metal dust: < LEL
Max velocity in duct (m/s)	35
Minimum velocity in duct	0
Minimum vessel size, push (m3)	0,46
Install type	Push and Pull
Minimum vessel size, pull (m3)	0,46
Dust type	[metallicorganic]
Kst (bar m/s)	organic dust: 300; metal dust: 260
Maximum reduced pressurem, Pred (bar)	0,5

C€







Diameter (in)	Connection	Model
160	FL	73008486*
180	FL	73008487*
200	FL	73008488*
160	QF	73008219*
160	FL	73008218*
160	NW	73008220*
180	QF	73008399*
180	FL	73008398*
180	NW	73008400*
200	QF	73008402*
200	FL	73008401*
200	NW	73008403*
250	QF	73008405*
250	FL	73008404*
250	FL	73008489*
250	NW	73008406*

<sup>\*</sup>Organic dust - PUSH & PULL; metal dust - PULL only



	Accessory	Part No
*	CARZ support frame suspended 160	73001558
<b>*</b>	CARZ support frame suspended 180	73001559
<b>*</b>	CARZ support frame suspended 200	73001560
<b>\&amp;\</b>	CARZ support frame suspended 315	73001562
<b>*</b>	CARZ support frame suspended 500	73001566
<b>**</b>	CARZ support frame suspended 710	73001569
*	Carz support frame suspended 900	73001571
<b>*</b>	CARZ support frame suspended 1000	73001572
**	CARZ support frame wall-hanging 160	73001573
**	CARZ support frame wall-hanging 180	73001574
**	CARZ support frame wall-hanging 200	73001575
**	CARZ support frame wall-hanging 250	73001576
**	CARZ support frame wall-hanging 315	73001577
**	CARZ support frame wall-hanging 350	73001578
**	CARZ support frame wall-hanging 400	73001579
**	CARZ support frame wall-hanging 450	73001580
**	CARZ support frame wall-hanging 500	73001581
**	CARZ support frame wall-hanging 560	73001582
**	CARZ support frame wall-hanging 900	73001586
**	CARZ support frame wall-hanging 1000	73001587



05-04-2024

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#### Patent protected product:

EP patent: EP 3 343 077

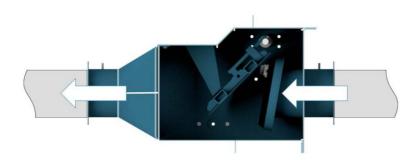
USA: US 10 315 059

China: 201711349554.2

Patent protected product



Explosion direction



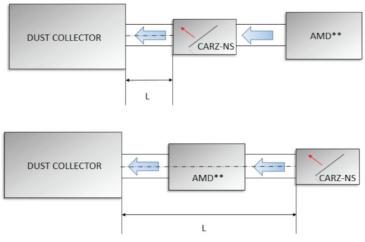
Suction direction





PULL configuration

\*\*AMD = Air moving device or fan



PUSH configuration

\*\*AMD = Air moving device or fan