Nederman

NRSZ 3 rotary valves

Continuous emptying of the dust collector hopper.



The NRSZ type rotary valve is used to transfer material between two separate systems. In pneumatic conveying systems, discharge is usually required from the filter or cyclone to the silo, at atmospheric pressure. This is an ideal application for the NRSZ type rotary valve.

The rotary valve can be used for emptying of several non-adhesive material types, also combustible dust. Max. particle size for the NRSZ 3 is $3 \times 3 \times 10$ mm (.1 x .1 x .4 in.)

The rotary valve should not work with highly abrasive dust.

The NRSZ rotary valve is made explosion pressure shock resistant. It prevents the transmission of the explosion effects, pressure wave, flame and sparkles until its maximum reduced explosion pressure Pred,Max. in both directions of the divided space with dangerous atmosphere of the flammable dust (except metal dust). The rotary valve should not work with capacity more than 60% of max.

- ATEX certified for St1 and ST2 dust.
- Robust construction.
- Effective air lock between the inlet and outlet provided due to the special rubber blades.

Product name	NRSZ 3 rotary valves
Noise level (dB(A))	< 70
Installation	Indoor, Outdoor
Material	Galvanised steel plate
Suitable for combustible dust	True
Application	Dust
Operating Temperature	Max. 70°C
Weight (kg)	32
Power (kW)	0,18





NRSZ 3 rotary valves

Model
73008863*
73009044**
73008862*
73008864*
73009227*

*Capacity at 100% filling - 2,3 m3/h **Without motor



NRSZ 3 rotary valves

Accessory	Part No
Speed sensor NRS/Z/-3	5507220

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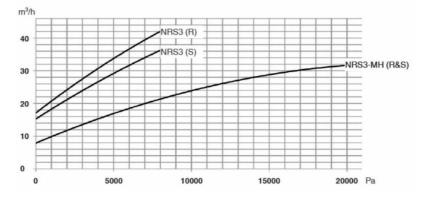
NRSZ 3 rotary valves

Rotary valve type	p _{rod.max} [kPa]		
	St1 Kst _{max} *=20 MPa · m/s	St2 Kst _{max} *=30 MPa · m/s	Rotation speed max [rpm]
NRSZ 3	40	40	10

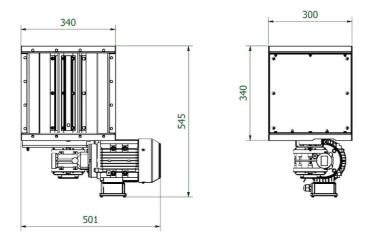
The combustible dust is described by the parameters: The limit values of the used class of dust St1: Kst_{max}=20 MPa·m/s, MIE \geq 13 mJ, MIT \geq 430°C (of a dust cloud). The limit values of the used class of dust St2: Kst_{max}=300 MPa·m/s, MIE \geq 2 mJ, MIT \geq 520°C (of a dust cloud).

Leakage

The leakage of the rotary valve during shutdown (S) and during operation (R) depends on the pressure drop over the rotor. See the diagramme.



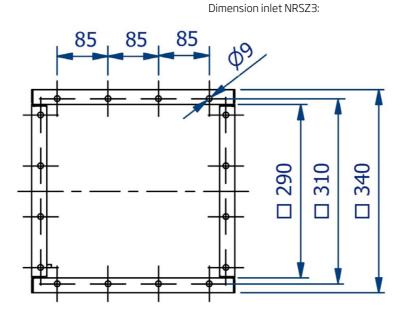
Dimensions NRS 3 / NRSZ 3



Dimensions NRS 3



NRSZ 3 rotary valves



Dimension inlet NRSZ3