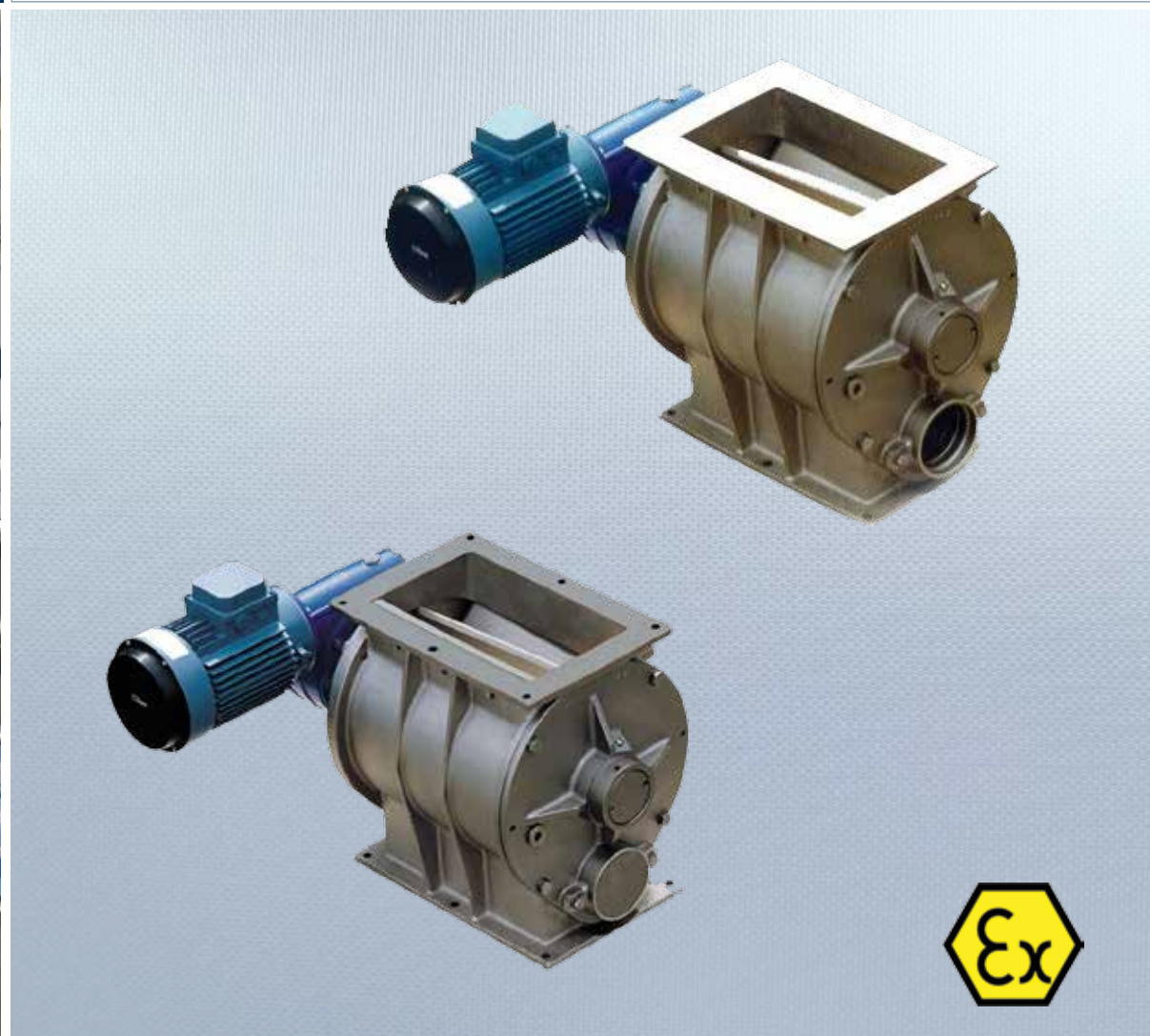


Blow-Through Rotary Valves RVS

Drop-Through Rotary Valves RVC



HIGH FILLING EFFICIENCY AND PRECISE METERING IN GRAVITY FEEDING AND PNEUMATIC CONVEYING OF POWDERS AND GRANULES

RVS Blow-Through Rotary Valves have two compartments at a time of the continuously turning rotor filled up with material through the inlet at the top. After less than half a turn the material is conveyed into an air stream of a pneumatic conveying pipe passing through the bottom of the rotary valve.

With RVC Drop-Through Rotary Valves, which have a similar design, the material falls out through the bottom outlet by gravity into a container, a conveyor or pneumatic conveying system.

Features

- Capacity: 5 – 10 – 15 – 20 – 38 – 78 litres per revolution (0.17 – 0.35 – 0.52-0.7 – 1.23 – 2.82 cu ft/rev)
- Working temperature: from -40 °C up to 220°C
- Working pressure: from – 0.5 bar up to 0.8 bar
- Material: cast iron or 304 stainless steel



ATEX Certification

RVS – RVC... X

ATEX 20/22 Certified

CE II 1D/3D c T135°C
0948
Cert.No.EX5 07 01 61456 002

ATEX Rotary Valves

ATEX rotary valves are designed and tested for use in potentially explosive zones classified as ZONE 22 or non-classified zones and with process atmospheres (inside the valve) classified as ZONE 20 in accordance with Directive 94/9/EC and 1999/92/EC.

Usage Limits

Ambient temperature: from -10°C to + 40°C
Process temperature (material): from – 20°C to + 60°C
Atmospheric pressure: from 0.8 to 1.1 bar
Maximum rotor speed: 30 rpm
Minimum ignition energy: mie > 3 mJ

RVC...E

ATEX 20/22 Certified

CE II 1D/3D c T135°C
0948

CE D St2
0948

EC Type Cert.FTZÚ14 ATEX 0053X
EN 15089:2009 - Explosion Protection Device

Flame Proof and Explosion Protection Device

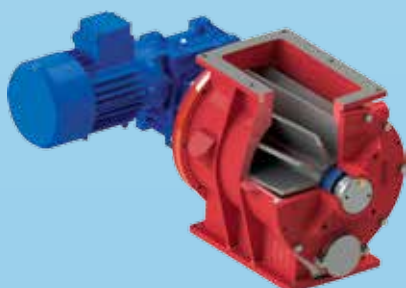
The RVC...E explosion protection device are ATEX certified for zone 20/22 and are used as a protective and dust explosion-flame proof system up to 6 bar.

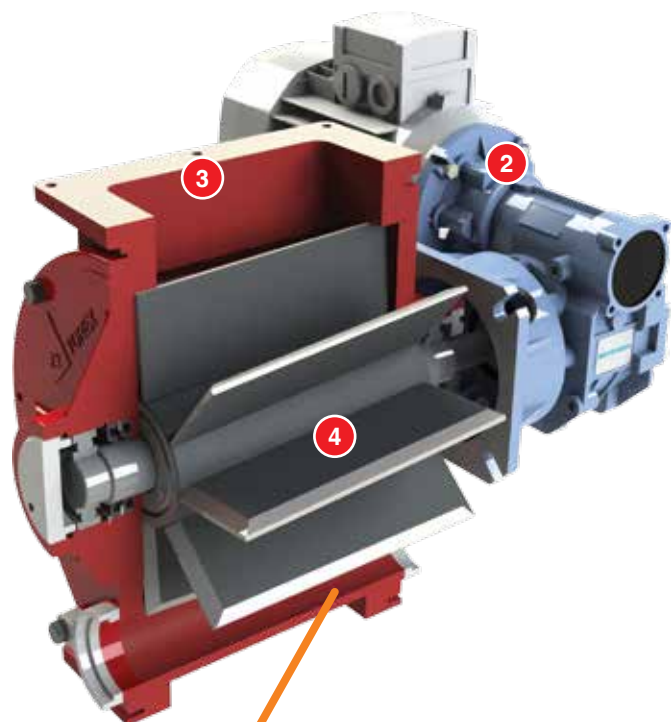
Suitable to be used under silo, hoppers, dust filters, cyclones, product separators, pneumatic conveying and dosing systems within the following conditions:

Ambient temperature: from -10°C to + 40°C
Process temperature (material): from – 20°C to + 60°C
Atmospheric Pressure: from 0.8 to 1.1 bar
Maximum rotor speed: 30 rpm
Minimum Ignition Energy: mie > 3 mJ
Maximum pressure differential between top and bottom flange: 0.7 bar (recommended)
Maximum Explosion Pressure: 6 bar

Features

- Suitable for application in hazardous area
- Stop flame and sparks passage from one flange to the other in both directions.
- Provide the maximum overpressure up to 6 bar.
- ATEX zone 20/22 certification included
- Thanks to the 10 rotor blades (RVC05) and 12 rotor blades (RVC 10-15-20-35) execution is suited for protective system and explosion barrier





2 Drive Unit



Bare Shaft



Direct Drive (20-30 rpm)



Direct Pre-Torque Gear Motor (10 rpm)

3 Casing



Internally Chrome-Plated
Used for abrasive materials



Completely Nickel-Plated
Used for corrosive materials or as a substitute of stainless steel for food applications if accepted.
Rotor and end flanges are completely nickel-plated too



Internally Teflon®-Coated
Used for sticky materials
Rotor and end flanges are Teflon®-coated too.

1

1 Bottom Outlet



Streamlined entry and discharge of air conveyed through valve

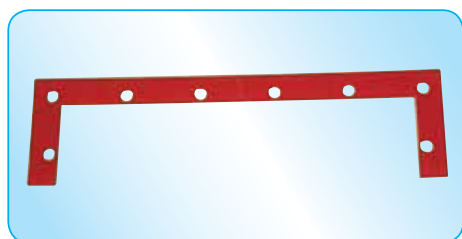
- Introduces high pressure conveying air through the valve casing and rotor pockets, ensuring high efficiency throughput with a low pressure drop
- Reduced overall height
- Pipe connections included bolted on both sides of the end plates

4 Rotor

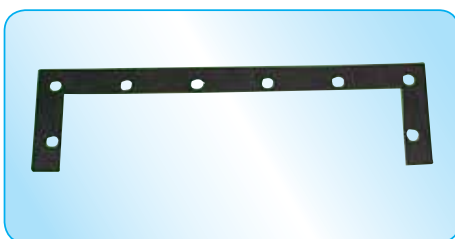


Standard Version with Chamfered Rotor Blades

Accessories



Vulkollan®



Viton®



Teflon®



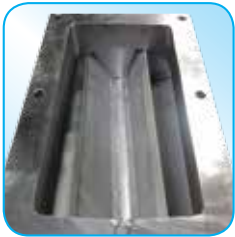
Mechanical Variable Speed Drive
(from 4 to 20 rpm)



Chain Transmission (10-20-30 rpm)



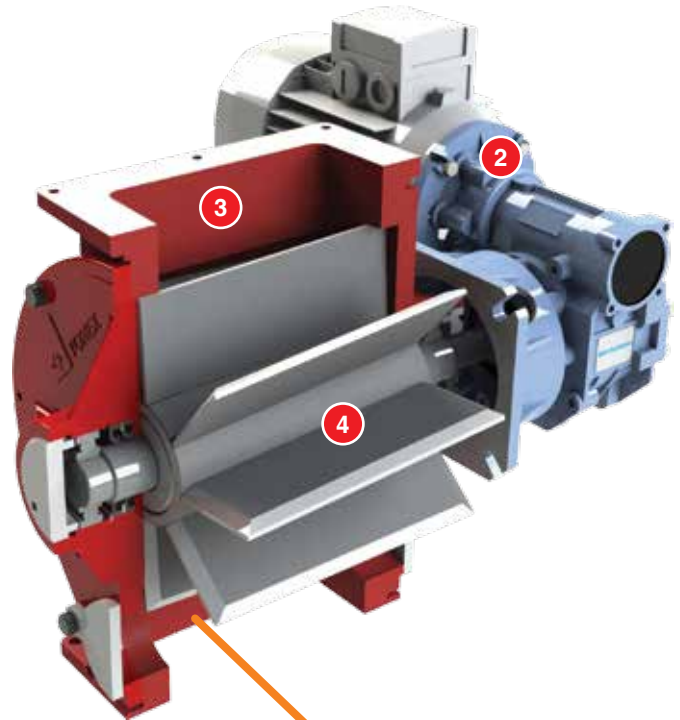
Tungsten Carbide Anti-wear treatment
Used for erosive and abrasive wear applications



Completely 304 Stainless Steel Cast
Used for food applications. Rotor and end flanges are manufactured from 304 stainless steel too.



Lateral air venting bores as standard
Used for:
- extracting excess air from rotor pockets
- decreasing air pressure inside the casing
- increasing throughput



1

1 Bottom Outlet



Large open bottom outlet to freely discharge material under gravity flow

- Suitable for both gravity and pneumatic conveying system
- In case of installation in pneumatic conveying system, a drop box custom made can be fitted to suit all pipe diameters (not provided by TOREX®)
- Identical inlet/outlet flange dimensions enable easy connection



Rotor with Replaceable Tips



Air-Purged Seals



External bearing
- packing gland seals
- suitable for temperature up to 220°C
- suitable for extremely fine powders



Rotation Indicator



Scraper

Applications



Benefits

- ✓ RVS with rectangular inlet flange and two lateral pipe connections on bottom outlet;
- ✓ RVC with rectangular inlet/outlet flange;
- ✓ Open rotor with bevelled edges as standard (except RVC/S 80);
- ✓ Sturdy compact structure;
- ✓ Drive unit mounted on rotor shaft without further bearing assembly or coupling;
- ✓ Easy access to internal mechanical parts;
- ✓ Various materials and treatments available depending on material handled;
- ✓ ATEX 20/22 version available.

Available from:
FILQUIP Pty Limited

5/126 Compton Rd
Underwood Qld 4119
Australia
Phone: +61 7 3208 3499
Fax: +61 7 3208 3449
Email: sales@filquip.com.au
www.filquip.com.au



043002388 July 2014 Rights reserved to modify technical specifications.



www.wamgroup.com