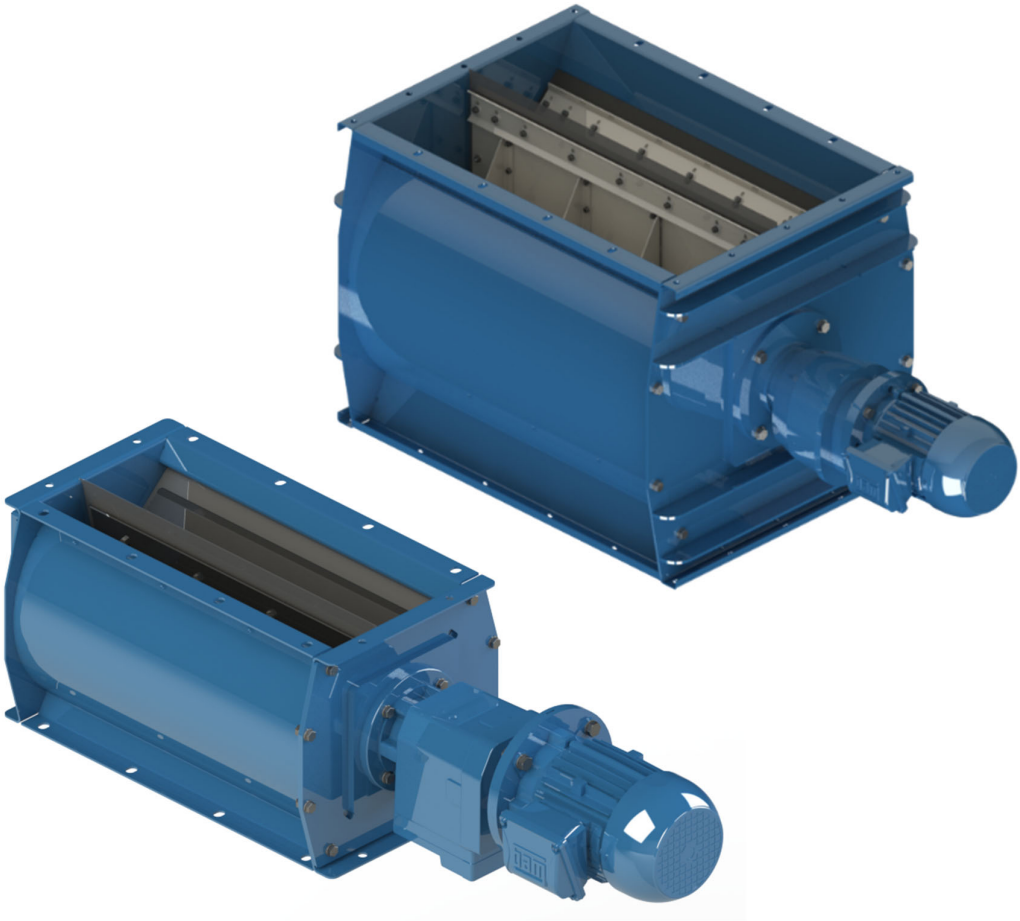
Formula Air
Supporting your performance



RVA & RVB Rotary valves

Rev. 1.0-2024

Content

1. Introduction

This manual cannot be reproduced, even partially, without prior written consent by Formula Air Group. Every step of the RVA and RVB rotary valve along its life cycle has been deeply analyzed by Formula Air Group in the expected area during the design, construction, and maintenance manual creation. However, it is understood that nothing can replace the experience, training and good sense of the professionals who work with the device.

Ignoring the cautions and warning from the present manual, improper use of parts or the whole device supplied, using unauthorized spare parts, manipulating the device by non-qualified personnel, violation of any safety norm regarding design, construction and use expected by the supplier, exempt Formula Air Group from all responsibility in case of damages to people or property.

Formula Air Group does not take any responsibility for the non-observance by the user of the preventive safety measures presented in this manual.

The use implies compliance and knowledge of the Machine Directive 2006/42/EU.

Failure to comply with the requirements of the operating manual or incorrect use of the RVA and RVB rotary valve during operation can lead to the damage of the RVA and RVB rotary valve and the loss of the safety function performed by the RVA and RVB rotary valve itself. This will result in termination of the warranty on the item and will release the manufacturer from any liability.

WARRANTY

In regards to the device's warranty, see the sales general condition in the contractual center.

ATTENTION

Before proceeding with the installation of the RVA and RVB rotary valve, ensure that the markings on the product are compatible with the rating of the site of use. Failure to comply with this prescription can cause serious injury to persons including death and/or serious damage to property.

NOTE: All drawings and references contained within this manual are non-contractual and are subject to change without prior notice at the discretion of the Formula Air Group and its partners.

2. Product description

Formula Air RVA and RVB rotary valves fulfil all relevant requirement to be used under filters or cyclones. To accomplish this, several instructions are described in this manual and shall be following prior to and during operation.

Note that besides the RVA and RVB rotary valve, the complete installation needs to comply to :

2006/42/EU – Machine Directive

2014/35/EU – Low Voltage Equipment Directive

2014/30/EU – Electromagnetic Compatibility and Repealing Directive (EMC)

2014/68/EU – Pressure Equipment Directive

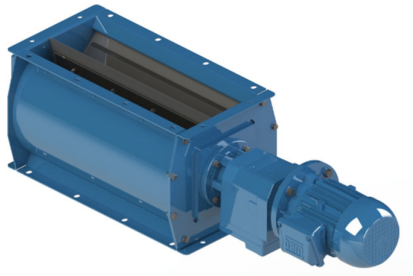


Figure 1. Formula Air RVA rotary valve

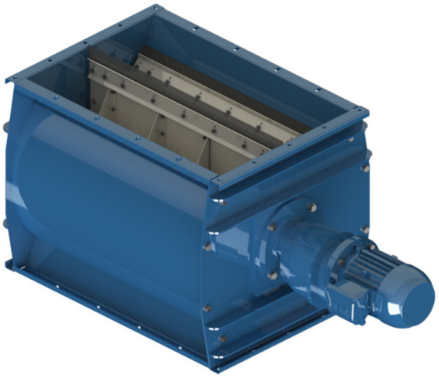


Figure 2. Formula Air RVB rotary valve

2.1 How it works

The RVA and RVB rotary valve is functionally built up of the following main components :

1. Rotary valve body
2. Rotor with rubber blades
3. Drive set (motor and gearbox)

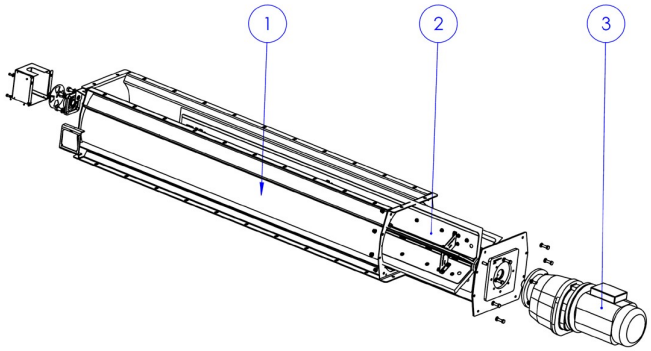


Figure 3. Structural design

2.1.1 Rotary valve body

The RVA and RVB rotary valve body is made of sheet steel. Inlet and outlet are foreseen with flange connection. The end plate positioned at the drive set can be dismounted in a way that provides access to the rotor. The rotary valve body is powder coated.

2.1.2 Rotor

The RVA rotor is built up of a rotor shaft mounted with 6 sets of chambers, while the RVB rotor is composed of 8 chambers. Neoprene rubber blades are mounted in the blade retainers in the chambers.

2.1.3 Motor and Gearbox

The rotor is driven by an electric motor. The connection between rotor and electric motor is established by a gearbox.

2.2 Overall dimensions

2.2.1 RVA model

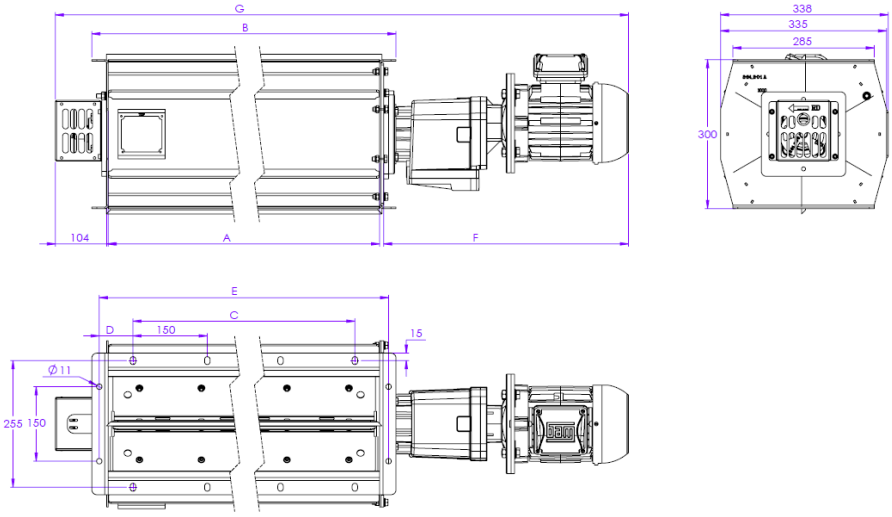


Figure 4. RVA dimensions

Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Mass (kg)
RVA1-NX-06	250	316	150 (1x150)	68	286	418	782	48
RVA2-NX-06	500	566	450 (3x150)	43	536	494	1108	74
RVA3-NX-06	750	816	600 (4x150)	93	786	494	1359	91
RVA4-NX-06	1000	1066	900 (6x150)	68	1036	494	1609	107
RVA5-NX-06	1500	1566	1350 (9x150)	93	1536	494	2109	141

2.2.2 RVB model

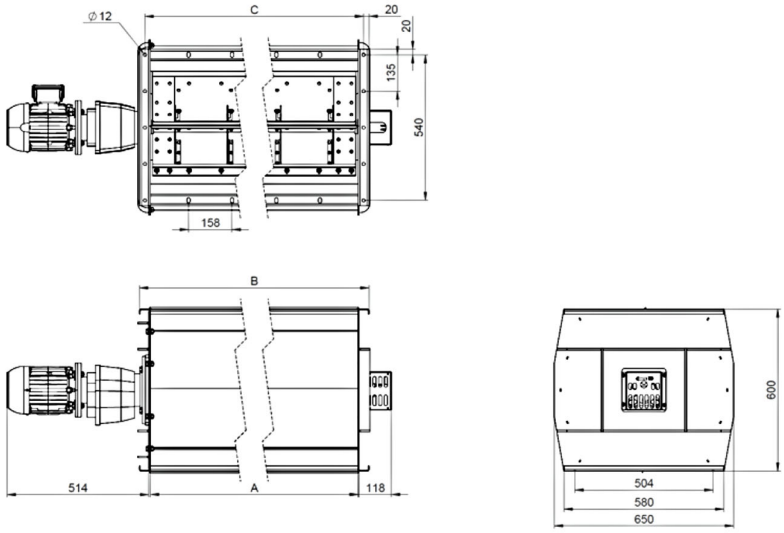


Figure 5. RVB dimensions

Type	A (mm)	B (mm)	C modular (mm)	Mass (kg)
RVB1-NX-08	800	580	4 x 135	140
RVB2-NX-08	750	830	5 x 158	185
RVB3-NX-08	1000	1080	8 x 130	260

2.3 Technical datasheet

Installation, operation, maintenance, and repair may only be carried out by qualified personnel.

Ensure that no tools or foreign objects remain in the machine during assembly or maintenance.

Selection and installation of the electrical parts shall be fulfilled according the EN60079-14 and the installation instructions of the specific equipment.

The airtightness of the rubber blade has to be controlled regularly according to the instructions in this user manual.

CAUTION!

The installation, connection, start-up and maintenance of the rotary valves have to be performed by qualified personnel. Use the appropriate equipment and clothing, apply the necessary safety measures and do not work alone.

The rotary valve must not be started until it has been mechanically connected on both sides to other ducting components by means of the built-in flanges.

The rotary valve must be sealed on both sides of the hole series and bolted in the predrilled holes.

It is mandatory to make sure that the whole installation is stopped and cannot be started-up again before everything is connected and assembled.

3. Transportation, storage & handling

3.1. Transportation

The RVA & RVB rotary valves are shipped assembled, palletized, and properly packed to prevent shifting and damages during transport and handling. The RVA & RVB rotary valves should always be transported covered and protected from atmospheric agents.

CAUTION !

Do not stack during transport !

3.2. Storage

Store the RVA & RVB rotary valves assembled, palletized, and covered and protected from atmospheric agents.

For prolonged storage, make regular checks that the rubber blade vanes don't degrade and that the bearings are greased to avoid corrosion. Refer to the manufacturer's manuals for the proper long-term storage of the motor and gear.

3.3. Handling

The RVA & RVB rotary valves are foreseen with flanges on which lifting eyes can be bolted for easy handling while installing. Always lift with an even weight distribution to avoid damages. Never lift the RVA & RVB rotary valves by mobile or sensitive parts of the rotary valve.

Make sure that the mounting surface is even, stable and that it can bear the load of the RVA & RVB rotary valve to ensure the proper functioning of the RVA & RVB rotary valves.

4. Installation

4.1. RVA & RVB rotary valve installation

Before installing, make sure that nothing is obtruding the flanged connection of the RVA & RVB rotary valve and of the vessel on which it is to be mounted.

Use a sealant tape, or paste all along the flange before assembly on the vessel to ensure perfect airtightness. But be careful that it doesn't come into contact with the rubber blade vanes or other mobile parts.

All of the holes along the flange pattern should be bolted to the vessel to ensure proper airtightness and weight distribution of the RVA & RVB rotary valve. We recommended the use of M10x35 bolts tightened at 64 Nm.

Make sure that the RVA & RVB rotary valve is level so that the material to extrude is evenly distributed along the RVA & RVB rotary valve rotor.

CAUTION !

The RVA & RVB rotary valve installation, connection, start-up and maintenance has to be performed in absence of potentially dangerous atmosphere through the process interruption.

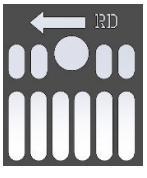
The installation, connection, start-up and maintenance of the RVA & RVB rotary valves have to be performed by qualified personnel. Use the appropriate equipment and clothing, apply the necessary safety measures and do not work alone.

The RVA & RVB rotary valve must not be started until it has been mechanically connected on both sides to other ducting components by means of the built-in flanges.

The RVA & RVB rotary valve must be sealed on both sides (dust inlet and outlet) and bolted in all the predrilled holes of the flanged connection using appropriate bolts and nuts.

Before any intervention, it is mandatory to make sure that the whole installation is stopped and that it is impossible to inadvertently set it back in operation before everything is connected and assembled.

4.2 Electrical connection



Electrical connection must only be carried out by a certified electrician. When making the electrical connection, check that the RVA & RVB rotary valve rotor is turning in the correct direction. The rotation direction is indicated by an arrow shaped out on the rotation disk protection cover.

The electrical connection must be carried out in accordance with current local and national regulation.

4.3 Precautions for proper use

CAUTION !

It is strictly forbidden to :

- Open the RVA & RVB rotary valve while the installation is running,
- Use the RVA & RVB rotary valve for wet material,
- Use the RVA & RVB rotary valve for sticky material,
- Use the RVA & RVB rotary valve for gas, steams or hybrid mixing, unstable chemical substances, Explosive substances, or Pyrotechnic substances,
- Use the RVA & RVB rotary valve for long fibrous or flexible material which could wrap around the rotor.

During functioning, the user has to ensure himself that there is no material stacking or material build-up inside the RVA & RVB rotary valve in order to ensure the proper discharge of the material.

During maintenance keep the extraction system disconnected and all the electrical equipment turned off, and make sure that it is impossible to inadvertently set it back in operation before everything is connected and assembled.

4.4 Gearbox & Motor

For information on the installation of the gearbox and drive motors, see relevant manuals from the original manufacturers (supplied separately).

Electrical parts shall be maintained according to manufacturer's instructions and inspected periodically according to local and national legislation (e.g. EN 60079-17).

IMPORTANT :

Always wear the required safety equipment. The national safety rules in force must be observed.

5. Maintenance

Maintenance must always be carried out according to the instructions in the manual.

Installation, operation, maintenance, and repair in areas with risk of explosions may only be carried out by qualified personnel.

Ensure that no tools or foreign objects remain in the machine during assembly or maintenance.

Any repairs may only be performed with original spare parts.

IMPORTANT !

Always wear the required safety equipment. The national safety rules in force must be observed.

5.1 Periodic maintenance

In order for the RVA & RVB rotary valve certification approval to be guaranteed by the manufacturer, maintenance must be carried out by the manufacturer or a distributor appointed by the manufacturer.

Periodic maintenance frequency needs to be regular enough to avoid dangerous situations or degradation to the RVA & RVB rotary valve.

The wear of the components is infinitely linked to parameters set in the specific application of the RVA & RVB rotary valve : running time, frequency, extraction volume, abrasive nature of the product, temperature, location.

To define the periodic maintenance frequency, we advise to check every week when you start the RVA & RVB rotary valve to clearly define the necessary intervals between inspection maintenances, following installation and RVA & RVB rotary valve condition evolution.

The time between 2 inspection operations cannot be more than 6 months according to the RVA & RVB rotary valve status.

5.2 Overhaul

For the manufacturer's guarantee to apply, the customer must have regular maintenance carried out by the manufacturer or a distributor appointed by the manufacturer (see §4.1.).

For distributors to be approved to carry out maintenance for the manufacturer, they must be trained by the manufacturer. The following must be checked: rubber blade vanes, rotor, bearings, gearbox and motor.

Before starting inspection or maintenance operations on the RVA & RVB rotary valve, you must secure the zone, make sure that the system is switch off, and that it is impossible to inadvertently set it back in operation.

The system may not be put back into service until all components are put back in place and secured.

CAUTION !

Rubber blade vanes and sealing ring must be impermeable ! Monitor wear regularly until service intervals can be determined (see §5.1 "Periodic maintenance").

5.3 Motor, gearbox & bearing

5.3.1 Bearing Maintenance

The lifespan of the grease is influenced by many factors. The greasing intervals in our table thus can only be seen as very rough estimates.

Operating temperature of bearing °C	Greasing interval		
	Environmental conditions		
	Clean	Dirty	Very dirty Heavily humid
50	3 years	6 months	3 months
70	1 year	2 months	1 month
100	3 months	2 weeks	1 week

Experience with comparable bearings or ones already used is therefore very important as not all operating conditions and influential factors that affect the service life of a lubricant – and hence also the bearing – are known or determinable in many cases.

CAUTION ! Bearings needing re-greasing can be done with a grease gun.

At the same time must be done control of bearings visual check and control of unexpected noise. In case of found malfunction the change of bearing is necessary.

For information on the maintenance of the gearbox and electric motors, see relevant manuals from the original manufacturers (supplied separately).

5.3.2 Motor

Make sure that the exterior of the electric motor housing is not damaged, and that all the cooling fins along the body are undamaged. Check for overheating or abnormal vibrations.

See that the electric terminal box is well closed and that it is watertight.

The electric motors are foreseen with life lubricated bearings which require not specific maintenance.

Refer to manufacturer maintenance guide for more in-depth maintenance guidelines.

5.3.3 Gearbox

Make sure that the exterior of the gearbox housing is not damaged, and that all the bolts between electric motor, gear and rotary valve are well tightened. Check for overheating or abnormal vibrations.

The gearboxes sizes RCV25 to RCV35 are factory life lubricated with synthetic oil which require no specific maintenance. As of size RCV 38, they are supplied without lubricant and has to be done before operational use.

Refer to manufacturer maintenance guide for more in-depth maintenance guidelines.

5.4 Replacing spare parts

5.4.1 Rubber wear out

A visual inspection needs to be carried out according to the periodic maintenance.

If the rubber blade vanes are not impermeable, damaged or worn, they must be replaced.

Rubber blades are worn out and must be replaced when dimension A and B are below optimal measurements in the following table (See figure 6).

RVA size	A (mm)	B (mm)
RVA1	28	10
RVA2	28	10
RVA3	28	10
RVA4	28	10
RVA5	28	10

RVB size	A (mm)	B (mm)
RVB1	38	10
RVB2	38	10
RVB3	38	10

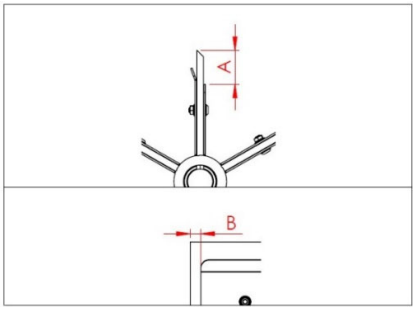


Figure 6. Rubber wear out

IMPORTANT !

The maximum temperature of the rubber blades is +70°C. The rubber blades should be checked and changed if the temperature inside the rotary valve is +70°C or more for a prolonged period of time or if material stays stuck inside the rotary valve.

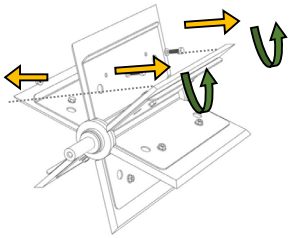
5.4.2 Replacing the rubber blade vanes

CAUTION !

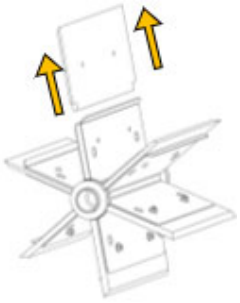
Before any manipulation to the RVA & RVB rotary valve, make sure that the motor is stopped and that all electrical connections are disconnected, and that it is impossible to inadvertently set it back in operation.

NOTE **:** all electrical manipulations should be performed by qualified personnel only.

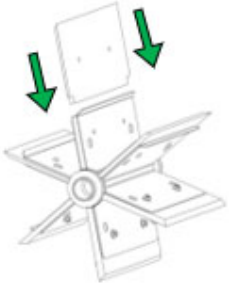
Step 1: Unscrew the nuts and bolts holding the rubber blade vanes :



Step 2: Take the rubber blade vanes out :



Step 3: Introduce the new rubber blade vanes into the metal vane gap. Make sure that the holes are aligned, and the vane is in the right direction then bolt them back :



5.4.3 Replacing the gearbox and motor

CAUTION !

Before any manipulation to the RVA & RV rotary valve, make sure that the motor is stopped and that all electrical connections are disconnected, and that it is impossible to inadvertently set it back in operation.

NOTE **:** all electrical manipulations should be performed by qualified personnel only.

Step 1: Unscrew the nuts and bolts holding the motor to the gear, and the gear to the rotary valve body,

Step 2 : Pull the components apart nice and level to make sure not to damage the shafts,

Step 3 : use copper grease on the new gear and motor shaft before sliding it back in place,

Step 4 : place all the nuts and bolts back and tighten to allowable torque,

Step 5 (for the motor) : make the necessary electrical connection to the terminal box (see §4.2).

5.4.4 Replacing the bearing or rotation disk

CAUTION !

Before any manipulation to the RVA & RVB rotary valve, make sure that the motor is stopped and that all electrical connections are disconnected, and that it is impossible to inadvertently set it back in operation.

Step 1: Unscrew the 4 bolts holding the rotation disk protection cover,

Step 2 : unscrew the screw holding the rotation disk, and remove the disk,

Step 3 : unscrew the 4 bolts holding the bearing in place and remove the bearing (if needed),

Step 4 : put the new bearing back using a bit of copper grease on the rotor shaft,

Step 5 : screw the new disk back on,

Step 6 : put the rotation disk protection cover back on and tighten the 4 bolts.

NOTE :

The RVB model also has small rubber blades on the sides of the retainers which need to be replaced following the same procedure.

5.5 Noise level

The noise ratio of the component in our scope of supply in connected condition and without media is below 75 dB(A) measured at 1 meter from the component.

Noise from transported media is not included.

IMPORTANT !

A higher noise level may occur depending on local conditions, transported material and other components connected to the RVA & RVB rotary valve. In this case separate measurements may be required.

If the total noise level in the area exceeds 85 dB(A), hearing protection must be used.

6. Components and spare parts

6.1 RVA Components

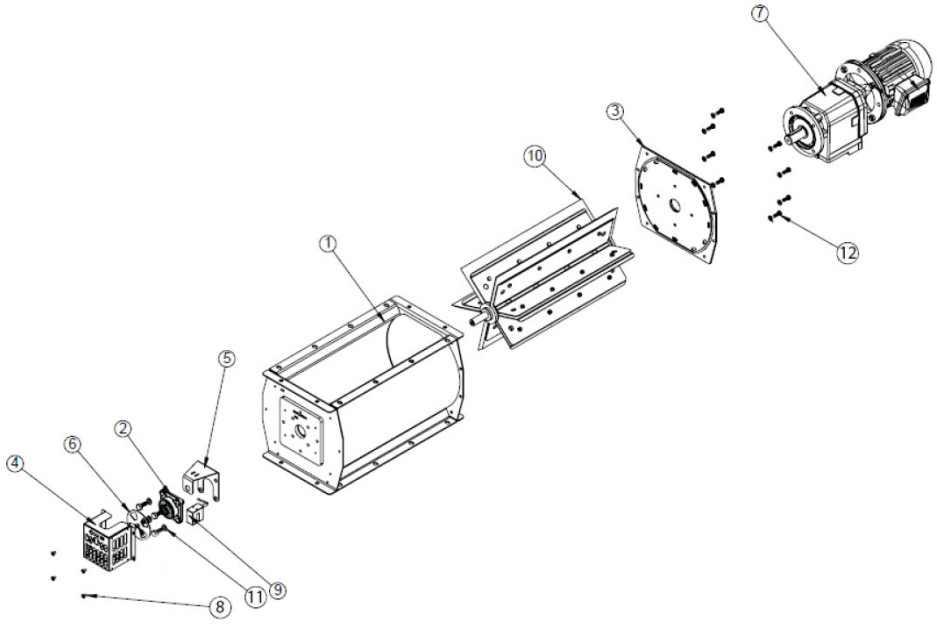


Figure 7 : RVA exploded view

Position	Description	Position	Description
1	Body	7	Motor and gear
2	Bearing housing	8	Bolt M5 x 10
3	Cover	9	Rotation detector
4	Rotation disc cover	10	Rotor and rubber blades
5	Detector holder	11	Bolts and washers M8
6	Rotation disc	12	Bolts, nuts & washers M8

Spare parts :

Code	Description
JCAB000028	Bearing UCF-204 for RVA rotary valve (all models)
JCAB000001	Set of rubber blades (6 pcs) for RVA1
JCAB000002	Set of rubber blades (6 pcs) for RVA2
JCAB000003	Set of rubber blades (6 pcs) for RVA3
JCAB000004	Set of rubber blades (6 pcs) for RVA4
JCAB000005	Set of rubber blades (6 pcs) for RVA5
JCAB000027	Felt seals kit for all RVA rotary valve (2 seal rings)
JEBB000001	Gearbox for motor 0,37kW
JEBB000002	Gearbox for motor 0,55kW
JEAA000005	Motor - IE2 - 0,37kW - 4Pole - 230/400V - 50Hz
JEAA000006	Motor - IE2 - 0,55kW - 4Pole - 230/400V - 50Hz
JCAB000006	Rotor complete with rubber blades RVA1 – NX -06
JCAB000007	Rotor complete with rubber blades RVA2 - NX -06
JCAB000008	Rotor complete with rubber blades RVA3 - NX -06
JCAB000009	Rotor complete with rubber blades RVA4 - NX -06
JCAB000010	Rotor complete with rubber blades RVA5 - NX -06

6.2 RVB Components :

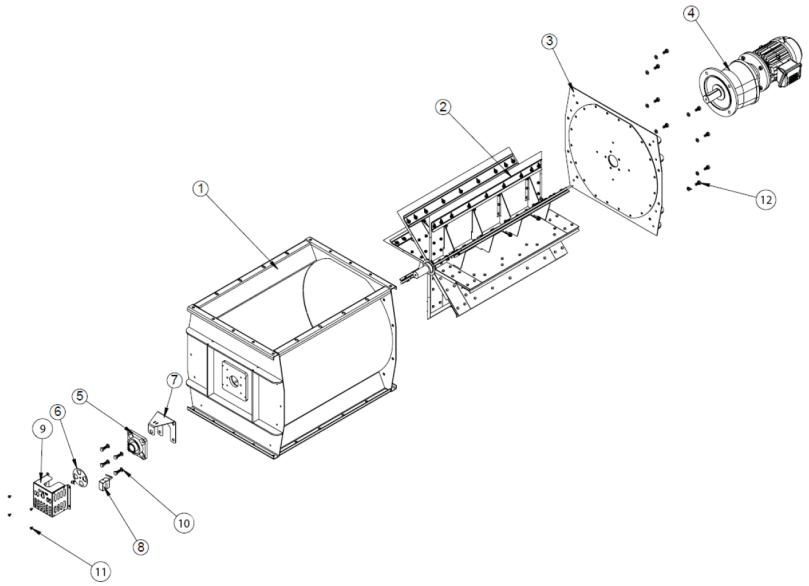


Figure 8. RVB Exploded view

Position	Description	Position	Description
1	Body	7	Detector holder
2	Rotor and rubber blades	8	Rotation detector
3	Cover	9	Rotation disc cover
4	Motor and gear	10	Bolts and washers M8
5	Bearing housing	11	Bolt M5 x 10
6	Rotation disc	12	Bolts, nuts & washers M8

Spare parts

Code	Description
PPA001007	Bearing UCF-207 for RVB rotary valve (all models)
JCAD000001	Set of rubber blades (8 pcs) for RVB1
JCAD000002	Set of rubber blades (8 pcs) for RVB2
JCAD000003	Set of rubber blades (8 pcs) for RVB3
JCAB000010	Felt seals kit for RVB1/RVB2 rotary valve (2 seal rings)
JCAB000011	Felt seals kit for RVB3 rotary valve (2 seal rings)
JEBB000003	Gearbox for motor 1,1 kW
JEBB000004	Gearbox for motor 1,5 kW
JEAA000007	Motor – IE3 – 1,1 kW - 4Pole - 230/400V - 50Hz
JEAA000008	Motor – IE3 – 1,5 kW - 4Pole - 230/400V - 50Hz
JCAD000004	Rotor complete with rubber blades RVB1 – NX -08
JCAD000005	Rotor complete with rubber blades RVB2 - NX -08
JCAD000006	Rotor complete with rubber blades RVB3 - NX -08

7. Rotation detector (optional)

The optional rotation detector is a detection system that controls if the rotation disk is turning. In case of rotation failure, it sends a signal to a control panel.

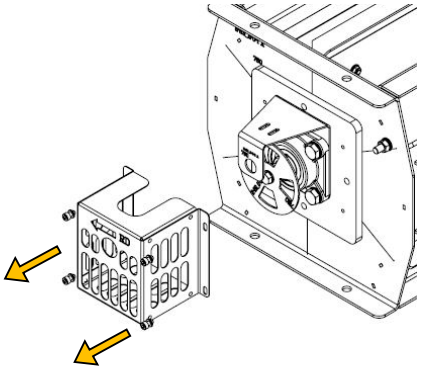
7.1 Placing the rotation detector

CAUTION !

Before any manipulation to the RVA & RVB rotary valve, make sure that that system is switched off, and that it is impossible to inadvertently set it back in operation.

NOTE **:** all electrical manipulations should be performed by qualified personnel only.

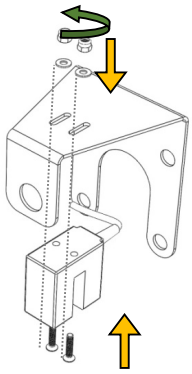
Step 1 : Remove the rotation disk protection cover by untightening the bolts holding it on the rotary valve body :



Step 2 : Introduce the sensor :

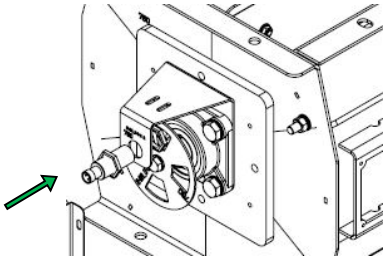
DU-6 detector ;

Attach the sensor through the inside of the sensor holder with the bolts and nuts delivered with the sensor.

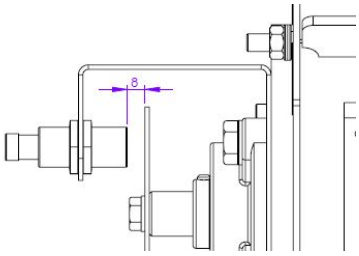


M18 optical sensor :

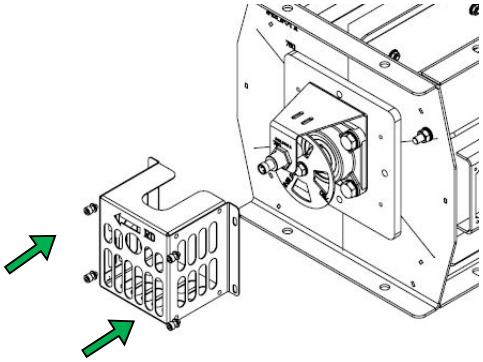
Introduce the sensor in the hole on the top of the front of the over and tighten it in place with the nuts supplied with the detector.



NOTE : make sure that the min/max distance between detector head and disk is respected as mentioned in the supplier detector guide.



Step 3 : Place the rotation disc cover back in place by tightening the bolts holding it on the rotary valve body.



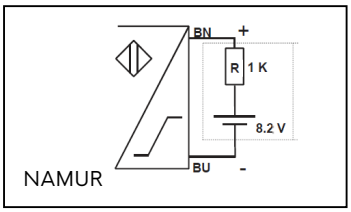
7.2 Connecting the detector

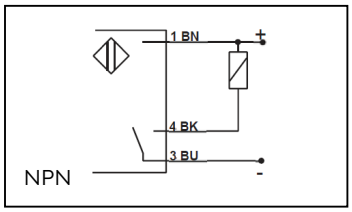
CAUTION !

Before any manipulation to the RVA & RVB rotary valve, make sure that that system is switch off, and that it is impossible to inadvertently set it back in operation.

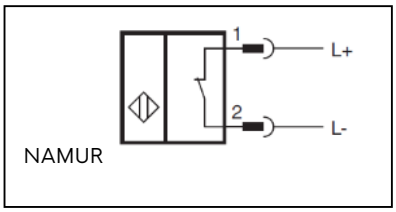
NOTE : all electrical manipulations should be performed by qualified personnel only.

DU-6 connection :





M18 optical connection :



8. Troubleshooting

Problem	Probable cause	Possible solution
– Rotary valve switches off thermally	– Foreign body got stuck	– Remove foreign body
	– Rotor frozen	– Thaw on the outside with hot air or water
	– Gear motor defective	– Replace motor, or gearbox
	– Rotor defective	– Replace rotor
	– Motor protection set incorrectly	– Adjust the motor protection
	– Fuse defective	– Replace fuse
	– Big voltage drop in power supply	– Insure voltage consistency
– Rotary valve is not turning	– Working switch is off	– Stop the installation, switch on the working switch
	– Motor protection switched of thermally	– See "Rotary valve switches off thermally"
	– Conditions of operation are not met in the control system	– Investigate why conditions are not met
	– Fuse defective	– Replace fuse
	– It might be that something is stuck in the rotary valve	– Investigate that nothing is stuck in the rotor
	– It might be that the motor or gearbox is broken	– Investigate if a part is broken and needs to be replaced
	– It might be that the motor or gearbox shaft key is broken	
– Rotary valve makes "screaming" noise	– Foreign body got stuck	– Remove foreign body
	– Rotor/rotary valve body is defective	– Replace defective component
	– The rotor turns the wrong way	– Wire the motor correctly
	– Rotor shaft is warped	– Change complete rotor
	– Rotor bearings are shot	– Replace rotor bearings
	– Lack of material going through, Empty rubber vanes turning on metal	– Resize rotary valve
		– See "Material will not pass the valve without accumulation"
– Material will not pass the valve without accumulation	– Volume of material per rotation is larger than planned	– Reduce the volume of material feed, or replace rotary valve
	– Very high pressure difference (too high under-pressure)	– More frequent regeneration
		– Replace rotary valve (with seals)
	– Settling velocity of material less than expected	– Shorter step-interval of chain conveyor
	– Rubber blade vanes are damaged, air passes	– Replace rubber blade vanes
	– The material accumulates in lumps which cannot pass	– Adjust the production machine to change the flow of material
	– The material is not removed fast enough at the outlet of the rotary valve	– Check the proper functioning of the emptying system
	– Transported material is too big/bulky	– Use the adequate rotary valve
	– Material agglutinates	
	– Material is wet or sticky	– Wrong application for the rotary valves
– Rotation disk doesn't turn but rotor does	– Rotation disk and rotor axle are no longer consolidated	– Tighten rotation disk on rotor axle
– Rotation detector doesn't react	– Rotary valve isn't running	– Turn on rotary valve
	– Cable is not connected	– Make sure cables are connected
	– Improperly connected cables	– Insure proper cable connection
	– Rotation disk isn't turning	– See" Rotation disk doesn't turn but rotor does"
	– Detection distance is too big or too short	– Verify installation distance
– Paint is chipping/peeling	– High temperature material going through	– Reduce material temperature
		– Inappropriate use
	– External environment factors	– Place indoors
		– Inappropriate use
	– Rubber blade vane friction on carcass	– See "Rotary valve makes "screaming" noise"

Problem	Probable cause	Possible solution
– The rotary valve has issues after prolonged standstill period	– Rubber blades are stuck	– Replace rubber blades
	– Rubber blades are hard/cracked	
	– The gear is making strange noises/gripped	– Refer to manufacturer's manual
	– The motor is making strange noises/gripped	– Refer to manufacturer's manual
	– Bearing is making strange noises/gripped	– Grease or replace the bearing

If the above does not help, please contact your supplier.

9. Dismantling and recycling

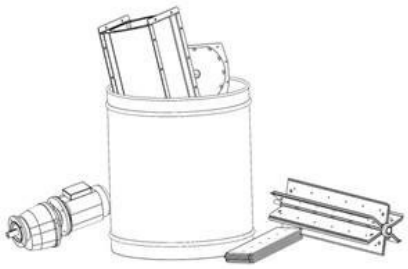
When dismantling a unit, be sure to keep in mind the following important information :

- As the unit is dismantled, set aside all still functioning parts to re-use them on another unit.
- You should always separate the different materials depending on their type: iron, rubber, oils, greases, etc.
- Recyclable parts must be disposed of in the appropriate containers or brought to a local recycling company.

The rubbish must be collected in special containers with appropriate labels and disposed of in compliance with the national laws and/or local legislations in force.

CAUTION !

It is strictly forbidden to dispose of toxic wastes in municipal sewerage and drain systems. This concerns all oils, greases, and other toxic materials in liquid or solid form.



10. Maintenance log

date	description

Contacts

Formula Air The Netherlands
Head Office / Production / Sales
Bosscheweg 36
5741 SX Beek en Donk,
The Netherlands
+31 492 45 15 45
info-nl@formula-air.com

Formula Air Germany
Sales
Dr.-Oetker Straße 10
54516 Wittlich
Germany
+49 6571 269860
info-de@formula-air.com

Formula Air France – West
Sales
6, avenue des Lions
44800 Saint-Herblain
France
+33 9 72 15 29 38
contact-ouest@formula-air.com

Formula Air Nordic
Sales
Stortorget 17
211 22 Malmö
Sweden
+46 40 654 06 10
info-scan@formula-air.com

Formula Air Belgium
Logistics / Sales
Rue des Dizeaux 4
1360 Perwez
Belgium
+32 81 23 45 71
info-be@formula-air.com

Formula Air France – North
Sales
Zac de la Carrière Dorée
BP 105, 59310 Orchies
France
+33 9 72 15 29 38
contact-fr@formula-air.com

Formula Air France – South
Sales
Chemin de Peyrecave
09600 Regat
France
+33 9 72 15 29 38
contact-sud@formula-air.com

Formula Air Export
Sales
Rue des Dizeaux 4
1360 Perwez
Belgium
+32 81 23 45 71
info-be@formula-air.com

Formula Air Baltic
Production / Sales
P. Motiekaičio g. 3
LT-77104 Šiauliai
Lithuania
+370 41 54 04 82
info-lt@formula-air.com

Formula Air France – East
Sales
2 Rue Porcherie
38460 Cremieu
France
+33 9 72 15 29 38
contact-est@formula-air.com

Formula Air Vietnam
Production / Sales
#33, Lot 2, Den Lu 1
Hoang Mai District, Hanoi
Vietnam
+84 (24) 38 62 68 01
info@vinaduct.com