

Rotary Airlock Feeder

Blow Through



Capacity: 5 to 38 litres/revolution
Objectives: powders dosing to feed the pneumatic conveying

The blow through adaptor enables to meter and/or feed material from a hopper or a bin into a pneumatic conveying line and to restrict or prevent conveying air from blowing up into the hopper or bin.



TECHNICAL SPECIFICATIONS

- Manufacturing materials:** cast iron body or stainless steel
- Surface treatment of the rotor:** nickel plating, teflon, hardened vanes
- Motorisation:** direct or chain sprocket
- Rotor:** steel or stainless steel
- Fixed rotor speed:** 10, 20, 30 revolutions/min.
- Variable rotor speed:** 4-35 revolutions/min.
- Capacity:** 2.2 to 19.5 L/t.



▶ **Surface treatment of the rotor:** chromium and nickel plating, tefloning



▶ **Motorisations:** direct by gear, coaxial variator with chain transmission or without motorisation (bare shaft)

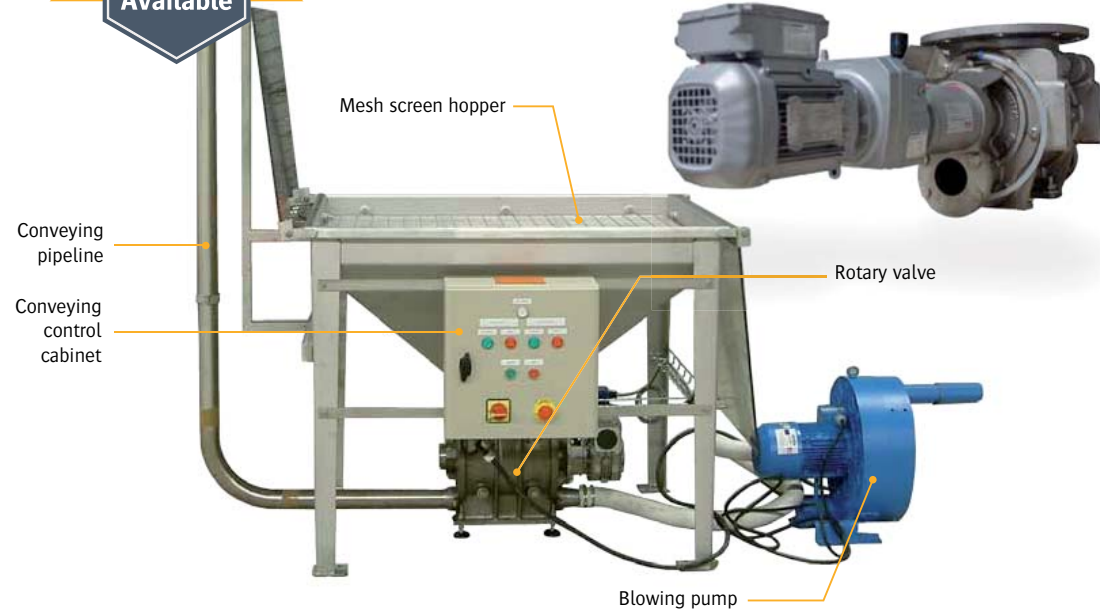


▶ **Cast iron body** or stainless steel AISI 304 L/316 L



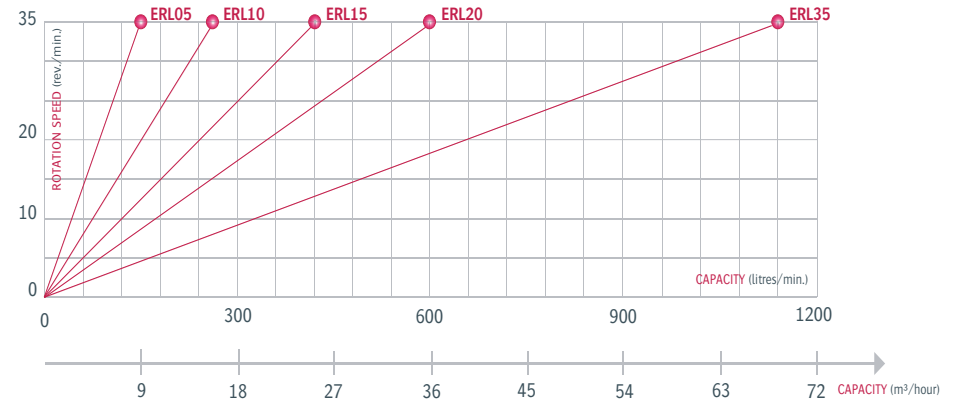
▶ **ATEX version** for a high explosion resistance and at the passage of flame

Advantages

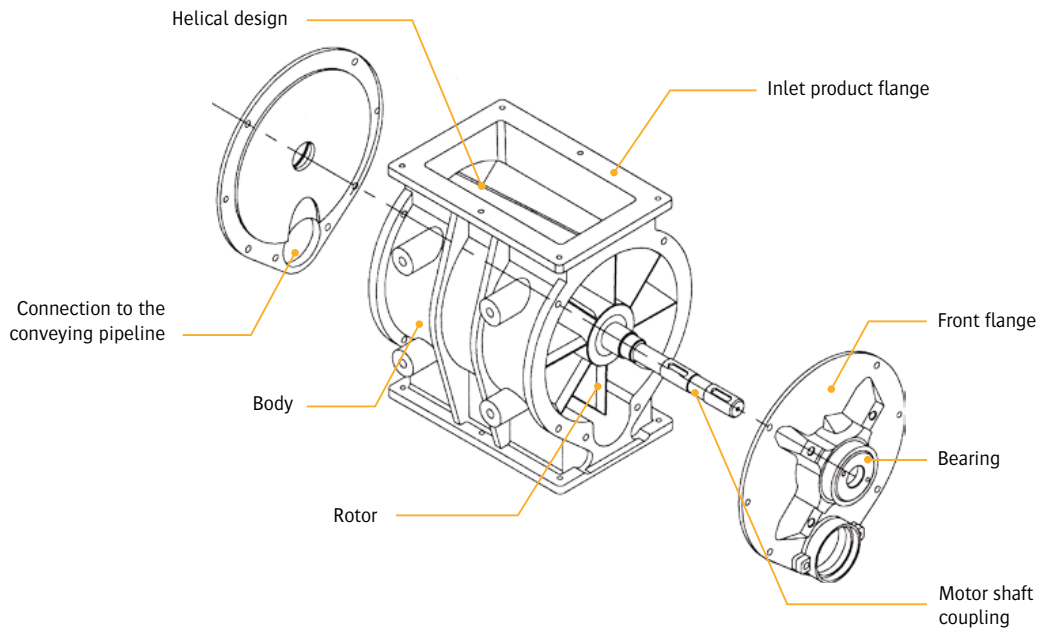


BLOW THROUGH ROTARY VALVE RANGE

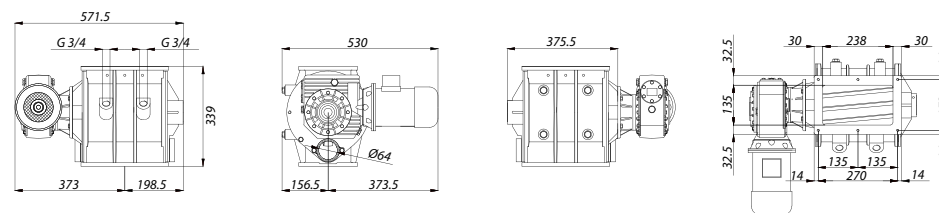
Models	ERL 05	ERL 10	ERL 15	ERL 20	ERL 35
Capacity (litres/rev.)	5	9	14	20	38
Feeding flange in mm.	170 x 122	135 x 238	148 x 276	196 x 337	284 x 569
Differential pressure max.	0.7	0.7	0.7	0.7	0.7
Service temperature	-20°C-60°C	-20°C-60°C	-20°C-60°C	-20°C-60°C	-20°C-60°C



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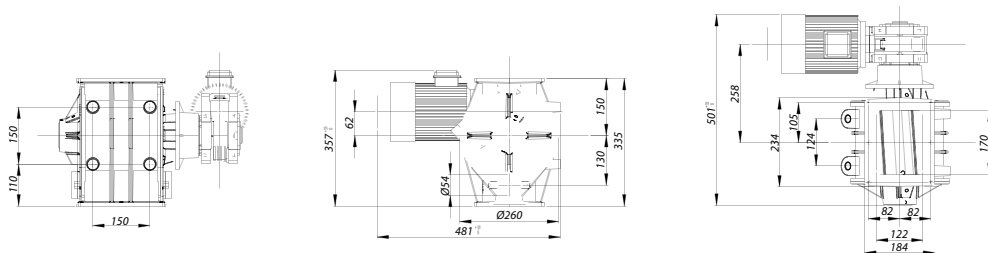
▶ BLOW THROUGH ROTARY VALVE - ERL 10



10 rounds/min.				20 rounds/min.				30 rounds/min.			
Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm) **	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm) **
5.4	0.85	0.37	300	10.8	0.75	0.55	232	16.2	0.65	0.55	149

* For medium to easy flowing product
** For a load factor of 100%

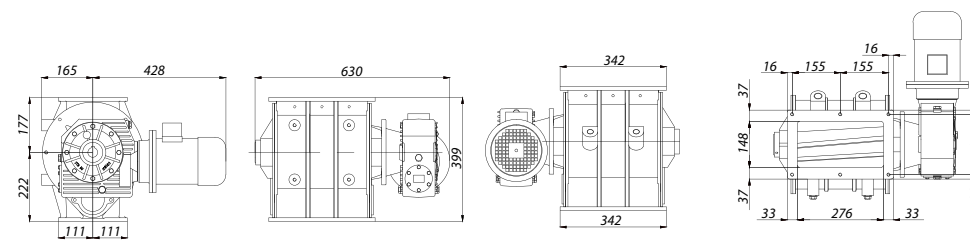
▶ BLOW THROUGH ROTARY VALVE - ERL 05



10 rounds/min.				20 rounds/min.				30 rounds/min.			
Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm) **	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm) **
3	0.85	0.37	300	6	0.75	0.55	232	9	0.65	0.55	149

* For medium to easy flowing product
** For a load factor of 100%

▶ BLOW THROUGH ROTARY VALVE - ERL 15

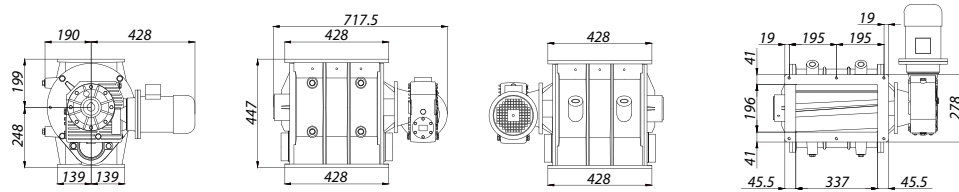


10 rounds/min.				20 rounds/min.				30 rounds/min.			
Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm) **	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm) **
8.4	0.85	0.55	472	16.8	0.75	0.75	328	25.2	0.65	1.1	308

* For medium to easy flowing product
** For a load factor of 100%

Blow Through Rotary Airlock Feeder

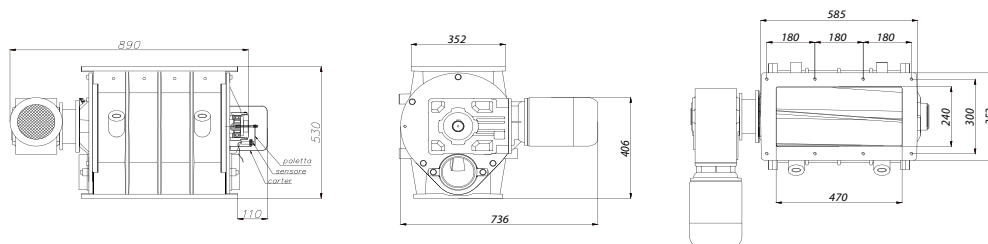
▶ BLOW THROUGH ROTARY VALVE - ERL 20



10 rounds/min.				20 rounds/min.				30 rounds/min.			
Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**
12	0.85	0.55	472	24	0.75	1.1	328	36	0.65	1.1	308

* For medium to easy flowing product
** For a load factor of 100%

▶ BLOW THROUGH ROTARY VALVE - ERL 35



10 rounds/min.				20 rounds/min.				30 rounds/min.			
Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**	Flow rate m ³ /h.	Load factor *	Power KW	Torque (Nm)**
22.8	0.85	1.1	929	45.6	0.75	1.5	633	68.4	0.65	2.2	630

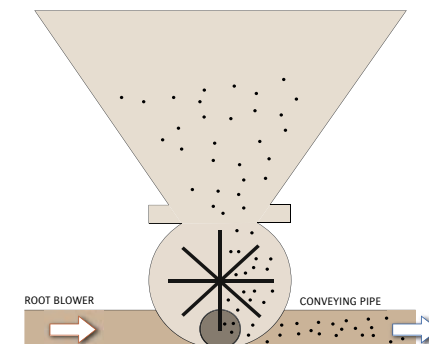
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▶ USE

The blow through rotary airlock feeders are designed to suit to pneumatic conveying processes. They can be mounted inline into a pneumatic conveying line.



Due to the space available under the production machines, the blow through rotary airlock feeders are an efficient solution. The added value of those rotary valves is to transfer sticky materials. The air conveying flow, through the rotary valve, ensures the cleaning of the rotor by taking off particles stuck on the walls.





▶ DEFLECTOR FOR GRANULES

The design highly respects the granular materials.

- High degree of filling
- Large degassing nozzle
- Strong design
- Available with direct motorisation or by chain
- Drilled flanges according to PN10, ANSI 150 lbs and JIS
- Versions compliant with ATEX 94/9/CE are available



▶ EASYCLEAN ROTARY VALVE

For a sanitary using in the food and pharmaceutical industries.

The rotary valve gets a rotor which can be easily dismantled in few minutes for controlling and cleaning the inside parts. The extraction mechanism of the moving parts is more secured for the operator and offers a better flexibility for the cleaning and maintenance of the installation between various productions. These stainless steel rotary valves can be dismantled easily as well as keeping the highest standards of hygiene.



▶ PRESSURIZED BEARINGS

To seal the rotary valve.

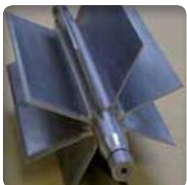
An air flow is injected to avoid that fine particles come inside the sealing system through the cable gland.



▶ ADJUSTABLE PADDLES

Adjustment of the rotor vane depending on the properties of each material.

A standard rotor is composed by 8 fixed vanes. Nevertheless, it is possible to configure the rotors, for making rotary valves suitable for the material, by adjusting vanes.



▶ MANUFACTURING MATERIAL

Manufacturing material adapted to your needs and expectations.

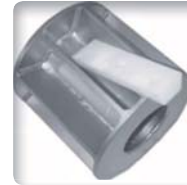
Three different configurations are available: steel design, stainless steel body and cast iron flange or even the full cast iron design. The aluminium configuration is anodised.



▶ DEGASSING NOZZLE

Deaeration system of the body to avoid the pressure return.

The degassing chambers are specially designed for being used in pneumatic conveying systems. It permits to avoid the pressure return into the piping and the hopper from where the product is extracted.



▶ PRECISION SHIM

For a more accurate feeding and the maintaining of a high rotation speed.

The precision shims are fixed directly onto the rotor and reduce the rotary airlock valve displacement by a fine feeding or the maintaining of high rotation speed.



▶ SPEED SET BOX

To facilitate the material introduction in the conveying pipeline.

The speed set box is settled under the rotary airlock valve to introduce the material in the pneumatic conveying pipeline.



▶ OVERFILL CONTROLLER

To ensure a rotary airlock valve with large displacement.

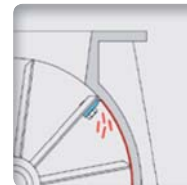
The overflow controller has been specially designed for revolving materials or for applications needing a rotary airlock valve with large displacement.



▶ DEGASSING BOX

To evacuate the air.

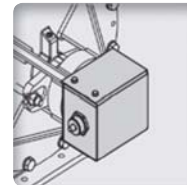
The degassing box is designed for pneumatic conveying applications to ensure the blower air evacuation returning by the rotary airlock valve.



▶ ROTOR WITH SCRAPER PADDLES

To eliminate sticky materials from the rotary airlock valve body.

The rotor with scraper vanes helps to get a very strong sealing and a full cleaning of the rotary airlock valve body for very sticky materials.



▶ ROTATION SENSOR

The box indicates a number of rotor rotations.

The box is an indicator aimed to check the airlock valve rotation speed and to identify any problems in case the velocity is too low.