

ERV series Vacuum Regulator

Product features/ Code of order

CHELIC

Feature

- Easy to install: light and compact, space saving.
- The filter element easy to change and replace.
- Could apply with elbow type fitting with 360° rotation and easy to piping.



Symbol:



Specification

Item	Model	ERV - 200
Fluid		Air
Port size	Rc	1/8、1/4
Pressure range	kPa(mmHg)	-98.6 ~ -1 (-740 ~ -7.5)
Air consumption	L/min(ANR)	0.6 within
Ambient and fluid temperature	°C	5 ~ 60
Weight	kg	0.2
Body material		Aluminum alloy die-casting


Code of order **ERV 200 - 01 - G - VG10A**

1 2 3

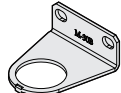
1	Mark	Port size (mm)
	01	1/8
	02	1/4

2	Mark	Thread type
	None	Rc
	G	G
	N	NPT

● G applicable to 1/8, 1/4

3	Mark	Pressure gauge
	None	Without pressure gauge
	VG10A	

● Accessory supplied with product

Mark	Bracket
Bracket included	

● ERV 200 series Selection table:

Item	Model	1 Port size	2 Thread type	3 Pressure gauge
ERV	200	01 • 02	G • N	VG10A

EV

EVM

VA□

VM□

VM□U

VHS

VSL

VKM

VKMT

VCK

VK20□

VK30□

VQ20□

VFD

VFM

VFU

ERV

ERVL

MVS

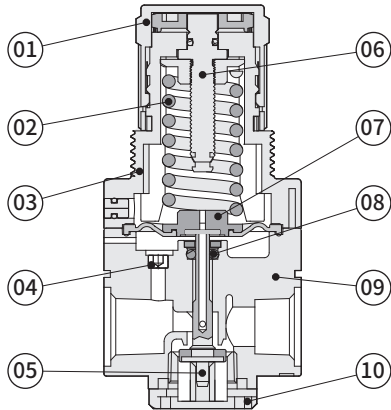
DYC

ERV series Vacuum Regulator

Product features

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Internal structure



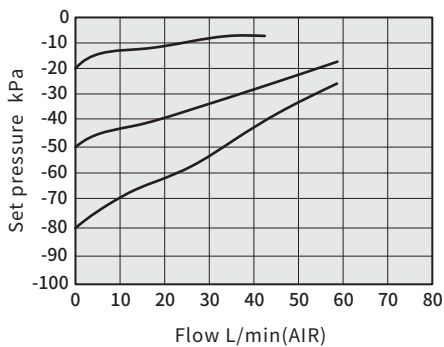
Working principle

Turn the knob left to pressure main spring to push diaphragm and activate seal pad on shaft, when the seal closes it will push the shaft. Meantime, the valve gate will open to allow primary pressure through the shaft to the main diaphragm, the above space between main spring will be in a balancing function. When the knob turn right, the main spring pressure decreased to allow over-flow hole opened to reduce secondary in inner pressure until the main spring strength to pull back the diaphragm which shut off the over-flow hole for decreasing degree of vacuum.

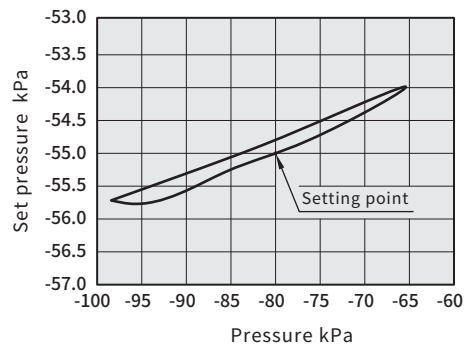
Components and material list

No.	Item	Material	No.	Item	Material
01	Pressure adjusting knob	POM	06	Screw rod	Copper Alloy
02	Pressure adjusting spring	Stainless	07	Main diaphragm	Copper+NBR
03	Pressure adjusting holder	POM	08	O-ring	NBR
04	Valve	Copper Alloy	09	The body	Copper Alloy
05	Shaft	Copper Alloy	10	The nut	POM

Flow rate characteristics



Pressure characteristics

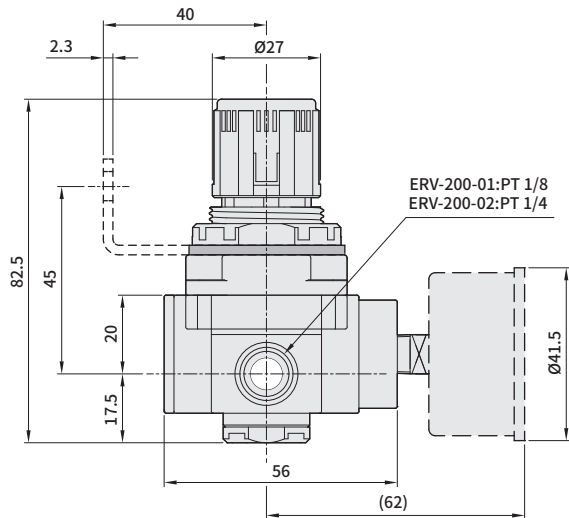
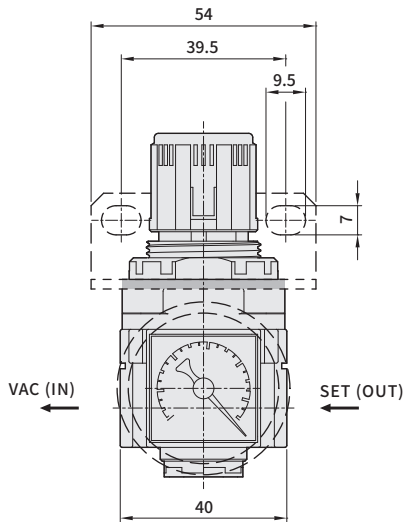
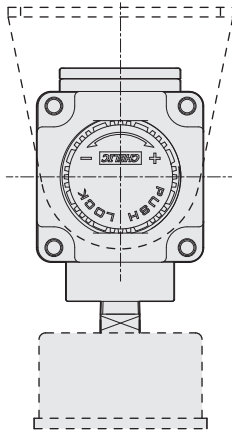


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Dimensions

CHELIC

ERV - 200 Standard



EV

EVM

VA □

VM □

VM □ U

VHS

VSL

VKM

VKMT

VCK

VK20 □

VK30 □

VQ20 □

VFD

VFM

VFU

ERV

ERVL

MVS

DYC

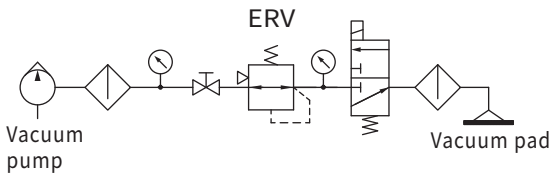
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Application example/ Cautions

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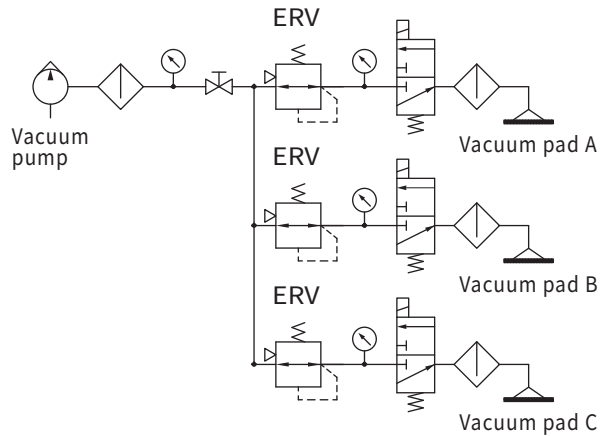
Application example

When to vacuum one workpiece



※ Note : Please refer to vacuum pump datasheet when lifting workpiece weight and quantity.

When to vacuum multiple workpieces



The notice for when designing and selecting

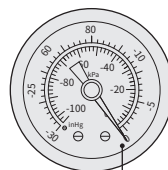
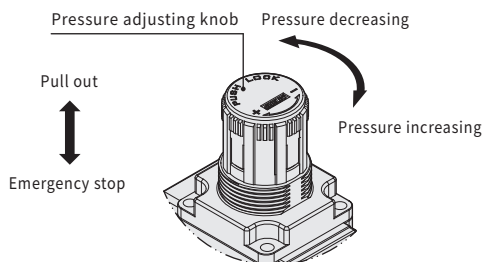
- When design the system, it should avoid the product in a high impact or strong movement working environment; And also to avoid exposing outdoor or under chemical environment.
- The pressure gauge is plastic transparent cover, please prevent the specific working environment such as spray printing or chemical fluid.
- The filter should be setting right after vacuum pump for keeping the product cleaning and away from dust environment that may cause flow insufficiently.

The notice for assembly

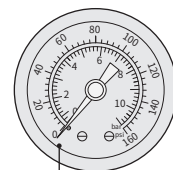
- When assembly, be attention to the negative pressure direction. Use in opposite direction is not applicable.
- Please use wrench to tighten the pressure gauge onto the product. The surface of pressure gauge is possible to be damaged if using by hand with uncontrollable pressures.
- Please avoid seal tap and objects flow into piping line, and avoid screw glue flowing to the product that cause damaged or insufficient functioning.

Caution for using

- The knob should be pull out and turn for adjusting. In clockwise turning is for negative pressure adjustment, the counterclockwise is to decrease negative pressure; after setting, the knob should be pushed back in position. When clockwise turning to maximum pressure (the pressure figure without changes), it should not be turned further by hand or tool for preventing breaking or damaged.
- The starting point of vacuum pressure gauge is reverse direction of positive pressure gauge, please pay attention when applying.



Negative pressure gauge starting point



Positive pressure gauge starting point