

# Diaphragm valves MV3-VCR

spectro **pur**



MV3-VCR with hand wheel



MV3-VCR with 200 bar pneumatic actuator

## Product features

- Stainless steel valves for manual or automatic (pneumatic) shut-off
  - Diaphragm metal-to-metal sealed to atmosphere
  - Fully functional even when valve is evacuated
  - Minimized internal volume for short purge times
  - No parts in the gas-wetted area exposed to friction or torsional stress provide minimum particle generation
  - Embedded soft seat seal made of PCTFE or PVDF permits frequent operation without loss of tightness
  - Modular design for easy replacement of internal parts
  - Clearly legible position indication (on/off)
  - 100 % Helium-leak-tested
  - Assembly in cleanroom class ISO 5.0
  - Modular design
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- Pneumatic actuator optional for line pressure 25, 100, 200 and 300 bar
  - Optional with inductive proximity switch
  - Variable installation position

## Technische Daten

### Materials

Body:	ES 1.4404
Diaphragms:	Hastelloy C276
Gas-wetted parts:	ES 1.4404
Valve seat seal:	PCTFE or PVDF

<b>Surface roughness</b> (gas-wetted areas)	$R_{a,max} \leq 0,25 \mu\text{m}$
	$R_{a,Avg} \leq 0,13 \mu\text{m}$

<b>Temperature range</b>	-30°C to +60°C
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### Leak rate

to atmosphere:	$< 10^{-9}$ mbar l/s He
via valve seat:	$< 10^{-6}$ mbar l/s He

### Operating press. / weight

Manual valve:	300 bar / 0,4 kg*
Pneumatic valve:	25 bar / 0,8 kg
	100 bar / 1,0 kg
	200 bar / 1,1 kg
	300 bar / 1,3 kg*
* O <sub>2</sub> : max. 200 bar	

<b>c<sub>v</sub>-value</b>	c <sub>v</sub> = 0,33
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<b>Nominal diameter</b>	DN 4
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### In-/outlet connectors

- VCR-female
- VCR-male
- tube stub 1/4" x 28 mm

### Technical data pneumatic actuators

<b>Actuator pressure</b>	6 to 8 bar
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<b>Actuator connector</b>	for hose Ø 4mm
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<b>Pneumatic function</b>	<ul style="list-style-type: none"> <li>• normally closed (NC)</li> <li>• normally open (NO)</li> </ul>
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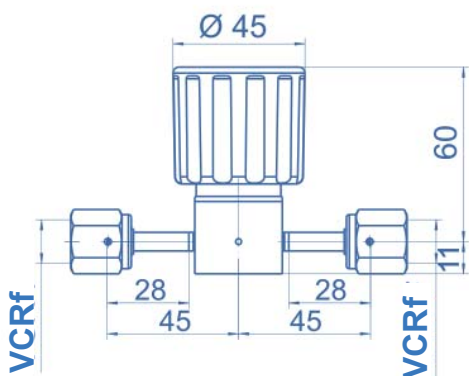
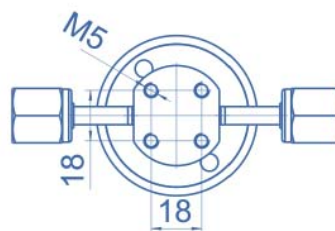
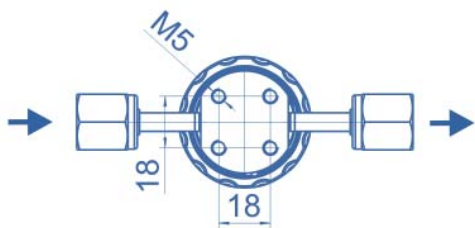
<b>Option</b>	<ul style="list-style-type: none"> <li>• inductive proximity switch</li> </ul>
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Fully functional under vacuum

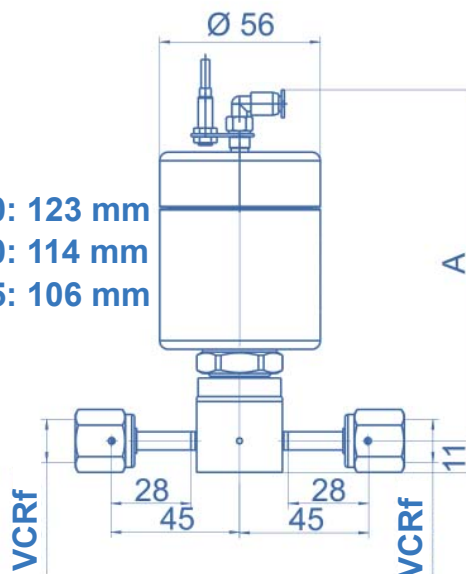
# Diaphragm valves MV3-VCR



## Dimensions



A:  
 PN200: 123 mm  
 PN100: 114 mm  
 PN 25: 106 mm



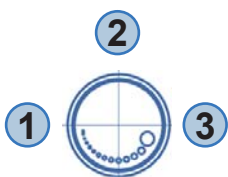
MV3 - 0VCRf - X - VVCRf - X - H

MV3 - 0VCRf - X - VVCRf - X - PN1200NC

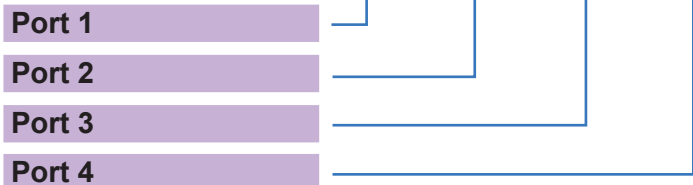
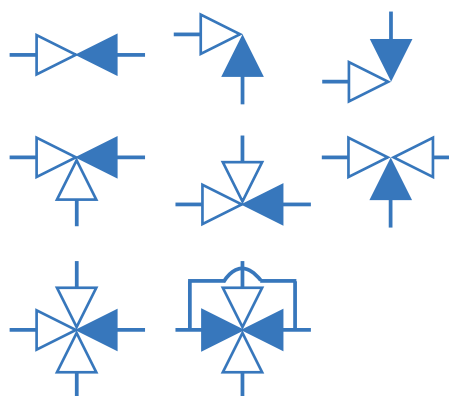
## Ordering information:

Diaphragm valves MV3-VCR

## Available configurations



4 MV3 - 0VCRm - X - VVCRf - X - H



- 0 inlet (port only)
- V outlet (open / close)
- X no port
- +
- VCRf VCR-female
- VCRm VCR-male
- OD 1/4 tube stub 1/4"

## Valve type

- H Manual valve
- PN Pneumatic actuator PN 25/100/200/300
- PN1 Pneumatic actuator PN 25/100/200/300 with inductive proximity switch
- N... Pneumatic actuator NO / NC