

Diaphragm valves MV3-VCR

spectropur



MV3-VCR with hand wheel

MV3-VCR with 200 bar pneumatic actuator

MV3-VCRa

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
-
- 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

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

Temperature range	-20°C to +60°C
--------------------------	----------------

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 ₂ : max. 200 bar

c_v-value	c _v = 0,33
----------------------------	-----------------------

Nominal diameter	DN 4
-------------------------	------

In-/outlet connectors

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

Technical data pneumatic actuators

Actuator pressure	6 to 8 bar
--------------------------	------------

Actuator connector	for hose Ø 4mm
---------------------------	----------------

Pneumatic function	<ul style="list-style-type: none"> • normally closed (NC) • normally open (NO)
---------------------------	--

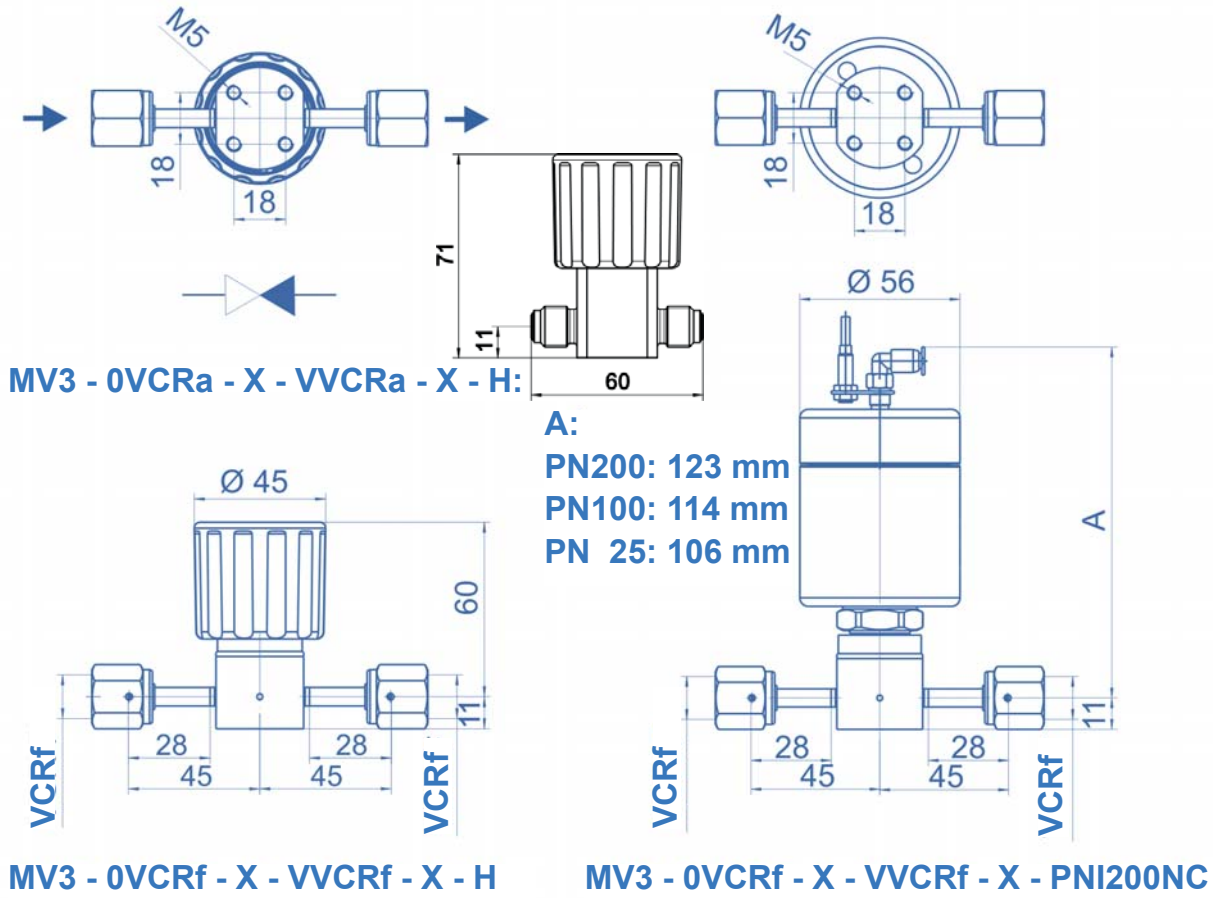
Option	<ul style="list-style-type: none"> • inductive proximity switch
---------------	--

Fully functional under vacuum

Diaphragm valves MV3-VCR

spectropur

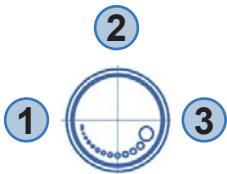
Dimensions



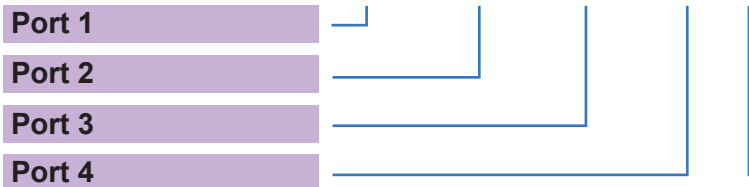
Ordering information:

Diaphragm valves MV3-VCR

Available configurations



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



- 0** inlet (port only)
- V** outlet (open / close)
- X** no port
- +**
- VCRf** VCR-female
- VCRm** VCR-male (face seal)
- VCRa** VCR-male (2 port line only)
- 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**

