



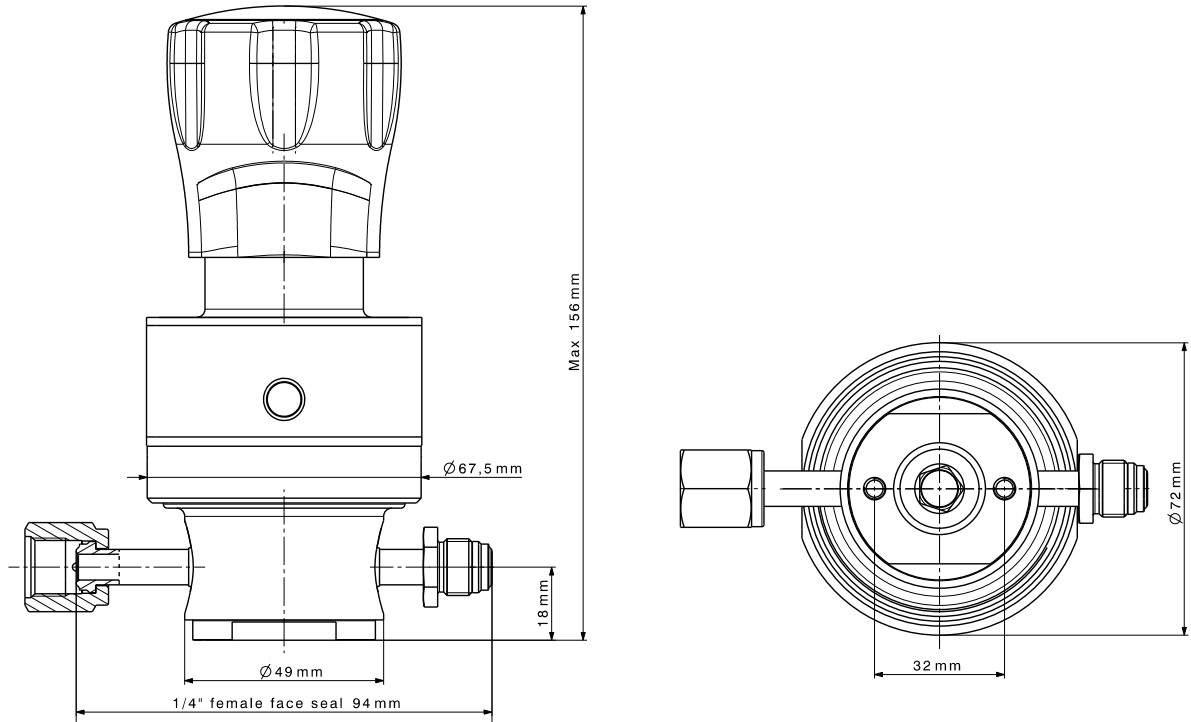
## SUB-ATMOSPHERIC PRESSURE REGULATOR FOR HP & UHP APPLICATIONS

- Unique threadless design in all versions for a higher purity level
- Spring less design
- Optimized supply pressure effect and excellent flow stability
- Life duration according to CGA E4
- Vacuum to 21 bar (300 psig) inlet
- Assembling, testing & packaging in cleanroom: Class ISO 4
- Individual serial number for full traceability
- Electropolished surface per SEMI F19 UHP Grade
- 316L VAR® stainless steel double melt per SEMI F20 option available

# RX4100



# RX4100 | ABSOLUTE PRESSURE REGULATOR FOR THE HIGHEST LEVEL OF PURITY



## SPECIFICATIONS

### Max. inlet pressure

21 bar (305 psig)

### Outlet pressure

0.7/2 bar  
(10/29 psig)

### Temperature range

-20°C to +65°C (-4°F to +149°F)

### Flow capacity (Cv)

0.5

### Supply pressure effect I\*

1.4

\*1 bar / 100 bar inlet pressure change

### Poppet type

Tied diaphragm

### Burst pressure

300% of operating pressure

### Proof pressure

150% of operating pressure

### Certified max. Helium outboard leak rate

$\leq 1 \times 10^{-9}$  mbar.l/s

### Certified max. Helium across the seat leak rate (at max. pressure)

$\leq 1 \times 10^{-8}$  mbar.l/s

### Certified max. Helium inboard leak rate (at max. pressure)

$\leq 1 \times 10^{-9}$  mbar.l/s

## CONSTRUCTION MATERIAL

	Parts	Material
<b>Wetted parts</b>	Body	SS 316L, VAR
	Seat	PCTFE (PVDF, PTFE, VESPEL® optional)
	Diaphragm	SS 316L (Hastelloy optional)
	Poppet	SS 316L (Hastelloy optional)
	Spring	SS 316L (Hastelloy optional)
	Spring Holder	SS 316L
<b>Non-wetted parts</b>	Bonnet	SS 303
	Handwheel	PA 6.6
	Others	Stainless Steel and Brass

## SURFACE FINISH

<b>S</b>	Ra 0.4 µm (15 µin)
<b>V</b>	Ra 0.25 µm EP (10 µin)
<b>U</b>	Ra 0.13 µm EP (5 µin)

SCAN ME FOR FLOW CURVES & PRODUCT CONFIGURATOR



# PRODUCT CONFIGURATOR

	Regulator type	Outlet pressure	Seat material		Cv value	Body material	Surface finish		Porting Configuration	Connections	Actuation type	Inlet pressure	Options										
RX	41	02	K		050	S	V		2W1	4F4F	M	021	HPG0										
	Vacuum (Tied diaphragm)	41	0.7 bar (10 psig)	01	PCTFE	K	0.5	050	Stainless Steel AISI 316L	S	Ra 0.4 µm (15 µin)	S	2 ports	2 W 1	1/4" Female VCR	4F	Hand-wheel	M	21 bar (305 psig)	021	Hastelloy Trim	H	
			2 bar (29 psig)	02	Vespel	V			Stainless Steel AISI 316 AOD Var	V	Ra 0.25 µm EP (10 µin)	V	3 ports	3 W 4	1/4" Male VCR	4M						Gauge (bar/PSI)	PG0
					PVDF	P				U	Ra 0.13 µm EP (5 µin)	U	4 ports	4 W 6	1/2" Female VCR	8F						Gauge (MPa)	PG1
					PTFE	T									1/2" Male VCR	8M							



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