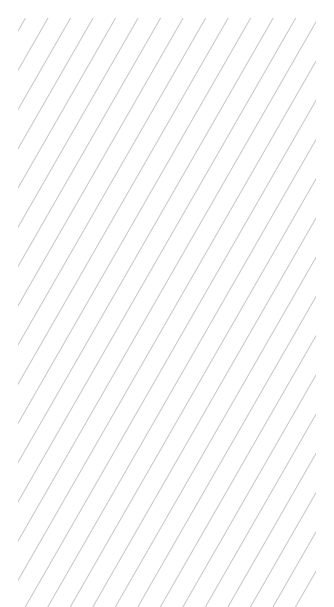




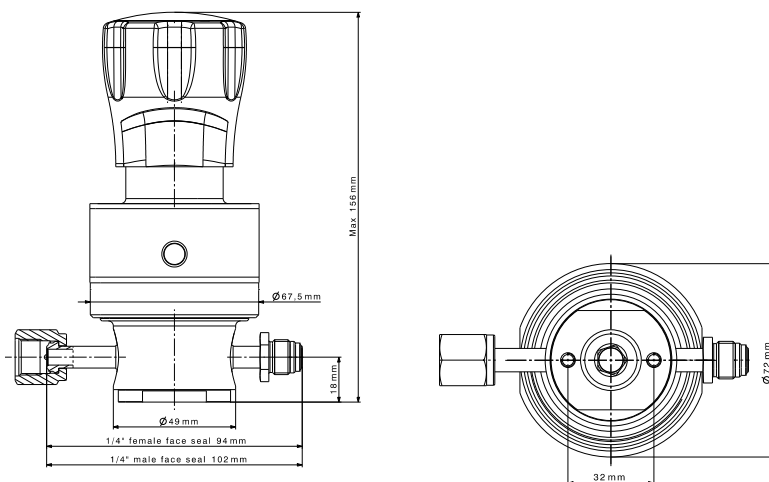
## SINGLE-STAGE DIAPHRAGM PRESSURE REGULATOR FOR HP & UHP APPLICATIONS

- Unique threadless design in all versions for a higher purity level
- Optimized supply pressure effect and excellent flow stability
- Life duration according to CGA E4
- Vacuum to 240 bar (3500 psi) 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

# RX4000



# RX4000 | THE FIRST OF ITS KIND THREADLESS PRESSURE REGULATOR FOR THE HIGHEST LEVEL OF PURITY



## SPECIFICATIONS

### Poppet type

RX4000: Free diaphragm  
RX4200: Tied diaphragm

### Burst pressure

300% of operating pressure

### Certified max. Helium outboard leak rate

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

### Temperature range

-20°C to +65°C  
(-4°F to +149°F)

### Proof pressure

150% of operating pressure

### 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

It's not possible to reach all outlet pressure with all inlet pressures, see compatibility table below:

## COMPATIBLE OUTLET/INLET PRESSURE

		2 bar	4 bar	7 bar	10 bar
CV	0.15	240	240	240	240
		240	240	240	240
	0.5	207	207	207	207
		21	21	21	21
	0.9	207	207	207	207
		117	117	207	207
	1.1	21	21	21	21
		117	117	117	117
			21	21	21

## CONSTRUCTION MATERIAL

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

## SURFACE FINISH

S	Ra 0.4 µm (15 µin)
V	Ra 0.25 µm EP (10 µin)
U	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	40	07	K	015	S	V	2W1	4F4F	M	240	HPG0												
	Free diaphragm	40	2 bar (29 psig)	02	PCTFE	K	0.15	015	Stainless Steel AISI 316L	S	Ra 0.4 μm (15 μin)	S	2 ports	2 W 1	¼" Female VCR	4F	Hand-wheel	M	21 bar (305 psig)	021	Hastelloy Trim	H	
			4 bar (58 psig)	04	Vespel	V	0.25	025	Stainless Steel AISI 316 AOD Var	V	Ra 0.25 μm EP (10 μin)	V	3 ports	3 W 4	¼" Male VCR	4M				117 bar (1,700 psig)	117	Gauge (bar/PSI)	P G 0
			7 bar (102 psig)	07	PVDF*	P	0.5	050		U	Ra 0.13 μm EP (5 μin)	U	4 ports	4 W 6	½" Female VCR	8F				207 bar (3,000 psig)	207	Gauge (MPa)	P G 1
			10 bar (145 psig)	10	PTFE*	T	0.9	090							½" Male VCR	8M				240 bar (3,500 psig)	240		
							1.1	110															

\* PTFE and PVDF seat are only available with 21 bar inlet pressure

<b>Flow capacity (Cv)</b>	0.15	0.25	0.5	0.9	1.1
<b>Supply pressure effect I*</b>	0.25	0.5	1.4	3	4

\*1 bar / 100 bar inlet pressure change



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