

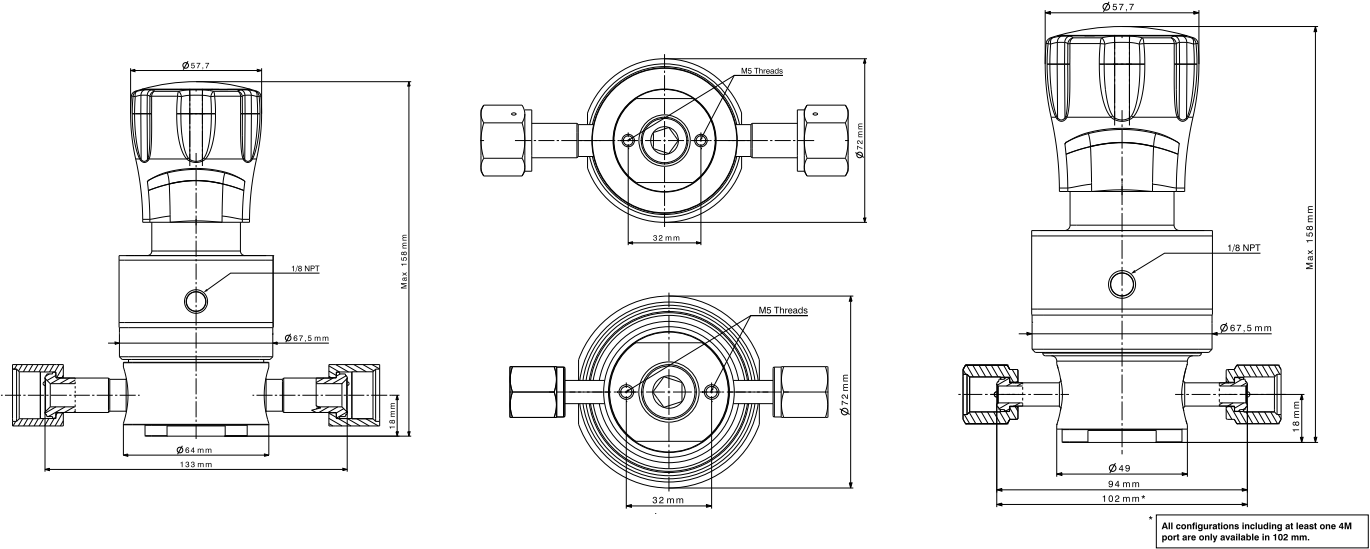


SINGLE-STAGE DIAPHRAGM PRESSURE REGULATOR FOR HP & UHP APPLICATIONS

- 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
- UHP Material - 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

Temperature range

-20°C to +65°C
(-4°F to +149°F)

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

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

COMPATIBLE OUTLET/INLET PRESSURE

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

CONSTRUCTION MATERIAL

Parts	Material
Body	SS 316L, UHP Material - Semi F20
Seat	PCTFE (Polyimide optional)
Diaphragm	SS 316L (Hastelloy optional)
Poppet	SS 316L (Hastelloy optional)
Spring	SS 316L (Hastelloy optional)
Spring Holder	SS 316L
Bonnet	SS 303
Handwheel	PA 6.6
Others	Stainless Steel and Brass

SURFACE FINISH

S	Ra 0.4 μ m (15 μ in)
V	Ra 0.25 μ m EP (10 μ in)
U	Ra 0.13 μ m EP (5 μ in)

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 dia-phragm	40	0.7 bar (10 psig)	01	PCTFE	K	0.15	015	Stainless Steel AISI 316L UHP Material - Semi F20	S	Ra 0.4 μm (15 μin)	S	2 ports	2 W 1	¼" Female VCR	4F	Hand-wheel	M	21 bar (300 psig)*	021	Hastelloy Trim¹	H
		2 bar (30 psig)	02	Polyimid	V	0.25	025		V	Ra 0.25 μm EP (10 μin)	V	3 ports	3 W 4	¼" Male VCR	4M	Panel Mount	F	117 bar (1,700 psig)	117	Gauge (bar/PSI)²	P G 0
		4 bar (60 psig)	04	PTFE*	T	0.5	050			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)²	P G 1
		7 bar (100 psig)	07			0.9	090							½" Male VCR	8M			240 bar (3,500 psig)	240		
		10 bar (150 psig)	10			1.1	110														

* PTFE seat are only available with 21 bar inlet pressure
¹ Includes Hastelloy C22 Poppet, wetted spring & diaphragm
² Standard gauge ports are Metal Face Seal ¼" Male

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

*1 bar / 100 bar inlet pressure change



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