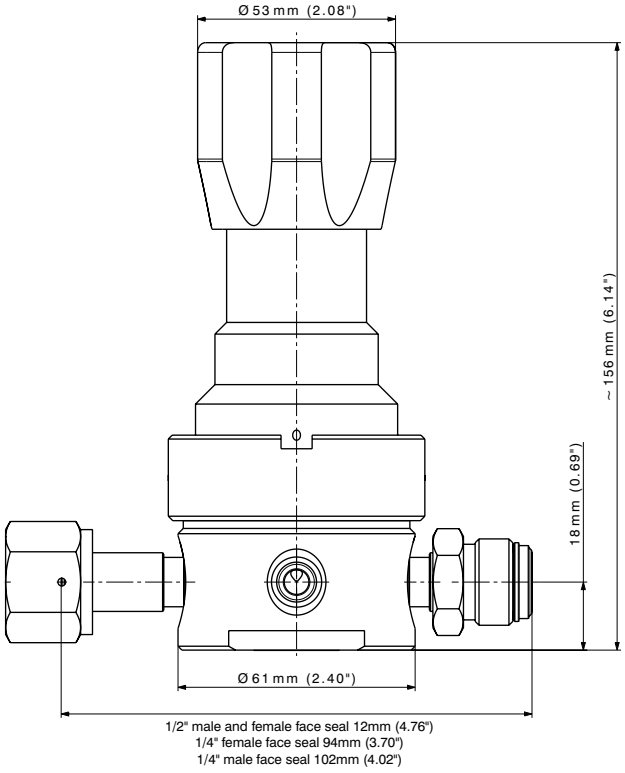
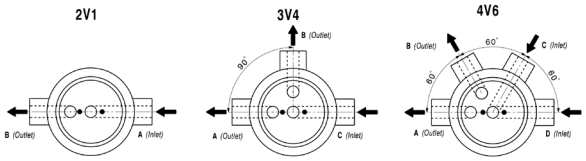
RX2500 | DIAPHRAGM PRESSURE REGULATOR HIGH FLOW

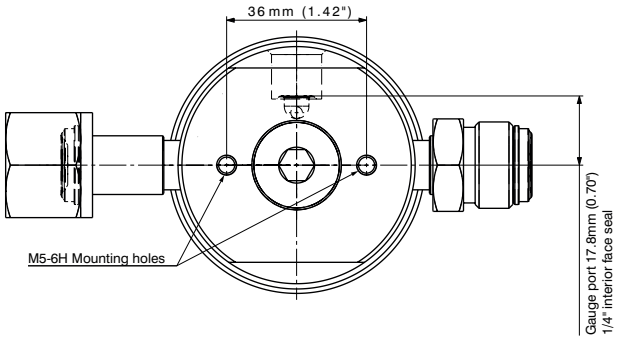
KEY FEATURES

- 100% Functional & Helium Leak Test performed
- Hastelloy® diaphragm
- Internally springless
- Assembling, testing & Packaging in cleanroom: Class ISO 4
- Individual serial number for full traceability
- Corrosion resistant internal option available: Hastelloy® poppet
- Electropolished surface roughness per SEMI F19 UHP Grade
- 316L VAR® stainless steel double melt per SEMI F20 option available
- High-Flow (HF) version (Cv:1.2) up to 1150 SLPM availble
- Fluid specific seat material as standard options
- Additional multi-port options

DIMENSIONS







Dimensions are for reference only and are subject to change without notice

SPECIFICATIONS

Max. inlet pressure	Standard: 200 bar (2900 psig) HF: 50 bar (363 psig)
Outlet pressure	5/8/10 bar* (73/116/145 psig)
Temperature range	-20°C to +60°C (-4°F to +140°F)
Flow capacity (Cv)	Standard: 0.45 High Flow: 1.2

Burst pressure**	300% of operating pressure
Proof pressure**	150% of operating pressure
Supply pressure effect l**	Standard: 1.5 bar / 100 bar HF: 6 bar / 100 bar

Certified max. Helium outboard leak rate (at max. pressure)	≤ 1 x 10^{-9} mbar.l/s
Certified max. Helium across the seat leak rate (at max. pressure)	≤ 1 x 10^{-7} mbar.l/s
Certified max. Helium inboard leak rate (at max. pressure)	≤ 1 x 10^{-9} mbar.l/s

* full outlet pressure not achievable at all inlet pressures
** According to CGA-E4

CONSTRUCTION MATERIAL

	Parts	Material
Wetted parts	Body	SS 316L, VAR
	Seat	PCTFE, PVDF, VESPEL®
	Diaphragm	Hastelloy®
	Poppet	SS 316L, Hastelloy®
Non-wetted parts	Bonnet	Chrome Plated Brass
	Handwheel	Aluminium
	Others	Stainless Steel and Others

SURFACE FINISH

S	V	U
Ra 0.4 µm (15 µin)	Ra 0.25 µm EP (10 µin)	Ra 0.13 µm EP (5 µin)

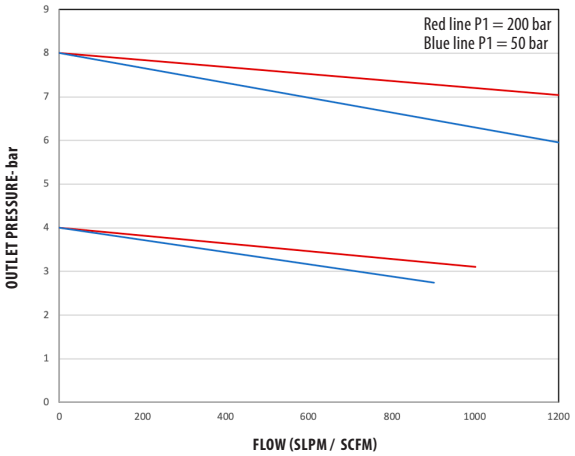
RATED FLOW CAPACITY (Q_R*) / OUTLET PRESSURE (P2)

P2 (bar)	Q_R*(SLPM)	Q_R*(SLPM) HF
5	650	950
8	1,100	-
10	-	1,900

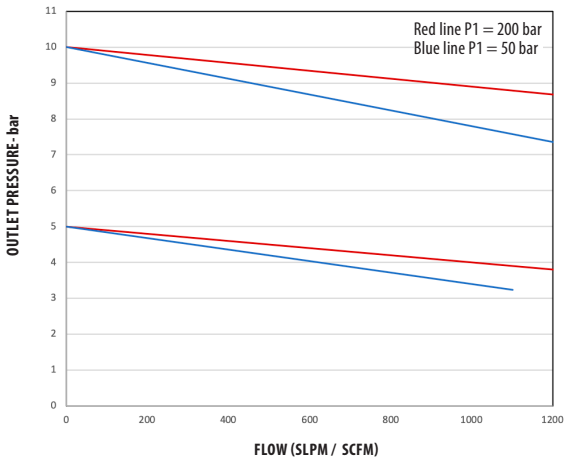
* According to CGA-E4
All specifications subject to change without notice

FLOW CURVES

FLOW CURVES RX2500 (NITROGEN)



FLOW CURVES RX2500 (NITROGEN) HF



PRODUCT CONFIGURATOR

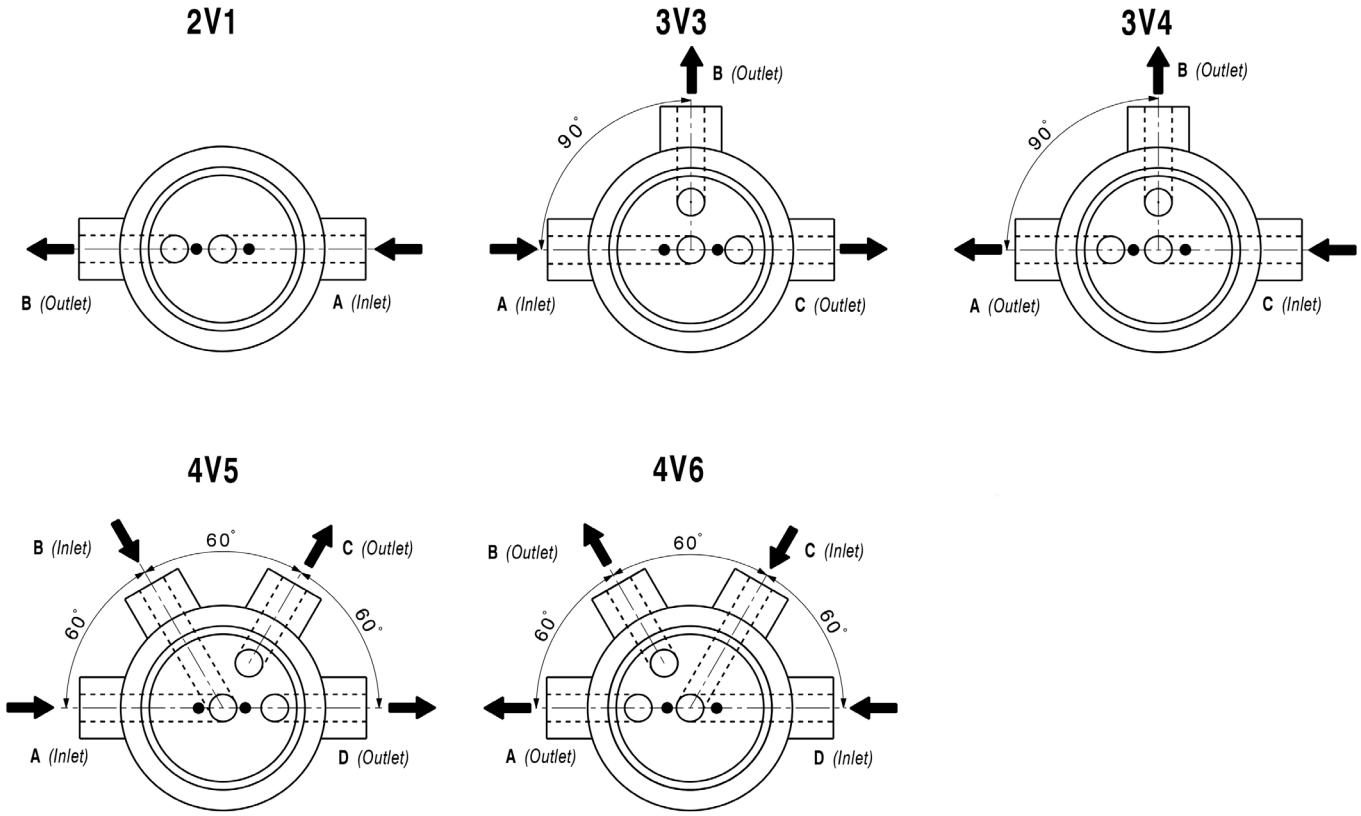
		Outlet Regulated Pressure		Body Material		Surface Finish		Porting Configuration		Inlet / Outlet Connections		Options		Version	
RX	25	02		-		V		2V1		4M4M		V		HF	
		2 bar (29 psig)	02	SS 316L	-	Ra 0.4 µm (15 µin)	S	2 ports	2V1	Metal face seal ½" - Male	8M	Vespel Seat	V	Standard (Cv 0.45)	
		5 bar (73 psig)	05	VAR	V	Ra 0.25 µm EP (10 µin)	V	3 ports	3V4	Metal face seal ½" - Female	8F	Hastelloy Poppet	HP	High Flow (Cv 1.2)	HF
		10 bar (145 psig)	10			Ra 0.13 µm EP (5 µin)*	U	4 ports	4V6	Metal face seal ¼" - Male	4M	Gauge(s)*	PG		
						*On demand				Metal face seal ¼" - Female	4F	PTFE Nickel loaded**	TE		
										Metal face seal ¼" - Internal*	4FI	*Gauge(s) requires 4FI connection(s) **Contact Rotarex			
										*Gauge port(s) only					

Special configuration on demand

REGULATORS

TOP VIEW

Standard configurations:



● → Bottom Threaded holes

Other configurations: on demand

PRESSURE GAUGES (BAR / PSI)