

SIR 200 | DIAPHRAGM PRESSURE REGULATOR / LOW FLOW

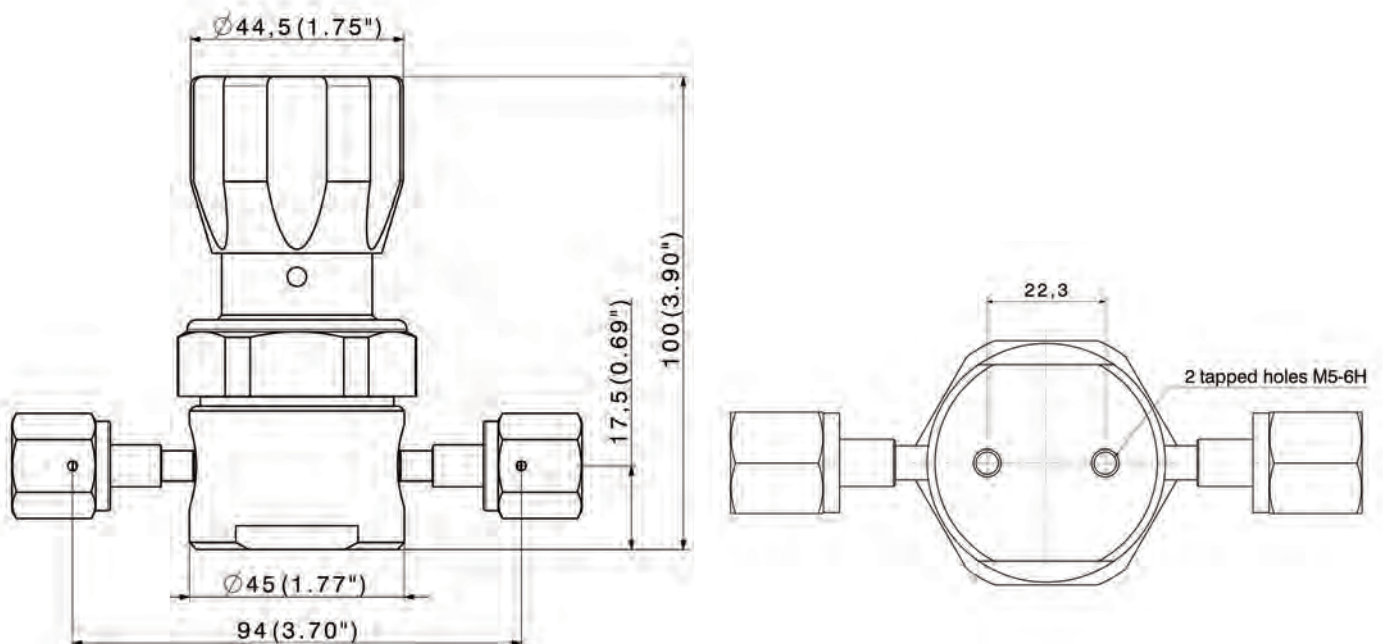
KEY FEATURES

- Individual Serial number, for full traceability
- Spherical ball for ultra smooth control
- Metal to metal seal to atmosphere
- Minimal wetted surfaces for optimal purging
- Gas specific solutions
- Assembling, testing & Packaging in cleanroom: Class ISO 4
- Controlled (PC) electropolishing for better corrosion resistance
- Multi-port options available
- Excellent response at low pressures (droop, hysteresis, creep)



*RIGHTS OF CHANGE RESERVED FOR PICTURE

DIMENSIONS



SPECIFICATIONS

Fluid media	Standard, high or ultra high purity corrosive and noncorrosive gases	Flow capacity (Cv)	0.09	Certified max. Helium across the seat leak rate (at max. pressure)	$\leq 1 \times 10^{-7}$ mbar.l/s
Max. inlet pressure	200 bar (2900 psig)	Number of ports	2, 3 or 4	Certified max. Helium inboard leak rate (at max. pressure)	$\leq 1 \times 10^{-9}$ mbar.l/s
Outlet pressure	2/4/7/10 bar (29/58/102/145 psig)	Burst pressure*	300% of operating pressure	Supply pressure effect I*	0.7 bar / 100 bar
Temperature range	-20°C to +65°C (-4°F to +149°F)	Proof pressure*	150% of operating pressure		
		Certified max. Helium outboard leak rate	$\leq 1 \times 10^{-9}$ mbar.l/s		

* According to CGA-E4

CONSTRUCTION MATERIAL

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

SURFACE FINISH

S	V	U
Ra 0.4 µm (15 µin)	Ra 0.25 µm EP (10 µin)	Ra 0.18 µm EP (7 µin)

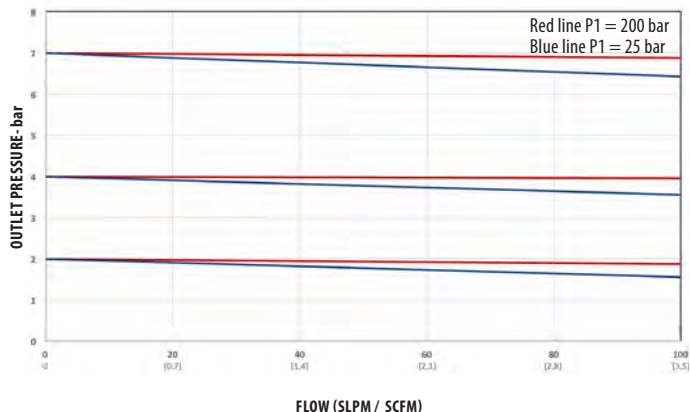
RATED FLOW CAPACITY (Q_R*) / OUTLET PRESSURE (P2)

P2 (bar)	Q _R *(SLPM)
2	40
4	90
7	160
10	220

* According to CGA-E4

FLOW CURVES

FLOW CURVES SIR200 (NITROGEN)



PRODUCT CONFIGURATOR

SIR	200	Surface Finish	Porting Configuration	Body Material	Seat Material	Outlet Regulated Pressure	End Connection	Options					
		S	4V5	I	K	4b	A/D: ¼NPTF	B/C: PG					
		Ra 0.4 µm (15 µin Ra)	See page 37	SS 316L	I PCTFE (Kel-F®)	2 bar (29 psig)	2b Metal face seal ¼" - Female	V¼F Pressure gauge 2"*					
		V							VAR*	A PI (Vespel®)	V	4b Metal face seal ¼" - Male	V¼M *Please refer to page 37
		Ra 0.25 µm EP (10 µin)										7b Metal face seal ¼" - Internal	V¼FI
		Ra 0.13 µm EP (5 µin)*		*On demand		7 bar (102 psig)							
		*On demand				10 bar (145 psig)	10b						



Special configuration on demand