

SIR 200 | DIAPHRAGM PRESSURE REGULATOR FOR UHP APPLICATIONS

The SIR 200 Regulator was created in response to the industry's needs for a high pressure non tied diaphragm regulator for specialty source gas service, i.e. gas cabinets. The design and material of construction, plus some unique features make it an ideal choice for gas source applications with the reactive and hazardous gases the Semiconductor and Allied Industries use.

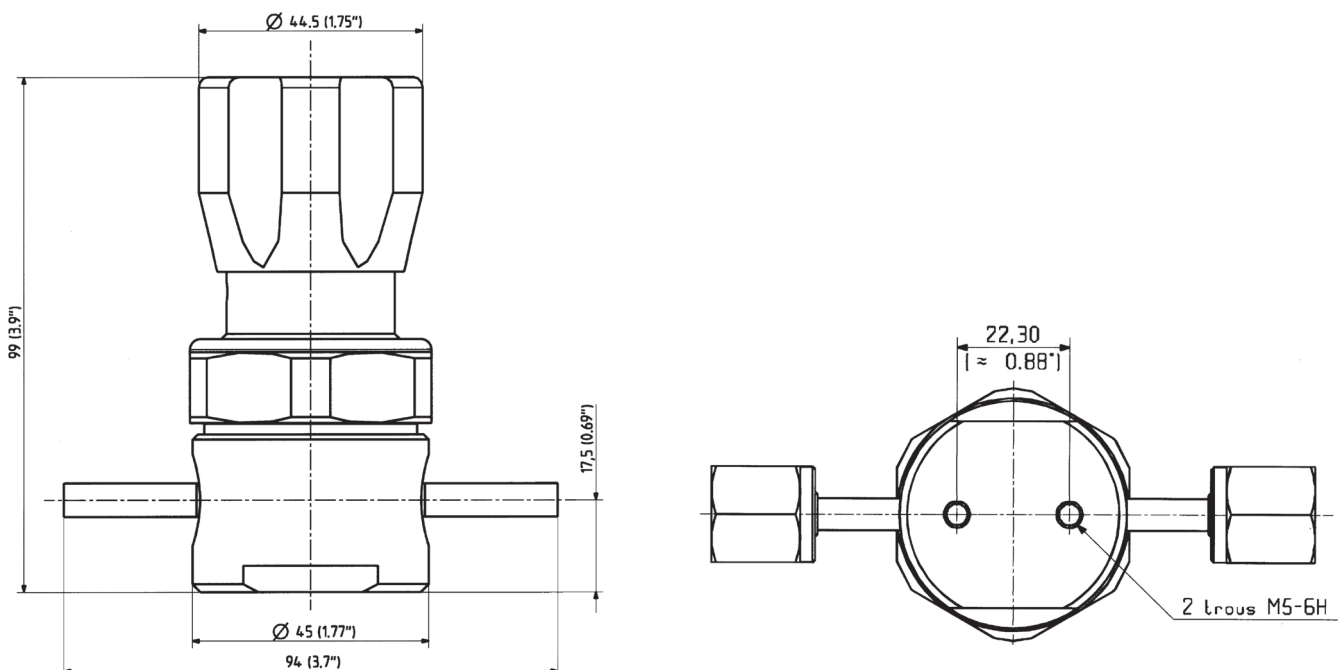
KEY FEATURES

- Individual Serial number, for full traceability
- Ergonomic Design
- Spherical ball for ultra smooth control
- Metal to metal seal to atmosphere
- Minimal wetted surfaces for optimal purging
- Gas specific solutions (Body and seat materials)
- Assembling, testing & Packaging in cleanroom Cl. 10
- Controlled (PC) electropolishing for better corrosion resistance
- 2,3,4,5, or 6 ports options available
- Diaphragm counter balance springs
- Excellent response at low pressures (droop, hysteresis, creep)



*RIGHTS OF CHANGE RESERVED FOR PICTURE

DIMENSIONS



ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Fluid Media	Standard, HP, UHP, corrosive and non-corrosive gases	Temperature range	-20°C to + 65°C (-4°F to 150°F)	Certified max. Helium outboard leak rate (at max. pressure)	< 1.10 ⁻⁹ mbar.l/sec
Inlet pressure	200 bar (2900 PSI)	Flow coefficient	CV = 0.2	Certified max. Helium across the seat leak rate (at max. pressure)	< 1.10 ⁻⁹ mbar.l/sec
Outlet pressure	2 - 4 - 7 bar (30 - 60 - 100 PSI)	Certified max. Helium inboard leak rate	< 1.10 ⁻⁹ mbar.l/sec	Number of ports	2, 3, 4, 5 or 6

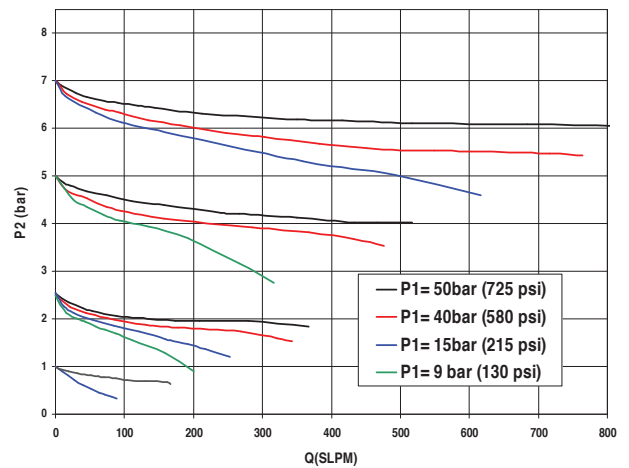
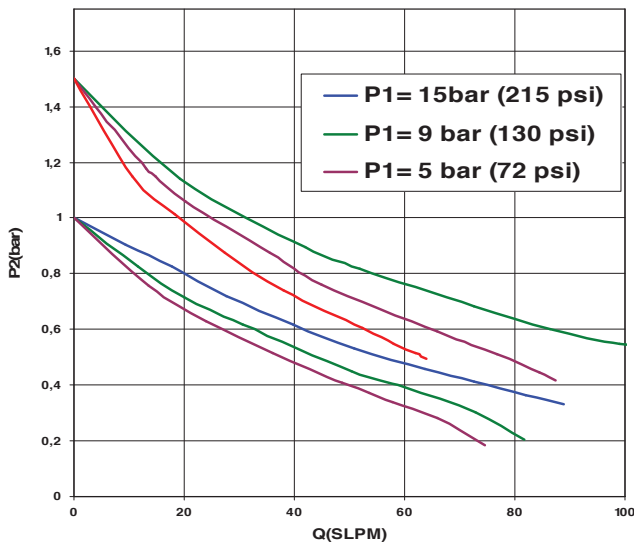
CONSTRUCTION MATERIAL

	Parts	Material
Wetted parts	Body	AISI 316L, VAR
	Diaphragm	Hastelloy®
	Seat	PCTFE (Kel-F®) / PI (VespeI®) / PVDF
	Poppet	AISI 316L, VAR
Non-wetted parts	Bonnet	Nickel Plated Brass
	Handle	Extruded Plastic
	Others	Stainless Steel or alloys

SURFACE FINISH

U	V	S
< Ra 0.18µm Ep. (7µin Ra)	< Ra 0,25µm Ep. (10µin Ra)	< Ra 0,4µm nonEP(15µin Ra)

FLOW CURVES



PRODUCT CONFIGURATOR

SIR	200	Series & Surface Finish	Port Configurations	Body material (others on request)	Seat Material	Outlet regulated Pressure	End Connection
		S	2V1	A	K	7b	A/B: V¼M
		Ra 0.18µm Ep. (7µin Ra)	U	AISI 316L, VAR	PCTFE (Kel-F®)	2 bar - 30 psig	2b Metal face seal ¼" - Female
		Ra 0.25µm Ep. (10µin Ra)	V	AISI 316L	PI (VespeI®)	4 bar - 60 psig	4b Metal face seal ¼" - Male
		Ra 0.4µm non Ep. (15µin Ra)	S	Hastelloy®	PVDF	7 bar - 100 psig Inlet: >240 bar >3500 psig	7b Metal face seal ¼" - Internal
							BWO ¼" - Standard (Orbital Weld)
							BWO 6 mm (Orbital Weld)
							¼" NPT - Inlet threads
							V¼-F
							V¼-M
							V¼-FI
							B¼
							B6
							NPTFI