

PART NUMBER						
Example :	SIR 100 U	2V1	A	/	K	7b A/B:V1/4M
	1	2	3		4	5 6

1 - Valve Series & Surface finish
SIR 100 U - Ra 0.15µm Ep. (6 Ra)
SIR 100 V - Ra 0.25µm Ep. (10 Ra)
SIR 100 S - Ra 0.4µm non Ep. (15 Ra)

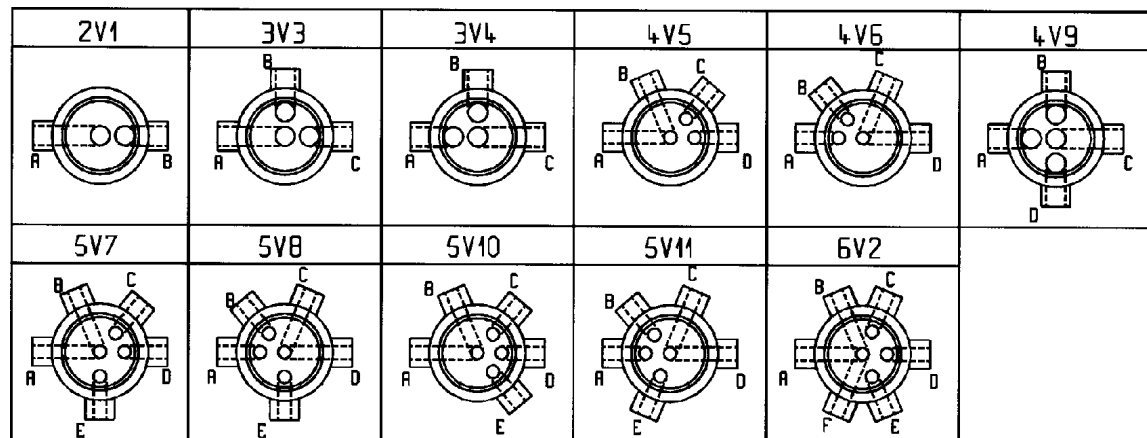
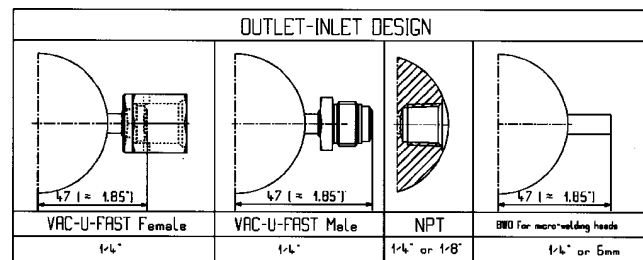
3 - Body Material
A AISI 316L AOD/VAR
I AISI 316L

5 - Outlet regulated pressure
2b 2 bar - 30 psig
4b 4 bar - 60 psig
7b 7 bar - 70 psig

2 - Ports configurations
2V1 2 ports in line
See below for other ports configurations

4 - Seat Material
K PCTFE (Kel-F®)
V PI (VespeI®)

6 - End Connections
V 1/4-F VAC-U-FAST® 1/4" - Female (Face Seal*)
V 1/4-M VAC-U-FAST® 1/4" - Male (Face Seal*)
V 1/4-FI VAC-U-FAST® 1/4" - Internal (Face Seal*)
B 1/4 BWO 1/4" - Standard (Orbital Weld)
B 6 BWO 6 mm (Orbital Weld)



*All VAC-U-FAST® Face Seals are VCR® compatible. VCR® is a registered trade mark of CAJON CO., HASTELLO® is a registered trade mark of HAYNES Corp., Kel-F® is a registered trade mark of 3M company, VespeI® is a registered trade mark of DUPONT



SELFA

Valves & Fittings

A total component solution, from source to process

SIR 100

DIAPHRAGM PRESSURE REGULATOR FOR HP & UHP APPLICATIONS



FEATURE a unique proven design

SIR 100

TECHNICAL DATA

SIR 100

The **SIR 100 Regulator** was created in response to the industry's need for a **low pressure none 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.

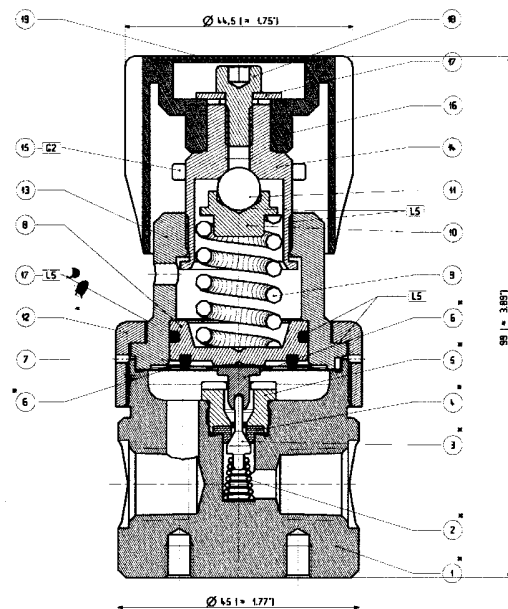
Ergonomic Design

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)



Controlled (PC) electropolishing for better corrosion resistance

Assembling and packaging in a class 10 cleanroom

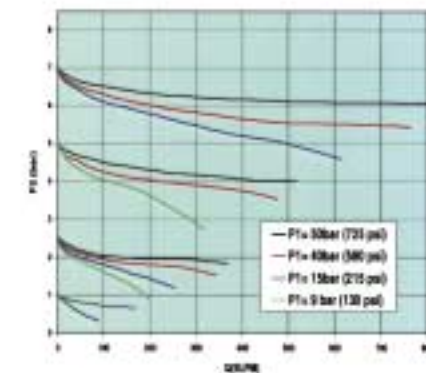
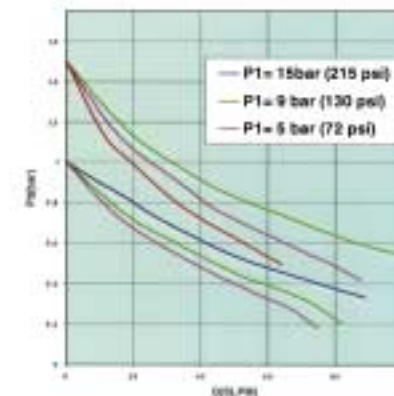
2,3,4,5, or 6 ports options available

diaphragm counter balance springs

Excellent response at low pressures (droop, hysteresis, creep)

Manufactured to the **THREE STAR PROCESS®**

TECHNICAL DATA	
Fluid Media	Standard, HP, UHP, corrosive and non-corrosive gases
Inlet pressure	725 PSI (50 bar)
Outlet pressure	30 - 60 - 100 PSI (2 - 4 - 7 bar)
Temperature range	-20°C to + 65°C (-4°F to 150°F)
Fow Coefficient	C _v = 0.2
Certified max. Helium inboard leak rate (at max. pressure)	< 10 ⁻¹⁰ sccs
Cerified max. Helium outboard leak rate (at max. pressure)	< 10 ⁻¹¹ sccs
Cerified max. Helium across the seat leak rate (at max. pressure)	< 2.10 ⁻⁸ sccs
Number of ports	2, 3, 4, 5 or 6

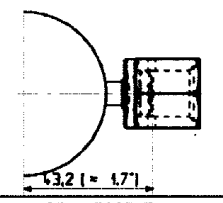
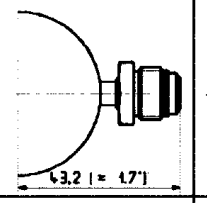
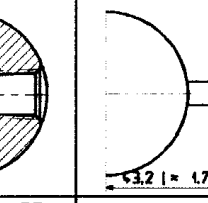
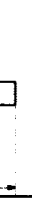


CONSTRUCTION MATERIALS

DIMENSIONS

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

SURFACE FINISH		
U: <Ra 0.15µm Ep. (6 Ra)	V: <Ra 0.25µm Ep. (10 Ra)	S: <Ra 0.4µm non Ep. (15 Ra)

OUTLET-INLET DESIGN			
			
VRC-L-FBST Female	VRC-L-FBST Male	NPT	2x Ø for mono-welding heads
1/4"	1/4"	1/4" or 1/8"	1/4" or 6mm

