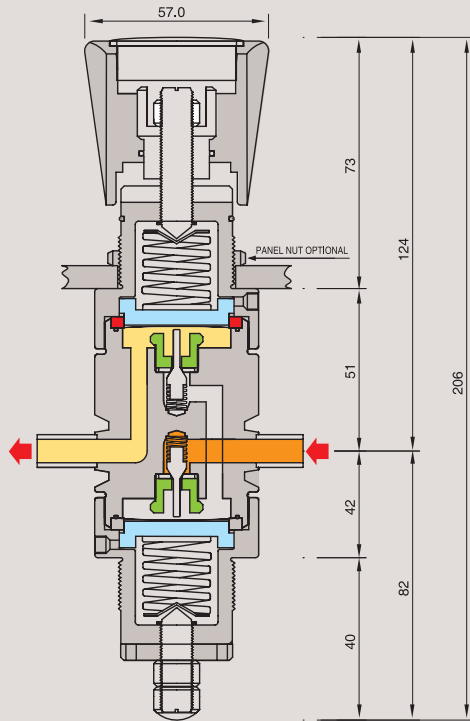


2200 S E R I E S

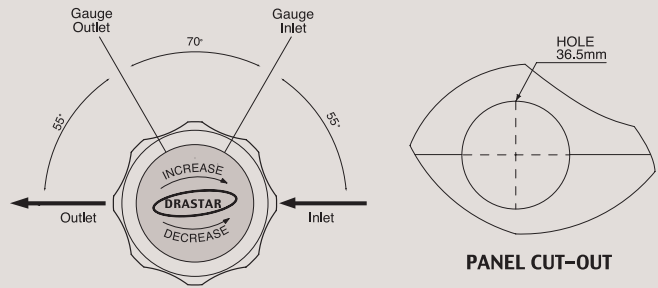
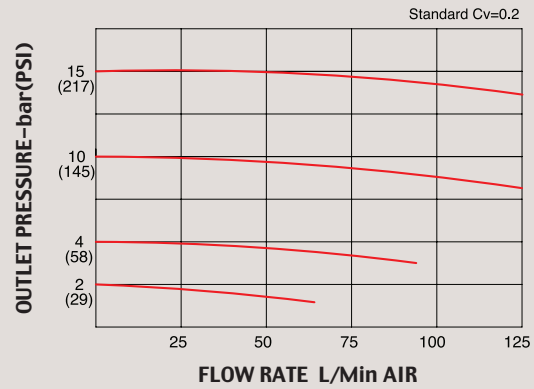
Dual-Stage Ultra High Purity
Pressure Reducing Regulators



FUNCTIONAL SCHEMATIC



FLOW CHART



2200 UHP Dual-Stage VCR type 1/4"

고압가스 실린더를 저압에서 정밀하고 안정적으로 사용할 수 있는 UHP VCR Type Two Stage (2단 감압 타입) 제품

- 316L Stainless Steel or 316L VAR (더블 멜트) E.P.
- 반도체 제조용 가스 설비, 고압가스라인, 벌크 가스라인, 제약, 연구소 및 실험실 등에 적합
- E.P. (Electropolishing) 처리를 하여 부식성 가스 사용환경에도 적합
- 최대 250바의 입구 압력을 2bar~15bar까지 조절 시 정밀성과 안정성이 뛰어남.
- 푸시&락 핸들(당사 특허) 장착으로 운전 중 셋팅 값 변동 방지. (-> page ## 참조)
- 전 부품은 CGA4.1 and ASTM G93 절차에 따라 세척하여 O₂ 사용 가능한 Oil free 제품임.
- 클린라인 외의 경우 고장방지 및 수명 연장을 위해 별도의 필터사용 필수 권장. (gas 7 μ m~15 μ m, water 15 μ m~80 μ m)

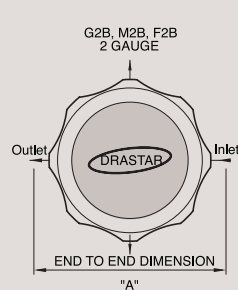
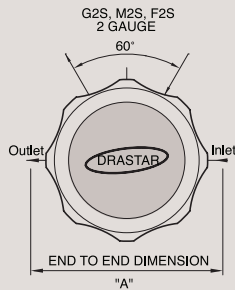
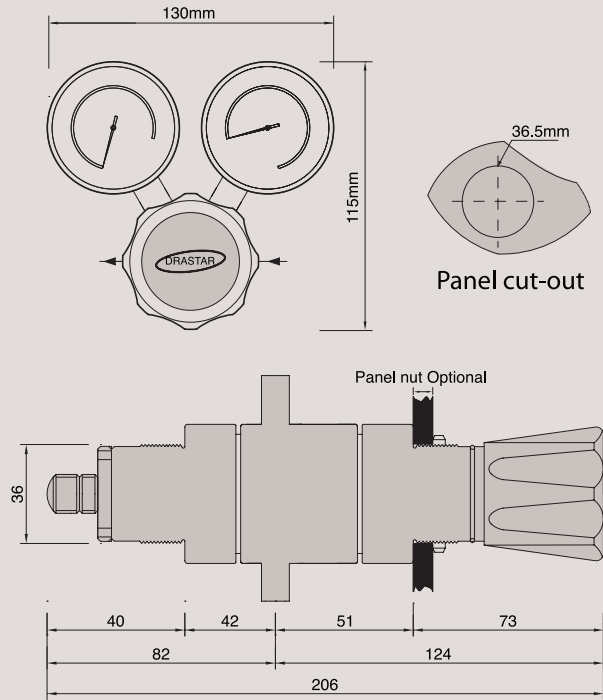
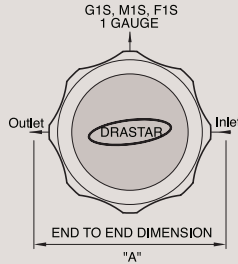
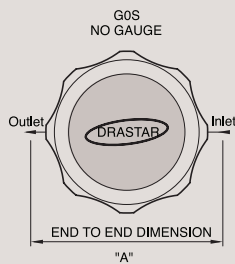
Specifications

Inlet & Outlet Ports	1/4" VCR Male or Female / Gauge Port : 1/4" H.P.I.C., 1/4" Female Swivel, 1/4" Male Swivel
Body	316L Stainless Steel E.P. or 316L SS VAR E.P.
Bonnet	Brass (standard)
Diaphragm	316L SS (standard) / Hastelloy C-22 (option)
Main Valve	316L SS (standard) / Hastelloy C-22 (option)
Valve Spring	316L SS (standard) / Hastelloy C-22 (option)
Valve Seat	PCTFE, Teflon, Vessel
Maximum Inlet Pressure	250bar (3,625psi)
Outlet Pressure/bar (psi)	2(29), 4(58), 7(101.5), 10 (145), 15(217.5)
Design Proof Pressure	150% of rated capacity
Leakage	Internal: Bubble-tight / External: $\leq 2 \times 10^{-8}$ atm cc/sec He
Operating Temperature	-40°C to +70°C (-40°F to +160°F)
Flow Capacity (Cv)	0.2
Other Options	Pressure gauge, CGA, Panel Mounting Nut
Net Weight (excl. gauge)	Approximately 1.6kgs

INSTALLATION DIMENSIONS

METRIC EQUIVALENTS ARE IN PARENTHESES

GAUGE PORT OPTIONS



2200 UHP Dual-Stage VCR type 1/4"

- 316L Stainless Steel E.P. or 316L Stainless Steel VAR (double-melted) E.P.
- Suitable for semiconductor manufacturing line, high pressure gas line, bulk gas line, pharmaceutical line, various research institute and laboratories, etc.
- By electropolished (E.P.) surface treatment, also suitable for corrosive gas applications.
- Offers outstanding accuracy and stability when adjusting maximum inlet pressure of 250 bar down to 2~15 bar.
- Push & Lock Handle (Drastar patented) prevents the possible change of preset pressure (refer to general information).
- Cleaning : CGA 4.1. and ASTM G-93 for O₂ service / Oil-free.
- Except for high purity gas lines, separate filtering is MUST (gas 7 μ m ~ 15 μ m water 15 μ m ~ 80 μ m) for long life and failure prevention.

Ordering Information

2200 - A 002 S - HPS - 4FS - G0S

BASIS SERIES

BODY MATERIAL & SURFACE FINISH

A = 316L B.A	25Ra
B = 316L E.P	10Ra
C = 316L E.P(P.E.P)	5Ra
D = 316L VAR E.P	10Ra
E = 316L VAR E.P(P.E.P)	5Ra

OUTLET PRESSURE RANGE

002 = 2bar(29psi)
004 = 4bar(58psi)
007 = 7bar(102psi)
010 = 10bar(145psi)
015 = 15bar(218psi)
130 = 130psi(9bar)

DIAPHRAGM MATERIAL

S = STS 316L
H = Hastelloy-C

MAX. INLET PRESSURE

H = 250bar(3,625psi)

GAUGE PORTS OPTIONS

Gauge Ports

G2S = 1/4" H.P.I.C	2
F2S = 1/4" Female Swivel	2
M2S = 1/4" Male Swivel	2

INLET / OUTLET PORTS SIZE

Type "A" ± 1.0 mm

4HP = 1/4" H.P.I.C	
4MS = 1/4" Male Swivel	94mm
4FS = 1/4" Female Swivel	94mm
4MSS = 1/4" Male Swivel	99mm
4FHD = 1/4" Female Swivel	100mm
4FL = 1/4" Female Swivel	110mm
4ML = 1/4" Male Swivel	110mm
4IMF = In Male/Out Female	94mm
4IFM = In Female/Out Male	94mm
4TS = 1/4" Tube Stubs	94mm

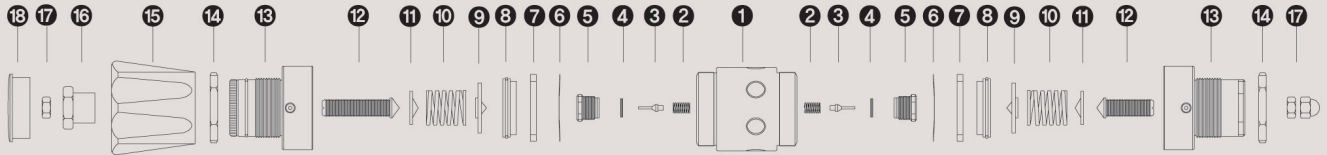
FLOW CAPACITY

S = Cv 0.2 Standard

SEAT MATERIAL

P = PCTFE
T = Teflon
V = Vespel

2200 SERIES PART LIST



Series Part List (Standard Model)

Item No	Part Name	Part No. & Description
01	Body	2000-01-01: 316L SS / 01-02: Nickel-plated Brass
02	Valve Spring	2000-02-01: 316L SS (standard) / 02-02: Hastelloy C-22 (option)
03	Main Valve	2000-03-01: 316L SS (standard) / 03-02: Hastelloy C-22 (option)
04	Valve Seat	2000-04-01: PFA (standard) / 04-02: Teflon (option) / 04-03: Polyimide (option)
05	Locking Screw	2000-05-01: 316L SS
06	Diaphragm	2000-06-01: 316L SS (standard) / 06-02: Hastelloy C-22 (option)
07	Diaphragm Plate	2000-07-01: common
08	Back-up Plate	2000-08-01: common
09	Spring Plate	2000-09-01: common
10	Load Spring	2000-10-01: 2bar / 10-02: 5bar / 10-03: 10bar / 10-04: 20bar *upper (left) 10-05: 2bar ~ 10bar / 10-06: 20bar *lower (right)
11	Pivot	2000-11-01: common
12	Adjusting Screw	2000-12-01: upper (left) 12-02: lower (right)
13	Bonnet	2000-13-01: Upper(left)-Brass / 13-02: Lower(right)-Brass
14	Panel Mount Nut	2000-14-01: option
15	Control Knob	2000-15-01: ABS
16	Push & Lock Handle Nut	2000-16-01: common
17	Locking Nut	2000-17-01: Nut / 17-02: Cap Nut
18	Name Cap	2000-18-01: 2bar / 18-02: 5bar / 18-03: 10bar / 18-04: 20bar

※ Parts for self-venting model and H1, H2, H3 options: please contact www.drastar.com
(self-venting 모델 및 고온용 모델은 별도 문의 : www.drastar.com)