DRAIOO SERIES UHP LOW PRESSURE VCR TYPE



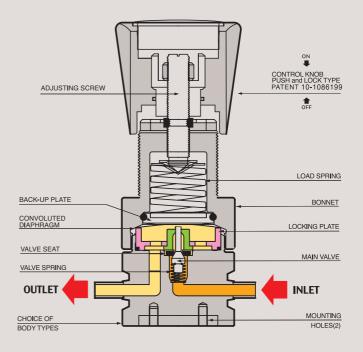




DRA100 SERIES



FUNCTIONAL SCHEMATIC



DRA100(Non-tied-type)

UHP Low Pressure VCR type (1/4" 3/8" 1/2" 3/4")

DRA 100 Series is an UHP low pressure reducing regulator with B.A. 25Ra, E.P. 10Ra, or E.P. 5Ra surface finish and applicable for high purity semiconductor manufacturing, specialty gas, and bulk gas lines as well as other facilities. Inlet pressures are 3600psig (250bar) or 600psig (42bar) and outlet pressure are 5psig(0.3bar) up to 250psig (17bar).

With DRASTAR's patented (patent #1086199) "push and lock type handle", you can operate it easily and stably; "locking" by pushing down the handle will prevent any slight change of pre-set pressure value, which could possibly be caused by any vibration from gas pipeline or ambient applications and the other way "unlocking" by pulling it back enables you to adjust the pressure value freely again.

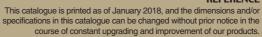
Features and Applications

- 1/4", 3/8", 1/2", and 3/4" VCR type
- Non-tied diaphragm type
- Surfaces finishes to B.A. 25Ra, E.P. 10 Ra or E.P. 5 Ra microinch
- Push and lock type handle (DRASTAR patent #10-1086199) mounted
- Threadless type: enhanced particle prevention by adopting the locking-plate seal system (DRASTAR patent #10-0753280)
- All works of welding, assembly, test and cleaning are performed in class 100 and class 10 clean-rooms
- Design proof pressure: 150% of maximum rated
- Applicable for Semiconductor manufacturing, specialty gases, bulk gas line and other facilities

Each product is manufactured taking into consideration of the best safety and easy manipulation. However in order to use the regulator in most safe, effective, precise and smooth way and prolong its life time, you are recommended to use the actual pressure within the range of $25\% \sim 75\%$ of its rated pressure.

1/4 " & 3/8 "

1/2" & 3/4"

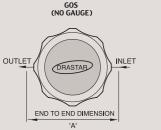


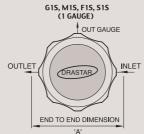


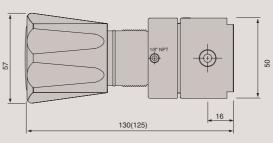
INSTALLATION DIMENSIONS

METRIC EQUIVALENTS ARE IN PARENTHESES

■ GAUGE PORT OPTIONS









OUTLET

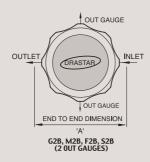
ORASTAB

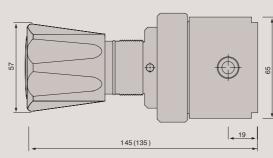
INLET

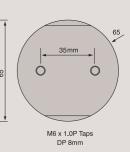
END TO END DIMENSION

'A'

G25, M25, F25, S25
(2 GAUGES)







ORDERING INFORMATION

DRA100 - A 025 S - H P S - 4MS - 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, E.P. VAR 10Ra
E = 316L, E.P. VAR(P.E.P) 5Ra

B.A.= Brigth Annealed., E.P.= Electropolished.

OUTLET PRESSURE RANGE

025 = 1-25psi (.1-1.7bar)

050 = 1-50psi (.1-3.5bar)

100 = 1-100psi (.1-7bar)

250 = 1-250psi (.2-17bar)

DIAPHRAGM MATERIAL

S = STS 316L

H = Hastelloy-C

MAX. INLET PRESSURE

H = 3600psi(250bar)

L = 600psi(42bar)

SEAT MATERIAL

P = PCTFE

T = Teflon

V = Vespel

GAUGE PORTS OPTIONS	Gauge Ports
G0S = None 0	F1S = 1/4" Femle Swivel. 1
G1S = 1/4" H.P.I.C · · · · · 1	F2S = 1/4" Femle Swivel. 2
G2S = 1/4" H.P.I.C · · · · 2	F2B = 1/4" Femle Swivel. 2
G2B = 1/4" H.P.I.C · · · · 2	S1S = 1/4" Fixed Male ···· 1
M1S = 1/4'' Male Swivel. 1	S2S = 1/4" Fixed Male2
M2S = 1/4'' Male Swivel. 2	S2B = 1/4" Fixed Male ···· 2
M2B = 1/4" Male Swivel 2	

INLET / OUTLET PORTS SIZE & Type "A" ± 1.5 mm

4HP = 1/4'' H.P.I.C

4MS & 4FS = 1/4" Male, Femail Swivel ·····	94mm
4ML & 4FL = 1/4" Male, Femail Swivel ······1	14.00mm
8MS & 8FS = 3/8" Male, Swivel ······1	20.00mm
8ML & 8FL = 3/8" Male, Femail Swivel ······12	20.00mm
2MS & 2FS = 1/2" Male, Femail Swivel ······14	40.00mm
2ML & 2FL = 1/2" Male, Femail Swivel ······1	80.00mm
3MS & 3FS = 3/4" Male, Femail Swivel10	60.00mm
3ML & 3FL = 3/4" Male, Femail Swivel	000mm
IMF = In Port Male / Out Port Female ·····	000mm
IFM = In Port Female / Out Port Male · · · · · · · · · · · · · · · · · · ·	000mm
4TS = 1/4" Tube Stubs	94.00mm
3TS = 3/4" Tube Stubs	60.00mm

FLOW CAPACITY

S = Cv 0.06 Standard (Inlet 3000psi) (1/4")

O = Cv 0.2 Optional (Inlet 500psi) (1/4")

S = Cv 0.2 Standard (3/8")

S = Cv 0.5 Standard (1/2")

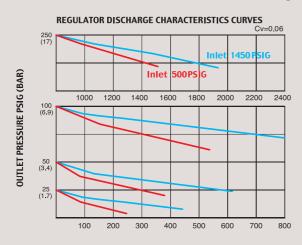
O = Cv 1.0 Optional (1/2")

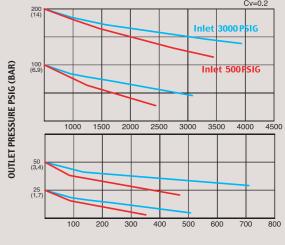
S = Cv 1.2 Standard (3/4")



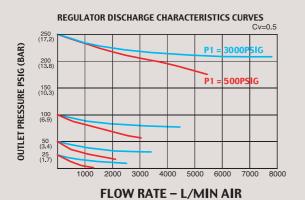


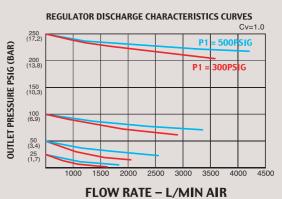
FLOW CHART



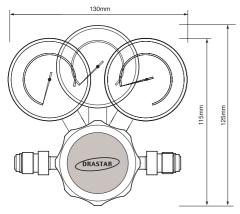


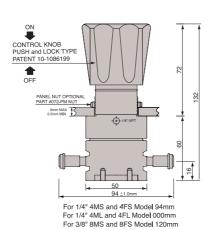
REGULATOR DISCHARGE CHARACTERISTICS CURVES

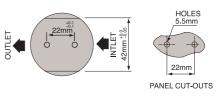




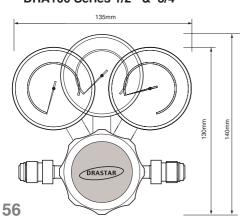
DRA100 Series 1/4" & 3/8"

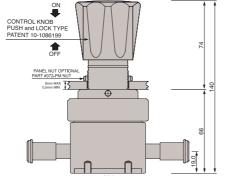




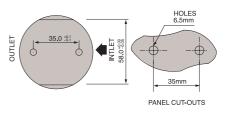


DRA100 Series 1/2" & 3/4"





For 3/8" 8ML and 8FL Model 000mm



For 1/2" Model 2MS and 2FS 142mm For 1/2" Model 2ML and 2FL 180mm For 3/4" Model 3MS and 3FS 160mm For 3/4" Model 3ML and 3FL 000mm