



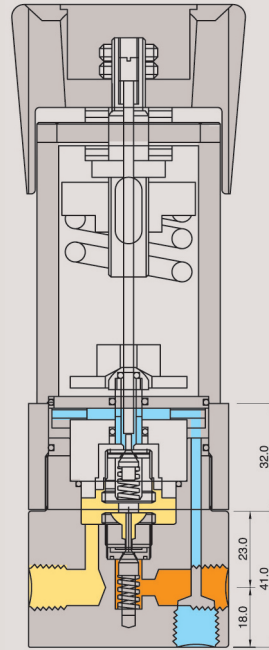
085 S E R I E S



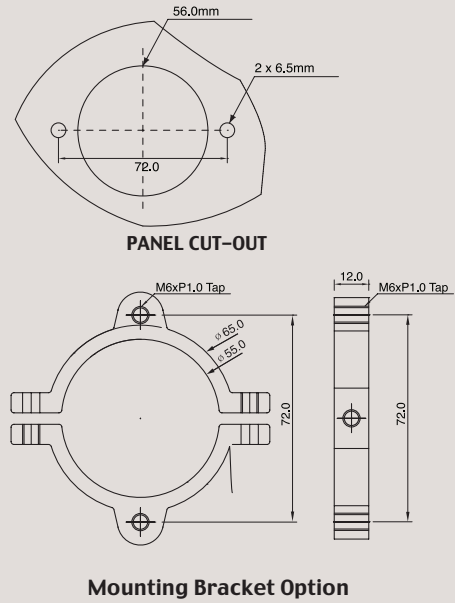
Hydraulic and gas High Pressure Regulators



FUNCTIONAL SCHEMATIC



INSTALLATION DIMENSIONS



085 High Pressure, Gas & Hydraulic, Single-Stage NPT type 1/4", 3/8", 1/2"

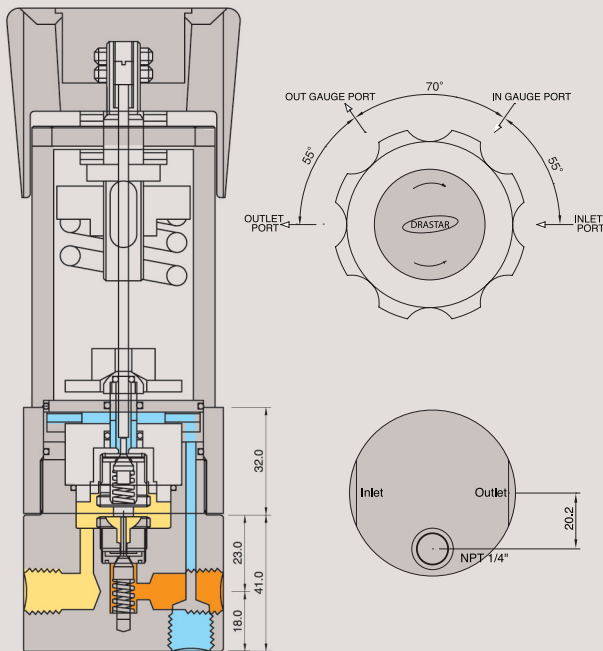
가스는 물론 hydraulic (유압) 환경에 최적화된 고압용 레귤레이터

- 316L Stainless Steel Body
- 피스톤 다이어그램과 316L SS 재질로 구성되어 고압가스, 고순도 가스, 부식성 가스, 제약 및 실험실, 연구소 등의 가스는 물론 특히 Hydraulic (유압), 오일, 물 등의 사용환경에 적합함.
- 입구압력 & 출구압력을 최대 700bar(10,150psi)까지 사용 가능한 고압용 제품임.
- 전 부품은 CGA4.1 and ASTM G93 규정에 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)

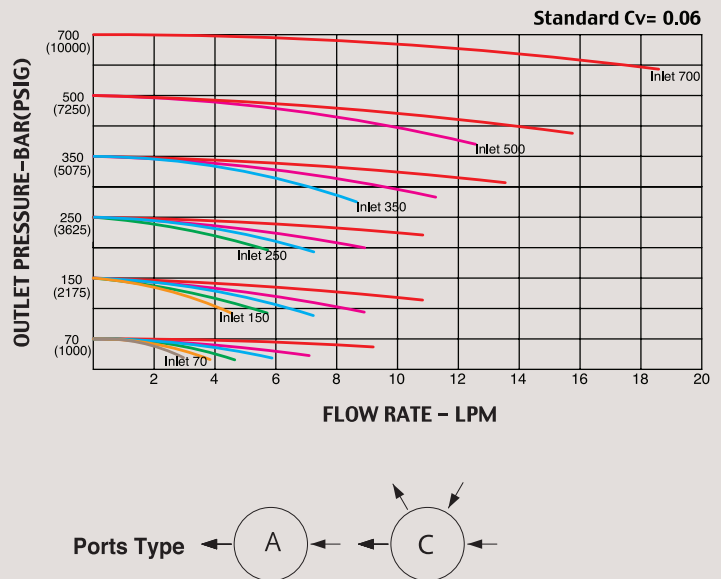
Specifications

Inlet & Outlet Ports	1/4", 3/8", 1/2" NPTF / Gauge Port : 1/4" NPTF
Body	316L Stainless Steel
Bonnet	Aluminum 6061
Piston Diaphragm	316L SS
Main Valve	316L SS
Valve Spring	316L SS (standard) / Hastelloy C-22 (option)
Valve Seat	PCTFE (Standard) / Vespel (option)
Maximum Inlet Pressure	085-AS-xxxA-1S-V : 414bar (6,000psi) 085-BS-xxxA-1S-V : 700bar (10,150psi)
Outlet Pressure/bar (psi)	70 (1,015), 150 (2,175), 250 (3,625), 350 (5,075), 500 (7,250), 700 (10,150)
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) (standard) H1 : up to +120°C (option) H2 : up to +250°C (option) H3 : up to +320°C (option)
Flow Capacity (Cv)	0.06 (Main Valve) / 0.2 (Venting Valve)
Other Options	Pressure gauge, CGA, Wall Mounting Bracket
Net Weight (excl. gauge)	Approximately 2.5kgs

INSTALLATION DIMENSIONS



FLOW CHART



085 High Pressure, Gas & Hydraulic, Single-Stage NPT type 1/4", 3/8", 1/2"

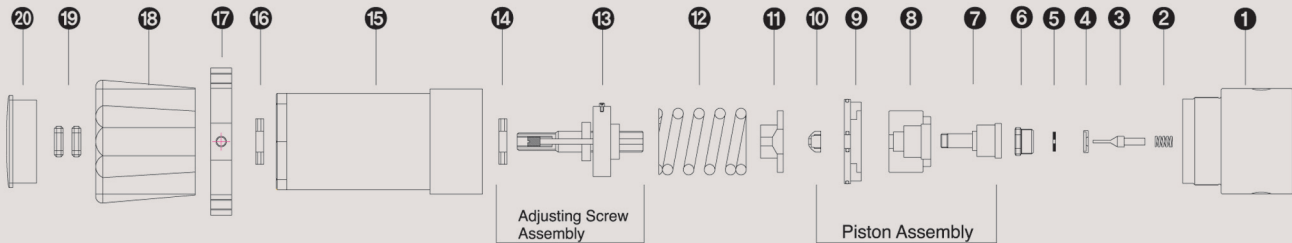
- Especially optimized for hydraulic, oil and water as well as high purity, corrosive, pharmaceutical, and laboratory gases.
- 316L Stainless Steel Body.
- Construction of 316L SS and piston diaphragm.
- Suitable for high pressure applications up to 700bar (10,150psi)
- Cleaning : CGA 4.1. and ASTM G-93 for O₂ service / Oil-free.
- Except for high purity gas lines, separate filtering is recommended for fault prevention and extended lifespan.(gas 7 μm~15 μm
water 15 μm~80 μm)

Ordering Information

085	A	S	-	070	A	-	1S	-	V	-	H1	
Basic Series	Inlet Pressure	Body Material		Outlet Pressure Range(bar/psi)	Port Type		Flow Capacity Cv		Diaphragm Material		Self-venting	High Temperature
085 Hydraulic	A = 414bar (6,000psi)	S=316L SS B=Brass		070 = 70/1,015 150 = 150/2,175 250 = 250/3,625 350 = 350/5,075 500 = 500/7,250 700 = 700/10,150	A = 2ports C = 4ports		1S : 1/4" 0.06 8S : 3/8" 0.06 2S : 1/2" 0.06 Standard		- 316L SS Standard		V=Self-venting Standard	H1 = 120° C H2 = 250° C H3 = 320° C Optional
1/4"NPTF 3/8"NPTF 1/2"NPTF	B = 700bar (10,150psi)						1O : 1/4" 0.2 8O : 3/8" 0.2 2O : 1/2" 0.2 Optional					

※ Note:1) Push and lock handle is NOT available / 푸시 & 락 핸들 미 적용.

85 SERIES PART LIST



Series Part List (Standard Model)

Item No	Part Name	Part No. & Description
01	Body	085-01-01: 316L SS
02	Valve Spring	085-02-01: 316L SS (standard) / 02-02: Hastelloy C-22 (option)
03	Main Valve	085-03-01: 316L SS (standard) / 03-02: Hastelloy C-22 (option)
04	Valve Seat Cartridge	085-04-01: 316L SS
05	Valve Seat	085-05-01: PFA (standard) / 05-02: Teflon (option) / 05-03: Polyimide (option)
06	Locking Screw	085-06-01: 316L SS
07	Piston	085-07-01: 70bar~250bar / 07-02: 350bar~700bar
08	Piston Diaphragm	085-08-01: common
09	Diaphragm Plate	085-09-01: common *7, 8, 9, 10 = Pistson Assembly
10	Diaphragm Locking Nut	085-10-01: common
11	Spring Plate	085-11-01: common
12	Load Spring	085-12-01: 70bar / 12-02: 150bar / 12-03: 250bar / 12-04: 350bar 12-05: 500bar / 12-06: 700bar
13	Adjusting Screw Assembly	085-13-01: Common
14	Thrust Needle Bearing	085-14-01: common #1226
15	Bonnet	085-15-01: AL2024
16	Thrust Needle Bearing	085-16-01: common #1226
17	Panel Mounting Bracket	085-17-01: option
18	Control Knob	085-18-01: common
19	Locking Nut	085-19-01: common
20	Name Cap	085-20-01: 70bar / 20-02: 150bar / 20-03: 250bar / 20-04: 350bar 20-05: 500bar / 20-06: 700bar

※ Parts for H1, H2, H3 options: please contact www.drastar.com
(고온용 모델은 별도 문의: www.drastar.com)