

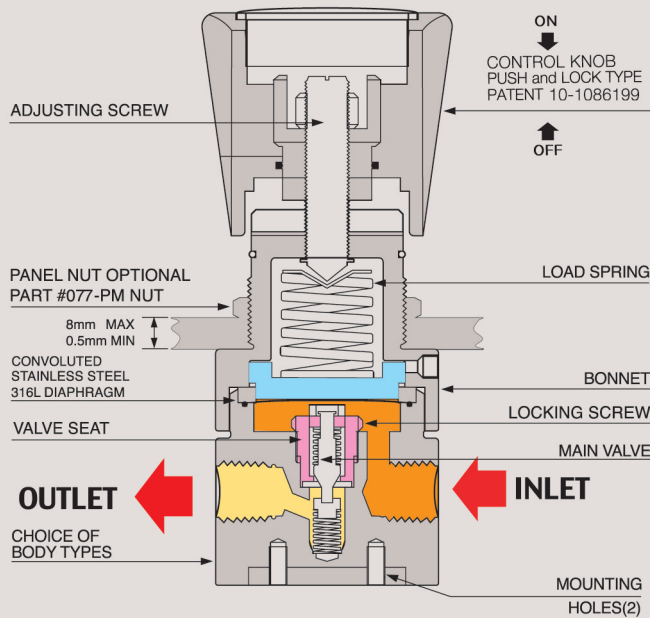


077 SERIES

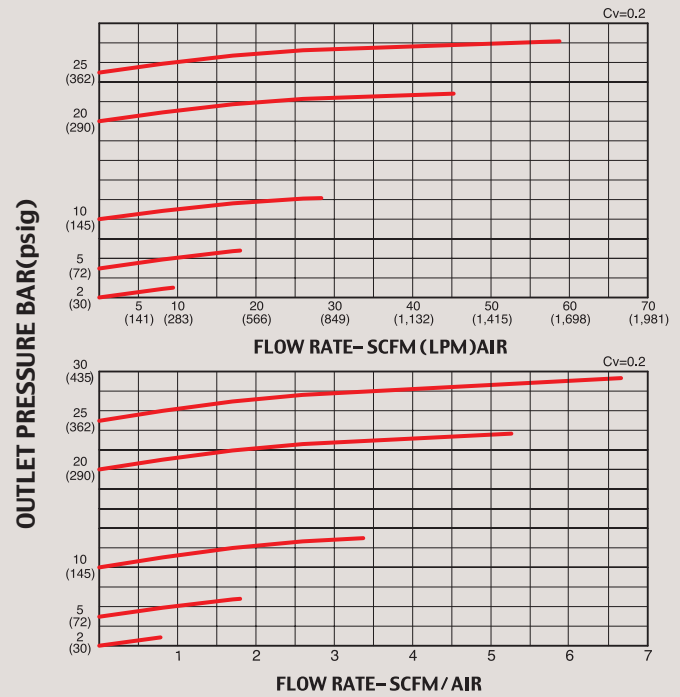
Relief / Backpressure Reducing Regulators



FUNCTIONAL SCHEMATIC



FLOW CHART



077 Relief/Backpressure, Low Pressure, Single-Stage NPT type 1/4"

1/4" NPT type의 저압용 Relief / Backpressure 레귤레이터

- 316L Stainless Steel Body
- 2bar ~ 20bar의 저압용으로 일반 가스와 물/액체 (W077 모델), 케미칼 및 부식성 가스에도 사용 가능.
- 푸시 & 락 핸들(당사 특허) 장착으로 운전 중 셋팅 값 변동 방지 (General Information 참조).
- 전 부품은 CGA4.1 and ASTM G93 시스템 준수하여 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)

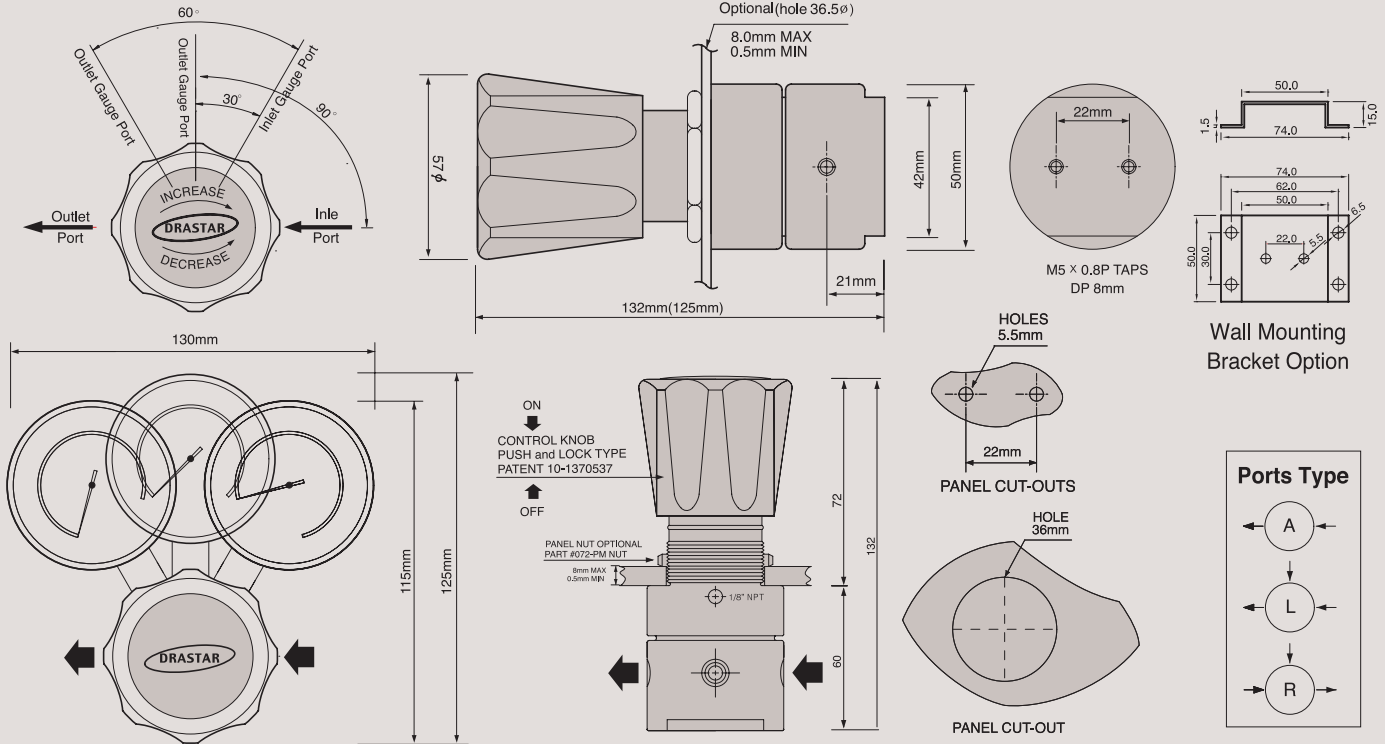
Specifications

Inlet & Outlet Ports	1/4" NPTF / Gauge port: 1/4" NPTF
Body	316L Stainless Steel
Bonnet	Brass (standard) / Stainless Steel (option)
Diaphragm	316L SS (standard) / Hastelloy C-22 (option)
Main Valve	316L SS (standard)
Valve Spring	316L SS (standard) / Hastelloy C-22 (option)
Valve Seat	Teflon (standard) / PCTFE, Vespel, PEEK (option)
Maximum Inlet Pressure	not available
Outlet Pressure/bar(psi)	2 (29), 5 (72.5), 10 (145), 20 (290)
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)	0.2
Other Options	Pressure gauge, CGA, Panel Mounting Nut, Wall Mounting Bracket
Net Weight (excl. gauge)	Approximately 1.2kgs

INSTALLATION DIMENSIONS

METRIC EQUIVALENTS ARE IN PARENTHESES

GAUGE PORT OPTIONS



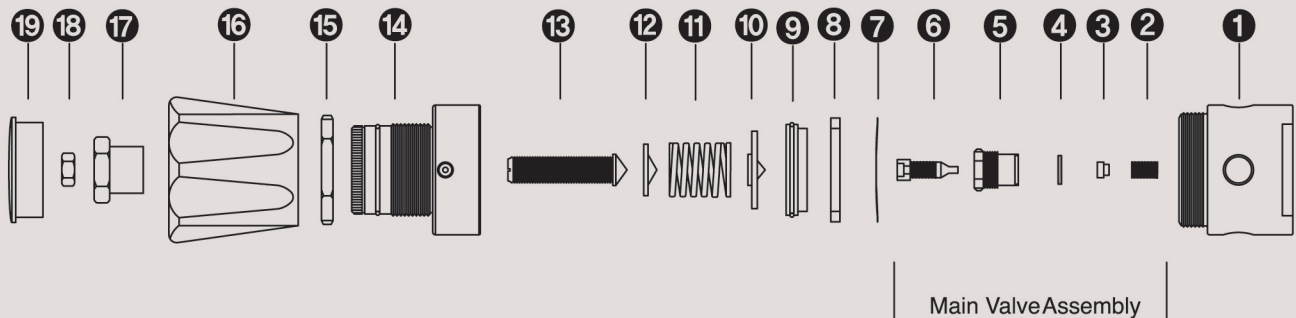
077 Relief/Backpressure, Low Pressure, Single-Stage NPT type 1/4"

- 316L Stainless Steel Body.
- Suitable for low pressure applications(2bar ~ 20bar) of general gas line, water and liquid (W072), chemical and corrosive gases.
- 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

(W) 077	S	-	002	L	-	1S	H	-	H1	
Basic Series	Body Material		Outlet Pressure Range(bar/psi)	Port Type		Flow Capacity Cv	Diaphragm Material	Inlet Pressure Psi(bar)	Self-venting	High Temperature
077 BPR-Low 1/4"NPTF	S=316L SS		002 = 2/29 005 = 5/72.5 010 = 10/145 020 = 20/290	A = 2 ports L = 3 ports R = 3 ports		1S : 0.2	-316L SS Standard H=Hastelloy C-22 Optional	—	—	H1 = 120° C H2 = 250° C H3 = 320° C Optional

077 SERIES PART LIST



Series Part List (Standard Model)

Item No	Part Name	Part No.	Model Application
01	Body	077-01-01: 316L SS	
02	Low Valve Spring	077-02-01: 316L SS (standard) / 02-02: Hastelloy C-22 (option)	
03	Spring Locking Plate	077-03-01: 2bar~10bar / 03-02: 20bar	
04	Valve Seat	077-04-01: Teflon (standard) / 04-02: Vessel, Polyimide (option)	
05	Locking Screw	077-05-01: 316L SS	
06	Main Valve Assembly	077-06-01: 316L SS	
07	Diaphragm	077-07-01: 316L SS (standard) / 07-02: Hastelloy C-22 (option)	
08	Diaphragm Plate	077-08-01: common	
09	Back-up Plate	077-09-01: common	
10	Spring Plate	077-10-01: common	
11	Load Spring	077-11-01: 2bar / 11-02: 5bar / 11-03: 10bar / 11-04: 20bar	
12	Pivot	077-12-01: common	
13	Adjusting Screw	077-13-01: common	
14	Bonnet	077-14-01: Brass	
15	Panel Mount Nut	077-15-01: Option	
16	Control Knob	077-16-01: ABS (standard) / 16-02: Aluminum (option)	
17	Push & Lock Handle Nut	077-17-01: common	
18	Locking Nut	077-18-01: common	
19	Name Cap	077-19-01: 2bar / 19-02: 5bar / 19-03: 10bar / 19-04: 20bar	

※ Parts for W077 model and H1, H2, H3 options: please contact www.drastar.com
(W모델 및 고온용 모델은 별도 문의: www.drastar.com)