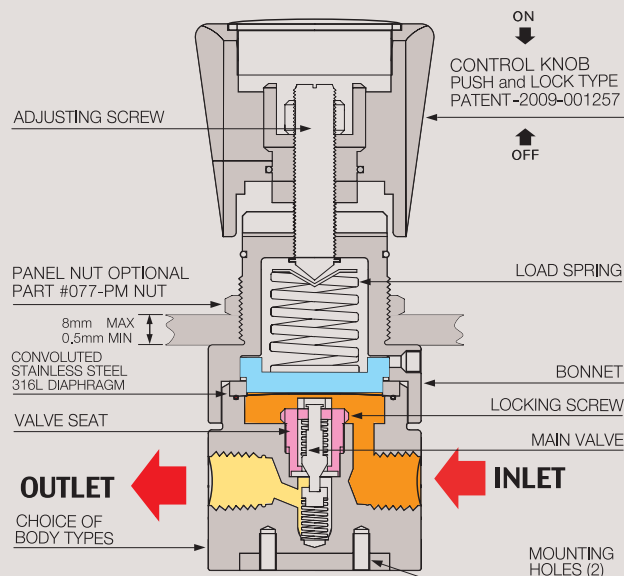
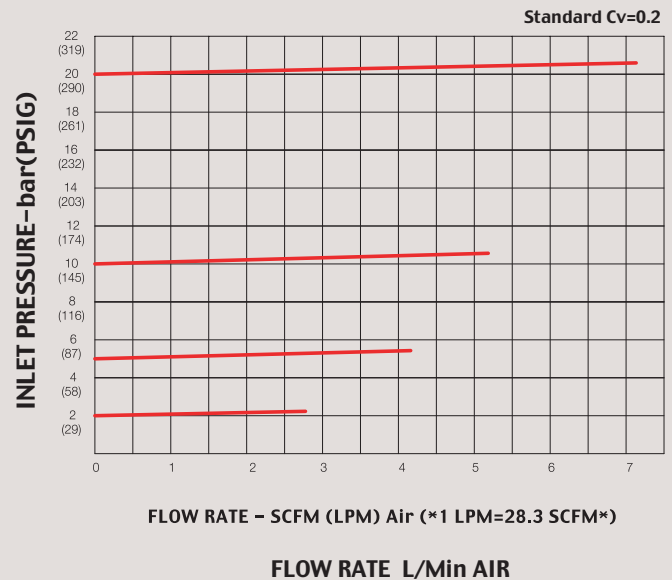


## FUNCTIONAL SCHEMATIC



## FLOW CHART



## BACK PRESSURE REGULATOR

### 077 SERIES

077시리즈는 back-pressure regulator로서 물, 케미칼, Liquid 또는 가스등을 사용하기에 적합한 제품이며 배관 사이즈는 NPT 1/4" 전용 레귤레이터 입니다. Body 의 재질은 모델에 따라 Brass or Stainless steel 316L로 이루어졌으며 각 모델에 따라 Working pressure 0.2~25bar(362psi)까지 폭넓게 사용할 수 있습니다. 모든 DRASTAR Regulators는 외부적인 진동과 가스배관 라인의 미세 진동 등으로 인하여 초기 셋팅 값이 스스로 변하는 현상을 완전히 해결한 드라스타만의 Push and Lock 타입의 조절 손잡이를 적용하여 사용하기에 더욱 편리합니다. 조절 손잡이를 누르면 셋팅값이 변하는 것을 방지하며, 손잡이를 앞으로 당기면 자유롭게 원하는 압력으로 다시 셋팅 할 수 있는 드라스타만의 특허 10-2009-0012957출원한 Push and Lock 타입의 레귤레이터입니다.

**077 Series** is the back-pressure type regulator suitable for water, chemical, liquid, gas, etc. and uses NPT 1/4" pipe exclusively. Regulator body is made of brass or stainless steel 316L and has the wide range of working pressure of 0.2 ~ 25 bar (362psi) by model. DRASTAR regulators are designed and manufactured for easier operation by equipping with the DRASTAR's own developed push and lock type handle which completely prevents the self-change of pre-set value which can be caused by the vibration from outside or minute vibration at the gas pipeline. You can prevent the self-changing of pre-set value just by pushing the handle and reset the value freely by drawing the handle. DRASTAR has created and applied patent for this push and lock system for DRASTAR regulators (patent number 10-2009-0012957).

### SPECIFICATIONS

Ports	077S-000-2NP4 2-ports NPT 1/4" 077S-000-3NP4 3-ports
Leak Rate Certification	to 2x10 <sup>-8</sup> atm cc/sec Helium available.
Body Materials	077S-000-xNP4 / Stainless steel 316L 077B-000-xNP4 / Brass
Bonnet Material	Nickel Plated Brass / (Stainless steel 316L Optional)
Diaphragm	Stainless steel 316L
Main Valve	Stainless steel 316L
Valve Spring	Stainless steel 316L
Valve Seat	Teflon (Kel-F, Polyimide, etc.. Optional)
Outlet Pressure Ranges	2bar(30psig), 5bar(72psig) 10bar(145psig), 25bar(362psig)
Operating Temperature	-40°C - +70°C (standard) 077S-000-xNP4-H1, +120°C (Optional) 077S-000-xNP4-H2, +250°C (Optional)
Flow Capacity	Cv=0.2 (Standard)

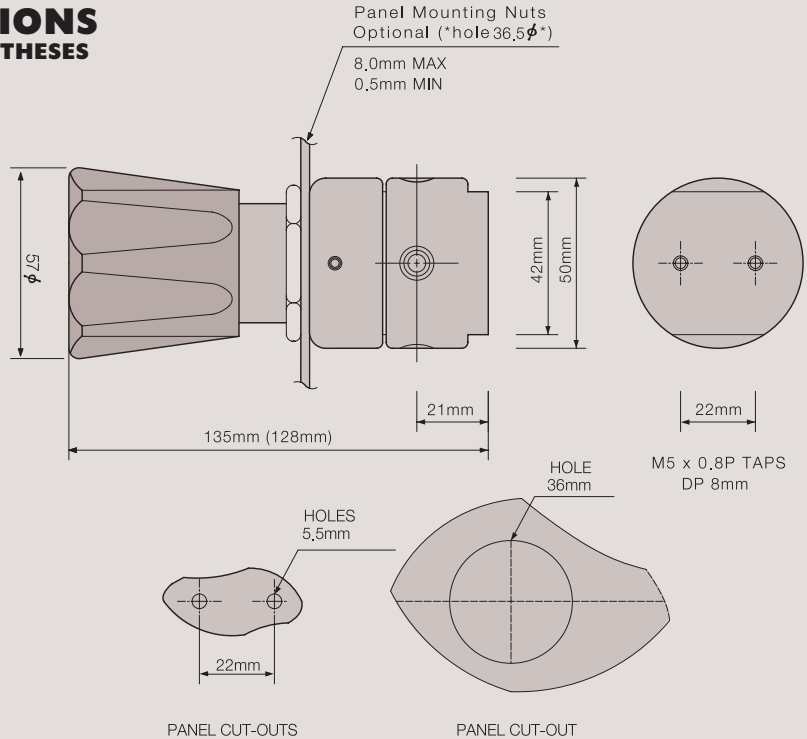
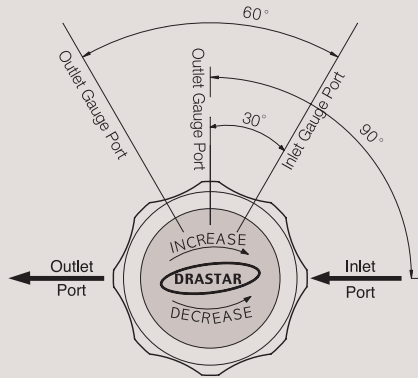
## REFERENCE

This catalogue is printed as of January 2010, and the dimensions and/or specifications in this catalogue can be changed without prior notice in the course of constant upgrading and improvement of our products.

# INSTALLATION DIMENSIONS

METRIC EQUIVALENTS ARE IN PARENTHESES

## GAUGE PORT OPTIONS



## Features

- Precision control of 1/4" NPT Type Back Pressure Regulator
- Suitable for the research labs, industrial control
- Control 2bar(30psig), 5bar(72psig) 10bar(145psig), 25bar(362psig)
- Panel mounting NUT (#077-PM nut) option
- W077S-000-XNP4 W MODEL IS ONLY TYPE for LIQUID or WATER

## 권장 사항

각 제품들은 최고의 안전성과 쉬운 조작성을 고려하여 제작되었습니다. 그러나 가장 안전하고 효율적인 Regulator 사용을 위해서는 실제 사용 압력을 각각의 모델에 따라 25%~75% 이내에서 사용하면 가장 이상적인 압력을 사용할 수 있습니다, 정밀하고 원활한 동작과 제품의 수명 연장을 위해서는 위의 범위 내에서 사용하기를 적극 권장합니다.

## Recommendations

Each product is manufactured since being taken into consideration of the best safety and easy manipulation. However in order to use the regulator in most safe and effective way, you are recommended to use the actual pressure within the range of its 25% ~ 75%. For making precise, smooth movement and to prolong product life, strongly recommended to make a use within above mentioned range.

## ORDERING INFORMATION

**W077-S-002-2-NP4-H-H1**

**W MODEL IS ONLY TYPE FOR LIQUID or WATER**

**BASIC SERIES**  
077

**BODY MATERIAL**  
S = STS 316L  
M = MONEL

**DIAPHRAGM and INTERNAL PARTS**  
S = STS 316L  
B = STS 316L  
M = Hastelloy or Monel

### HIGH TEMPERATURE

H1 = 120 °C  
H2 = 250 °C

**DIAPHRAGM MATERIAL**  
H=Hastelloy-c(Optional)

### IN & OUT PORTS SIZE

NP4 = 1/4" NPT

### Ports

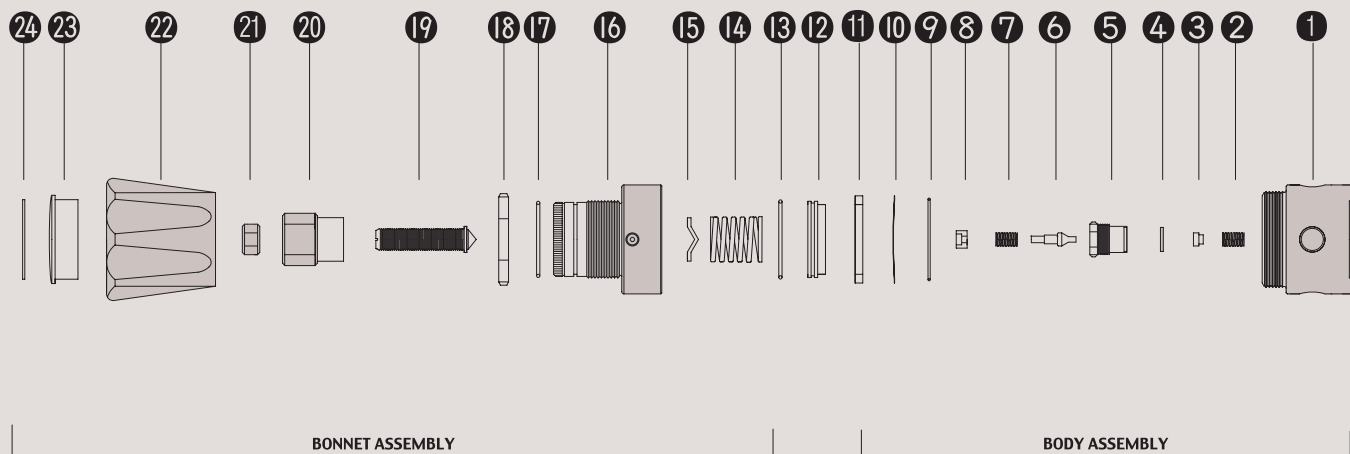
2 = 2 Port  
3 = 3 Port  
4 = 4 Port

### CONTROLLED PRESS. RANGES

002 = 2bar (30psi)  
005 = 5bar (72psi)  
010 = 10bar (145psi)  
025 = 25bar (362psi)



## 077 SERIES PART LIST



## STANDARD MODEL SERIES

Item No.	Description	Part No.	Model Application
01	Body	077-01-01	077-01-1 Stainless Steel 316L body / 077-01-02 Brass body
02	Low Valve Spring	077-02	All Model Same
03	Spring Locking Plate	077-03	All Model Same
04	Valve Seat	077-04	077-04-01 2bar, 5bar, 10bar, 25bar
05	Valve Seat Locking Screw	077-05	All Model Same
06	Main Valve	077-06	All Model Same
07	Valve Spring	077-07	All Model Same
08	Valve Spring Locking Plate	077-08	All Model Same
09	O-Ring	077-09	All Model Same
10	STS316L Diaphragm	077-10	All Model Same
11	Locking Ring	077-11	All Model Same
12	Back-up Plate	077-12	All Model Same
13	O-Ring	077-13	All Model Same
14	Load Spring	077-14	077-32-01 2bar, 5bar, 10bar, 25bar
15	Pivot	077-15	All Model Same
16	Bonnet	077-16	All Model Same (077-40-03, Stainless steel 316L Bonnet Optional)
17	O-Ring	077-17	All Model Same
18	Panel mount Nut	077-18	All Model Same
19	Adjusting Screw	077-19	All Model Same
20	Push and Lock Slide	077-20	All Model Same
21	Locking Nut	077-21	All Model Same
22	Control Knob	077-22	All Model Same
23	Name Cap	077-23	All Model Same
24	Name Cap Plate	077-24	077-48-01 2bar, 5bar, 10bar, 25bar