# 085 S E R I E S

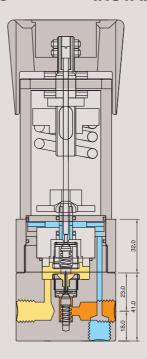
**Hydraulic and Gas High Pressure Regulators** 

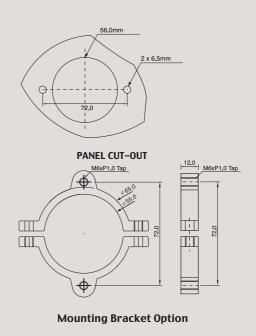


## **FUNCTIONAL SCHEMATIC**

# **INSTALLATION DIMENSIONS**







# 085 Pressure Reducing Regulators (1/4", 3/8", 1/2")

**085 Series** is a pressure reducing regulator designed to control in particular the liquids such as hydraulic, oil, water, etc. as well as various gases. 085 Series offers extended life span by adopting the piston diaphragm which Drastar developed. As body and all internal parts of the regulator are constructed of stainless steel 316L, this series also offers safe and easy operation not only with the liquids such as hydraulic, oil, water, etc. and but also high pressure, high purity, and corrosive gases and in the pharmaceutical, research institutes and laboratory applications.

- Maximum inlet pressure is 700bar(10,000psi) and outlet pressure ranges from 5bar (70psi) up to 700bar (10,000psi)
- All manufacturing processes such as cleaning, welding, assembly, testing, and packing of Drastar pressure regulators are performed in the class-100 and class-10 clean room.

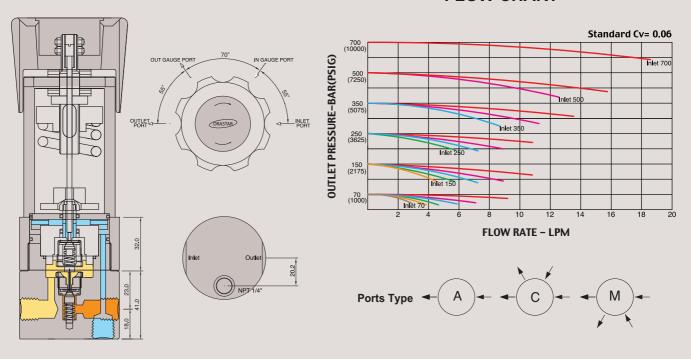
# **Specifications**

Port Sizes	1/4", 3/8", 1/2" FNPT				
Body	Stainless Steel 316L				
Bonnet	AL6061				
Diaphragm	Stainless Steel 316L				
Main Valve	Stainless Steel 316L				
Valve Spring	Stainless Steel 316L				
Valve Seat	PCTFT or Vespel (Optional)				
Maximum Inlet Pressure	700bar(10,000psig) or 420bar(6,000psi)				
Outlet Pressure Range	70bar,150bar, 250bar, 350bar, 500bar, 700bar				
Design Proof Pressure	150% of maximum rated				
Leakage	to 2x10 <sup>-®</sup> atm cc/sec Helium available.				
Operating Temperature	- $40^{\circ}$ C to $+70^{\circ}$ C ( $-40^{\circ}$ F to $+160^{\circ}$ F) (Standard)				
	H1 model: up to +120°C (Optional)				
	H2 model: up to +250°C (Optional)				
Flow Capacity	Cv=0.06 / Main Valve Cv=0.2 / Venting Valve				
Other Options	CGA, Inlet and Outlet Gauges, etc.				

DRASTER CO., LTD.

## **INSTALLATION DIMENSIONS**

# **FLOW CHART**



### \* [DRASTAR Regulators are Oil-free]

DRASTAR's all pressure regulators are assembled, cleaned, inspected, and packed in clean-rooms equipped with clean bench, helium detector, particle counter, ultrasonic cleaner, ultrapure water system, vacuum packaging machine, etc. through oxygen cleaning procedure in compliance with process and regulations indicated in CGA 4.1. and or ASTM G-93 and are free of any grease or oils.

\*\* Caution: Filtering (gas 7μm~15μm, water 15μm~80μm) is a MUST to use in the general gas application other than high purity gases. Otherwise, it may cause a failure to the regulators. It is strongly recommended to install filter for extension of life span and saving the maintenance expense.

### **ORDERING INFORMATION**

085 -	<b>-</b> B	s -	- 070	A -	- 1	<b>s</b> -	· V ·	- H1
	MAX. NLET PRESSURE	BODY MATERIAL	OUTLEI PRESSURE RANGE	PORTS TYPE FNPT	IN AND OUTPORTS SIZE	FLOW CAPACITY	SELF VENTING	HIGH TEMPE- RATURE
Series	A = 420bar (6,000psi) B = 700bar (10,000psi)	S = STS 316L	070 = 1-70bar(1-1000psi) 150 = 5-150bar(10-2175psi) 250 = 10-250bar(30-3600psi) 350 = 20-350bar(50-5000psi) 500 = 30-500bar(100-7200psi) 700 = 30-700bar(100-10000psi)	A = 2 Ports C = 4 Ports <del>M = 4 Ports</del>	8 = 3/8" 2 = 1/2"	S = 0.06 Standard O = 0.2 Optional	V = Self- Venting Standard	H1 = +120° C H2 = +250° C H3 = +320° C