

# GPS 270/280 Single-Stage



These general purpose single-stage regulators are recommended for inert and non-corrosive gas application where precise control of delivery pressure is not necessary.

They are well suited for closely monitored analytical work and are ideal for use with liquified hydrocarbon gases. They should not be used in applications where inboard diffusion of air or outgassing of elastomeric components would adversely affect the work being done.

The 270 can be used for oxygen and inert gases. The 272 can be used for high pressure flammable gases. The 280 and 281 can be used with acetylene and LP gas, respectively, with a maximum inlet pressure of 400 psig.

### GPS 270/280 FEATURES

- 2-3/4" Nylon reinforced diaphragm
- 2-1/2" Dual scale gauges
- Stem type seat mechanism
- Chrome plated body, housing cap, fittings and gauges

### MATERIALS OF CONSTRUCTION

Body .....	Chrome plated forged brass
Spring housing cap .....	Chrome plated forged brass
Diaphragm .....	Nylon reinforced neoprene
Nozzle .....	Brass
Seat .....	GPS 270,272 Polyurethane GPS 280,281 Neoprene
Seals .....	Nylon™
Filter .....	Sintered bronze
Seat Return Spring .....	Stainless Steel
Pressure Adjusting Spring .....	Music wire
Adjusting Knob .....	ABS plastic
Outlet valve	
Body .....	Chrome plated forged brass
Stem .....	Brass
Packing .....	Teflon™
Tip .....	Stainless steel ball

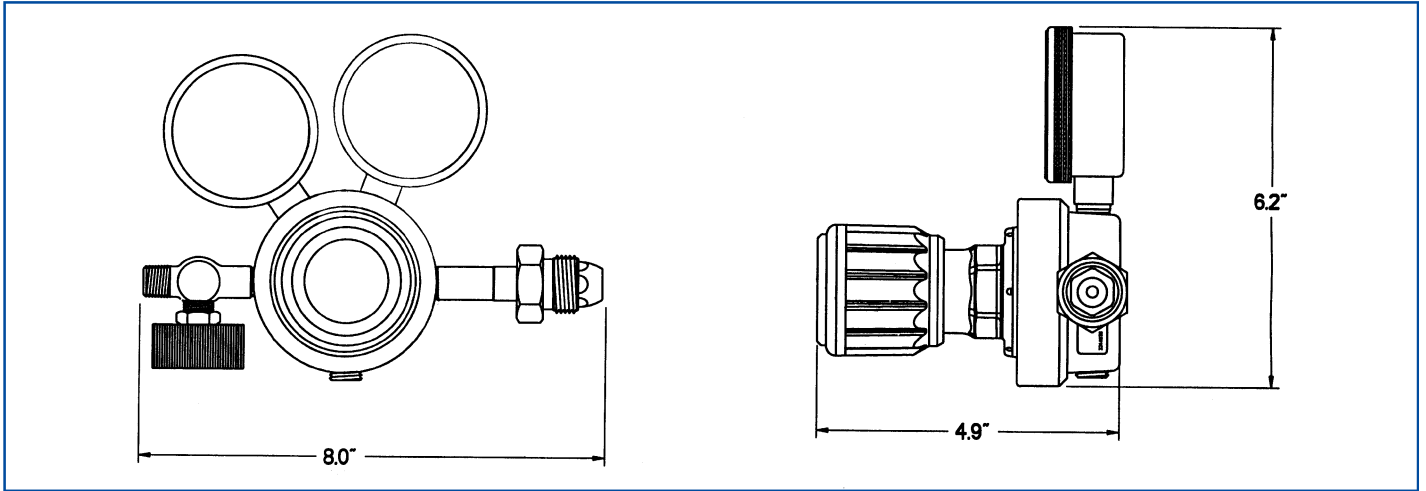
### GPS 270/280 SPECIFICATIONS

Maximum inlet .....	(Model 270,272) 3000 psig (Model 280,281) 400 psig
Outlet pressure ranges .....	15 (2-15 psig) 40 (2-40 psig) 80 (4-80 psig) 125 (5-125 psig)
Valve outlet .....	1/4" NPT (M)
Temperature Operating Range .....	0 to 140°F (-17 to 60°C)
Outlet pressure rise .....	Less than .85 psig per 100 psig inlet decay
Flow coefficient .....	C <sub>v</sub> = .18

### GPS 270/280 TYPICAL APPLICATIONS

- Non-Critical Specialty Gases
- Purging
- Liquid Hydrocarbon Blends
- Medical OEM
- General OEM

# Single-Stage **GPS 270/280**



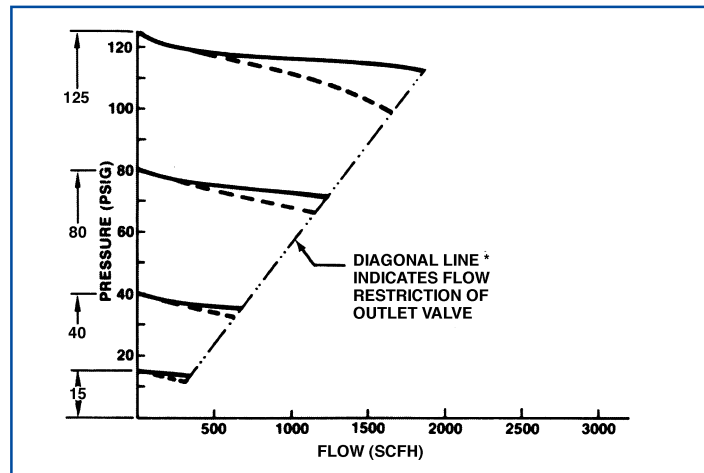
## GPS 270/280 PERFORMANCE DATA

### Flow vs Outlet Pressure

Inlet Pressure  
(Air @ 70°F)

— 2000 psig  
- - - 200 psig

\*Tested with outlet valve full open & outlet pressure taken at regulator L.P. gauge port



## ORDERING: MODEL NUMBER SYSTEM

XXX	-	XXX	-	XXX	-	XXX	-	XX	-	XX
Base Regulator		Body Type		Delivery Pressure		Inlet Fitting		Outlet Fitting		Options
GPS		270 272 280 281		<i>Delivery</i> 15 - 2-15 40 - 2-40 80 - 4-80 125 - 5-125 <i>Outlet Gauge</i> 2-30 psig 2-60 psig 4-100 psig 5-200 psig		320 - CGA 320 326 - CGA 326 346 - CGA 346 350 - CGA 350 540 - CGA 540 580 - CGA 580 590 - CGA 590 300 - CGA 300 510 - CGA 510		4M - 1/4" MNPT BV - shut-off valve 1/4" 4F - 1/4" Female NPT		00 - Bare Body 15 - Panel Mount

\*Note: Not all delivery pressures and inlet fittings are available on each model.

# GPT 270/280 Two-Stage



These general purpose two-stage regulators are recommended for use with inert and non-corrosive pure gases and mixtures in laboratories where constant delivery pressure regardless of fluctuation in tank pressure are required. They should not be used in applications where inboard diffusion of air or outgassing of elastomeric components would adversely affect the work being done.

The 270 can be used for oxygen and inert gases. The 272 can be used for high pressure flammable gases and has a remote venting relief valve. The 280 and 281 can be used with acetylene and LP gas, respectively, with a maximum inlet pressure of 350 psig.

## GPT 270/280 FEATURES

- 1-1/2" Nylon reinforced diaphragm on 1st stage
- 2-3/4" Nylon reinforced diaphragm on 2nd stage
- 2-1/2" Dual scale gauges
- Stem type seat mechanisms
- Chrome plated body, housing caps, fittings and gauges

## MATERIALS OF CONSTRUCTION

Body .....	Chrome plated forged brass
Spring housing cap .....	Chrome plated forged brass
Diaphragm .....	Nylon reinforced neoprene
Nozzle .....	Brass
Seat .....	GPT 270,272 Polyurethane GPT 280,281 Neoprene
Seals .....	Nylon™
Filter .....	Sintered bronze
Seat Return Spring .....	Stainless Steel
Pressure Adjusting Spring .....	Music wire
Adjusting Knob .....	ABS plastic
Outlet valve	
Body .....	Chrome plated forged brass
Stem .....	Brass
Packing .....	Teflon™
Tip .....	Stainless steel ball

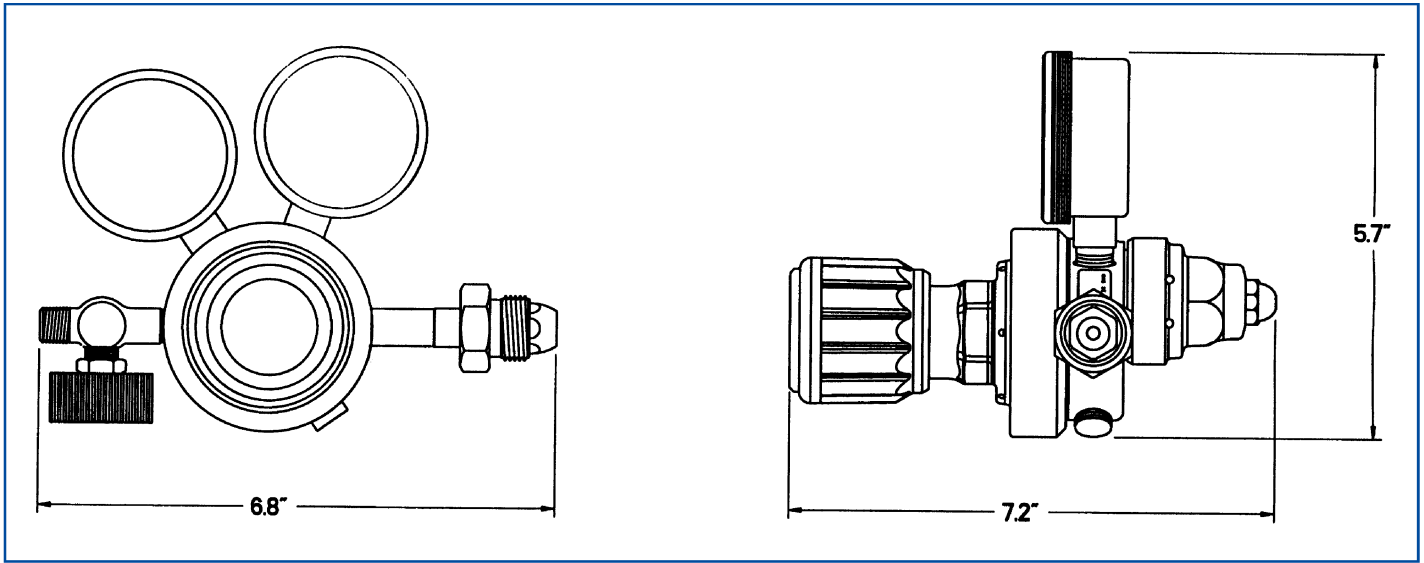
## GPT 270/280 SPECIFICATIONS

Maximum inlet .....	(Model 270,272) 3000 psig (Model 280,281) 350 psig
Outlet pressure ranges .....	15 (2-15 psig) 40 (2-40 psig) 80 (4-80 psig) 125 (5-125 psig)
Valve outlet .....	1/4" NPT (M)
Temperature Operating Range .....	0 to 140°F (-17 to 60°C)
Outlet pressure rise .....	Less than .1 psig per 100 psig inlet decay
Flow coefficient .....	C <sub>V</sub> = .08

## GPT 270/280 APPLICATIONS

- Blanketing
- Purging
- Pressure Testing
- Chamber Pressurization
- Non-High Purity Specialty Gases
- Medical OEM
- Non-High Purity or Critical Lazing Gases
- Hydrocarbon Service

# Two-Stage GPT 270/280



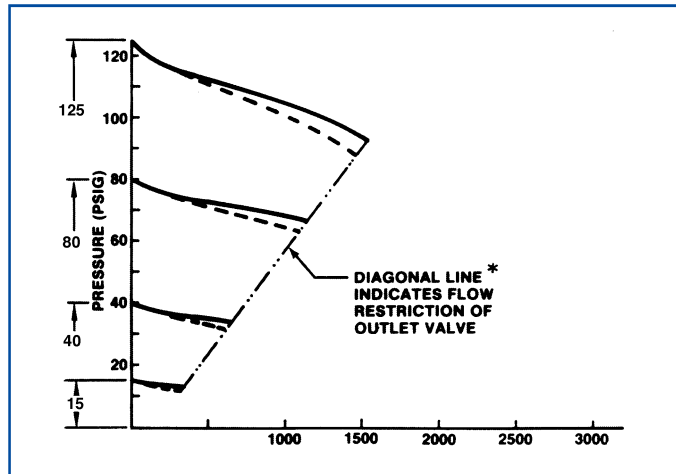
## GPT 270/280 PERFORMANCE DATA

### Flow vs Outlet Pressure

Inlet Pressure  
(Air @ 70°F)

———— 2000 psig  
- - - - 250 psig

\*Tested with outlet valve full open & outlet pressure taken at regulator L.P. gauge port



### ORDERING: MODEL NUMBER SYSTEM

Base Regulator	Body Type	Delivery Pressure	Inlet Fitting	Outlet Fitting	Options
GPT	270 272 280 281	<i>Delivery</i> <i>Outlet Gauge</i> 15 - 2-15    2-30 psig 40 - 2-40    2-60 psig 80 - 4-80    4-100 psig 125 - 5-125    5-200 psig	320 - CGA 320 326 - CGA 326 346 - CGA 346 350 - CGA 350 540 - CGA 540 580 - CGA 580 590 - CGA 590 300 - CGA 300 <small>(280 only)</small> 510 - CGA 510	4M - 1/4" MNPT	00 - Bare Body 15 - Panel Mount

\*Note: Not all delivery pressures and inlet fittings are available on each model.

# GPL 270/280 Line Regulators



These general purpose line regulators are recommended for control of inert and non-corrosive gases servicing low pressure pipelines. They should not be used in applications where inboard diffusion of air or outgassing of elastomeric components would adversely affect the work being done.

The 270 can be used for oxygen and inert gases. The 272 can be used for flammable gases. The 280 can be used with acetylene.

### GPL 270/280 FEATURES

- 2-3/4" Nylon reinforced diaphragm
- 2-1/2" Chrome plated, dual scale gauges
- Stem type seat mechanisms
- Chrome plated body, housing caps and gauges

### MATERIALS OF CONSTRUCTION

Body .....	Chrome plated forged brass
Spring housing cap .....	Chrome plated forged brass
Diaphragm .....	Nylon reinforced neoprene
Nozzle .....	Brass
Seat .....	Polyurethane
Seals .....	Nylon™
Filter .....	102 Micron stainless steel screen
Seat Return Spring .....	Stainless Steel
Pressure Adjusting Spring .....	Music wire
Adjusting Knob .....	ABS plastic

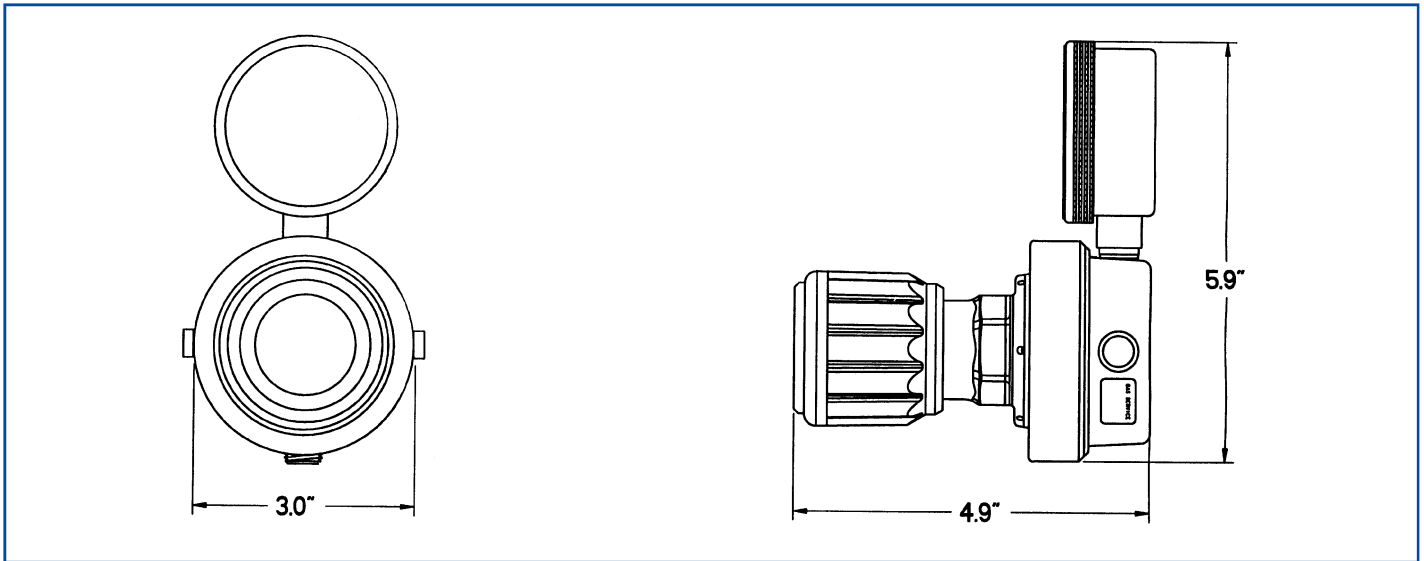
### GPL 270/280 SPECIFICATIONS

Maximum inlet .....	350 psig
Outlet pressure ranges .....	15 (2-15 psig)
	40 (2-40 psig)
	80 (4-80 psig)
	125 (5-125 psig)
Temperature Operating Range .....	0 to 140°F (-17 to 60°C)
Ports .....	1/4" NPT (F)
Flow coefficient .....	C <sub>V</sub> = .33

### GPL 270/280 TYPICAL APPLICATIONS

- Point of Use Laboratory Systems
- Gas Supply Purging
- Control of Cryogenic Gases
- Bulk Gas Distribution Systems
- Non-Critical Specialty Gases
- Liquid Hydrocarbon Blends
- OEM Applications

# Line Regulators **GPL 270/280**



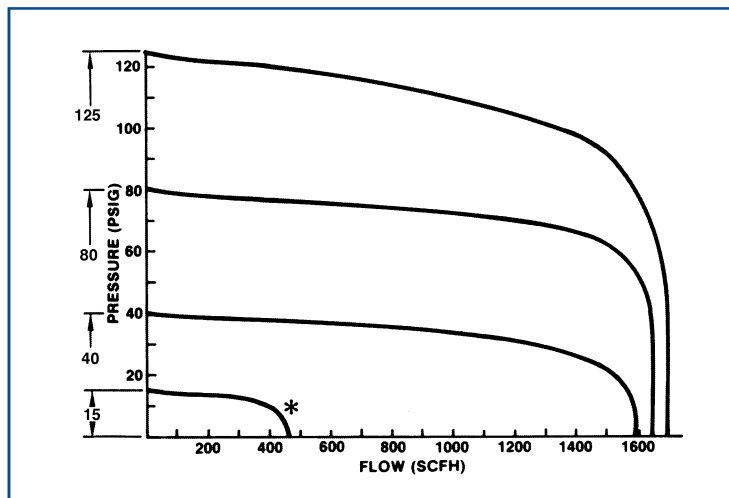
## GPL 270/280 PERFORMANCE DATA

### Flow vs Outlet Pressure

Inlet Pressure  
(Air @ 70°F)

— 200 psig

\*Indicates 50 psig inlet pressure



### ORDERING: MODEL NUMBER SYSTEM

Base Regulator	Body Type	Delivery Pressure	Inlet Fitting	Outlet Fitting	Options
GPL	270 272 280	<i>Delivery</i> 15 - 2-15 40 - 2-40 80 - 4-80 125 - 5-125 <i>Outlet Gauge</i> 2-30 psig 2-60 psig 4-100 psig 5-200 psig	4F - 1/4" FNPT	4F - 1/4" FNPT	00 - Bare Body 15 - Panel Mount

\*Note: Not all delivery pressures and inlet fittings are available on each model.