



INDUSTRIAL
REGULATORS

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Innovative Solutions

Get Consistent Quality

By involving every employee in our ISO 9001:2008 Quality Assurance Program, you can count on the quality we provide you. We have coordinated our business systems, invested in state-of-the-art machine tools, and built an extensive component inventory so we can consistently provide cost-effective solutions and on-time delivery to meet your replacement or project requirements — regardless of size or complexity.

Make the Right Choice

"We simply make it right" by putting your needs first. The next time you specify control valves, regulators or vapor control emission systems, or you need a replacement fast...call the supplier that makes it right. Rely on Cashco for your single-source convenience. Great service, field-proven quality, and timely delivery makes Cashco the right choice.

Select Control Valves & Regulators FOR SPECIALIZED OR UTILITY SERVICE

We manufacture a broad line of throttling rotary and linear control valves, pressure reducing regulators, and back pressure regulators in line sizes from 1/4 inch to 10 inches and Cv ranges from .002 to 4,406. Models are available to handle slurries, cryogenic service, and corrosive fluids; to withstand high temperatures and pressures; and to maximize the reduction of fugitive emissions. Contact Cashco for complete product information.



WE ARE CASHCO

The Strength Of Our Organization Is Our Employees

COMMITMENT. QUALITY. DEDICATION.

Cashco, Inc. is a manufacturing enterprise, centrally located within the United States. Our employees use hard work, commitment, and passion to define company goals that deliver world-class products at a fair price.

At Cashco, we continue to innovate our products until they are recognized as best in class within their respective industry. If the customer is not satisfied, we take it upon ourselves to make it right. Cashco employees are the bloodline of our company elevating products above industry standards for performance, dependability, and safety.

At Cashco, the strength of our organization is our employees.

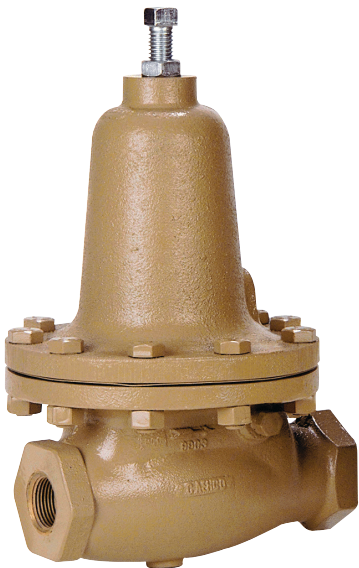
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MODEL // 1000HP

The Model 1000HP is the most versatile, self-contained pressure reducing regulator available today. Its unique internal design and straight-through flow path isolate the diaphragm from fluid velocity effects and increase capacity and stability at both high or low-flow rates. Flow-to-open design and extended guiding allow pressure drops to 650 psid. It can be used in severe service and cryogenic applications that normal pressure reducing regulators cannot handle. Four body materials and nineteen trim material selections provide compatibility with many fluids — including saturated and superheated steam, industrial gases, fuel oils, compressed air, sour gas, chemical, and other process fluid services.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)	2" (DN50)
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The Model **1000HP** is a self-contained pressure reducing regulator.



END CONNECTIONS

NPT	EXTENDED NIPPLES	BSPT	BSPP	FLANGED	14" FACE TO FACE
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COMMON APPLICATIONS

STEAM, INDUSTRIAL GASES, SOUR GASES, FUEL OILS, COMPRESSED AIR, CHEMICALS, WATER CONDENSATE



DESIGN PRESSURE

INLET: UP TO 740 psig (51 Barg)
OUTLET: UP TO 300 psig (20.7 Barg)
PRESSURE DROP: UP TO 650 psid

CV RANGE:

From 3 to 22

MATERIALS:

Body & Spring chamber - DI, BRZ, CS, 316 SST

Trim - BR, 416 SST, 316 SST

Seat - Metal: SST, Composition: Buna-N, EPDM, TFE, F.C. Elastomer

Diaphragm - Phos. BRZ, 302 SST, Neoprene, F.C. Elastomer, EPDM

TEMPERATURE RANGE:

Liquid or Gas: -20°F to +400°F
(-29°C to +205°C)

Steam: 406°F - SAT @ 250 psig
(208°C - SAT@ 17.2 Barg)

SEAT LEAKAGE:

Class IV or Class VI

MODEL // 1000HP-1+6/1000HP-1+8

Models 1000HP-1+6 or 1000HP-1+8 are differential reducing regulators used to maintain a relatively constant pressure differential between the fluid loading pressure - P_{Load} , and the valve's outlet pressure - P_2 , with P_2 pressure higher than P_{Load} pressure. Model 1000HP-1+6 is a single-diaphragm differential construction. Model 1000HP-1+8 is a double-diaphragm differential construction. A double-diaphragm design prevents the fluid passing through the body from mixing into the loading fluid pressurizing the spring chamber in the event of a diaphragm failure.



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)	2" (DN50)
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END CONNECTIONS

NPT	EXTENDED NIPPLES	BSP	14" FACE TO FACE	FLANGED
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COMMON APPLICATIONS

STEAM, HEAVY OIL



DESIGN PRESSURE

INLET: UP TO 740 psig (51 Barg)

OUTLET: UP TO 300 psig (20.7 Barg)

CV RANGE:

From 3 to 22

TEMPERATURE RANGE:

-20°F to +400°F (-29°C to +205°C)

MATERIALS:

Body & Spring chamber - DI/DI, CS/CS,
CS/DI, BRZ/DI

Trim - BR, BRZ, SST

Body & Cylinder - BRZ/BRZ, CS/SST

SEAT LEAKAGE:

Class IV or Class VI

MODEL // 1000LP

This 1000LP-Series Regulator has a larger diaphragm area than its 1000HP counterpart to handle lower operating pressures. However, the 1000LP's basic construction, specifications, and superior rangeability mirrors the 1000HP regulator. The internal design isolates the diaphragm from fluid velocity effects and eliminates flow-induced instability at high and low-flow rates.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)	1" (DN25)
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END CONNECTIONS

FNPT	RF FLANGED	BSP	EXTENDED NIPPLES	14" FACE TO FACE
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COMMON APPLICATIONS

INDUSTRIAL GASES, FUEL GASES, SOUR GAS,
CHEMICALS, COMPRESSED AIR, SATURATED STEAM,
WATER CONDENSATE



DESIGN PRESSURE

INLET: UP TO 450 psig (31.0 Barg)
OUTLET: 1-30 psig (0.07-2.1 Barg)

*The Model **1000LP** is a pressure reducing regulator with a large diaphragm area to handle lower operating pressures*

CV RANGE:

From 3 to 9

TEMPERATURE RANGE:

-20°F to +600°F (-6°C to +315°C)

MATERIALS:

Body & Spring chamber - CI, BRZ, CS, 316 SST

Trim - BR, 416 SST, 316 SST

Seat - Metal: SST, Composition: Buna-N, V-TFE, F.C. Elastomer, EPDM

Diaphragm - Phos. BRZ, 302 SST, Neoprene, F.C. Elastomer, EPDM, Buna-N

SEAT LEAKAGE:

Class IV or Class VI

MODEL // C-CS

The Model C-CS Self-Contained Pressure Reducing Regulator is designed primarily for steam control in sanitary piping systems. It can also be used for clean gas and liquid applications. Body, diaphragm, stem and plug are all 316L SST. The unit has a maximum inlet pressure of 150 psig and can maintain outlet pressure between 10 and 75 psig. Special units are available for use under intermittent vacuum conditions.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

3/4" (DN20)	1" (DN25)	1.5" (DN40)	2" (DN50)	3" (DN80)
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END CONNECTIONS

TRI-CLAMP



COMMON APPLICATIONS

PROCESSED FOOD PRODUCTION, COSMETIC PRODUCTION, SPECIALTY CHEMICALS



DESIGN PRESSURE

INLET UP TO 150 psig (10.3 Barg)
OUTLET BETWEEN 10-75 psig (0.69-5.2 Barg)

The Model
C-CS
is a "CLEAN STEAM"
regulator often
used in the
Pharmaceutical
Industry

CV RANGE:

From 2 to 27 Cv

MATERIALS:

1" Investment Cast 316L SST
1"-3" Barstock 316L SST

TEMPERATURE:

Max Operating 366°F (185°C)

TRIM:

316L SST

MODEL // C-PRV

The Model C-PRV Self-Contained Pressure Reducing Regulator is designed for liquid or gaseous fluids used in sanitary biotech process piping. It can handle a maximum 175 psig inlet pressure and can maintain outlet pressures from 2 to 125 psig. The patented Model C lock-open feature allows CIP with cleaning solution up to 50 psig and SIP up to 20 psig. Optional diaphragms are made from FDA-approved materials. Model C-PRV is 3A-approved.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1" (DN25)	1.5" (DN40)	2" (DN50)	3" (DN80)
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END CONNECTIONS

TRI-CLAMP



COMMON APPLICATIONS

PHARMACEUTICALS, PROCESSED FOOD PRODUCTION, COSMETIC PRODUCTION, SPECIALTY CHEMICALS



DESIGN PRESSURE

INLET: UP TO 175 psig (12.1 Barg)
OUTLET: UP TO 150 psig (10.3 Barg)

*The Model
C-PRV is a
self-contained
pressure reducing
regulator.*

CV RANGE:

From 3.2 to 27 Cv

MATERIALS:

1" Investment Cast 316L SST
1"-3" Barstock 316L SST

TEMPERATURE RANGE:

+40°F to +353°F (+4°C to +149°C)

TRIM:

Diaphragm - EPDM, FK, FKM or Gylon
Stem and plug - 316L SST

MODEL // D

The Model D Pressure Reducing Regulator is a time-proven product. For over 80 years, this inexpensive, rugged built regulator with piston-type, valve plug has been serving in medium-capacity, industrial applications including service for steam, air, oil, water, and many chemicals and gases. Optional construction extends Model D capabilities to cryogenic, pharmaceutical, food and NACE applications.



**VIEW IN
3D!**

*The Model **D** is an economical industrial-grade regulator*



LINE SIZES AVAILABLE

3/8" (DN10)	1/2" (DN15)	3/4" (DN20)	1" (DN25)
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END CONNECTIONS

NPT	EXTENDED NIPPLES	BSPT	BSPP	FLANGED	TRI-CLAMP	14" FACE TO FACE
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COMMON APPLICATIONS

GASSES, LIQUIDS, CRYOGENICS,
STEAM



DESIGN PRESSURE

INLET: UP TO 600 psig (41 Barg)
OUTLET: 2-250 psig (0.14-17 Barg)
PRESSURE DROP: UP TO 350 psid (24 Bard)

CV RANGE:

From 1.8 to 4

TEMPERATURE RANGE:

-325°F to +400°F (-198°C to +204°C)

MATERIALS:

Body & Spring chamber - CI, BRZ, CS, 316 SST
Trim - BR, 416 SST, 316 SST
Seat - Metal: BRZ, SST, Composition: Buna-N, TFE, EPDM, F.C. Elastomer
Diaphragm - Phos. BRZ, 302 SST, Neoprene, F.C. Elastomer, EPDM, Buna-N

SEAT LEAKAGE:

Class IV or Class VI

MODEL // DL

The Model DL is a basic, general service, self contained regulator. Unit is the Cashco reducing regulator product utilized for the majority of industrial applications. A time-proven product with 80+ years of experience.



VIEW IN
3D!



LINE SIZES AVAILABLE

1.5" (DN40)	2" (DN50)
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END CONNECTIONS

NPT	EXTENDED NIPPLES	BSPT	BSPP	FLANGED	14" FACE TO FACE
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COMMON APPLICATIONS

SOUR GAS, INDUSTRIAL GASES, CHEMICALS, WATER, OIL, STEAM, COMPRESSED AIR, CRYOGENICS



DESIGN PRESSURE

INLET: UP TO 300 psig (20.6 Barg)
OUTLET: 2-150 psig (0.14-10.3 Barg)
PRESSURE DROP: UP TO 150 psid (10.3 Bard)

CV RANGE:

From 7.0 to 10

TEMPERATURE RANGE:

-325°F to +400°F (-198°C to +204°C)

MATERIALS:

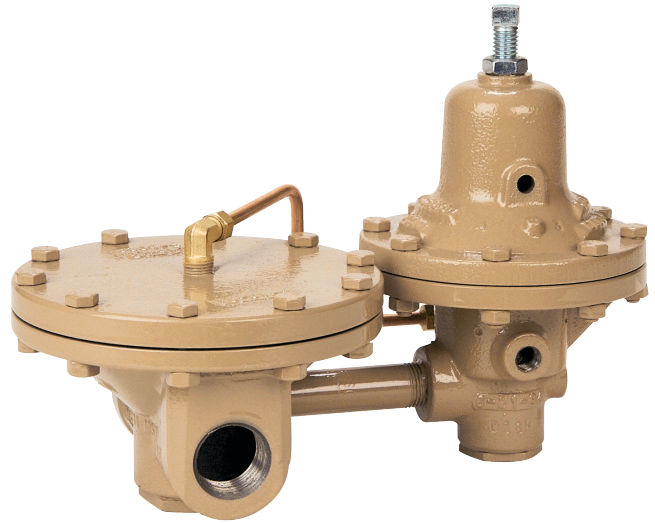
Body & Spring chamber - CI, BRZ, CS, 316 SST
Trim - BR, 416 SST, 316 SST
Seat - Metal: BRZ, SST, Composition: Buna-N, TFE, EPDM, F.C. Elastomer
Diaphragm - Phos. BRZ, 302 SST, Neoprene, F.C. Elastomer, EPDM, Buna-N

SEAT LEAKAGE:

Class IV or Class VI

MODEL // POSR-1

The POSR-1 is a low-cost, pilot-operated pressure reducing steam regulator with a bellows seal design that eliminates sticking. Pilot and main valve trim are hardened 416 SST for long life. These regulators can maintain outlet pressure with +/-5% and are commonly used in large steam heating installations and process applications with coolers, pasteurizers, sterilizers, vulcanizers and other equipment. Available without the pilot as a pressure-loaded regulator.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)

3/4"
(DN20)

1"
(DN25)



END CONNECTIONS

FNPT



COMMON APPLICATIONS

STEAM HEATING



DESIGN PRESSURE

INLET: UP TO 300 psig (20.7 Barg)

OUTLET: 5-150 psig (0.34-10.3 Barg)

PRESSURE DROP: UP TO 200 psid (13 Bard)

*The Models **POSR-1** is a low-cost, pilot-operated steam regulator with bellows seals that eliminates sticking.*

CV RANGE:

From 3.4 to 5.8

TEMPERATURE RANGE:

UP TO +450°F (232°C)

MATERIALS:

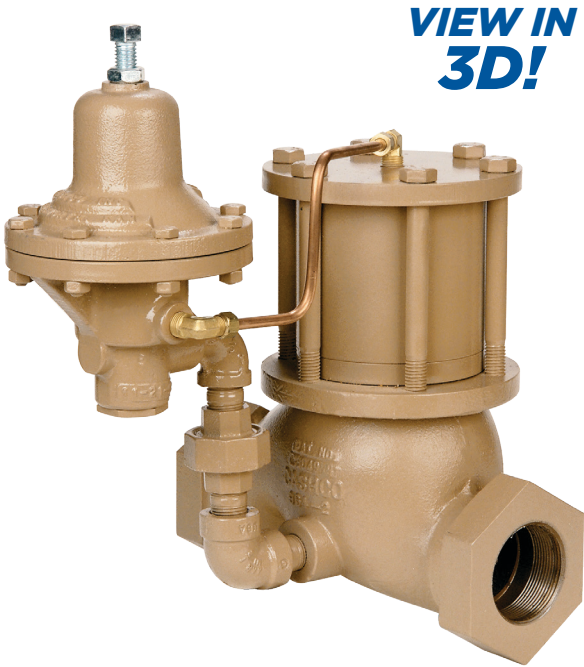
Body - DI, CS

Seat - HDN 416 SST

Diaphragm - 302 SST

MODEL // POSR-2

The POSR-2 is a high-capacity version of the POSR-1. It utilizes a pressure-loaded piston design to eliminate the common problem of main valve diaphragm rupture. The POSR-1 and POSR-2 also eliminate common pilot valve sticking and provide high sensitivity and stability even on older or intermittently used steam systems.



VIEW IN
3D!



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)	2" (DN50)	3" (DN80)	4" (DN100)
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END CONNECTIONS

NPT	FLANGED	FLAT FACED	RAISED FACED
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COMMON APPLICATIONS

STEAM DISTRIBUTION SYSTEMS



DESIGN PRESSURE

INLET: UP TO 300 psig (20.7 Barg)
OUTLET: 5-150 psig (0.34-10.3 Barg)
PRESSURE DROP: UP TO 200 psid

The Model
POSR-2 is a high-
capacity, pilot-
operated steam
regulator with
bellows seal that
eliminates sticking.

CV RANGE:

From 6.9 to 88

TEMPERATURE RANGE:

UP TO +450°F (232°C)

MATERIALS:

Body - DI, CS

Seat - HDN 416 SST

Diaphragm - 302 SST (pilot only)

SEAT LEAKAGE:

Class IV

MODEL // 31-N

**VIEW IN
3D!**

Model 31-N is designed for use in the process industry where low-pressure gas is controlled. Corrosion-resistant Epoxy Coated CS and SST construction negates gas diffusion effects. The 31-N is designed primarily for blanketing fluids that are volatile, corrosive or lethal. No internal relief.



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.5" (DN40)	2" (DN50)
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END CONNECTIONS

FNPT	EXTENDED NIPPLES	RF FLANGED	14" FACE TO FACE
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*The Model
31-N is a
regulator
designed for
up to 16" W.C.
control.*



COMMON APPLICATIONS

BLANKETING INERT GASES THAT ARE VOLATILE,
CORROSIVE OR LETHAL, FUEL GAS SERVICES



DESIGN PRESSURE

INLET: UP TO 100 psig (6.9 Barg)
OUTLET: 2-16" W.C. (50-400mm H2O)
PRESSURE DROP: UP TO 100 psid

CV RANGE:

From 0.5 to 3.9

TEMPERATURE RANGE:

-30°F to +400°F (-34°C to +204°C)

MATERIALS:

Body & Spring chamber - CS, 316 SST
Trim - 316L SST
Seat - Buna-N, Silicone, F.C. Elastomer
Diaphragm - Buna-N, F.C. Elastomer

SEAT LEAKAGE:

Class VI

MODEL // 1465

The Model 1465 is intended specifically for low-flow and high-pressure drop applications. It is frequently used to reduce pressure on a sample fluid to allow easier sampling/analysis.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)



END CONNECTIONS

FNPT



COMMON APPLICATIONS

NATURAL GAS, INERT GASES, SOUR GAS, STEAM, CHEMICALS, WATER



DESIGN PRESSURE

INLET: UP TO 5000 psig (344 Barg)
OUTLET: UP TO 600 psig (41.4 Barg)
PRESSURE DROP: Up to 4700 psid

*The Model
1465 is a low-
flow regulator
for condensate
analyzer
letdown*

CV RANGE:

From 0.05 to 0.19

TEMPERATURE RANGE:

-20°F to +400°F (-28°C to +204°C)

MATERIALS:

- Body - 316 SST
- Spring chamber - BR, 316L SST
- Trim - SST
- Seat - Stellite
- Diaphragm - 302 SST, Neoprene, Elgiloy, FKM

MODEL // 3381

The Model 3381 is designed to handle low to moderate flows. It is suitable for controlling a wide range of fluids, including industrial gases, air, oil, steam and water. High-mass plug provides stability. Available for cryogenic service.

**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)

3/8"
(DN10)



END CONNECTIONS

FNPT



COMMON APPLICATIONS

INDUSTRIAL GASES, AIR, OIL,
STEAM, WATER



DESIGN PRESSURE

INLET: 800 psig (55.2 Barg)

OUTLET: UP TO 300 psig (20.7 Barg)

*The Model
3381 is
a bronze
regulator
for low-flow
service.*

MAXIMUM CV:

0.5

TEMPERATURE RANGE:

-325°F to +400°F (-198°C to +204°C)

MATERIALS:

Body & Spring chamber - BRZ

Trim - BR

Seat - Metal: BR, Composition: Buna-N,
TFE

Diaphragm - Phos. BRZ, Neoprene,
FKM

MODEL // 4381

The Model 4381 duplicates the strengths of the 3381 in SST. Its high-mass plug contributes to stability and it can handle industrial gases, air, oil, steam, water and many chemicals. Available for cryogenic service.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4" (DN8)	3/8" (DN10)	1/2" (DN15)
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END CONNECTIONS

NPT	RF FLANGED
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COMMON APPLICATIONS

INDUSTRIAL GASES, AIR, OIL, STEAM,
WATER, CHEMICALS



DESIGN PRESSURE

INLET: 1500 psig (103 Barg)
OUTLET: 2-500 psig (0.14-34.5 Barg)

*The Model
4381 is a
SST-bodied
regulator
for low-flow
service.*

MAXIMUM CV:

0.5

TEMPERATURE RANGE:

-325°F to +400°F (-198°C to +204°C)

MATERIALS:

Body & Trim - SST
Spring Chamber - BRZ, 316L SST
Seat - Metal: 316 SST, Composition:
TFE, EPDM
Diaphragm - 302 SST, TFE-coated
SST, Neoprene, EPDM

MODEL // 5381

Model 5381 Pressure Reducing Regulator is ideally suited for clean gas, clean liquid and clean steam applications. It can handle inlet pressures up to 600 psig and maintain outlet pressure from 5 to 200 psig. To minimize sanitation problems associated with porosity and welds, Model 5381 is machined from 316L SST barstock, polished to a 32 micro-inch Ra finish internally, and electro-polished.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)



END CONNECTIONS

TRI-CLAMP



COMMON APPLICATIONS

PHARMACEUTICAL HEALTH CARE PRODUCTS, PROCESSED FOOD PRODUCTION, COSMETIC PRODUCTIONS, SPECIALTY CHEMICALS



DESIGN PRESSURE

INLET: UP TO 600 psig (41.3 Barg)
MAXIMUM DROP: 400 psig (27.6 Barg)

*The Model **5381**
is a pressure
reducing
regulator.*

MAXIMUM CV:

0.5

MATERIALS:

316L SST barstock

TEMPERATURE RANGE:

-20 to +400°F (-29° to +204°C)

TRIM:

DIAPHRAGM: 302 SST, EPDM
SEAT: TFE

MODEL // **MPRV-H**

The Model MPRV-H is a compact, brass body or SST body pressure regulator used to control outlet pressure level between atmospheric and 600 psig. Available for cryogenic service.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

3/8" (DN10)	1/2" (DN15)
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END CONNECTIONS

FNPT



COMMON APPLICATIONS

AIR, OIL, WATER, GAS SERVICES



DESIGN PRESSURE

INLET: UP TO 740 psig (51 Barg)
OUTLET: UP TO 300 psig (20.7 Barg)
PRESSURE DROP: UP TO 650 psid

*The Model
MPRV-H is
a compact
pressure reducing
regulator with a
Max CV of 1.03.*

MAXIMUM CV:

1.4

TEMPERATURE RANGE:

-325°F to +180°F (-198°C to +82°C)

MATERIALS:

Body - Bronze
Spring chamber - 316/316L SST
Trim - BR, SST
Seat - TFE or Buna-N
Diaphragm - Metal: 302 SST,
Composition: Gylon, Buna-N

MODEL // **MPRV-L**

The Model MPRV-L is a compact, brass body or SST body pressure reducing regulator used to control outlet pressure level between atmospheric and 600 psig.



**VIEW IN
3D!**

**LINE SIZES AVAILABLE**

1/4"
(DN8)

3/8"
(DN10)

**END CONNECTIONS**

FNPT

BSPT

**COMMON APPLICATIONS**

AIR, OIL, WATER, GAS SERVICES

**DESIGN PRESSURE**

**MAXIMUM PRESSURE DROP: 600 psid
(41.4 Bard)**

The Model
MPRV-L is
a compact
regulator with a
Max Cv of .48

MAXIMUM CV:

.66

TEMPERATURE RANGE:

-325°F to +180°F (-198°C to +82°C)

MATERIALS:

Body - Bronze, ASTM B283,
C37700

Spring chamber - 316/316L SST, ASTM
A479

Trim - Brass, SST

Seat - TFE or Buna-N

Diaphragm - Metal: 302 SST,
Composition: Gylon, Buna-N

MODEL // PBE

The Model PBE has a compact body and functions in a dual role as a pressure building regulator and as an economizer relief regulator in one model. The pressure build feature controls the outlet pressure while the economizer feature operates to relieve any excess pressure in the system above set point from atmospheric to 600 psig.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)



END CONNECTIONS

FNPT

BSPT



COMMON APPLICATIONS

LIQUIFIED GAS IN STORAGE TANKS



DESIGN PRESSURE

**MAXIMUM PRESSURE DROP: 600 psid
(41.4 Bard)**

*The Model **PBE**
is a compact
pressure build/
economizer up
to 1/4".*

MAXIMUM CV:
.49

TEMPERATURE RANGE:
-325°F to +150°F (-198°C to +65°C)

MATERIALS:

Body - Brass: ASTM B16, Alloy 360

Spring chamber - Bronze: ASTM B283, C37700

Trim - BR

Seat - TFE

Diaphragm - Gylon, 302 SST

MODEL // **PBE-L**

The Model PBE-L has a compact, forged body and functions in a dual role as a pressure building regulator and as an economizer relief regulator in one model. The pressure build feature controls the outlet pressure while the economizer feature operates to relieve any excess pressure in the system above set point from atmospheric to 600 psig.

**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)



END CONNECTIONS

FNPT

BSPT



COMMON APPLICATIONS

LIQUIFIED GAS IN STORAGE TANKS



DESIGN PRESSURE

MAXIMUM PRESSURE DROP: 600 psid
(41.4 Bard)

*The Model **PBE-L** is a compact pressure build/economizer regulator.*

MAXIMUM CV:

1.5

TEMPERATURE RANGE:

-325°F to +150°F (-198°C to +65°C)

MATERIALS:

Body & Spring chamber - Bronze

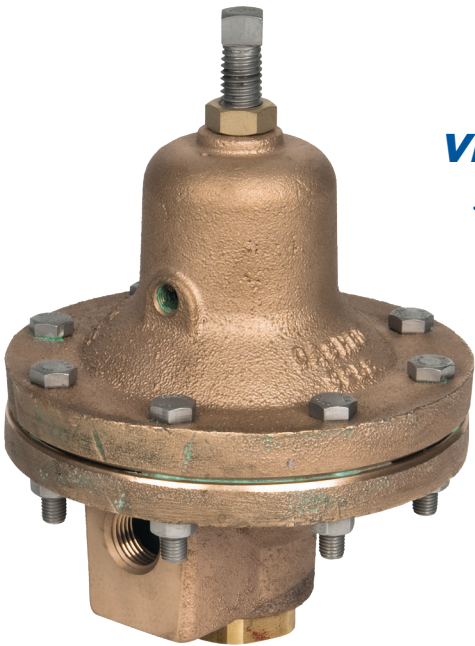
Trim - BR

Seat - TFE

Diaphragm - Metal: 302 SST,
Composition: Gylon

MODEL // PBE-H

The Model PBE has a compact body and functions in a dual role as a pressure building regulator and as an economizer relief regulator in one model. The pressure build feature controls the outlet pressure while the economizer feature operates to relieve any excess pressure in the system above set point from atmospheric to 250 psig.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)



END CONNECTIONS

FNPT

BSPT



COMMON APPLICATIONS

LIQUIFIED GAS IN STORAGE TANKS



DESIGN PRESSURE

**MAXIMUM PRESSURE DROP: 395 psid
(27.2 Bard)**

*The Model **PBE-H** is a pressure build/ economizer with Max Cv up to 1.80.*

MAXIMUM CV:
3.0

TEMPERATURE RANGE:
-325°F to +150°F (-198°C to +65°C)

MATERIALS:
Body & Spring chamber - Bronze:
ASTM B62 C83600
Trim - 316 SST
Seat - Metal: 316 SST, Composition:
TFE or Nylon
Diaphragm - TFE coated SST, SST or
Neoprene

MODEL // HP

The HP is a heavy-duty high-pressure regulator designed to control downstream pressure between 10 and 750 psig with inlet pressures as high as 3000 psig. Composition seat provides bubble-tight shutoff. Metal seating is available and metal seating surfaces can be stellite. This regulator is not designed to be used in steam applications.

**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)

3/4"
(DN20)

1"
(DN25)

1.5"
(DN40)



END CONNECTIONS

FNPT

**RF
FLANGED**

BSPT

**EXTENDED
NIPPLES**

**14" FACE
TO FACE**



COMMON APPLICATIONS

CLEAN GASES, BOTTLED GASES, LIQUIDS,
HYDROGEN



DESIGN PRESSURE

INLET: UP TO 3000 psig (207 Barg)

OUTLET: UP TO 750 psig (51.7 Barg)

The Model **HP** is a high-pressure regulator, the industry standard for differential service on seal all systems.

MAXIMUM CV:
UP TO 4

TEMPERATURE RANGE:
-20°F to +600°F (-201°C to +315°C)

MATERIALS:

Body & Spring chamber - CS, SST, Mn
BRZ

Trim - 316 SST

Seat - Metal: 316 SST, Composition:
TFE or Nylon

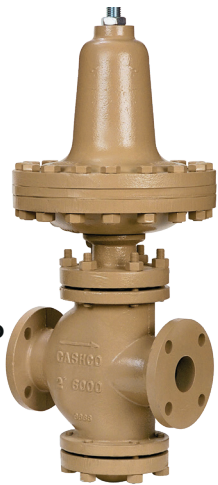
Diaphragm - TFE coated SST, SST or
Neoprene

MODEL // 8310LP/8310HP

The Model 8310LP and the Model 8310HP are some of the highest-capacity pressure reducing regulators we manufacture. Their balanced plug design and double-port construction yields outstanding performance even at very low pressure drops. Diaphragms are isolated from fluid velocity effects. Applications include a wide variety of fluids.



MODEL 8310LP
VIEW IN 3D!



MODEL 8310HP
VIEW IN 3D!



LINE SIZES AVAILABLE

1.5" (DN40)	2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)
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END CONNECTIONS

NPT	FLANGED	FLAT FACED	RAISED FACED	14" FACE TO FACE
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COMMON APPLICATIONS

AIR, INERT GASES, CHEMICALS,
WATER, FUEL OILS, STEAM



DESIGN PRESSURE

INLET: **HP** - UP TO 650 psig / **LP** - UP TO 200 psig
OUTLET: **HP** - 10 to 200 psig / **LP** - 1 to 30 psig
PRESSURE DROP: **HP** - UP TO 450 psid / **LP** - UP TO 200 psid

The Models **8310LP/8310HP** are self-contained, high-capacity regulators with double-seat design ideal for remote installation.

MAXIMUM CV:
UP TO 100

TEMPERATURE RANGE:
-20°F to +450°F (-29°C to +232°C)

MATERIALS:
Body - CI, CS
Spring chamber - DI, CS
Trim - SST
Seat - TFE, Rulon - 316 SST, Stellite
Diaphragm - 302 SST, Neoprene, F.C. Elastomer

SEAT LEAKAGE:
FCI 70-2

MODEL // 345

The Model 345 utilizes a piston design to handle high pressures. With optional nylon or TFE seats, it can control downstream pressures between 50 and 300 psig with inlet pressures as high as 4000 psig. A metal-seated version with an unbalanced trim design is also available. The Model 345 is used primarily as a first-stage letdown valve on high-pressure applications. It is not designed to be used in steam applications.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)

3/4"
(DN20)

1"
(DN25)



END CONNECTIONS

NPT

FLANGED

**14" FACE
TO FACE**



COMMON APPLICATIONS

LET DOWN VALVE ON HIGH PRESSURE APPLICATIONS,
CLEAN GASES, BOTTLED GASES, LIQUIDS



DESIGN PRESSURE

INLET: UP TO 4000 psig (275 Barg)

OUTLET: 50-3000 psig (3.4-206 Barg)

PRESSURE DROP: UP TO 3000 psid

The Model 345 is a heavy-duty, high-pressure regulator commonly found in hydraulic or gaseous service.

MAXIMUM CV:
UP TO 1.8

TEMPERATURE RANGE:
UP TO +400°F (204°C)

MATERIALS:

Body - Alum. BRZ, SST

Spring chamber - BRZ

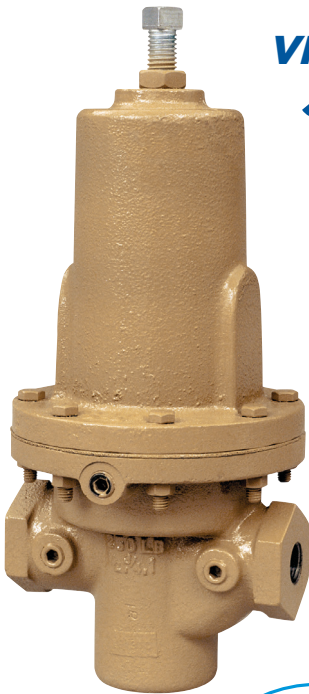
Trim - 316 SST

Seat - Metal: 316 SST, Stellite

Composition: TFE, Nylon

MODEL // DA1

The DA1 is an excellent pressure reducing regulator for all fluid types. Whether it is GOX or a viscous fluid, the Model DA1 is able to provide constant and accurate control through the necessary range of flow of your application. The regulator features a high-flow design with balanced trim as a standard. The balanced trim allows rangeability up to 1000:1 for varying flows with every little change in set pressure. Due to the high capacities these regulators provide, it is now possible to install regulators where control valves were once needed. This allows additional savings since controllers, positioners and auxiliary air supply are no longer needed.



**VIEW IN
3D!**

LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	

*The Model **DA1** is a high capacity pressure reducing regulator.*



END CONNECTIONS

NPT	EXTENDED NIPPLES	BSPT	14" FACE TO FACE	EXTENSION TUBE ENDS	FLANGED
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COMMON APPLICATIONS

CLEAN FLUIDS, ATMOSPHERIC INDUSTRIAL GASES, NATURAL GAS, AIR, OIL, WATER, STEAM, CORROSIVE & NON-CORROSIVE CHEMICAL SERVICES



DESIGN PRESSURE

INLET: 10-1480 psig (0.69-102.1 Barg)
OUTLET: 1-450 psig (0.07-34.5 Barg)

MAXIMUM CV:

198

TEMPERATURE RANGE:

-425°F to +400°F
(-253°C to +204°C)

MATERIALS:

Body - BRZ, DI, CS, HC, Duplex SST, 316 SST

Spring chamber - BRZ, DI, CS, Duplex SST, 316 SST

Trim - 17-PH SST, 316L SST, Monel

Seat - PolyAll, V-TFE, GF-TFE, C+TFE, NBR, BC, FKM

Diaphragm - Composition: BC, EPR, FKM, FK, NBR, FKM + TFE, Elast. TFE

Metal: Be-Cu

MODEL // DA2

The DA2 is a positive bias differential pressure reducing regulator for all fluid types. Much like the DA1, the ability to allow varying flows with little change in set pressure makes this an ideal regulator for high accuracy applications.

**VIEW IN
3D!**



LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	3" (DN80)	4" (DN100)		

*The Model **DA2** is a positive bias differential pressure reducing regulator*



END CONNECTIONS

NPT	EXTENDED NIPPLES	BSPT	14" FACE TO FACE	EXTENSION TUBE ENDS	FLANGED
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COMMON APPLICATIONS

CLEAN FLUIDS, ATMOSPHERIC INDUSTRIAL GASES, NATURAL GAS, AIR, OIL, WATER, STEAM, CORROSIVE & NON-CORROSIVE CHEMICAL SERVICES



DESIGN PRESSURE

INLET: 10-3705 psig (0.69-255 Barg)
OUTLET: 5-1500 psig (0.34-103.4 Barg)

MAXIMUM CV:

196

TEMPERATURE RANGE:

-425°F to +400°F
(-253°C to +204°C)

MATERIALS:

Body & Spring Chamber - BRZ, DI, CS, 316 SST

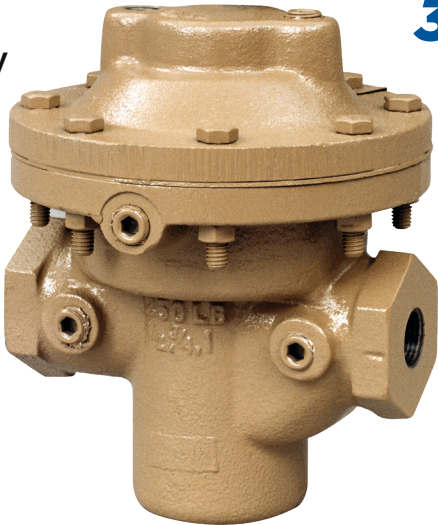
Trim - 17-PH SST, 316L SST, Monel

Seat - PolyAll, V-TFE, GF-TFE, C+TFE, Buna-N, BC

Diaphragm - Composition: BC, EPR, FKM, FK, NBR, FKM + TFE, Elast. TFE
Metal: Be-Cu

MODEL // DA4

The DA4 is a dome loaded, high-capacity reducing regulator. Much like the DA1, the ability to allow varying flows with little change in set pressure makes this an ideal regulator for high accuracy applications. The DA4 and the DA6 are ideal solutions for automating your pressure control systems.



VIEW IN
3D!

LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	

The Model DA4 is a dome loaded, high-capacity reducing regulator.

END CONNECTIONS



NPT	EXTENDED NIPPLES	BSPT	14" FACE TO FACE	EXTENSION TUBE ENDS	FLANGED
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COMMON APPLICATIONS



CLEAN FLUIDS, ATMOSPHERIC INDUSTRIAL GASES, NATURAL GAS, AIR, OIL, WATER, STEAM, CORROSIVE & NON-CORROSIVE CHEMICAL SERVICES

DESIGN PRESSURE



INLET: 10-3705 psig (0.69-255 Barg)
DROP: 5-1500 psid (0.34-103.4 Bard)

MAXIMUM CV:
198

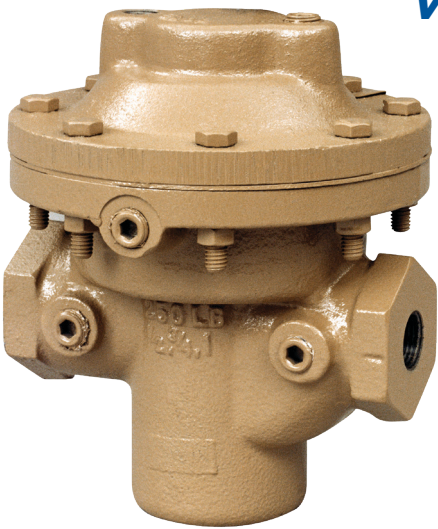
TEMPERATURE RANGE:
-425°F to +400°F (-253°C to +204°C)

MATERIALS:

Body & Cover Dome - BRZ, DI, CS,
Duplex SST, 316 SST
Trim - 17-PH SST, 316L SST, Monel
Seat - PolyAll, V-TFE, GF-TFE,
C+TFE, BC, NBR, FKM
Diaphragm - Composition: BC, EPR,
FKM, FK, NBR, FKM + TFE, Elast. TFE,
Metal: Be-Cu

MODEL // DAP

The DAP is a pressure loaded pressure reducing regulator for all fluid types. Much like the DAO, the ability to allow varying flows with little change in set pressure makes this an ideal regulator for high accuracy applications. The difference is the larger piston design, which allows for higher outlet pressures with lower pressure drops across the valve.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.5" (DN40)	2" (DN50)
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END CONNECTIONS

NPT	FLANGED	BSPT
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COMMON APPLICATIONS

CLEAN FLUIDS, ATMOSPHERIC INDUSTRIAL GASES, NATURAL GAS, AIR, OIL, WATER, STEAM, CORROSIVE & NON-CORROSIVE CHEMICAL SERVICES



DESIGN PRESSURE

INLET: 3600 psig (248.2 Barg)
OUTLET: 1125 psig (84.4 Barg)

*The Model **DAP** is a large piston/pilot operated gaseous pressure reducing regulator.*

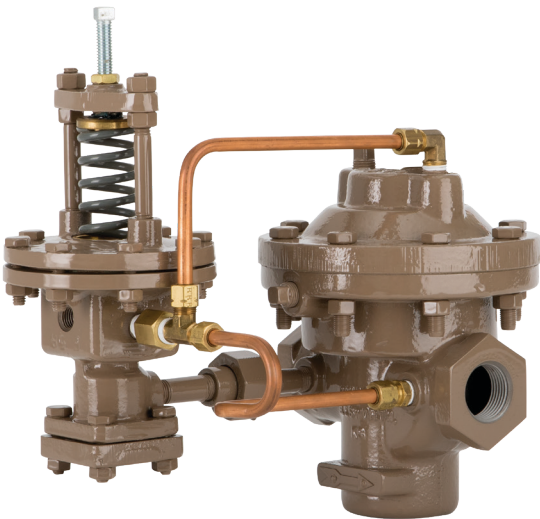
MAXIMUM CV:
50

TEMPERATURE RANGE:
-20°F to +400°F (-29°C to +204°C)

MATERIALS:
Body & Cover Dome - SST
Trim - 17-PH SST, 316L SST
Seat - V-TFE, PA, C-TFE

MODEL // DAO

The DAO is a pilot-operated steam reducing regulator with a piston design. The internal pressure balanced plug/piston provides high flow capacity and moderate pressure drop capability. Much like the DAP, the ability to allow varying flows with little change in set pressure makes this an ideal regulator for high accuracy applications. Apply in steam service applications only.



**VIEW IN
3D!**

LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	



END CONNECTIONS

NPT	FLANGED
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COMMON APPLICATIONS STEAM SERVICE



DESIGN PRESSURE

INLET: 35-400 psig (2.4-27.6 Barg)
OUTLET: 2-215 psig (0.13-14.8 Barg)

*The Model **DAO** is a small piston/pilot operated steam pressure reducing regulator.*

MAXIMUM CV:
209

TEMPERATURE RANGE:
+100°F to +406°F (+38°C to +208°C)

MATERIALS:
Body & Cover Dome - DI, CS
Trim - 17-PH SST
Seat - GF-TFE

MODEL // PGR-1

Model PGR-1 is high performance, pressure loaded diaphragm-type, flow-to-open pressure reducing regulator. Design includes an internal pressure balancing piston-cylinder that provides high flow capacity. The internal trim design allows the same basic unit to cover a broad range of pressure settings. Performance meets or exceeds that of competitive pressure loaded or pilot-operated designs. The PGR-1 regulator is applied primarily in clean, natural gaseous service and fuel gas - sweet or sour.



VIEW IN 3D!



LINE SIZES AVAILABLE

1" (DN25)	1.5" (DN40)	2" (DN50)	3" (DN80)	4" (DN100)
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END CONNECTIONS

NPT	FLANGED
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COMMON APPLICATIONS

CLEAN NATURAL GASEOUS SERVICE, FUEL GAS - SWEET OR SOUR



DESIGN PRESSURE

INLET: 10-400 psig (0.68-27.6 Barg)
OUTLET: 2.0" WC-200 psig (13.8 Barg)

*The Model **PGR-1** is a precise pressure reducing regulator.*

MAXIMUM CV:
198

TEMPERATURE RANGE:
-70°F to +250°F (-56°C to +121°C)

MATERIALS:
Body/Cover Dome - DI/DI,
CS/CS, SST/SST

MODEL // ULR-1

Model ULR-1 is high performance, pressure loaded diaphragm-type, flow-to-open pressure reducing regulator. Design includes an internal pressure balancing piston-cylinder that provides high flow capacity and high pressure drop capability. The internal trim design allows the same basic unit to cover a broad range of pressure settings. Performance meets or exceeds that of competitive pressure loaded or pilot-operated designs. A back pressure regulator or "unloader" is piped to the top of the dome and is "set" to control the outlet pressure of the pressure reducing regulator.



VIEW IN
3D!

LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	



END CONNECTIONS

NPT	FLANGED	BSPT	14" FACE TO FACE
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COMMON APPLICATIONS
GASEOUS SERVICE, ATMOSPHERIC
INDUSTRIAL GASES



DESIGN PRESSURE
MAX. OPERATING: 525 psig (36.2 Barg)
OUTLET: 2-400 psig (0.13-27.6 Barg)

The Model **ULR-1** is an economical, high-capacity precision regulator.

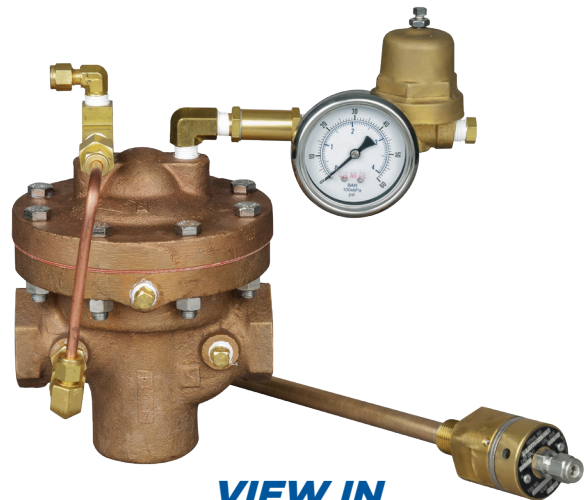
MAXIMUM CV:
198

TEMPERATURE RANGE:
-50°F to +400°F (-45°C to +204°C)

MATERIALS:
Body/Cover Dome - BRZ/BRZ
SST/SST

MODEL // PTR-1

Model PTR-1 is high performance, pressure loaded diaphragm-type, flow-to-open pressure reducing regulator. Design includes an internal pressure balancing piston-cylinder that provides high-flow capacity and high pressure drop capability. Performance meets or exceeds that of competitive pressure loaded or pilot-operated designs. A back pressure regulator or "unloader" is piped to the top of the dome and is "set" to control the outlet pressure of the pressure reducing regulator. In addition, a low-temperature probe (pneumatic controller) with an integral, rigid insertion bulb and invar rod is installed up-stream of the Model PTR-1. When the exposed outer sheath senses a change in the process temperature below the minimum temperature set point of the probe, it vents loading pressure from the dome of the regulator and allows it to close.



**VIEW IN
3D!**

LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	



END CONNECTIONS

NPT	FLANGED	BSPT
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COMMON APPLICATIONS
GASEOUS SERVICE, ATMOSPHERIC
INDUSTRIAL GASES



DESIGN PRESSURE
MAX. OPERATING: 525 psig (36.2 Barg)
OUTLET: 2.0-400 psig (0.13-27.6 Barg)

*The Model
PTR-1 is
a precise
temperature
control
regulator.*

MAXIMUM CV:

198

TEMPERATURE RANGE:

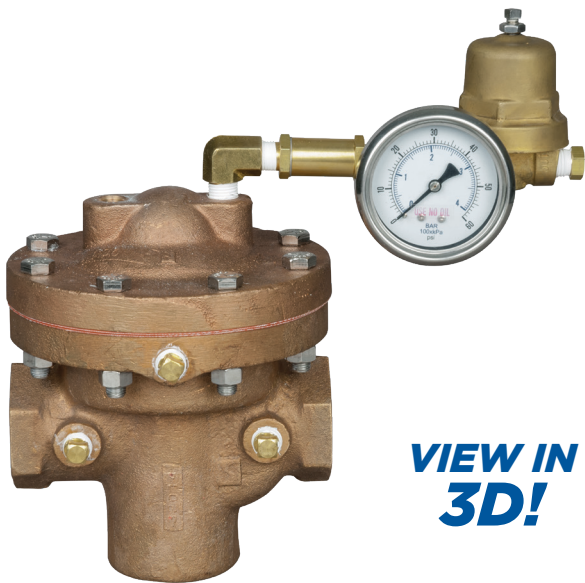
-325°F to +400°F (-198°C to +204°C)

MATERIALS:

Body/Cover Dome - BRZ/BRZ
SST/SST

MODEL // ALR-1

Model ALR-1 is a high performance, pressure loaded diaphragm-type, flow-to-open pressure reducing regulator. Design includes an internal pressure balancing piston-cylinder that provides high flow capacity and high pressure drop capability. The internal trim design allows the same basic unit to cover a broad range of pressure settings. Performance meets or exceeds that of competitive pressure loaded or pilot-operated designs. A back pressure regulator or "unloader" is used to maintain outlet pressure through an auxiliary gas supply.



LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	



END CONNECTIONS

NPT	FLANGED	BSPT
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COMMON APPLICATIONS
ATMOSPHERIC INDUSTRIAL GASES - GN₂,
GOX, Ar, He, H₂, CO₂



DESIGN PRESSURE
MAX. OPERATING: 525 psig (36.2 Barg)
OUTLET: 2-400 psig (0.13-27.6 Barg)

The Model
ALR-1 uses
auxiliary gas
supply to load
the dome.

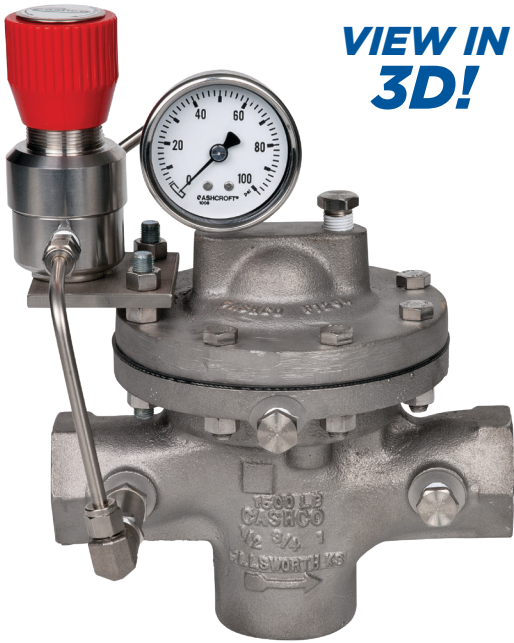
MAXIMUM CV:
198

TEMPERATURE RANGE:
-50°F to +400°F (-45°C to +204°C)

MATERIALS:
Body/Cover Dome - DI/DI,
BRZ/BRZ, CS/DI, BRZ/DI, CS/
CS, SST/SST, SST/DI, SST/CS

MODEL // SLR-1

Model SLR-1 is high performance, self-relieving and reducing regulator. Design includes an internal pressure balancing piston-cylinder that provides high flow capacity and high pressure drop capability. The internal trim design allows the same basic unit to cover a broad range of pressure settings. Performance meets or exceeds that of competitive pressure loaded or pilot-operated designs.



LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	



END CONNECTIONS

NPT	FLANGED	BSPT	14" FACE TO FACE
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COMMON APPLICATIONS
GASEOUS SERVICE, ATMOSPHERIC
INDUSTRIAL GASES



DESIGN PRESSURE
MAX. OPERATING: 750 psig (51.7 Barg)
OUTLET: 0.5-750 psig (0.13-51.7 Barg)

The Model **SLR** is a high performance, self relieving, pressure reducing regulator.

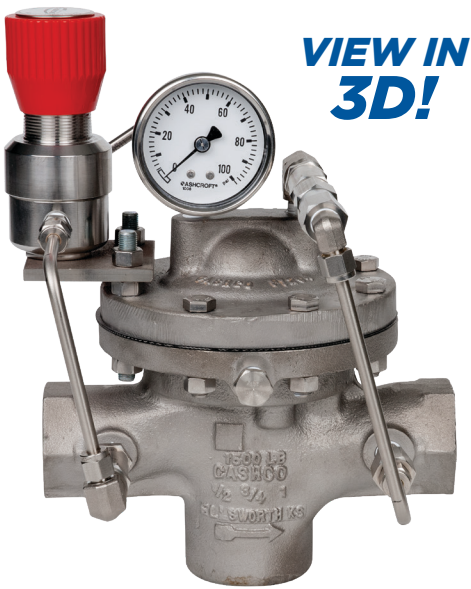
MAXIMUM CV:
198

TEMPERATURE RANGE:
-50°F to +400°F (-45°C to +204°C)

MATERIALS:
Body/Cover Dome - DI/DI,
BRZ/BRZ, CS/DI, BRZ/DI, CS/
CS, SST/SST, SST/DI, SST/CS

MODEL // SLR-2

Model SLR-2 is a high performance, pressure loaded diaphragm-type, flow-to-open, non-relieving pressure reducing regulator. Design includes an internal pressure balancing piston-cylinder that provides high flow capacity and high pressure drop capability. Performance meets or exceeds that of competitive pressure loaded or pilot-operated designs. A non-relieving pressure regulator "loader" is bracket mounted to the top of the dome. The set point of the loader controls the upstream supply pressure into the dome to maintain the desired downstream pressure of the SLR-2. Pressure in the dome will constantly bleed out through a filter and check valve which is piped back into the outlet of the body of the pressure reducing regulator.



LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	



END CONNECTIONS

NPT	FLANGED	BSPT	14" FACE TO FACE
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COMMON APPLICATIONS

GASEOUS SERVICE, ATMOSPHERIC INDUSTRIAL GASES,
CORROSIVE & NON-CORROSIVE CHEMICAL GAS



DESIGN PRESSURE

MAX. OPERATING: UP TO 3600 psig (248 Barg)
OUTLET: 0.5-1250 psig (0.13-86.1 Barg)

The Model
SLR-2 is a high
performance,
non-relieving,
pressure reducing
regulator.

MAXIMUM CV:
198

TEMPERATURE RANGE:
- 50°F to +400°F (-45°C to +204°C)

MATERIALS:
Body/Cover Dome - DI/DI,
BRZ/BRZ, CS/DI, BRZ/DI, CS/
CS, SST/SST, SST/DI, SST/CS

MODEL // P1

The Model P1 is designed for gases and liquids with inlet pressures up to 3600 psig (248 Barg). Standard adjustable outlet ranges from 1-10 psig (.07-.69 Barg) thru 10-750 psig (.69-51.7 Barg). Flow coefficient of 0.02, 0.06 and 0.20 available. This versatile point of use regulator can be ordered with a variety of options to meet your system demands. Standard construction includes a 40 micron integral filter, adjustment knob and diffusion resistant stainless steel diaphragm.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)

3/8"
(DN10)

1/2"
(DN15)



END CONNECTIONS

FNPT

**TUBE
ENDS**

TRI-CLAMP



COMMON APPLICATIONS

ANALYZER SYSTEMS, GAS CABINETS,
CORROSIVES, HIGH PURITY GAS, HYDROGEN



DESIGN PRESSURE

INLET: UP TO 3600 psig (248 Barg)

OUTLET: UP TO 750 psig (51.7 Barg)

*The Model **P1** is a
single-stage, high
pressure reducing
regulator*

CV CAPABILITY:

0.02, 0.06 AND 0.20

TEMPERATURE RANGE:

-325°F to +500°F (-198°C to +260°C)

MATERIALS:

Body/Spring Chamber - 316L
SST, Brass/6061 AL

MODEL // P2

The Model P2 is designed for gases with inlet pressures up to 3600 psig (248 Barg). Standard adjustable outlet ranges from 1-10 psig (.07-.69 Barg) thru 10-750 psig (.69-51.7 Barg). Flow coefficient of 0.02, 0.06 and 0.20 available. This versatile cylinder gas regulator can be ordered with a variety of options to meet your system demands. Standard construction includes a 40 micron integral filter, adjustment knob and diffusion resistant stainless steel diaphragm. Gauges and CGA fittings are optional.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)

3/8"
(DN10)

1/2"
(DN15)



END CONNECTIONS

FNPT

CGA



COMMON APPLICATIONS

CYLINDER GAS, CALIBRATION GAS,
LASER GAS, MEDICAL GAS



DESIGN PRESSURE

INLET: UP TO 3600 psig (248.2 Barg)
OUTLET: 1-750 psig (0.07-51.7 Barg)

*The Model **P2**
is a single stage
cylinder gas high
pressure reducing
regulator.*

CV CAPABILITY:

0.02, 0.06 AND 0.20

TEMPERATURE RANGE:

-325°F to +500°F (-198°C to +260°C)

MATERIALS:

Body/Spring chamber – 316L
SST, Brass/6061 AL

MODEL // P3

The Model P3 is a 2-stage regulator designed for gases with inlet pressures up to 3600 psig (248 Barg). Standard adjustable outlet ranges from 1-10 (.07-.69 Barg) thru 10-750 psig (.69-51.7 Barg). Flow coefficient of 0.02, 0.06 and 0.20 available. This versatile cylinder gas regulator can be ordered with a variety of options to meet your system demands. Standard construction includes a 40 micron integral filter, adjustment knob and diffusion resistant stainless steel diaphragm. Gauges and CGA fitting are optional.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)

3/8"
(DN10)

1/2"
(DN15)



END CONNECTIONS

FNPT

CGA



COMMON APPLICATIONS

CYLINDER GAS, CARRIER GAS,
CALIBRATION GAS, LASER GAS,
MEDICAL GAS



DESIGN PRESSURE

INLET: UP TO 3600 psig (248.2 Barg)

OUTLET: 1-500 psig (0.07-34.5 Barg)

*The Model **P3**
is a two stage
cylinder high gas
pressure reducing
regulator.*

CV CAPABILITY:

0.02, 0.06 AND 0.08

TEMPERATURE RANGE:

-325°F to +400°F (-198°C to +204°C)

MATERIALS:

Body/Spring chamber – 316L
SST, Brass/6061 AL

MODEL // P4

The Model P4 is designed for gases with inlet pressures up to 3600 psig (248 Barg). Standard adjustable outlet ranges from 1-10 psig (.07-.69 Barg) through 10-500 psig (.69-34.4 Barg). Flow coefficient of .6 Cv available. This versatile point of use regulator can be ordered with a variety of options to meet your system demands. Standard construction includes a 40 micron integral filter, adjustment knob and diffusion resistant stainless steel diaphragm.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

3/8" (DN10)	1/2" (DN15)
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END CONNECTIONS

FNPT	TUBE ENDS	TRI-CLAMP
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COMMON APPLICATIONS

CORROSIVE, HIGH PURITY GAS



DESIGN PRESSURE

INLET: UP TO 3600 psig (248.2 Barg)
OUTLET: 1-500 psig (0.07-34.5 Barg)

*The Model **P4**
is a balanced
pressure
reducing
regulator.*

MAXIMUM CV:
.6

TEMPERATURE RANGE:
-55°F to +275°F (-48.2°C to +135°C)

MATERIALS:
Body/Spring chamber – 316L
SST, Brass/6061 AL

MODEL // P5

The Model P5 is a piston designed regulator for gases and liquids with inlet pressures up to 3600 psig (248 Barg). Flow coefficient of 0.06. This general purpose use regulator can be ordered with a variety of options to meet your system demands. Standard construction includes a 40 micron integral filter, adjustment knob and diffusion resistant stainless steel diaphragm.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

- 1/4" (DN8)
- 3/8" (DN10)
- 1/2" (DN15)



END CONNECTIONS

- FNPT



COMMON APPLICATIONS

INJECTION MOLDING EQUIPMENT, HIGH PRESSURE GAS BOOSTER SYSTEMS, GAS CABINETS, RESEARCH & DEVELOPMENT LABORATORIES



DESIGN PRESSURE

INLET: UP TO 3600 psig (248.2 Barg)
OUTLET: 50-1500 psig (3.4-103 Barg)

*The Model
P5 is a piston
designed reducing
regulator*

MAXIMUM CV:

.06

TEMPERATURE RANGE:

-55°F to +300°F (-48°C to +149°C)

MATERIALS:

Body/Spring chamber - 316L
SST

SEAT LEAKAGE:

BUBBLE TIGHT

MODEL // P7

The Model P7 is a piston designed regulator that safely reduces inlet pressures of up to 4500 psig (310 Barg) and accurately delivers high gas flows throughout the 10-1500 psig (.69-103.4 Barg) range. This self-venting unit can be furnished as a non-venting regulator for hydraulic applications.



VIEW IN
3D!



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)
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END CONNECTIONS

FNPT	RF FLANGED
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COMMON APPLICATIONS

HYPERBARIC CHAMBERS, AIR COMPRESSORS, PRESSURIZED BALLAST TANKS, HIGH PRESSURE TESTING, LIFE SUPPORT APPLICATIONS, MANIFOLD SYSTEMS, TUBE TRAILERS, GAS TRANSFER STATIONS



DESIGN PRESSURE

INLET: UP TO 4500 psig (310.3 Barg)
OUTLET: 10-1500 psig (0.69-103.4 Barg)

The Model **P7**
can handle
pressure up to
4500 psig.

MAXIMUM CV:

2.0

TEMPERATURE RANGE:

0°F to +400°F (-17°C to +204°C)

MATERIALS:

Body/Spring chamber -
Brass/Brass or 316 SST/316 SST

MODEL // BQ

The Model BQ is designed for lower flow installations to control flow rates not covered by Model 123. It is often used in economizer circuits. It is also a popular cryogenic regulator and widely used in chemical process services.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)

3/8"
(DN10)

1/2"
(DN15)



END CONNECTIONS

NPT



COMMON APPLICATIONS

AIR, INERT GASES, CRYOGENIC GAS OR LIQUIDS, CHEMICALS, WATER, FUEL OIL, STEAM



DESIGN PRESSURE

MAXIMUM INLET PRESSURE: UP TO 400 psig (27.6 Barg)

*The Model **BQ** is for lower-flow and cryogenic applications.*

MAXIMUM CV:

2

TEMPERATURE RANGE:

-325°F to +600°F (-198°C to +315°C)

MATERIALS:

Body - DI, BRZ, CS, SST

Spring chamber - DI, BRZ, SST

Trim - BR, 316 SST

Seat - Metal: BR, SST, Composition:

Buna-N, TFE, EPDM, FKM

Diaphragm - Phos. BRZ, 302 SST,

Neoprene, EPDM, Elgiloy, NBR, FKM

MODEL // BR

The Model BR is a versatile back-pressure regulator, available either in a globe style or angular porting configuration. Controlling inlet pressures up to 120 psig, it can be utilized in a majority of the general industrial pressure relief applications.



LINE SIZES AVAILABLE

3/8" (DN10)	1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.5" (DN40)	2" (DN50)
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END CONNECTIONS

NPT	RF FLANGED	BSPT	BSPP	EXTENDED NIPPLES
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*The Model **BR** is a flow thru, back pressure regulator with set pressures up to 200 psig.*



COMMON APPLICATIONS

CRYOGENIC LIQUIDS, SOUR GAS, INDUSTRIAL GASES, CHEMICALS, WATER, OIL, STEAM, COMPRESSED AIR



DESIGN PRESSURE

INLET: 2-120 psig (0.14-8.3 Barg)
PRESSURE DROP: UP TO 260 psid

MAXIMUM CV:
UP TO 14.5

TEMPERATURE RANGE:
-325°F to +400°F (-198°C to +204°C)

MATERIALS:

- Body & Spring chamber - CS, 316 SST
- Trim - BR, 416 SST, 316 SST
- Seat - Metal: BR, SST,
Composition: Buna-N, TFE, EPR, Neoprene
- Diaphragm - Phos. BRZ, 302 SST, Neoprene, F.C. Elastomer, EPDM, NBR, FK, Gylon

MODEL // 123

With five body materials and twenty-three trim material combinations, the Model 123 is compatible with most fluids. It can handle a wide range of flow and pressure settings to match nearly any back-pressure application up to a 2" line size. The regulator offers four composition seat materials and controlled compression with metal-to-metal back-up for long life and trouble-free operation.

**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)

3/4"
(DN20)

1"
(DN25)

1.5"
(DN40)

2"
(DN50)



END CONNECTIONS

NPT

FLANGED

**EXTENDED
NIPPLES**

*The Model 123 is
a highly versatile
back pressure
regulator.*



COMMON APPLICATIONS

AIR, INERT GASES, CRYOGENIC GAS OR LIQUIDS,
SOUR GAS, CHEMICALS, WATER, FUEL OIL, STEAM



DESIGN PRESSURE

**MAXIMUM PRESSURE DROP: 350 psid
(24.14 Bard)**

MAXIMUM CV:
UP TO 7

TEMPERATURE RANGE:
-325°F to +450°F (-198°C to +204°C)

MATERIALS:

Body & Spring chamber - CI, BRZ,
CS, LCC, 316 SST

Trim - BRZ, 416 SST, 316 SST

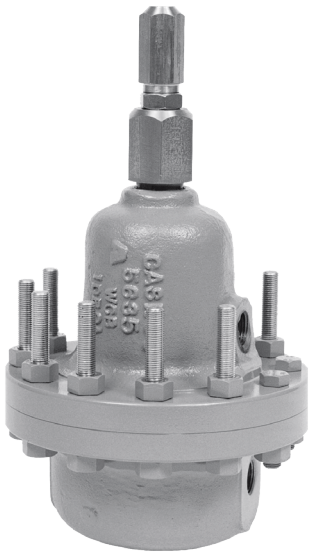
Seat - Metal: BR, 416 SST, 316 SST,
Stellite Composition: Buna-N, TFE, EPR,
F.C. Elastomer

Diaphragm - Phos. BRZ, 302 SST,
Neoprene, F.C. Elastomer, EPDM, Buna N

MODEL // **123-1+6+S**

The Model BR is a versatile back-pressure regulator, available either in a globe style or angular porting configuration. Controlling inlet pressures up to 120 psig, it can be utilized in a majority of the general industrial pressure relief applications.

**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.5" (DN40)
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END CONNECTIONS

NPT	RF FLANGED
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COMMON APPLICATIONS

LIQUID, GASEOUS SERVICES



DESIGN PRESSURE

INLET: UP TO 1500 psig (103 Barg)
OUTLET: UP TO 1480 psig (102 Barg)

CV CAPABILITY:
UP TO 7.5

TEMPERATURE RANGE:
-20°F to +400°F (-29°C to +205°C)

MATERIALS:
Body & Spring chamber – CS

MODEL // **1171**

The Model 1171 is a back pressure/relief regulator suitable for most liquid and gas applications including pump by-pass and modulating back pressure relief services.

**VIEW IN
3D!**

**LINE SIZES AVAILABLE**

3/8"
(DN10)

**END CONNECTIONS**

NPT

**COMMON APPLICATIONS**

INDUSTRIAL GASES, AIR, OIL,
STEAM, WATER

**DESIGN PRESSURE**

INLET: UP TO 300 psig (20.7 Barg)

*The Model **1171**
brass-bodied BPR
is for low-flow
general service.*

MAXIMUM CV:

.68

TEMPERATURE RANGE:

-325°F to +400°F (-198°C to +204°C)

MATERIALS:

Body - Brass

Spring chamber - BRZ

Trim - BR

Seat - Metal: BR, Composition:

TFE

Diaphragm - Phos. BRZ,

Neoprene, FKM

MODEL // 3171

Model 3171 is designed to handle low to mid-range flow rates. It can control inlet pressure to set point levels between 5 and 200 psig. Stainless steel body construction from 316 barstock virtually eliminates porosity and corrosion.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)



END CONNECTIONS

TRI-CLAMP



COMMON APPLICATIONS

PHARMACEUTICAL INDUSTRY, PROCESSED FOOD PRODUCTION,
COSMETICS PRODUCTION, SPECIALTY CHEMICALS



DESIGN PRESSURE

INLET: UP TO 240 psig (16.5 Barg)
OUTLET: UP TO 200 psig (13.8 Barg)

CV RANGE:

FROM 0.01-0.3

TEMPERATURE RANGE:

-20°F to +400°F (-29°C to +205°C)

MATERIALS:

316 SST barstock

TRIM:

Diaphragm - 302 SST or EPDM
Seat - 316 SST or TFE

MODEL // 1164

The Model 1164 back pressure regulator is equipped with a variety of body and trim materials that make it compatible with many fluids and chemicals. Its large orifice and diaphragm combine sensitivity with high capacity.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

3/4"
(DN20)

1"
(DN25)

1.5"
(DN40)

2"
(DN50)



END CONNECTIONS

NPT



COMMON APPLICATIONS

AIR, INERT GASES, CHEMICALS, WATER,
FUEL OIL, STEAM



DESIGN PRESSURE

MAXIMUM INLET PRESSURE: 225 psig
(15.5 Barg)

*The Model **1164**
is an economical
back pressure
regulator.*

MAXIMUM CV:

UP TO 15.7

TEMPERATURE RANGE:

-20°F to +400°F (-29°C to +205°C)

MATERIALS:

Body - DI, BRZ, CS

Spring chamber - CI, BRZ, CS

Trim - 416 SST, 316 SST, 302 SST

Seat - Metal: 316 SST, Composition: TFE

Diaphragm - Phos. BRZ,

TFE-coated, 302 SST

MODEL // 6987

This heavy-duty, angle-bodied back pressure regulator can handle high inlet and outlet pressure plus high pressure drops. Six range springs provide wide setpoint selection. Applications include fuel, oil, water, inert gases, air and chemicals.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)
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END CONNECTIONS

NPT	RF FLANGED	EXTENDED NIPPLES
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COMMON APPLICATIONS

AIR, INERT GASES, WATER, FUEL
OIL, CHEMICALS



DESIGN PRESSURE

**MAXIMUM INLET PRESSURE: 1500 psig
(103.4 Barg)**

*The Model 6987
is a heavy-duty
high-pressure back
pressure regulator.*

MAXIMUM CV:

FULL ORIFICE - UP TO 2.2
REDUCED ORIFICE - UP TO 1.1

MATERIALS:

Body - CS, SST
Spring chamber - CS
Trim - 316 SST
Seat - Metal: 316 SST, Stellite
Diaphragm - 302 SST

TEMPERATURE RANGE:

-20°F to +450°F (-29°C to +232°C)

MODEL // 2171

Model 2171 is similar in design and capacity to its brass-bodied counterpart, but its SST body and trim enable it to handle an even wider range of fluids.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)

3/8"
(DN10)

1/2"
(DN15)



END CONNECTIONS

NPT



COMMON APPLICATIONS

INDUSTRIAL GASES, AIR, OIL, STEAM,
WATER, CHEMICALS



DESIGN PRESSURE

INLET STANDARD: UP TO 300 psig
(20.7 Barg)

*The Model **2171**
is a stainless
steel low-flow
back pressure
regulator.*

MAXIMUM CV:

.76

TEMPERATURE RANGE:

-325°F to +400°F (-198°C to +204°C)

MATERIALS:

Body - 316L SST

Spring chamber - 316 SST, BRZ

Trim - 316 SST

Seat - Metal: 316 SST,

Composition: TFE

Diaphragm - 302 SST, Neoprene,

TFE-coated, 302 SST, FL Elastomer

MODEL // 8311HP & 8311LP

When air and electric controls are not available, these reliable high-capacity regulators can be used in place of control valves. Dual-port construction makes these our highest-capacity back pressure regulators. Both models share the same basic design, differing only in diaphragm size.

VIEW IN
3D!



LINE SIZES AVAILABLE

1.5" (DN40)	2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)
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END CONNECTIONS

NPT	FLANGED	RAISED FACED	FLAT FACED	14" FACE TO FACE
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COMMON APPLICATIONS

AIR, INERT GASES, CHEMICALS, WATER, FUEL OILS, STEAM



DESIGN PRESSURE

INLET PRESSURE:
LP VARIATION: UP TO 39 psig (2.69 Barg)
HP VARIATION: UP TO 260 psig (17.93 Barg)
PRESSURE DROP: UP TO 260 psid

The Models **8311HP** and **8311LP** are high-capacity regulators and ideal for remote installations.

MAXIMUM CV:
UP TO 100

TEMPERATURE RANGE:
-20°F to +450°F (-29°C to +232°C)

MATERIALS:

- Body - CI, CS
- Spring chamber - CI, DI, CS
- Trim - 316 SST
- Seat - Metal: 316 SST, Stellite
- Diaphragm - 302 SST, Neoprene, F.C. Elastomer

SEAT LEAKAGE:

Class II

MODEL // 31-B

The Model 31-B is a compact relief regulator designed expressly for use as a back pressure regulator or bypass valve for controlling inlet pressure between 2 and 16 inches - W.C. (mm H₂O) range. Body is available in cast carbon steel or stainless steel materials only, Interior wetted trims for corrosive applications is standard.

**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2"
(DN15)

3/4"
(DN20)

1"
(DN25)

1.5"
(DN40)

2"
(DN50)



END CONNECTIONS

FNPT

**RF
FLANGED**

**EXTENDED
NIPPLES**

**14" FACE
TO FACE**



COMMON APPLICATIONS

INERT GAS OF FLUIDS THAT ARE
VOLATILE, CORROSIVE, LETHAL



DESIGN PRESSURE

MAXIMUM INLET & OUTLET: 50 psig
(3.44 Barg)

*The Model 31-B
is a back pressure
regulator that
maintains set points
as low as 2" W.C.*

MAXIMUM CV:
3.0

TEMPERATURE RANGE:
-30°F to +400°F (-34°C to +204°C)

MATERIALS:

Body & Spring chamber - CS, SST

Trim - 316 SST

Seat - Buna-N, Silicone, TFE, F.C.
Elastomer

Diaphragm - Buna-N, F.C. Elastomer

SEAT LEAKAGE:

Class VI

MODEL // CA-1

The Model CA-1 is a compact bronze or stainless steel back pressure regulator used to control inlet pressure level between atmospheric and 400 psig (27.6 Barg) by relieving excess pressure.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/8"
(DN6)

1/4"
(DN8)



END CONNECTIONS

FNPT



COMMON APPLICATIONS

LIQUID RECIRCULATION, FUEL OILS, AIR,
OIL, WATER, GAS SERVICES



DESIGN PRESSURE

SPRINGS FOR 2-400 psig (0.14-27 Barg)

*The Model **CA-1**
is a compact,
forged bronze
back pressure
regulator.*

MAXIMUM CV:
UP TO 0.46

TEMPERATURE RANGE:
-325°F to +300°F (-198°C to +149°C)

MATERIALS:

Body & Spring chamber - ASTM B62
C83600, ASTM A479 S31600/S31603
Trim - 316 SST
Seat - Metal: 303 SST, Brass B16
Diaphragm - Metal: 302 SST, Phos.
Bronze, Composition: Buna-N

MODEL // **CA-2**

The Model CA-2 is a compact bronze or stainless steel back pressure regulator used to control inlet pressure level between atmospheric and 610 psig (42.0 Barg) by relieving excess pressure.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)

3/8"
(DN10)

1/2"
(DN15)



END CONNECTIONS

NPT



COMMON APPLICATIONS

LIQUID RECIRCULATION, FUEL OILS, AIR,
OIL, WATER, GAS SERVICES



DESIGN PRESSURE

SPRINGS FOR 3-610 psig (0.2-42 Barg)

*The Model **CA-2**
is a compact,
forged bronze
back pressure
regulator.*

MAXIMUM CV:
0.97

TEMPERATURE RANGE:
-325°F to +300°F (-198°C to +149°C)

MATERIALS:

Body & Spring chamber - ASTM B62
C83600, ASTM A479 S31600/S31603
Trim - 316 SST
Seat - Metal: 303 SST, Monel® R-405
Diaphragm - Metal: 302 SST, Phos.
Bronze, Composition: Buna-N

MODEL // **CA5/SA5**

Models CA5 and SA5 are high performance spring-operated, flow-to-open back pressure regulators with an internal pressure balancing piston-cylinder that provides medium flow capacity and high pressure drop capability.

**VIEW IN
3D!**

**LINE SIZES AVAILABLE**

3/4"
(DN20)

1"
(DN25)

**END CONNECTIONS**

**TUBE
ENDS**

**COMMON APPLICATIONS**

GASEOUS OR LIQUID SERVICE, HIGH PURITY
OXYGEN, NITROGEN, HYDROGEN, HELIUM, ARGON

**DESIGN PRESSURE**

OPERATING: UP TO 300 psig (20.7 Barg)
OUTLET: 5-300 psig (0.34-20.7 Barg)

MATERIALS:

IC - ASTM A351, Gr. CF3M
BS - ASTM A479, Tp. 316L

TEMPERATURE:

-20°F to +400°F (-29°C to +205°C)

TRIM:

316L SST

SEAT:

PolyAll, V-TFE, CTFE

STATIC SEAL:

FFKM

DYNAMIC SEAL:

UC CTFE/SST

MODEL // C-BPV

The Model C-BPV controls inlet pressures in liquid and gaseous (non-steam) applications. Its range of set pressures is from 2 to 125 psig. Optional diaphragms, plugs and stems are made from FDA-approved materials. Model C-BPV is also 3A-approved.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

3/4"
(DN20)

1"
(DN25)

1.5"
(DN40)

2"
(DN50)

3"
(DN80)



END CONNECTIONS

TRI-CLAMP



COMMON APPLICATIONS

PHARMACEUTICAL INDUSTRY, PROCESSED FOOD PRODUCTION,
COSMETICS PRODUCTION, SPECIALTY CHEMICALS



DESIGN PRESSURE

INLET & OUTLET: UP TO 150 psig
(10.3 Barg)

CV RANGE:

From 4.4-27 Cv

TEMPERATURE RANGE:

40°F to 300°F (4°C to 149°C)

MATERIALS:

1" Investment Cast 316L SST
3/4"-3" Barstock 316L SST

TRIM:

Diaphragm - EPDM, FKM, Silicone
or Gylon
Stem & plug - 316L SST

MODEL // DA5

The DA5 is an excellent back pressure regulator for all fluid types. The regulator features a high flow design with standard balanced trim. The balanced trim allows rangeability up to 500:1; allowing for varying flows with very little change in set pressure. Due to the high capacities these regulators provide, it is now possible to install regulators where control valves once were needed. This allows additional savings since controllers, positioners and auxiliary air are not needed. The Model DA8 is similar to this regulator except it provides positive bias differential construction.



VIEW IN
3D!

LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	

The Model **DA5** is a high capacity self-contained back pressure regulator.

END CONNECTIONS



NPT	FLANGED	BSPT	EXTENDED PIPE NIPPLES	14" FACE TO FACE	EXTENSION TUBE ENDS
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COMMON APPLICATIONS



CLEAN FLUIDS, ATMOSPHERIC INDUSTRIAL GASES, NATURAL GAS, AIR, OIL, WATER, STEAM, CORROSIVE & NON-CORROSIVE CHEMICAL SERVICES

DESIGN PRESSURE



INLET: 1-675 psig (0.07-46.5 Barg)
DROP: 3-675 psid (0.21-46.5 Bard)

MAXIMUM CV:
187

TEMPERATURE RANGE:
-425°F to +400°F (-254°C to +204°C)

MATERIALS:

Body - BRZ, DI, CS, HC, 316 SST, Duplex SST
Spring chamber - BRZ, DI, CS, 316 SST, Duplex SST
Trim - 17-PH SST, 316L SST, Monel
Seat - PolyAll, V-TFE, GF-TFE, C+TFE, FKM
Diaphragm - Composition: BC, EPR, FKM, FK, NBR, FKM + TFE, Elast. TFE, Metal: Be-Cu

SEAT LEAKAGE:

Class IV or Class VI

MODEL // DA6

The DA6 is a pressure loaded back pressure regulator for all fluid types. Much like the DA5, the ability to allow varying flows with little change in set pressure makes this an ideal regulator for high accuracy applications. When the precision of automated controls cannot be sacrificed, the dome-loaded series is ideal. The ability to load the regulator with a wide variety of pilots, airsets and I/P transducers allows for accuracy and automation in a small inexpensive package.



**VIEW IN
3D!**

LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	2.5" (DN65)	3" (DN80)	4" (DN100)	

The Model **DA6** is a high capacity pressure loaded back pressure regulator.

END CONNECTIONS



NPT	FLANGED	BSPT	EXTENDED PIPE NIPPLES	14" FACE TO FACE	EXTENSION TUBE ENDS
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COMMON APPLICATIONS

CLEAN FLUIDS, ATMOSPHERIC INDUSTRIAL GASES, NATURAL GAS, AIR, OIL, WATER, STEAM, CORROSIVE & NON-CORROSIVE CHEMICAL SERVICES

DESIGN PRESSURE

INLET: 2.0 WC" - 750 psig (51.7 Barg)
DROP: 5-750 psid (0.34-51.7 Bard)

MAXIMUM CV:

187

TEMPERATURE RANGE:

-425°F to +400°F (-254°C to +204°C)

MATERIALS:

Body - BRZ, DI, CS, HC, 316 SST
Cover dome - BRZ, DI, CS, LCC, 316 SST
Trim - 17-PH SST, 316L SST, Monel
Seat - PolyAll, V-TFE, GF-TFE, C+TFE, FKM
Diaphragm - Composition: BC, EPR, FKM, FK, NBR, FKM + TFE, Elast. TFE, Metal: Be-Cu

SEAT LEAKAGE:

Class IV or Class VI

MODEL // DA8

The DA8 is a positive bias differential back pressure regulator for all fluid types. Much like the DA5, the ability to allow varying flows with little change in set pressure makes this an ideal regulator for high accuracy applications.



VIEW IN 3D!

LINE SIZES AVAILABLE



1/2" (DN15)	3/4" (DN20)	1" (DN25)	1.25" (DN32)	1.5" (DN40)
2" (DN50)	3" (DN80)	4" (DN100)		

The Model **DA5** is a high capacity self-contained back pressure regulator.

END CONNECTIONS



NPT	FLANGED	BSPT	EXTENDED PIPE NIPPLES	14" FACE TO FACE	EXTENSION TUBE ENDS
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COMMON APPLICATIONS



CLEAN FLUIDS, ATMOSPHERIC INDUSTRIAL GASES, NATURAL GAS, AIR, OIL, WATER, STEAM, NON-CORROSIVE CHEMICAL SERVICES

DESIGN PRESSURE



INLET: 10-750 psig (0.69-51.7 Barg)
DROP: 5-750 psid (0.34-51.7 Bard)

MAXIMUM CV:
187

TEMPERATURE RANGE:
-425°F to +400°F (-254°C to +204°C)

MATERIALS:

- Body - BRZ, DI, CS, 316 SST
- Spring chamber - BRZ, DI, CS, 316 SST
- Trim - 17-PH SST, 316L SST, Monel
- Seat - PolyAll, V-TFE, GF-TFE, C+TFE, FKM
- Diaphragm - Composition: BC, EPD, FKM, FK, NBR, FKM + TFE, Elast. TFE, Metal: Be-Cu

SEAT LEAKAGE:

Class IV or Class VI

MODEL // B2

The Model B2 is designed for gases and liquids with control ranges up to 750 psig (51.7 Barg). Flow coefficient of 0.10, 0.20 and 0.30 are available. This versatile back pressure regulator can be ordered with a variety of options to meet your system demands. Standard construction includes an adjustment knob and diffusion resistant stainless steel diaphragm.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/4"
(DN8)

3/8"
(DN10)

1/2"
(DN15)



END CONNECTIONS

NPT

**TUBE
ENDS**

TRI-CLAMP



COMMON APPLICATIONS

ECONOMIZER CIRCUIT, ANALYZER BACK PRESSURE, CORROSIVE, HIGH PURITY GAS



DESIGN PRESSURE

INLET: 1-750 psig (0.07-51.7 Barg)

*The Model **B2** is
a high pressure
back pressure
regulator.*

CV CAPABILITY:

0.05, 0.1, 0.2 AND 0.3

TEMPERATURE RANGE:

-45°F to +575°F (-42.7°C to +301°C)

MATERIALS:

Body/Spring chamber - 316L
SST/316L SST, Brass/6061 AL,
Brass/316L SST

MODEL // B7

The Model B7 is a self-contained, back pressure/relief regulator designed to control inlet setpoint pressure between 10-1150 psig.



**VIEW IN
3D!**



LINE SIZES AVAILABLE

1/2" (DN15)	3/4" (DN20)
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END CONNECTIONS

NPT	FLANGED	TRI-CLAMP
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COMMON APPLICATIONS

HYPERBARIC CHAMBERS, AIR COMPRESSORS, PRESSURIZED BALLAST TANKS, TUBE TRAILERS, GAS TRANSFER STATIONS



DESIGN PRESSURE

INLET: 10-1150 psig (.69-79.3 Barg)

*The Model **B7** is a back pressure regulator that maintains set points up to 1150.*

MAXIMUM CV:
2.5

TEMPERATURE RANGE:
-35°F to +400°F (-37°C to +204°C)

MATERIALS:
Body & Spring chamber - 316L SST/316L SST, ASTM A479 Brass/Brass, ASTM B16 Brass/316L SST
Trim - SST, Brass

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