



Neon
Controls

"Go Brighter. Go Neon."

Series 10

Pressure reducing regulator

Series 15

Single stage cylinder regulator



Series 15

Typical Applications

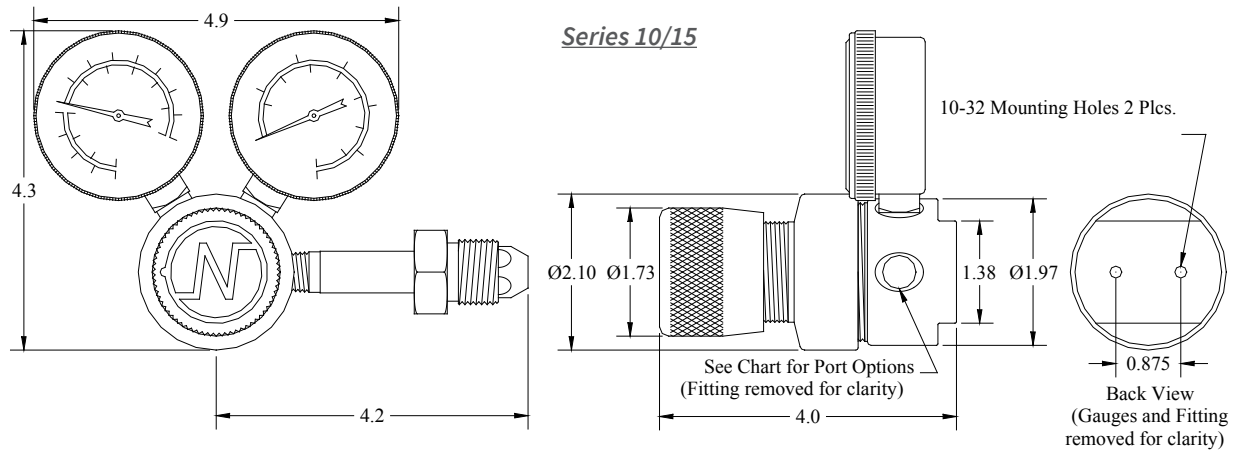
- Laboratory and Point-of-Use Gas systems in medical, pharmaceutical, food and beverage, and other high purity gas applications
- Process analyzer gases, metal fabrication, petrochemical, and specialty industrial gas cylinders

Features and Benefits

- Simple poppet and seat design for easy maintenance
- 10 micron filter element to protect the regulator seat
- 3 point sub-seat seal protects against leakage
- 2 year factory warranty

Neon 10 and 15 Series are compact, lightweight, high purity, single stage, pressure reducing regulators for specialty, flammable, and industrial gasses or liquids. We offer a multitude of outlet pressure, seat material, and flow coefficient options. Our sensitive, long life, 316L stainless steel diaphragms insure gas purity and integrity.

We offer a wide variety of body materials, porting options, and connections to meet your specific needs, while minimizing the internal unswept volume of the regulator. Regulators can be supplied with options such as installed pressure gauges, valves, and CGA assemblies.



All measurements in inches.



Series 10 Brass

Specifications

For questions about this product, please contact Neon Controls.

Operating Parameters

Pressure rating per criteria of CGA E-4; ASME B31; ASME BPVC

Maximum Inlet Pressure

6000 psig / 415 Bar

Maximum Outlet Pressure

10, 25, 50, 100, 250, 500, 750, 1000 psig
70, 175, 345, 690, 1725, 3450, 5170, 6895 kPa
.7, 2, 4, 7, 20, 35, 50, 70 Bar

Design Proof Pressure

150% of rated pressure

Leakage

Internal: Bubble tight

External: Designed to meet $< 2 \times 10^{-8}$ atm/cc He

Operating Temperature

-40°F to 185°F / -40°C to 85°C

Flow Capacity

0.03, 0.07, 0.24, 0.3

Wetted Materials

Body

Brass, Chrome Plated Brass, 316L Stainless Steel, Monel, Hastelloy C, Titanium

Seat

Tefzel, Peek, PCTFE, Vespel, Ceramic Filled Teflon

Filter

10 micron 316L Stainless Steel

Seal

Teflon, Viton

Diaphragm

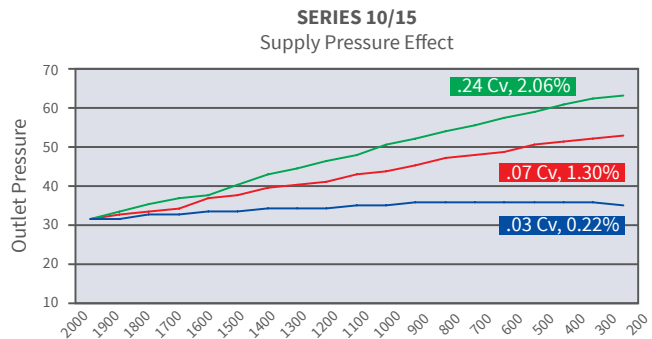
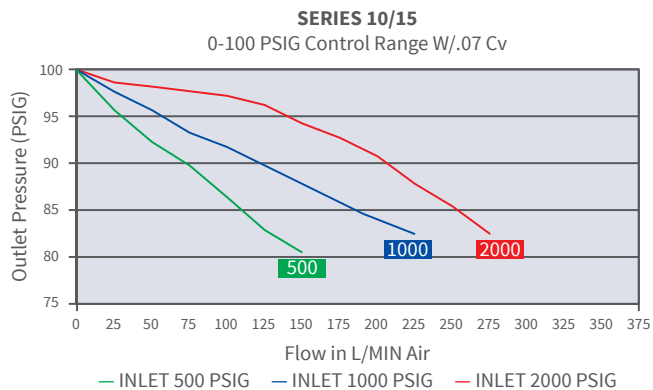
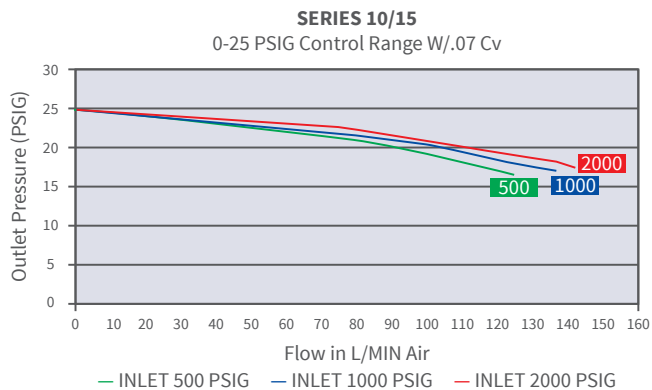
316L Stainless Steel with Tefzel Sealing Ring

Spring Housing

302 Stainless Steel, Chrome Plated Aluminum, Black Anodized Aluminum

Remaining Parts

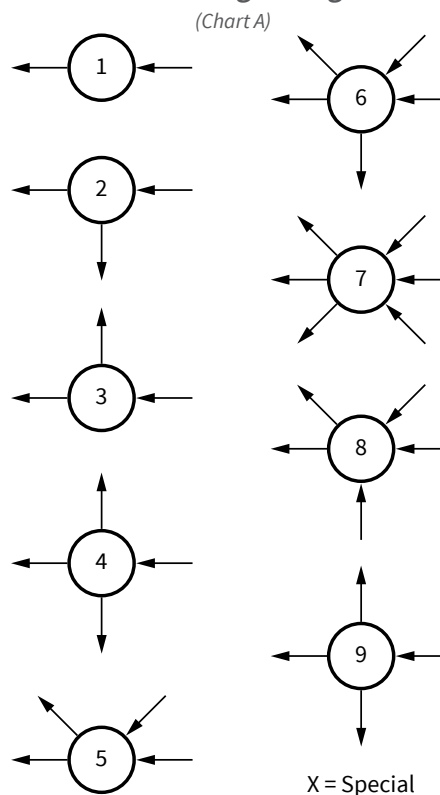
Inconel



15	-	2	4	5	B	1
Series	-	Body Mtl	Outlet Range	Porting	Connection	Gauges
10		1 - Brass	1 - 10 PSI	See Chart A	A - 1/8"	1 - with gauges
15		2 - 316L SS	2 - 25 PSI		B - 1/4"	2 - no gauges
		3 - Monel	3 - 50 PSI		C - 3/8"	3 - customer supplied
		4 - Hastelloy C	4 - 100 PSI			
		5 - Titanium	5 - 250 PSI		Others by request	
		6 - Chrome Brs	6 - 500 PSI			
			7 - 750 PSI			
			8 - 1000 PSI			

-	2	A	Z	1	-	580
-	Cv	Diaphragm	Seat	Cap	-	CGA
1 - 0.03		A - 316L SS	C - Ceramic	A - Chrm Al	With Acorn nut	Insert 3 digit portion of CGA number [optional]
2 - 0.07		w/Tefzel Ring	Filled Teflon	B - 302SS		
3 - 0.24			F - PCTFE	C - Anod Al		
4 - 0.30		B - 316LSS	K - Peek	D - Chrm Al PM	With Knob	
		w/Teflon Shield	P - Vespel	E - 302SS PM		
			Z - Tefzel	F - Anod Al PM		
				1 - Chrm Al		
				2 - 302SS		
				3 - Anod Al		
				4 - Chrm Al PM		
				5 - 302SS PM		
				6 - Anod Al PM		

Standard Porting Configuration



10 series is a single stage regulator without CGA assembly for cylinder mounting.

15 series is typically sold complete with gauges and CGA assembly.

Pressure and Temperature Table			
Seat Material	Max Temperature F°	Suggested Minimum Inlet	Max Inlet at Max Temp
TEFZEL	175°F	10 PSIG	3600 PSIG
PCTFE (KEL-F)	175°F	10 PSIG	6000 PSIG
CERAMIC FILLED TEFLON	275°F	100 PSIG	3600 PSIG
VESPEL HIGH TEMP	500°F	500 PSIG	3600 PSIG
VESPEL LOW TEMP	175°F	500 PSIG	6000 PSIG
PEEK HIGH TEMP	500°F	10 PSIG	3600 PSIG
PEEK LOW TEMP	175°F	10 PSIG	6000 PSIG

Special Options	
04	Relief valve
15	Outlet valve - packed
16	Outlet valve - packless
28	Inconel range spring
62	"T" Filter
66	Satin Finish (Brass Only)

For other options contact factory

Shipping Weight: 1.9 pounds

NeonControls.com

How To Videos

Available 24/7

Smartphone & Tablet Compatible

<http://youtube.com/neoncontrols>



Warranty

Precision Instrumentation warrants each Neon regulator to be free from defects in materials and workmanship for two years after manufacture date.

In the unlikely event that a Neon regulator is defective in workmanship or materials, Precision Instrumentation will, at its discretion, repair or replace the regulator free of charge.

The selling distributor must process all warranty claims. If the original purchaser suspects a defect in a Neon regulator, the regulator, together with proof of purchase, must be returned to the selling distributor for evaluation and disposition.

This warranty applies only under conditions of use for which each regulator is designed and does not cover cosmetic damage or damage due to misuse, abuse, neglect, accident, improper installation, or acts of God. This warranty does not extend to or apply to any regulator that has been repaired or altered by any party other than Precision Instrumentation or its authorized distributors.

This warranty is in lieu of and excludes all other warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose. Precision Instrumentation will not be liable for any special or consequential damages, or for any loss, damage or expense directly or indirectly arising from use of or inability to use any regulator, either separately or in combination with any other equipment or material, or from any other case.

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