



Neon
Controls

“Go Brighter. Go Neon.”

Series 10

Pressure reducing regulator

Series 15

Single stage cylinder regulator



Series 15

Typical Applications

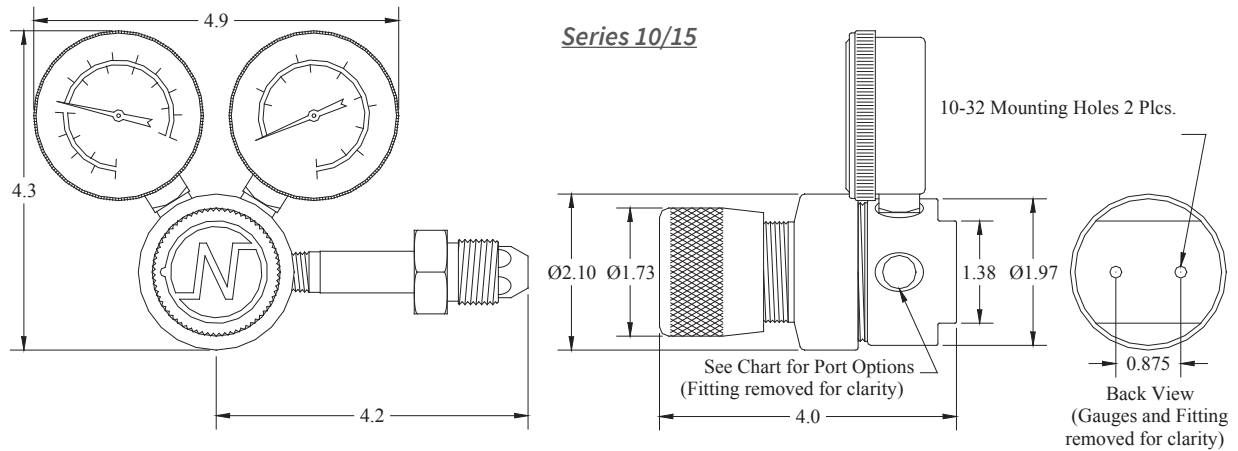
- Laboratory and Point-of-Use Gas systems in medical, pharmaceutical, food and beverage, and other high purity gas applications
- Process analyzer gases, metal fabrication, petrochemical, and specialty industrial gas cylinders

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

2, 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, 0.35, 0.58

Wetted Materials

Body

Brass, 316L Stainless Steel, Monel, Hastelloy C, Titanium, Electroless Nickel Plated Brass

Seat

Tefzel, Peek, PCTFE [standard], Vespel

Filter

10 micron 316L Stainless Steel

Seal

Teflon, Viton

Diaphragm

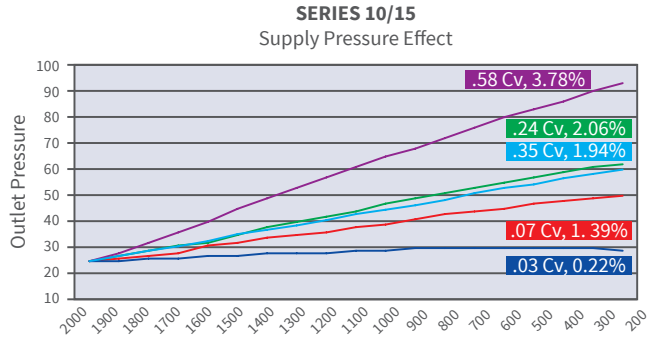
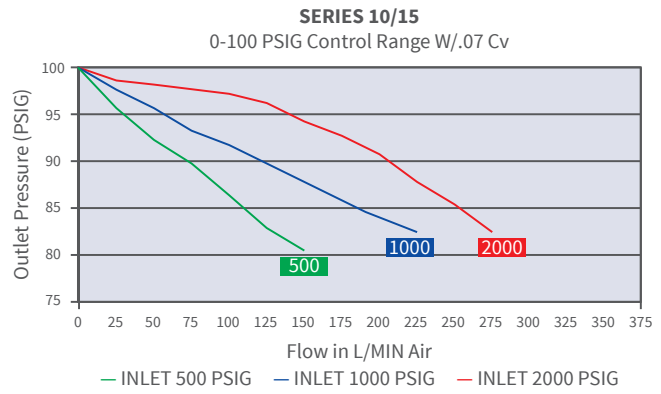
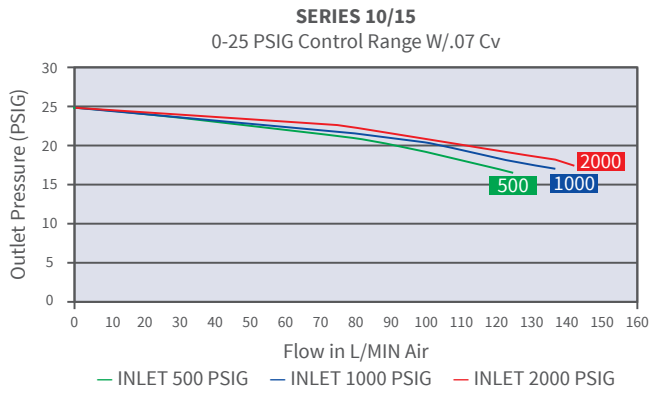
316L Stainless Steel with Tefzel Sealing Ring

Spring Housing

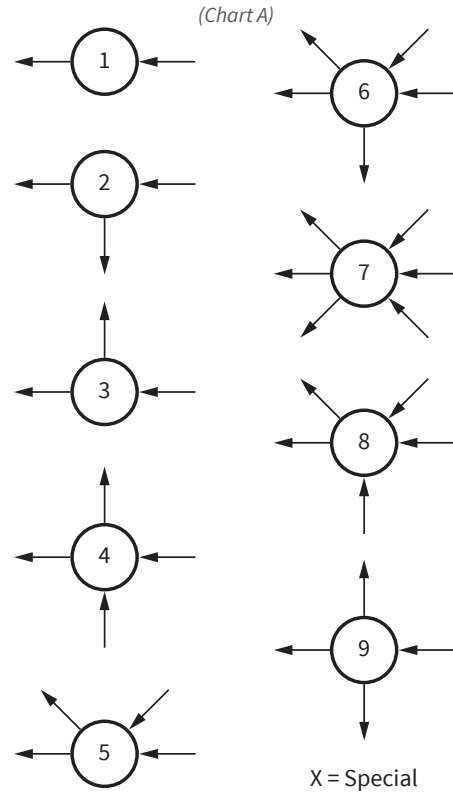
316L Stainless Steel, Electroless Nickel Plated Aluminum, Black Anodized Aluminum

Remaining Parts

Inconel



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.

15	-	2	4	5	B	1
Series	-	Body Mtl	Outlet Range	Porting	Connection	Gauges
10	-	1 - Brass	0 - 2 PSI	See Chart A	A - 1/8"	1 - with gauges
15	-	2 - 316L SS	1 - 10 PSI		B - 1/4"	2 - no gauges
		3 - Monel	2 - 25 PSI		C - 3/8"	3 - customer supplied
		4 - Hastelloy C	3 - 50 PSI			
		5 - Titanium	4 - 100 PSI		Others by request	
		6 - Electroless Nickel Plated Brass	5 - 250 PSI			
			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	F - PCTFE [standard]	A - ENP Al	With Acorn nut	Insert 3 digit portion of CGA number [optional]
2	0.07	w/Tefzel Ring	K - Peek	B - 316L SS		
3	0.24		P - Vespel	C - Anod Al	With Knob	
4	0.30	B - 316L SS	Z - Tefzel	D - ENP Al PM		
6	0.35	w/Teflon Shield		E - 316L SS PM		
7	0.58			F - Anod Al PM		
				1 - ENP Al		
				2 - 316L SS		
				3 - Anod Al		
				4 - ENP Al PM		
				5 - 316L SS PM		
				6 - Anod Al PM		

Pressure and Temperature Rating for Seats

Code	Material	Pressure in PSI Minimum	Pressure in PSI Maximum	Temperature Maximum
F	PCTFE	10	3600	150°F
Z	TEFZEL	10	2400	150°F
K	PEEK	50	6000	150°F
K	PEEK	50	3600	500°F
P	VESPEL	25	6000	150°F
P	VESPEL	25	3600	500°F

Special Options

04	Relief Valve (<150 psi)
15	Outlet valve - packed
16	Outlet valve - packless
71	Find Adjust
73	Helium Leak Test
74	Liquid Service Filter
75	Relief Valve (150 psi +)
SR	Self-relieving

For other options contact factory

Shipping Weight: 1.9 pounds

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.

Tefzel, Teflon & Vespel are registered trademarks of E.I. Dupont - Monel is a registered trademark of INCOAlloys Int.

Hastelloy is a registered trademark of Cabot Corp. KEL-F is a registered trademark of 3M.



Neon
Controls

“Go Brighter. Go Neon.”



Proudly made in the USA since 1988

13413 Benson Ave. | Chino, CA 91710 | 1-800-864-6810 | NeonControls.com

Neon Controls is a product of



Precision
Instrumentation

12/2014