Neon Controls

"Go Brighter. Go Neon."

Series 44

Semi-Automatic Changeover

Series 44

Typical Applications

- Wherever a continuous supply of cylinder gas is required

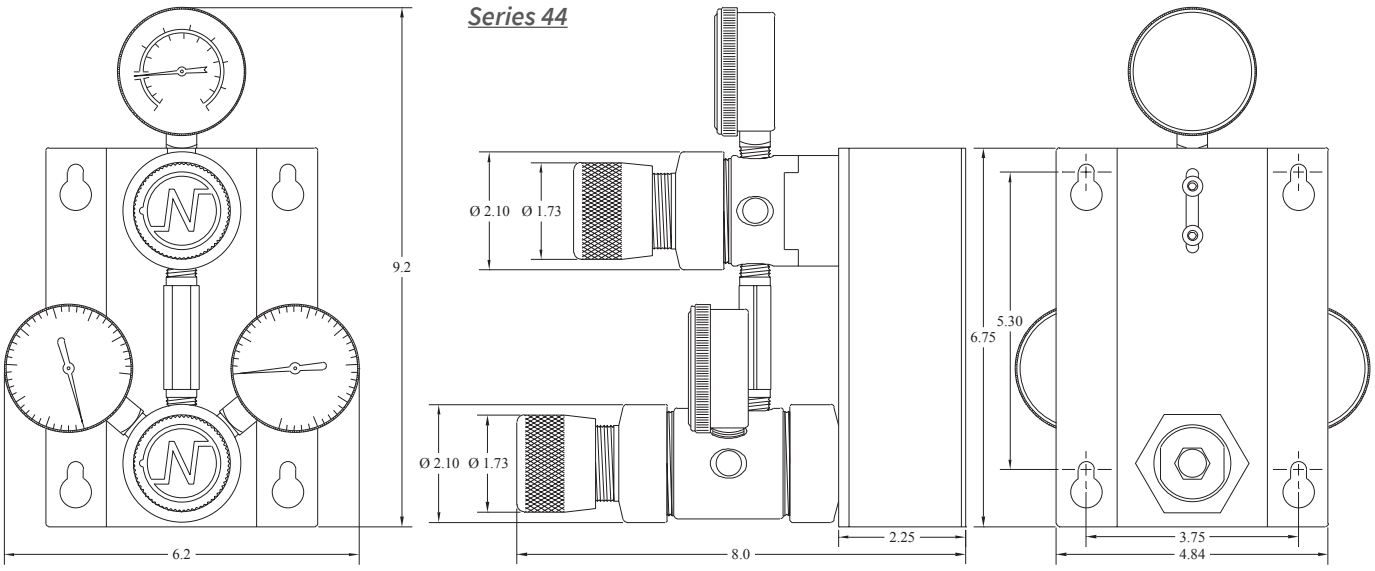
Features and Benefits

- Compact, economical design with mounting bracket
- Wide variety of construction materials, Cv values, outlet ranges, and other options
- 2 year factory warranty

The Series 44 semi-automatic changeover provides an uninterrupted supply of gas to your instrumentation or process. Incorporating two Neon Series 10 regulators into one body minimizes space requirements while providing the high purity construction of the Series 10. The outlet of this assembly feeds another Series 10 regulator to provide final regulation for your application.

When the primary source bottle reaches the preset crossover point the secondary bottle automatically takes over. Turning the indicator knob so that the arrow points to the now-active source bottle allows replacing the original primary cylinder, which will then take over automatically when the secondary bottle is depleted.

A wide variety of options such as pigtails, CGAs, check valves, pressure switches, and outlet valves allow you to customize this item to your specific requirements.



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 psig
70, 175, 345, 690, 1725, 3450 kPa
.7, 2, 4, 7, 20, 35 Bar

Design Proof Pressure

150% of rated pressure

Leakage

Internal: Bubble tight
External: Designed to meet < 2 x 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, 0.30, 0.35, 0.58

Wetted Materials

Body

Brass, 316L Stainless Steel, Monel,
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

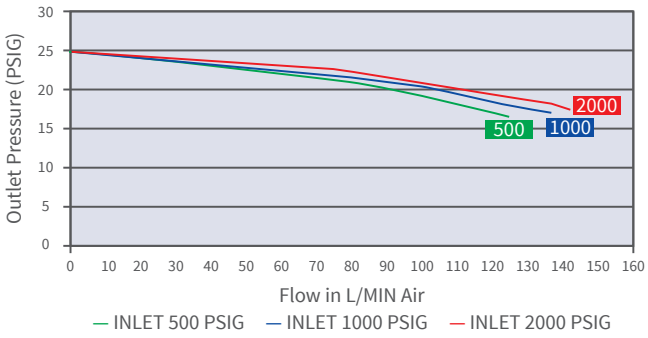
Spring Housing

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

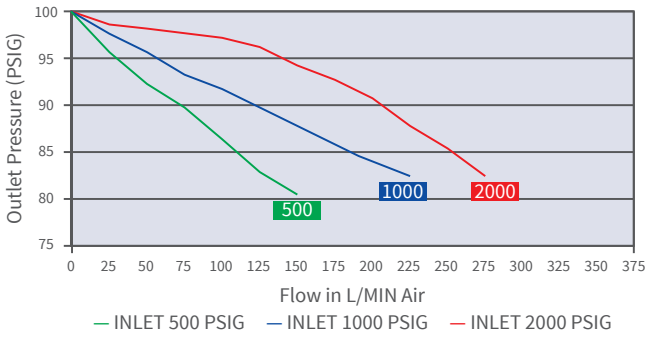
Remaining Parts

Inconel

SERIES 44
0-25 PSIG Control Range W/.07 Cv



SERIES 44
0-100 PSIG Control Range W/.07 Cv



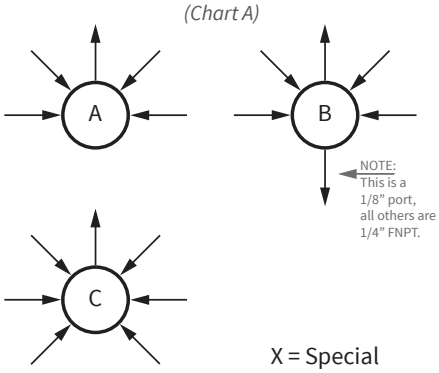
44	-	2	4	A	B	1
Series	-	Body Mtl	Outlet Range	Porting	Connection	Gauges
44		1 – Brass 2 – 316L SS 3 – Monel 6 – Electroless Nickel Plated Brass	1 – 10 PSI 2 – 25 PSI 3 – 50 PSI 4 – 100 PSI 5 – 250 PSI 6 – 500 PSI	A – 5 ports B – 6 ports C – 7 ports	A – 1/8” B – 1/4”	1 – with gauges 2 – no gauges 3 – customer supplied

-	2	A	Z	1
-	Cv	Diaphragm	Seat	Cap & Knob
	1 – 0.03 2 – 0.07 3 – 0.24 4 – 0.30 6 – 0.35 7 – 0.58	A – 316L SS w/Tefzel Ring B – 316L SS w/Teflon Shield	F – PCTFE *[standard]* K – Peek P – Vespel Z – Tefzel	1 – ENP Al/Knob 2 – 316L SS/Knob 3 – Anod Al/Knob A – ENP Al/TP B – 316L SS/TP C – Anod Al/TP

-	1		9	2
-	Changeover Pressure		Delivery Regulator Porting	Delivery Regulator Cv
	1	Primary is 150 psi above max set point / Reserve is 180 psi above max set point	See Chart B	1 – 0.03 2 – 0.07 3 – 0.24 4 – 0.30 6 – 0.35 7 – 0.58
	6	Custom – Please Specify		

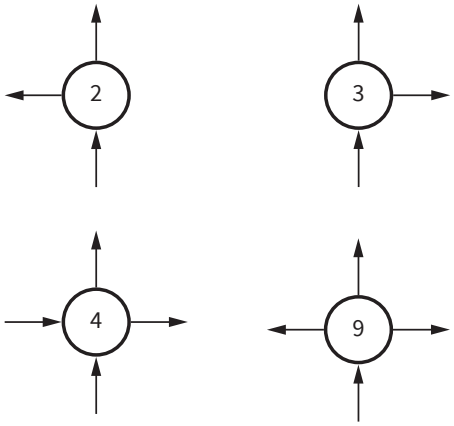
Standard Porting Configuration

(Chart A)



X = Special

(Chart B)



X = Special

Pigtails • Braided hoses • CGA assemblies are available; order separately

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
15	Outlet valve - packed
16	Outlet valve - packless
51	Check Valves [2]
70	Pressure Switch
71	FIne Adjust
72	Cleaned for O2 service
P	Plug

Shipping Weight: 11 pounds

SERIES 44

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

Neon Controls is a product of

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