

## Features

- Mounting versatility
- Knurled knob or Instrument quality knob
- Push-to-connect fittings available
- Series "0" input port rotates 360°
- Series "11" output port rotates 360°
- Direct gauge mount to output (System 11)



## Pressure Regulators

Pneumadyne's "0" & "11" Series Pressure Regulators are used to maintain a preset downstream pressure. Relieving and non-relieving styles are available to accommodate application requirements.

To ease regulator installation, porting options include 10-32 UNF, 1/8 NPT, barbs and push-in connections. For alignment purposes, the "0" Series features a swivel input and the "11" Series features a swivel output port.

The "11" Series can be mounted on a manifold allowing the consolidation of components with varying output pressures on a common pressure source (see figure C - System 11). Pneumadyne's micro gauge can be mounted on the "11" Series regulator with an extended gauge port providing an onsite pressure indicator.

Choose from a knurled knob or an Acetal panel knob for precision adjustment. Regulator components are anodized or Electroless nickel plated for corrosion and wear resistance.

## Performance Data

Temperature Range	Operating Pressure	C <sub>v</sub> Full Open	Flow Rate (scfm)	
			50 psi	125 psi
-20°F to 160°F	30 psi to 125 psi	.27	9.8	22

C<sub>v</sub> per ANSI / (NFPA) T3.21.3

## Materials

Aluminum/ Black Anodize, Brass and Steel/ Electroless Nickel, Brass/ Black Dichromate, Buna-N, Stainless Steel, Acetal

## Function

### Relieving Regulator

*Figure A* - Adjustment of the control knob to a pre-determined level shifts the piston, unseating the Buna-N poppet and allowing air to flow through port 1 to port 2. When the set pressure is reached, the pressure under the piston and the force exerted by the spring are balanced producing a regulated output at port 2. A minimum of 30 psi input is required to maintain regulation.

*Figure B* - When downstream pressure exceeds the set level the poppet is seated -blocking input flow 1. The back pressure flows *in* output 2 lifting the Buna-N cup seal and piston allowing air to pass through the hollow stem and out the exhaust port 3.

### Non-relieving Regulator

The non-relieving regulator flow path- input 1 to output 2- is the same as the relieving regulator, however the non-relieving regulator contains a solid piston that does not permit backflow at output port 2 to be exhausted.

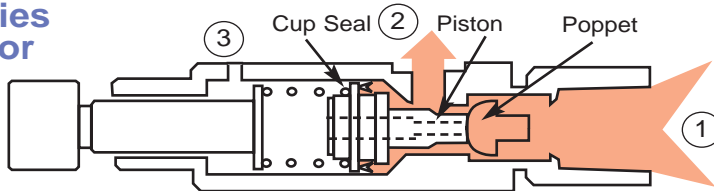
**Warning:** for safety reasons non-relieving regulators are recommended for use with liquids only and with adequate means of downstream relief.

### Regulator Cut-away

### Extended Port

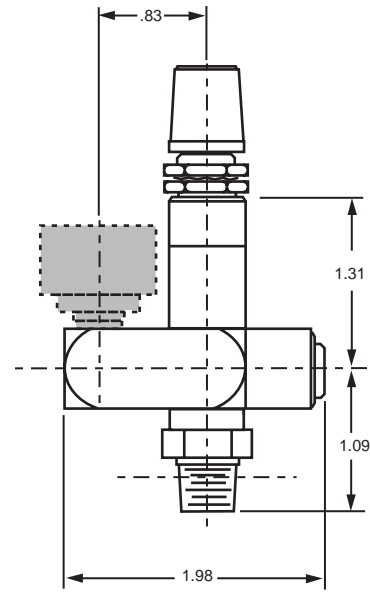
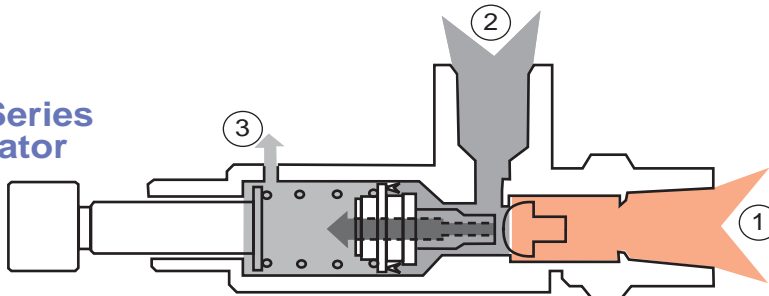
#### “O” Series Regulator

figure A



#### “11” Series Regulator

figure B *Relieving Mode*



The “11” Series Regulator with extended gauge port housing and micro gauge installed (to prevent damage the gauge is packaged and sold separately). [Gauge data](#)

**Control Knob-** select the knurled knob manufactured from steel or the panel knob molded from durable acetal -both are standard actuators.

**Slotted adjustment screw-** also available - *contact factory.*

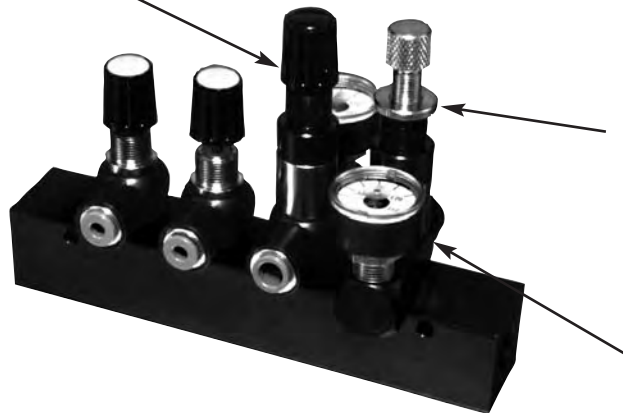


figure C

**Locking Nut-** RLN-40 (*sold separately*)- available to lock adjustment and eliminate possible setting variance, ideal for locations requiring infrequent adjustment.

**Micro Gauge-** PMG-60, PMG-160 (*sold separately*)- can be mounted on the “11” Series regulator with an extended gauge port providing an on-site pressure indicator. To order a gauge ready regulator add a “-G” suffix to the part number.

**System 11-** a method of consolidating 2 to 10 components with a common pressure source. Component selection includes button style valves, regulators, and needle valves. *Each System 11 is designed per order- contact factory. See System 11 Information.*

## Product Information

### "O" Series Regulators Relieving

Part Number	Input x Output	
Knurled Knob	RO-RK-1	1/8 NPT 10-32 (F)
	RO-RK-2	10-32 (F) Elbow 10-32 (F)
	RO-RK-3	10-32 (F) Tee 10-32 (F)
	RO-RK-4	1/8 NPT (F) 10-32 (F)
	RO-RK-5	170 Barb 10-32 (F)
	RO-RK-6	1/4 Push-in 10-32 (F)
	RO-RK-7	5/32 Push-in 10-32 (F)
Panel Knob	RO-RP-1	1/8 NPT 10-32 (F)
	RO-RP-2	10-32 (F) Elbow 10-32 (F)
	RO-RP-3	10-32 (F) Tee 10-32 (F)
	RO-RP-4	1/8 NPT (F) 10-32 (F)
	RO-RP-5	170 Barb 10-32 (F)
	RO-RP-6	1/4 Push-in 10-32 (F)
	RO-RP-7	5/32 Push-in 10-32 (F)

### Non-Relieving

Knurled Knob	RO-NK-1	1/8 NPT 10-32 (F)
	RO-NK-2	10-32 (F) Elbow 10-32 (F)
	RO-NK-3	10-32 (F) Tee 10-32 (F)
	RO-NK-4	1/8 NPT (F) 10-32 (F)
	RO-NK-5	170 Barb 10-32 (F)
	RO-NK-6	1/4 Push-in 10-32 (F)
	RO-NK-7	5/32 Push-in 10-32 (F)
Panel Knob	RO-NP-1	1/8 NPT 10-32 (F)
	RO-NP-2	10-32 (F) Elbow 10-32 (F)
	RO-NP-3	10-32 (F) Tee 10-32 (F)
	RO-NP-4	1/8 NPT (F) 10-32 (F)
	RO-NP-5	170 Barb 10-32 (F)
	RO-NP-6	1/4 Push-in 10-32 (F)
	RO-NP-7	5/32 Push-in 10-32 (F)

### Accessories

RLN-40	Locking Nut
PMG-100	Micro Gauge 0-100 psi
PMG-160	Micro Gauge 0-160 psi
PMG-60	Micro Gauge 0-60 psi

## Ordering Information

- To order Pressure Regulators use the Product Information listing to select part number.
- To order a gauge ready regulator, add a -G suffix to the part number.

## Product Number Diagram:

### "O" & "11" Series Regulators

**R 1 1 - R K - 1 4**

#### Model

R= Regulator

#### Series

O= "O" Series  
11= "11" Series

#### Function

R= Relieving  
N= Non-relieving

#### Actuator Style

K= Knurled Knob  
P= Panel Knob

#### "O" Series Input

1= 1/8 NPT / 10-32 (F)  
2= 10-32 (F) Elbow  
3= 10-32 (F) Tee  
4= 1/8 NPT (F)  
5= 170 Barb\*  
6= 1/4 Push-in  
7= 5/32 Push-in

#### \* "O" Series Output

10-32 (F) ONLY  
no designation

#### "11" Series Output

4= 1/8 NPT (F)  
6= 1/4 Push-in  
7= 5/32 Push-in

#### "11" Series Input

1= 1/8 NPT / 10-32 (F)  
4= 1/8 NPT (F)  
6= 1/4 Push-in  
7= 5/32 Push-in

#### Example:

Regulator "11" Series, Relieving with Knurled Knob,  
1/8 NPT / 10-32 (F) Input x 1/8 NPT (F) Output

\*170 barb- recommended for use with .170 ID PUR or .170 ID PE tubing

### "11" Series Regulators Relieving

Part Number	Input x Output	
Knurled Knob	R11-RK-14	1/8 1/8 NPT (F)
	R11-RK-16	NPT 1/4 Push-in
	R11-RK-17	5-32 Push-in
	R11-RK-44	1/8 1/8 NPT (F)
	R11-RK-46	NPT 1/4 Push-in
	R11-RK-47	(F) 5-32 Push-in
	R11-RK-64	1/8 NPT (F)
Panel Knob	R11-RK-66	1/4 Push-in 1/4 Push-in
	R11-RK-67	5-32 Push-in
	R11-RK-74	5/32 1/8 NPT (F)
	R11-RK-76	Push-in 1/4 Push-in
	R11-RK-77	5-32 Push-in
	R11-RP-14	1/8 1/8 NPT (F)
	R11-RP-16	NPT 1/4 Push-in
Panel Knob	R11-RP-17	5-32 Push-in
	R11-RP-44	1/8 1/8 NPT (F)
	R11-RP-46	NPT 1/4 Push-in
	R11-RP-47	(F) 5-32 Push-in
	R11-RP-64	1/8 NPT (F)
	R11-RP-66	1/4 Push-in 1/4 Push-in
	R11-RP-67	5-32 Push-in
Panel Knob	R11-RP-74	1/8 NPT (F)
	R11-RP-76	5/32 1/4 Push-in
	R11-RP-77	Push-in 5-32 Push-in

### "11" Series Regulators Non-Relieving

Part Number	Input x Output	
Knurled Knob	R11-NK-14	1/8 1/8 NPT (F)
	R11-NK-16	NPT 1/4 Push-in
	R11-NK-17	5-32 Push-in
	R11-NK-44	1/8 1/8 NPT (F)
	R11-NK-46	NPT 1/4 Push-in
	R11-NK-47	(F) 5-32 Push-in
	R11-NK-64	1/8 NPT (F)
Panel Knob	R11-NK-66	1/4 Push-in 1/4 Push-in
	R11-NK-67	5-32 Push-in
	R11-NK-74	5/32 1/8 NPT (F)
	R11-NK-76	Push-in 1/4 Push-in
	R11-NK-77	5-32 Push-in
	R11-NP-14	1/8 1/8 NPT (F)
	R11-NP-16	NPT 1/4 Push-in
Panel Knob	R11-NP-17	5-32 Push-in
	R11-NP-44	1/8 1/8 NPT (F)
	R11-NP-46	NPT 1/4 Push-in
	R11-NP-47	(F) 5-32 Push-in
	R11-NP-64	1/8 NPT (F)
	R11-NP-66	1/4 Push-in 1/4 Push-in
	R11-NP-67	5-32 Push-in
Panel Knob	R11-NP-74	1/8 NPT (F)
	R11-NP-76	5/32 1/4 Push-in
	R11-NP-77	Push-in 5-32 Push-in

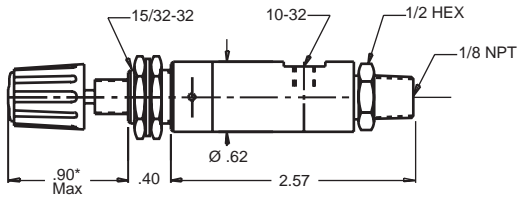
**Custom Products: Contact factory for applications requiring 1/8 NPT male or 1/4 NPT male output port**

**“O” Series**

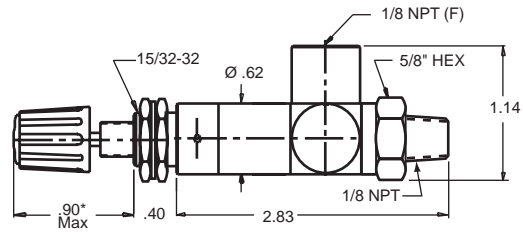
Shown with Panel Knob

**“11” Series**

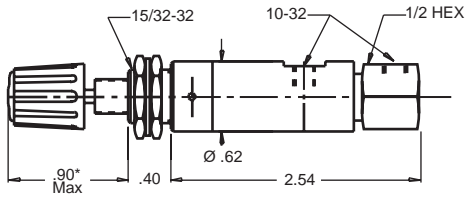
Shown with Panel Knob



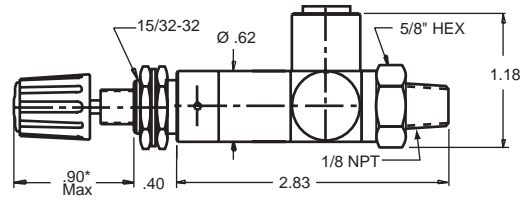
“-1” Input



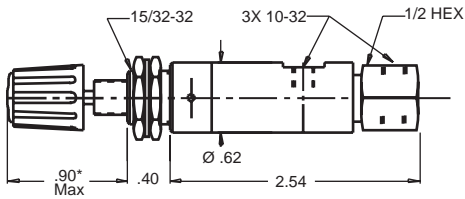
“-14” Porting



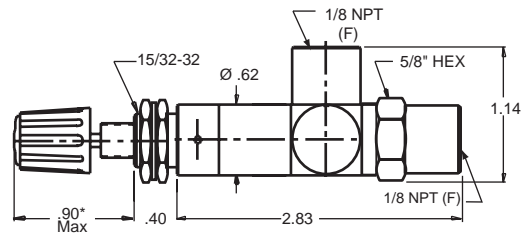
“-2” Input



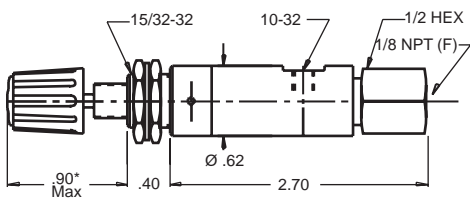
“-16” Porting  
“-17” Porting



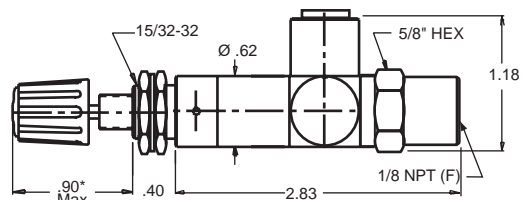
“-3” Input



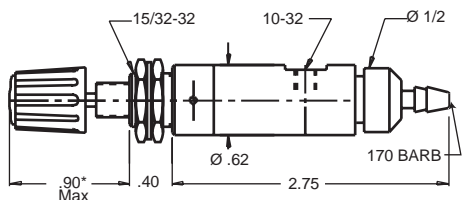
“-44” Porting



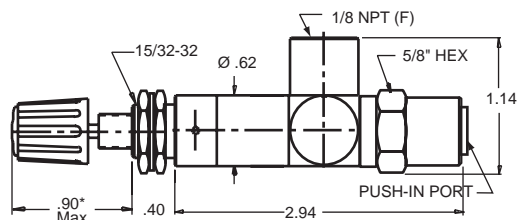
“-4” Input



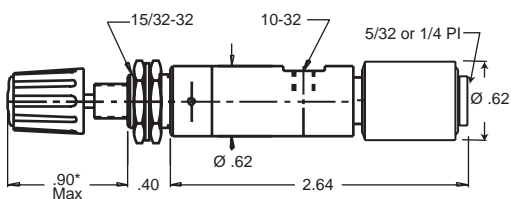
“-46” Porting  
“-47” Porting



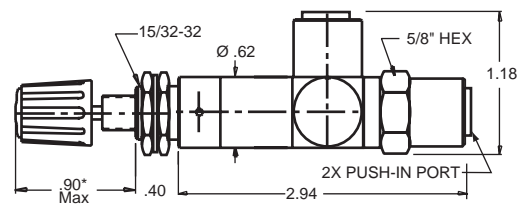
“-5” Input



“-64” Porting  
“-74” Porting



“-6” Input  
“-7” Input



“-66” Porting  
“-67” Porting  
“-76” Porting  
“-77” Porting

\*.74 Max for knurled knob- all regulators