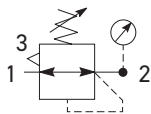
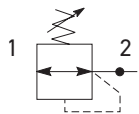


## P31 Regulators - Mini

- Integral 1/4" ports (NPT, BSPP & BSPT)
- Robust but lightweight aluminum construction
- Secondary pressure ranges
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Relieving & non-relieving types
- Non-rising knob



Self relieving regulator with gauge



Non-relieving regulator

Port Size	Description (relieving)	Gauge	Part Number
1/4"	125 psig (8 bar)	None	<b>P31RB12BNNP</b>
1/4"	125 psig (8 bar)	Square	<b>P31RB12BNT</b>

### Operating Information

Flow capacity*:	1/4	68 scfm (32 dm <sup>3</sup> /s, ANR)
Operating temperature†:		-4°F to 150°F (-20°C to 65.5°C)
Supply pressure (max):		300 psig (20 bar)
Adjusting range pressure:		30 psig (0-2 bar) 60 psig (0-4 bar) 125 psig (0-8 bar) 232 psig (0-16 bar)
Gauge port (2 each)**	1/8 BSPP, BSPT, NPT	
Weight:		0.37 lb (0.17 kg)

\* Inlet pressure 145 psig (10 bar). Secondary pressure 91.3 psig (6.3 bar) and 14.5 psig (1 bar) pressure drop.

\*\* Non-gauge option only.

† Units with square gauges: 5°F to 150°F (-15°C to 65.5°C)

### Ordering Information:

P31RB		1	2	B	N	T	P
<b>Basic Series</b> Global Modular Mini Regulator P31RB		<b>Thread Type</b> BSPP 1 BSPT 2 NPT 9		<b>Port Size</b> 1/4 2		<b>Relief</b> Relieving B Non-Relieving N Reverse Flow-Relieving R	
<b>Mounting</b> P Plastic Panel Mount Nut		<b>Adjustment Range</b>		<b>Adjustment</b> N Non-rising knob			
		<b>With Square Gauge</b>		<b>With Round Gauge</b>			
		psig      bar		Z      30 psig; 2 bar; 0.2 MPa			
		1 = 30*      V = 2*		M      60 psig; 4 bar; 0.4 MPa			
		3 = 60      S = 4		G      125 psig; 8 bar; 0.8 MPa			
		5 = 125      T = 8		J      232 psig; 16 bar; 1.6 MPa			
				<b>Without Gauge</b>			
				Y      30 psig; 2 bar; 0.2 MPa			
				L      60 psig; 4 bar; 0.4 MPa			
				N      125 psig; 8 bar; 0.8 MPa			
				H      232 psig; 16 bar; 1.6 MPa			

\* Regulator comes with gauge respective to the adjustment range selected.

Most Popular



**Material Specifications**

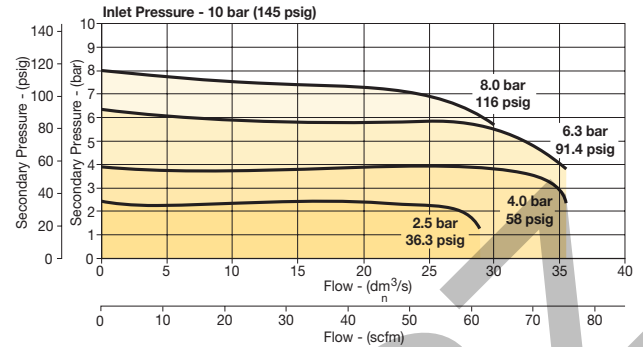
Body	Aluminum
Adjustment knob	Acetal
Bonnet	PBT
Diaphragm assembly	Brass / Nitrile
Valve assembly	Brass / Nitrile
Springs	Steel
Seals	Nitrile
Panel nut	Acetal

**Repair and Service Kits**

Diaphragm repair kit - relieving	<b>P31KB00RB</b>
Diaphragm repair kit - non-relieving	<b>P31KB00RC</b>
Panel mount nut - aluminum	<b>P31KA00MM</b>
Panel mount nut - plastic	<b>P31KA00MP</b>
Angle bracket (attaches via panel nut)	<b>P31KB00MR</b>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>

**Flow Charts**

**P31RB 1/4" Regulator**



**⚠ WARNING**

**Product rupture can cause serious injury.  
Do not connect regulator to bottled gas.  
Do not exceed Maximum primary pressure rating.**

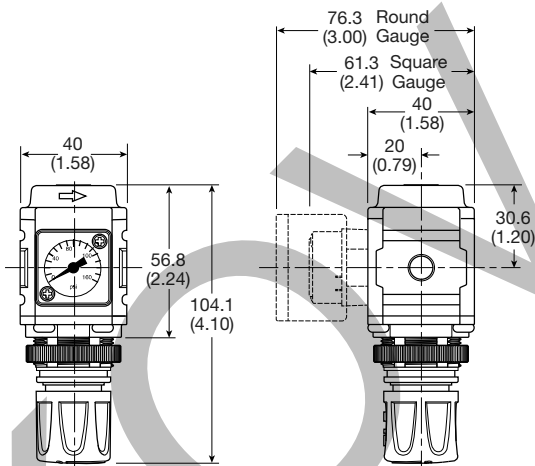
**CAUTION:**

**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

**Gauges**

Square flush mount gauge	0-4 bar	<b>K4511SCR04B</b>
	0-11 bar	<b>K4511SCR11B</b>
	0-60 psig	<b>K4511SCR060</b>
	0-160 psig	<b>K4511SCR160</b>
Square with adapter kit	0-4 bar	<b>P6G-PR10040</b>
	0-11 bar	<b>P6G-PR10110</b>
	0-60 psig	<b>P6G-PR90060</b>
	0-160 psig	<b>P6G-PR90160</b>
40mm Round 1/8" center back mount	0-60 psig / 0-4 bar	<b>P3D-KAB1ALN</b>
	0-140 psig / 0-10 bar	<b>P3D-KAB1ANN</b>
	0-300 psig / 0-20 bar	<b>P3D-KAB1AHN</b>

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.



mm (Inches)

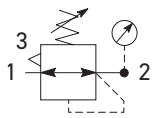
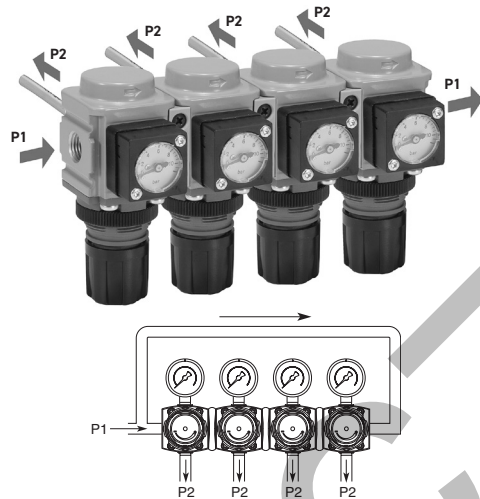
**NOTE:** 1.20 in. (30mm) hole required for panel nut mounting.

**Most Popular**

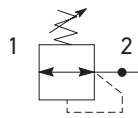


### P31 Common P1 Regulators – Mini

- Manifold style regulator with line pressure on both sides
- Pressure output is at front or rear
- Inlet port 1/4" (NPT, BSPP & BSPT)
- Working port 1/8"
- Robust construction
- Secondary pressure ranges
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation
- Relieving & non-relieving types
- Non-rising knob



Self relieving regulator with gauge



Non-relieving regulator

Port Size	Description (relieving)	Gauge	Part Number
1/4"	125 psig (8 bar)	None	<b>P31HB12BNNP</b>
1/4"	125 psig (8 bar)	Square	<b>P31HB12BNT</b>

#### Operating Information

Flow capacity*:	42 scfm (20 dm <sup>3</sup> /s, ANR)
Operating temperature:	-4°F to 150°F (-20°C to 65.5°C)
Supply pressure (max):	300 psig (20 bar)
Adjusting range pressure:	30 psig (0-2 bar) 60 psig (0-4 bar) 125 psig (0-8 bar) 232 psig (0-16 bar)
P1 port size (inlet/outlet)	1/4 NPT, BSPP, BSPT
P2 regulated ports (2 ea.)	1/8 NPT, BSPP, BSPT
Weight:	0.66 lb (0.30 kg)
* Inlet pressure 145 psig (10 bar). Secondary pressure 91.3 psig (6.3 bar) and 14.5 psig (1 bar) pressure drop.	

#### Ordering Information:

P31HB		1	2	B	N	T	P																																										
<b>Basic Series</b>	Global Modular Mini Common Regulator	<b>P31HB</b>	<b>Thread Type</b>	BSPP 1 BSPT 2 NPT 9	<b>Port Size †</b>	1/4 2 † Working port 1/8".	<b>Relief</b>	Relieving B Non-Relieving N	<b>Mounting</b>	P Plastic Panel Mount Nut																																							
								<b>Adjustment Range</b>																																									
								<table border="1"> <thead> <tr> <th colspan="2">With Square Gauge</th> <th colspan="2">With Round Gauge</th> </tr> </thead> <tbody> <tr> <td>psig</td> <td>bar</td> <td>Z</td> <td>30 psig; 2 bar; 0.2 MPa</td> </tr> <tr> <td>1 = 30*</td> <td>V = 2*</td> <td>M</td> <td>60 psig; 4 bar; 0.4 MPa</td> </tr> <tr> <td>3 = 60</td> <td>S = 4</td> <td>G</td> <td>125 psig; 8 bar; 0.8 MPa</td> </tr> <tr> <td>5 = 125</td> <td>T = 8</td> <td>J</td> <td>232 psig; 16 bar; 1.6 MPa</td> </tr> <tr> <td colspan="4"><b>Without Gauge</b></td> </tr> <tr> <td></td> <td></td> <td>Y</td> <td>30 psig; 2 bar; 0.2 MPa</td> </tr> <tr> <td></td> <td></td> <td>L</td> <td>60 psig; 4 bar; 0.4 MPa</td> </tr> <tr> <td></td> <td></td> <td>N</td> <td>125 psig; 8 bar; 0.8 MPa</td> </tr> <tr> <td></td> <td></td> <td>H</td> <td>232 psig; 16 bar; 1.6 MPa</td> </tr> </tbody> </table>		With Square Gauge		With Round Gauge		psig	bar	Z	30 psig; 2 bar; 0.2 MPa	1 = 30*	V = 2*	M	60 psig; 4 bar; 0.4 MPa	3 = 60	S = 4	G	125 psig; 8 bar; 0.8 MPa	5 = 125	T = 8	J	232 psig; 16 bar; 1.6 MPa	<b>Without Gauge</b>						Y	30 psig; 2 bar; 0.2 MPa			L	60 psig; 4 bar; 0.4 MPa			N	125 psig; 8 bar; 0.8 MPa			H	232 psig; 16 bar; 1.6 MPa
With Square Gauge		With Round Gauge																																															
psig	bar	Z	30 psig; 2 bar; 0.2 MPa																																														
1 = 30*	V = 2*	M	60 psig; 4 bar; 0.4 MPa																																														
3 = 60	S = 4	G	125 psig; 8 bar; 0.8 MPa																																														
5 = 125	T = 8	J	232 psig; 16 bar; 1.6 MPa																																														
<b>Without Gauge</b>																																																	
		Y	30 psig; 2 bar; 0.2 MPa																																														
		L	60 psig; 4 bar; 0.4 MPa																																														
		N	125 psig; 8 bar; 0.8 MPa																																														
		H	232 psig; 16 bar; 1.6 MPa																																														
								<b>Adjustment</b>																																									
								N Non-Rising Knob																																									

\* Regulator comes with gauge respective to the adjustment range selected.

Most Popular



**Materials of Construction**

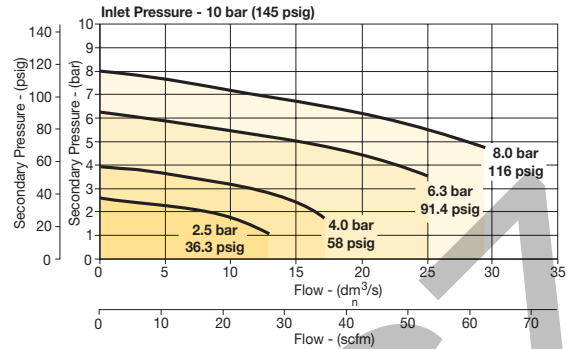
Body	Aluminum
Adjustment knob	Acetal
Bonnet	Glass-filled PBT
Diaphragm assembly	Brass / Nitrile
Valve assembly	Brass / Nitrile

**Repair and Service Kits**

Diaphragm repair kit - relieving	<b>P31KB00RB</b>
Diaphragm repair kit - non-relieving	<b>P31KB00RC</b>
Panel mount nut - aluminum	<b>P31KA00MM</b>
Panel mount nut - plastic	<b>P31KA00MP</b>
Angle bracket (attaches via panel nut)	<b>P31KB00MR</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>

**Flow Charts**

**P31HB 1/4" Common Regulator**



**⚠ WARNING**

**Product rupture can cause serious injury.  
Do not connect regulator to bottled gas.  
Do not exceed Maximum primary pressure rating.**

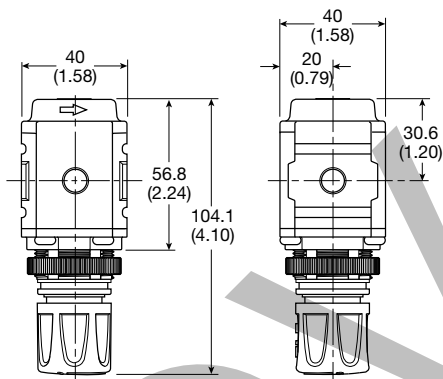
**CAUTION:**

**REGULATOR PRESSURE ADJUSTMENT** - The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

**Gauges**

Square with adapter kit	0-4 bar	<b>P6G-PR10040</b>
	0-11 bar	<b>P6G-PR10110</b>
	0-60 psig	<b>P6G-PR90060</b>
	0-160 psig	<b>P6G-PR90160</b>
40mm Round 1/8" center back mount	0-60 psig / 0-4 bar	<b>P3D-KAB1ALN</b>
	0-140 psig / 0-10 bar	<b>P3D-KAB1ANN</b>
	0-300 psig / 0-20 bar	<b>P3D-KAB1AHN</b>

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.



mm (Inches)

**NOTE:** 1.20 in. (30mm) hole required for panel nut mounting.

**Most Popular**

