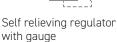
## P31 Regulators - Mini

- Integral 1/4" ports (NPT & BSPP)
- · 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









Non-relieving regulator

Port Size	Description (relieving)	Gauge	Part Number
1/4"	125 psig (8 bar)	Square	P31RB12BNTP

### **Operating Information**

Flow capacity\*: 1/4 73 scfm (32 dm³/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)

125 psig (0-8 bar) 232 psig (0-16 bar) 0.37 lb (0.17 kg)

Weight: 0.37 lb (0.17 kg)

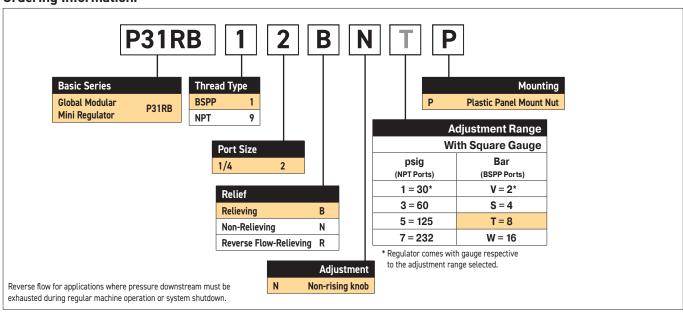
 Inlet pressure 145 psig (10 bar). Secondary pressure 91.3 psig (6.3 bar) and 14.5 psig (1 bar) pressure drop.

\*\* Non-gauge option only.

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

Gauge supplied with every part. Gauge can be installed on the front or back of the regulator. If no gauge is installed, both seal screws must be installed.

#### **Ordering Information:**





#### Global FRL and P3Y Series

#### **Material Specifications**

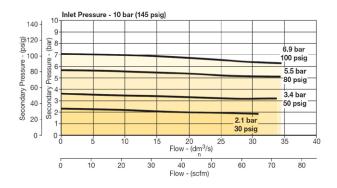
Body	Aluminum
Adjustment knob	Acetal
Bonnet	PBT
Diaphragm assembly	Stainless Steel / Nitrile
Valve assembly	Acetal / Nitrile
Springs	Steel
Seals	Nitrile
Panel nut	Acetal

#### Repair and Service Kits

Panel mount nut - aluminum	P31KA00MM
Panel mount nut - plastic	P31KA00MP
Angle bracket (attaches via panel nut)	P31KB00MR
C-bracket (fits to body)	P31KA00MW
T-bracket with body connector	P31KA00MT
Body connector	P31KA00CB

#### Flow Charts

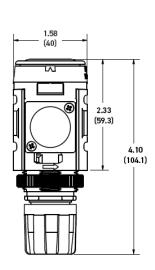
#### P31RB 1/4" Regulator

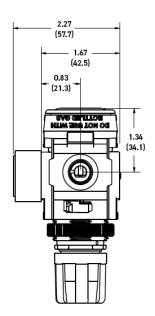


# Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed Maximum primary pressure rating.

#### **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.





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

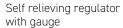
Square gauge supplied with every part. Gauge can be installed on the front or back of the regulator. If no gauge is installed, both seal screws must be installed.



# 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)
- 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



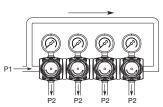




Non-relieving regulator

Port Size	Description (relieving)	Gauge	Part Number
1/4"	125 psig (8 bar)	Square	P31HB12BNTP





#### **Operating Information**

Flow capacity\*:

1/4 64 scfm (20 dm³/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)

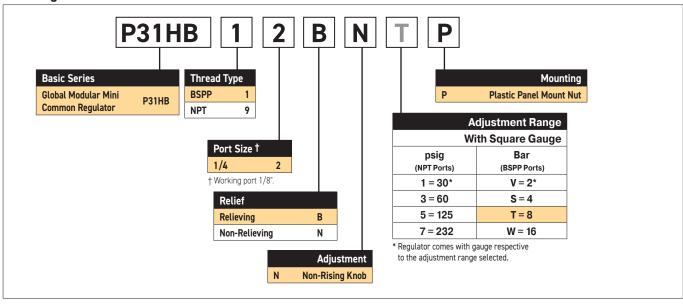
P1 port size (inlet/outlet) 1/4 NPT, BSPP

P1 port size (inlet/outlet) 1/4 NP1, BSPP
P2 regulated ports (2 ea.) 1/8 NPT, BSPP
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.

Gauge supplied with every part. Gauge can be installed on the front or back of the regulator. If no gauge is installed, both seal screws must be installed.

#### **Ordering Information:**





#### Global FRL and P3Y Series

#### **Materials of Construction**

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

#### Repair and Service Kits

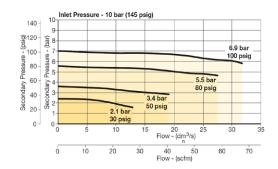
Panel mount nut - aluminum	P31KA00MM
Panel mount nut - plastic	P31KA00MP
Angle bracket (attaches via panel nut)	P31KB00MR
T-bracket with body connector	P31KA00MT
Body connector	P31KA00CB

# 1.58 (40) 2.33 (59.3) 4.10 (104.1)

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

#### Flow Charts

#### P31HB 1/4" Common Regulator

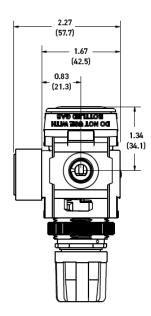


#### **↑** WARNING

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.



Square gauge supplied with every part. Gauge can be installed on the front or back of the regulator. If no gauge is installed, both seal screws must be installed.

