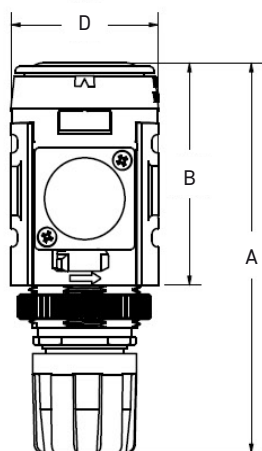


| Material Specifications |                           |
|-------------------------|---------------------------|
| Body                    | Aluminum                  |
| Adjustment knob         | Acetal                    |
| Bonnet                  | PBT                       |
| Diaphragm assembly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

| Repair and Service Kits                |                  |
|----------------------------------------|------------------|
| Panel mount nut - aluminum             | <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> |

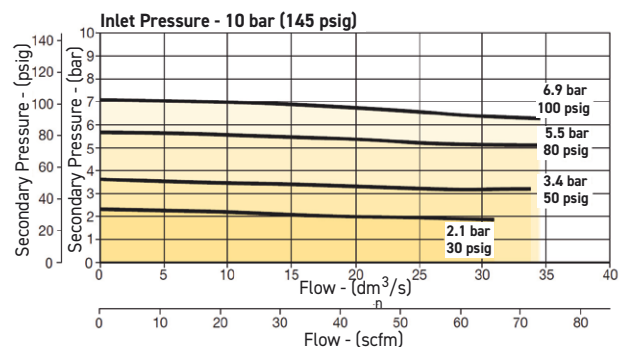
### Dimensions Inches (mm)

|   | NPT air ports<br>M2.5 gauge air port | BSP air ports<br>1/8 gauge air port |
|---|--------------------------------------|-------------------------------------|
| A | 4.10 (104,10)                        |                                     |
| B | 2.33 (59,30)                         | 2.24 (56,80)                        |
| C | 1.34 (34,10)                         | 1.20 (30,60)                        |
| D | 1.58 (40)                            |                                     |
| E | 0.83 (21,30)                         | 0.79 (20)                           |
| F | 1.67 (42,50)                         | 1.58 (40)                           |
| G | 2.27 (57,70)                         | 2.41 (61,30)                        |



## Flow Charts

### P31RB 1/4" Regulator

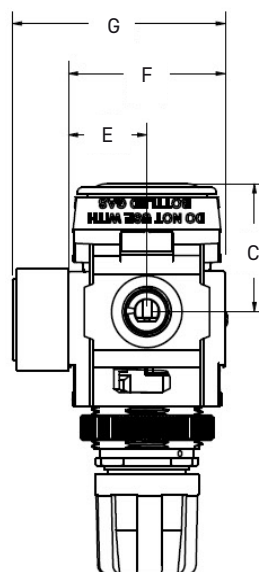


### WARNING

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.



**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.

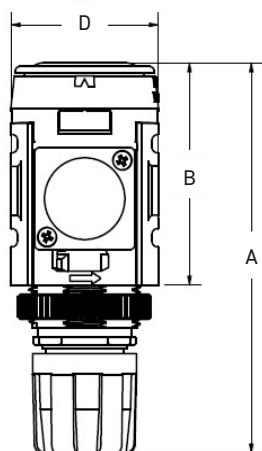
### Most Popular

| Material Specifications |                           |
|-------------------------|---------------------------|
| 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             | <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> |

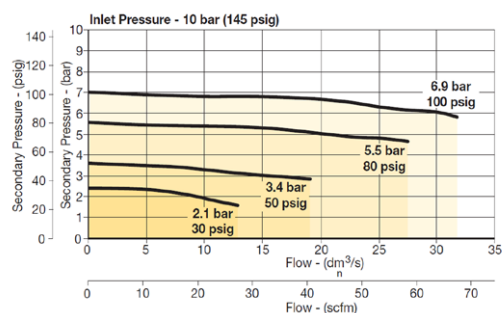
### Dimensions Inches (mm)

|   | NPT air ports<br>M2.5 gauge air port | BSP air ports<br>1/8 gauge air port |
|---|--------------------------------------|-------------------------------------|
| A | 4.10 (104,10)                        |                                     |
| B | 2.33 (59,30)                         | 2.24 (56,80)                        |
| C | 1.34 (34,10)                         | 1.20 (30,60)                        |
| D | 1.58 (40)                            |                                     |
| E | 0.83 (21,30)                         | 0.79 (20)                           |
| F | 1.67 (42,50)                         | 1.58 (40)                           |
| G | 2.27 (57,70)                         | 2.41 (61,30)                        |



## Flow Charts

### P31HB 1/4" Common Regulator

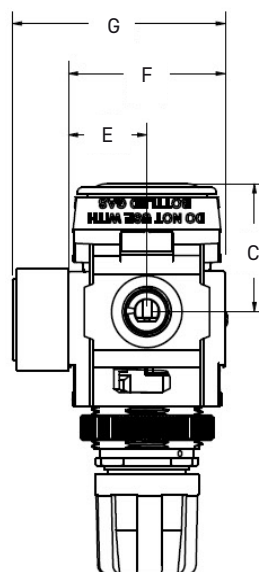


### WARNING

**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.



**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.

### Most Popular

| Material Specifications |                           |
|-------------------------|---------------------------|
| Body                    | Aluminum                  |
| Adjustment knob         | Acetal                    |
| Body cap                | ABS                       |
| Bonnet                  | Glass-filled nylon        |
| Plastic bowl            | Polycarbonate             |
| Metal bowl              | Aluminum                  |
| Bowl guard              | Nylon                     |
| Filter element          | Polyethylene              |
| Seals                   | Nitrile                   |
| Springs                 | Steel                     |
| Valve assembly          | Acetal/ Nitrile           |
| Diaphragm assembly      | Stainless Steel / Nitrile |
| Panel nut               | Acetal                    |

**WARNING**

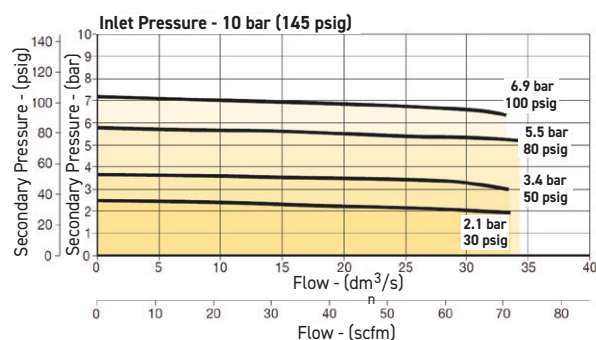
**Product rupture can cause serious injury.  
Do not connect regulator to bottled gas.  
Do not exceed Maximum primary pressure rating.**

**CAUTION:**

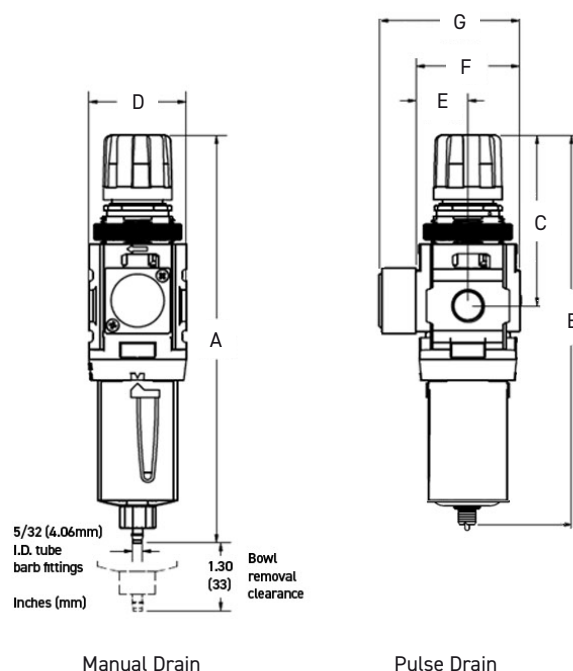
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and 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.

**Dimensions Inches (mm)**

|   | NPT air ports<br>M2.5 gauge air port | BSP air ports<br>1/8 gauge air port |
|---|--------------------------------------|-------------------------------------|
| A | 6.57 (167)                           | 6.96 (176,90)                       |
| B | 6.57 (167)                           | 6.77 (172)                          |
| C | 2.75 (70)                            | 2.89 (73,50)                        |
| D | 1.58 (40)                            |                                     |
| E | 0.83 (21,30)                         | 0.79 (20)                           |
| F | 1.67 (42,50)                         | 1.58 (40)                           |
| G | 2.27 (57,70)                         | 2.41 (61,30)                        |

**Flow Charts****P31EB 1/4" Filter / Regulator****Repair and Service Kits**

|                                          |                   |
|------------------------------------------|-------------------|
| Plastic bowl / bowl guard manual drain   | <b>P31KB00BGM</b> |
| Plastic bowl / bowl guard pulse drain    | <b>P31KB00BGB</b> |
| Metal bowl / w/o sight gauge pulse drain | <b>P31KB00BMB</b> |
| 5μ particle filter element               | <b>P31KA00ESE</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>  |



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.

**Most Popular**

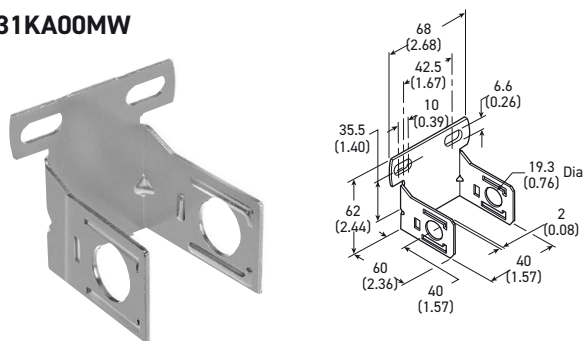
# P31, P32, P33 SERIES

## Accessories - P31 Series

### C-Bracket

(Fits to filter and lubricator body)

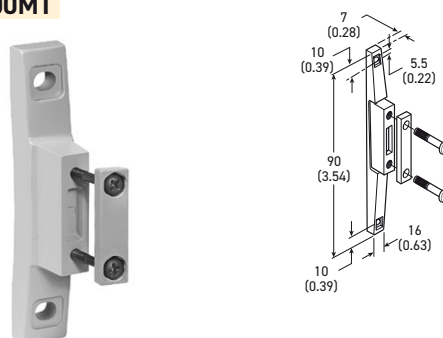
**P31KA00MW**



### T-Bracket w/ Body Connector

(O-ring not shown)

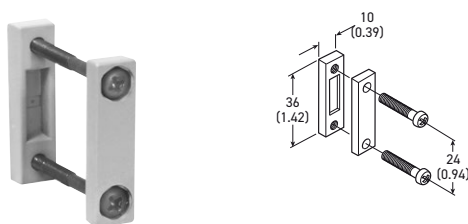
**P31KA00MT**



### Body Connector

(O-ring not shown)

**P31KA00CB**



### Port Block Kit

(O-ring not shown)

|          |                  |          |                  |
|----------|------------------|----------|------------------|
| 1/8 NPT  | <b>P31KA91CP</b> | 1/8 BSPT | <b>P31KA21CP</b> |
| 1/4 NPT  | <b>P31KA92CP</b> | 1/4 BSPT | <b>P31KA22CP</b> |
| 3/8 NPT  | <b>P31KA93CP</b> | 3/8 BSPT | <b>P31KA23CP</b> |
| 1/8 BSPP | <b>P31KA11CP</b> |          |                  |
| 1/4 BSPP | <b>P31KA12CP</b> |          |                  |
| 3/8 BSPP | <b>P31KA13CP</b> |          |                  |



### Port Block Kit w/ T-Bracket

(O-ring not shown)

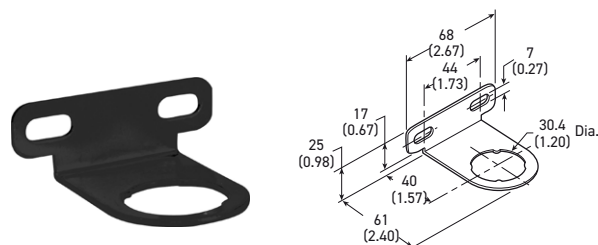
|          |                  |          |                  |
|----------|------------------|----------|------------------|
| 1/8 NPT  | <b>P31KA91CN</b> | 1/8 BSPT | <b>P31KA21CN</b> |
| 1/4 NPT  | <b>P31KA92CN</b> | 1/4 BSPT | <b>P31KA22CN</b> |
| 3/8 NPT  | <b>P31KA93CN</b> | 3/8 BSPT | <b>P31KA23CN</b> |
| 1/8 BSPP | <b>P31KA11CN</b> |          |                  |
| 1/4 BSPP | <b>P31KA12CN</b> |          |                  |
| 3/8 BSPP | <b>P31KA13CN</b> |          |                  |



### Angle Bracket

(Fits to regulator and filter/regulator body)

**P31KB00MR**



Extended air ports sizes by adding end port blocks or for converting from BSPP body threaded to NPT or BSPT.

### Most Popular

# P3Y SERIES

## Coalescing Filter

### P3Y Coalescing and Adsorber Filters - Large

- Extended high efficiency filter element provides greater filtration surface area.
- Integral 3/4" or 1" ports (BSPP & NPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- Adsorber activated carbon element removes oil vapors and most hydrocarbons
- Robust but lightweight aluminum construction

**Notes:** To optimize the life of the coalescing element, it is advisable to install a P3YFA pre-filter with a 5 micron element upstream of the coalescing filter.  
To optimize the life of the adsorber element, it is advisable to install a P3Y coalescing 0.01 micron filter upstream of the adsorber filter.

| Port Size | Description                                                      | Part Number        |
|-----------|------------------------------------------------------------------|--------------------|
| 3/4"      | Coalescing Filter 0.01 micron, Combined Manual / Semi-Auto Drain | <b>P3YFA16DSCN</b> |
| 3/4"      | Coalescing Filter 0.01 micron, Auto Drain                        | <b>P3YFA16DSAN</b> |
| 1"        | Coalescing Filter 0.01 micron, Combined Manual / Semi-Auto Drain | <b>P3YFA18DSCN</b> |
| 1"        | Coalescing Filter 0.01 micron, Auto Drain                        | <b>P3YFA18DSAN</b> |



### Operating Information

|                         |                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supply pressure (max)*: | 254 psig (17.5 bar)                                                                                                                                                                                                                                                                                                                                                                                        |
| Operating temperature:  | 14°F to 140°F (-10°C to 60°C)                                                                                                                                                                                                                                                                                                                                                                              |
| Manual / auto drain:    | Closed at 11.6 psig (0.8 bar)<br>G1/8 thread male                                                                                                                                                                                                                                                                                                                                                          |
| Media specifications:   | 1 micron <0.5mg/m <sup>3</sup> at 21°C<br>0.01 micron <0.008mg/m <sup>3</sup> at 21°C<br>adsorber <0.003mg/m <sup>3</sup> at 21°C                                                                                                                                                                                                                                                                          |
| Bowl capacity:          | 4.4 US oz. (130 cm <sup>3</sup> )                                                                                                                                                                                                                                                                                                                                                                          |
| Standard filtration:    | 0.01 micron                                                                                                                                                                                                                                                                                                                                                                                                |
| Flow capacity†:         | 3/4" 1.0 micron coalescing 290 scfm (137 dm <sup>3</sup> /s, ANR)<br>1" 1.0 micron coalescing 307 scfm (145 dm <sup>3</sup> /s, ANR)<br>3/4" 0.01 micron coalescing 275 (177 dm <sup>3</sup> /s, ANR)<br>1" 0.01 micron coalescing 307 (145 dm <sup>3</sup> /s, ANR)<br>3/4" Activated carbon adsorber 275 (177 dm <sup>3</sup> /s, ANR)<br>1" Activated carbon adsorber 307 (145 dm <sup>3</sup> /s, ANR) |
| Fluid:                  | Compressed air                                                                                                                                                                                                                                                                                                                                                                                             |
| Weight:                 | 3.5 lb (1.6 kg)                                                                                                                                                                                                                                                                                                                                                                                            |
| †                       | Inlet pressure 91.4 psig (6.3 bar) inlet pressure and 7.3 psig (0.5 bar) pressure drop.                                                                                                                                                                                                                                                                                                                    |
| *                       | Air supply must be dry enough to avoid ice formation at temperatures below 35.6°F (2°C).                                                                                                                                                                                                                                                                                                                   |

Air quality:ISO 8573-1:2010: 0.01µm closes to Class 1 for maximum particle size and concentration of solid contaminants, and closes to Class 1 on maximum oil content (ppm/wt). Within ISO 8573-1:2010: Adsorber closes to Class 1 on maximum oil content (ppm/wt).

### Ordering Information:

|                         |                     |                  |                                       |                   |                                   |
|-------------------------|---------------------|------------------|---------------------------------------|-------------------|-----------------------------------|
| <b>P3YFA</b>            | <b>1</b>            | <b>8</b>         | <b>A</b>                              | <b>SC</b>         | <b>N</b>                          |
| <b>Basic Series</b>     | <b>Thread Type*</b> | <b>Port Size</b> | <b>Element</b>                        | <b>Drain Type</b> |                                   |
| Coalescing Filter P3YFA | BSPP 1              | 3/4 6            | 0.01 micron Element with DPI Standard | SC                | Combined Manual / Semi-Auto Drain |
|                         | NPT 9               | 1 8              | A Adsorber                            | SA                | Auto drain                        |
|                         |                     |                  | 2 1 Micron                            |                   |                                   |

\* Note: For 1-1/2" ported unit, please order P3YKA\*BCP port block kit separately.

#### Most Popular

Auto drain is recommended for 0,01 or 1 micron.  
Manual drain for adsorber.