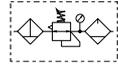


**Popular Combinations:** Inlet pressure 10 bar (145 psig), Secondary pressure 6.3 bar (91.3 psig), 1 bar (14.5 psig) pressure drop.



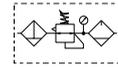
**Filter + Regulator + Lubricator Combinations, Poly bowl**  
**5 micron element, 8 bar (116 psig) regulator + gauge and wall mounting brackets**



Port size	Flow	Manual drain	Weight	Pulse drain	Weight
1/4"	13 dm <sup>3</sup> /s 27 (scfm)	<b>P31CB12GEMNTLNW</b>	0.46 kg (1.01 lbs)	<b>P31CB12GEBNTLNW</b>	0.46 kg (1.01 lbs)



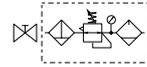
**Filter/Regulator + Lubricator Combinations, Poly bowl**  
**5 micron element, 8 bar (116 psig) regulator + gauge and wall mounting brackets**



Port size	Flow	Manual drain	Weight	Pulse drain	Weight
1/4"	14 dm <sup>3</sup> /s 28 (scfm)	<b>P31CA12GEMNTLNW</b>	0.35 kg (0.77 lbs)	<b>P31CA12GEBNTLNW</b>	0.35kg (0.77 lbs)



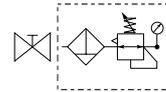
**Ball Valve + Filter/Regulator + Lubricator Combinations, Poly bowl**  
**5 micron element, 8 bar (116 psig) regulator + gauge and wall mounting brackets**



Port size	Flow	Manual drain	Weight	Pulse drain	Weight
1/4"	14 dm <sup>3</sup> /s 28 (scfm)	<b>P31QA12GEMNTLNW</b>	0.35 kg (0.77 lbs)	<b>P31QA12GEBNTLNW</b>	0.35kg (0.77 lbs)



**Ball Valve + Filter/Regulator Combinations + Poly bowl**  
**5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**



Port size	Flow	Manual drain	Weight	Pulse drain	Weight
1/4"	14 dm <sup>3</sup> /s 28 (scfm)	<b>P31QN12GEMNTW</b>	0.4 kg (0.88 lbs)	<b>P31QN12GEBNTW</b>	0.4 kg (0.88 lbs)

<b>P 3 1</b>					<b>E</b>		<b>N</b>		<b>LN</b>	<b>W</b>		
<b>Combination</b>		<b>Thread type</b>		<b>Port size</b>	<b>Drain type</b>		<b>Adjustment range</b>		Add only for options with Lubricator			
Combination <b>C</b>		BSPP <b>1</b>	NPT <b>9</b>	1/4 <b>2</b>	Manual drain <b>M</b>	<b>With square gauge</b>						
Shut off + Combi <sup>1</sup> <b>Q</b>					Pulse drain <b>B</b>	2 bar * <b>V</b>						
<b>Combination type</b>		<b>Bowl type</b>			<b>Without gauge</b>							
F/R+L <b>A</b>	F+R+L <b>B</b>	Poly bowl with bowl guard <b>G</b>	Metal bowl without sight glass <b>M</b>	2 bar <b>Y</b>	4 bar <b>L</b>	8 bar <b>N</b>	16 bar <b>H</b>					
F/R <b>N</b>												

**Note:** All bowl types are the same for each component

**Example:** If a "G" is specified for a F+L, both units would get a poly bowl with bowl guard.

\* Unit comes with 0-4 bar, gauge respectively

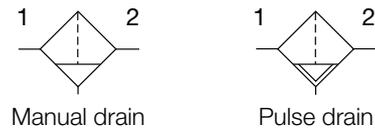
\*\* Unit comes with 0-10 bar, gauge respectively

<sup>1</sup> Option not available with F+R+L  
 Bar gauges fitted to BSPP  
 PSI gauges fitted to NPT

**Mini Particulate Filter - P31**

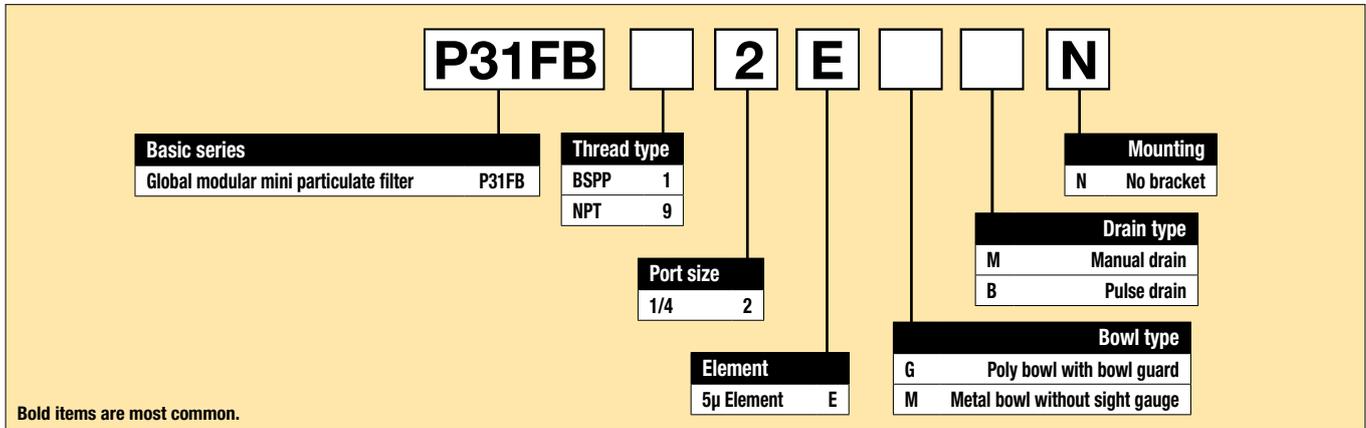


**Symbols**



- Integral 1/4" ports (NPT & BSPP)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminum construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting

**Options:**



Port size	Description	Flow <sup>†</sup> dm <sup>3</sup> /s (scfm)	Max. bar (psig)	Height mm (inches)	Width mm (inches)	Depth mm (inches)	Part number <sup>†</sup>
1/4"	Poly bowl - manual drain	12 (25)	10 (150)	124.8 (4.91)	40 (1.58)	40 (1.58)	<b>P31FB12EGMN</b>
1/4"	Poly bowl - pulse drain	12 (25)	10 (150)	119.6 (4.71)	40 (1.58)	40 (1.58)	<b>P31FB12EGBN</b>
1/4"	Metal bowl - manual drain	12 (25)	17 (250)	124.8 (4.91)	40 (1.58)	40 (1.58)	<b>P31FB12EMMN</b>
1/4"	Metal bowl - pulse drain	12 (25)	17 (250)	119.6 (4.71)	40 (1.58)	40 (1.58)	<b>P31FB12EMBN</b>

† Standard part numbers shown in bold. For other models refer to Options chart above.  
 ‡ Flow with 6.3 bar (91.3 psig) inlet pressure and 0.34 (4.9 psig) pressure drop.

### Specifications

Flow capacity*	1/4	12 dm <sup>3</sup> /s (25 scfm)
Operating temperature	Plastic bowl	-10°C to 52°C (14°F to 125°F)
	Metal bowl	-10°C to 65.5°C (14°F to 150°F)
Max. supply pressure	Plastic bowl	10 bar (150 psig)
	Metal bowl	17 bar (250 psig)
Standard filtration		5 micron
Useful retention†		12 cm <sup>3</sup> (0.4 US oz.)
Port size	BSPP / NPT	1/4
Weight		0.11 kg (0.24 lbs)

\* Inlet pressure 6.3 bar (91.3 psig). Pressure drop 0.34 bar (4.9 psig).  
 † Useful retention refers to volume below the quiet zone baffle.

#### Air quality:

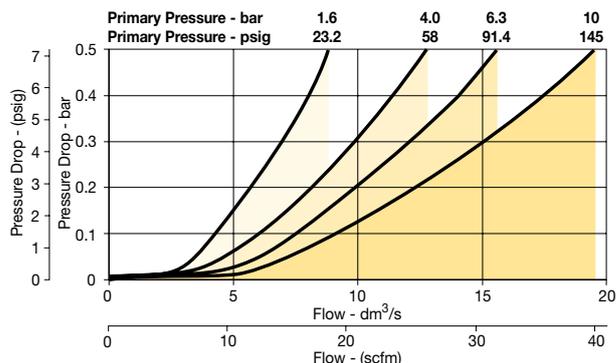
Within ISO 8573-1: 1991 Class 3 (Particulates)  
 Within ISO 8573-1: 2001 Class 6 (Particulates)

### Material Specifications

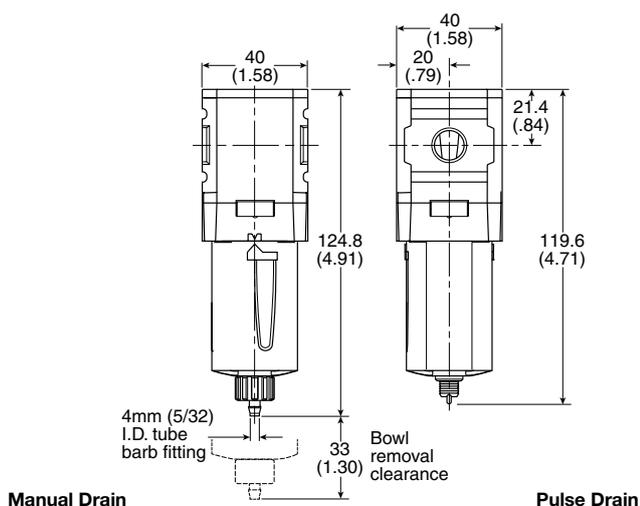
Body	Aluminum
Body cap	ABS
Bowl	Polycarbonate
Bowl guard	Nylon
Element retainer	Acetal
Baffle	Acetal
Filter element	Sintered polyethylene
Seals	Nitrile

### Flow Charts

#### 1/4 Filter



### Dimensions mm (inches)

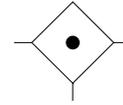


### Repair and Service Kits

Plastic bowl / Bowl guard manual drain	<b>P31KB00BGM</b>
Metal bowl / w/o sight gauge manual drain	<b>P31KB00BMM</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>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>

**Mini Coalescing and Adsorber Filters - P31**

**Symbol**



- Integral 1/4" ports (NPT & BSPP)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- Differential Pressure Indicator (DPI) standard on Coalescing Filters
- Positive bayonet latch to ensure correct and safe fitting
- Adsorbing activated carbon element removes oil vapors and most hydrocarbons

**Note:** To optimize the life of coalescing element, it is advisable to install a P31F pre-filter with a 5 micron element upstream of the coalescing filter.

To optimize the life of an Adsorber it is advisable to install a P31 Coalescing Filter upstream of the Adsorber. Adsorber element should be replaced approximately every 1000 hours of service.

**Options:**

**P31FB** [ ] **2** [ ] [ ] [ ] **N**

<b>Basic series</b>	<b>Thread type</b>	<b>Mounting</b>
Global modular mini coalescing filter P31FB	BSPP 1 NPT 9	N No bracket
	<b>Port size</b>	<b>Drain type</b>
	1/4 2	B Pulse drain M Manual drain
	<b>Element</b>	<b>Bowl type</b>
	0.01µ Element C 0.01µ Element with DPI D 1µ Element 9 1µ Element with DPI Q Adsorber A	G Poly bowl with bowl guard M Metal bowl without sight gauge

**Bold items are most common.**

Port size	Description	Flow† dm <sup>3</sup> /s (scfm)	Max. bar (psig)	Height mm (inches)	Width mm (inches)	Depth mm (inches)	Part number†
1/4"	Poly bowl - 0.01 micron - manual drain	3.6 (7.5)	10 (150)	136.9 (5.39)	40 (1.58)	40 (1.58)	<b>P31FB12DGMN</b>
1/4"	Poly bowl - 0.01 micron - pulse drain	3.6 (7.5)	10 (150)	131.7 (5.19)	40 (1.58)	40 (1.58)	<b>P31FB12DGBN</b>
1/4"	Metal bowl - 0.01 micron - manual drain	3.6 (7.5)	10 (150)	136.9 (5.39)	40 (1.58)	40 (1.58)	<b>P31FB12DMMN</b>
1/4"	Metal bowl - 0.01 micron - pulse drain	3.6 (7.5)	10 (150)	131.7 (5.19)	40 (1.58)	40 (1.58)	<b>P31FB12DMBN</b>

† Standard part numbers shown in bold. For other models refer to Options chart above.  
 ‡ Flow with 6.3 bar (91.3 psig) inlet pressure and 0.2 (3 psig) pressure drop.

**Specifications**

Flow capacity		
1.0 micron coalescing		5.5 dm <sup>3</sup> /s (12 scfm)
0.01 micron coalescing		3.6 dm <sup>3</sup> /s (7.5 scfm)
Activated carbon adsorber		6 dm <sup>3</sup> /s (12.7 scfm)
Operating temperature	Plastic bowl	-10°C to 52°C (14°F to 125°F)
	Metal bowl	-10°C to 65.5°C (14°F to 150°F)
Max. supply pressure	Plastic bowl	10 bar (150 psig)
	Metal bowl	10 bar (150 psig) <sup>§</sup>
Standard filtration		1.0 and 0.01 micron
Adsorber	Max. oil carryover (ppm w/w)	0.003 @ 21°C (70°F)
Useful retention <sup>†</sup>		12 cm <sup>3</sup> (0.4 US oz.)
Port size	BSPP / NPT	1/4
Weight		0.11 kg (0.24 lbs)

Inlet pressure 6.3 bar (91.3 psig), Pressure drop 0.2 bar (3 psig), Saturated Element.

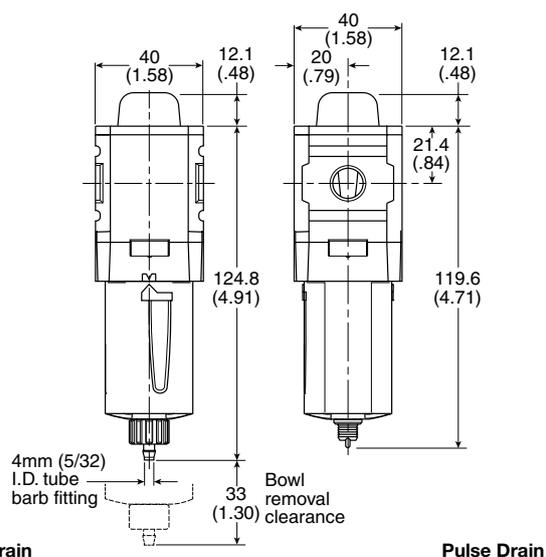
<sup>†</sup> Useful retention refers to volume below the quiet zone baffle.

<sup>§</sup> Without pressure indicator (DPI) – max. pressure for metal bowl version is 17 bar (250 psig).

**Material Specifications**

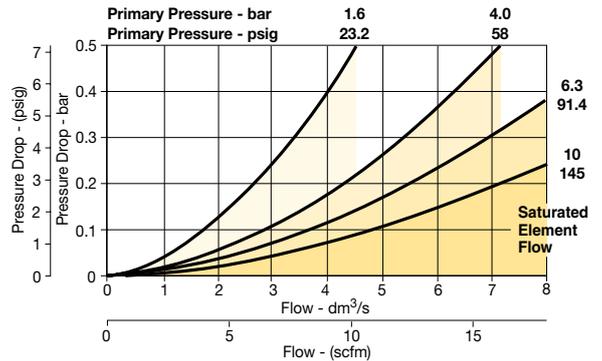
Body	Aluminum	
Body cap	ABS	
Bowl	Plastic bowl	Polycarbonate
	Metal bowl	Aluminum
Filter element	1.0 and .01 micron	Borosilicate cloth
Adsorber	Activated carbon	
Seals	Nitrile	

**Dimensions mm (inches)**

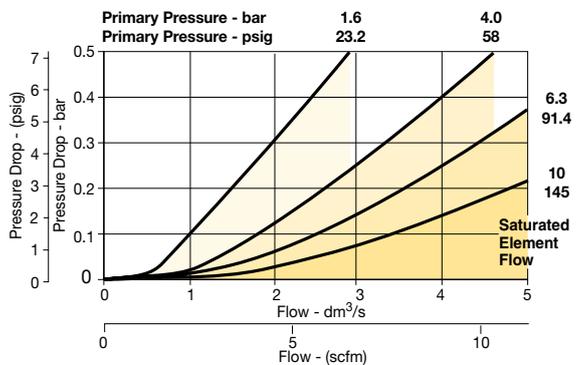


**Flow Charts**

**P31 - 1.0 micron flow**



**P31 - 0.01 micron flow**



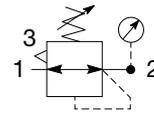
**Repair and Service Kits**

Plastic bowl / Bowl guard manual drain	<b>P31KB00BGM</b>
Metal bowl / w/o sight gauge manual drain	<b>P31KB00BMM</b>
Plastic bowl / Bowl guard pulse drain	<b>P31KB00BGB</b>
Metal bowl / w/o sight gauge pulse drain	<b>P31KB00BMB</b>
1µ coalescing filter element	<b>P31KA00ES9</b>
0.01µ coalescing filter element	<b>P31KA00ESC</b>
Activated carbon adsorber filter element	<b>P31KA00ESA</b>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>
Differential pressure indicator (replacement)	<b>P31KB00RQ</b>

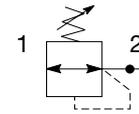
**Mini Regulator - P31**



**Symbols**



Self relieving regulator with gauge



Non relieving regulator

- Integral 1/4" ports (NPT & BSPP)
- Robust but lightweight aluminum construction
- Secondary pressure ranges 0-2 bar (0-30 psig), 0-4 bar (0-60 psig), 0-8 bar (0-125 psig), 0-16 bar (0-232 psig)
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Relieving & Non-relieving types
- Non-rising knob

**Options:**

<b>P31RB</b>		<b>2</b>		<b>N</b>		<b>P</b>																																												
<b>Basic series</b> Global modular mini regulator <b>P31RB</b>	<b>Thread type</b> BSPP 1 NPT 9	<b>Port size</b> 1/4 2	<b>Relief</b> Relieving <b>B</b> Non-relieving <b>N</b> Reverse flow / Relieving <b>R</b>	<b>Adjustment range</b>		<b>Mounting</b> P Plastic panel mount nut																																												
				<table border="1"> <thead> <tr> <th colspan="2">With square gauge</th> <th colspan="2">With round gauge</th> </tr> <tr> <th>psig</th> <th>bar</th> <th>Z</th> <th>With round gauge</th> </tr> </thead> <tbody> <tr> <td><b>1 = 30*</b></td> <td><b>V = 2*</b></td> <td>M</td> <td>2 bar; 30 psig; 0.2 MPa</td> </tr> <tr> <td><b>3 = 60</b></td> <td><b>S = 4</b></td> <td>G</td> <td>4 bar; 60 psig; 0.4 MPa</td> </tr> <tr> <td><b>5 = 125</b></td> <td><b>T = 8</b></td> <td>J</td> <td>8 bar; 125 psig; 0.8 MPa</td> </tr> <tr> <td colspan="2"></td> <td colspan="2"><b>Without gauge</b></td> </tr> <tr> <td colspan="2"></td> <td>Y</td> <td>16 bar; 232 psig; 1.6 MPa</td> </tr> <tr> <td colspan="2"></td> <td>L</td> <td>2 bar; 30 psig; 0.2 MPa</td> </tr> <tr> <td colspan="2"></td> <td>N</td> <td>4 bar; 60 psig; 0.4 MPa</td> </tr> <tr> <td colspan="2"></td> <td>H</td> <td>8 bar; 125 psig; 0.8 MPa</td> </tr> <tr> <td colspan="2"></td> <td></td> <td>16 bar; 232 psig; 1.6 MPa</td> </tr> </tbody> </table>		With square gauge		With round gauge		psig	bar	Z	With round gauge	<b>1 = 30*</b>	<b>V = 2*</b>	M	2 bar; 30 psig; 0.2 MPa	<b>3 = 60</b>	<b>S = 4</b>	G	4 bar; 60 psig; 0.4 MPa	<b>5 = 125</b>	<b>T = 8</b>	J	8 bar; 125 psig; 0.8 MPa			<b>Without gauge</b>				Y	16 bar; 232 psig; 1.6 MPa			L	2 bar; 30 psig; 0.2 MPa			N	4 bar; 60 psig; 0.4 MPa			H	8 bar; 125 psig; 0.8 MPa				16 bar; 232 psig; 1.6 MPa	
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<b>Bold items are most common.</b>				<p>* Unit comes with 0-4 bar or 0-60 psig gauge respectively.                  Bar gauges fitted to BSPP                  PSI gauges fitted to NPT</p>																																														

Port size	Description	Flow† dm <sup>3</sup> /s (scfm)	Max. bar (psig)	Height mm (inches)	Width mm (inches)	Depth mm (inches)	Part number†
1/4"	8 bar (125 psig) relieving	32 (68)	20 (300)	104.1 (4.1)	40 (1.58)	40 (1.58)	<b>P31RB12BNNP</b>
1/4"	8 bar (125 psig) + gauge	32 (68)	20 (300)	104.1 (4.1)	40 (1.58)	61.3 (2.41)	<b>P31RB12BNTTP</b>

† Standard part numbers shown in bold. For other models refer to Options chart above.  
 ‡ Flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

### Specifications

Flow capacity*	1/4	32 dm <sup>3</sup> /s (68 scfm)
Operating temperature†	-20°C to 65.5°C (-4°F to 150°F)	
Max. supply pressure	20 bar (300 psig)	
Adjusting range pressure	0-2 bar (30 psig)	
	0-4 bar (60 psig)	
	0-8 bar (125 psig)	
	0-16 bar (232 psig)	
Port size	BSPP / NPT	1/4
Gauge port (2 ea.)**	BSPP / NPT	1/8
Weight	0.17 kg (0.37 lbs)	

\* Inlet pressure 10 bar (145 psig). Secondary pressure 6.3 bar (91.3 psig).

\*\* Non-gauge option only.

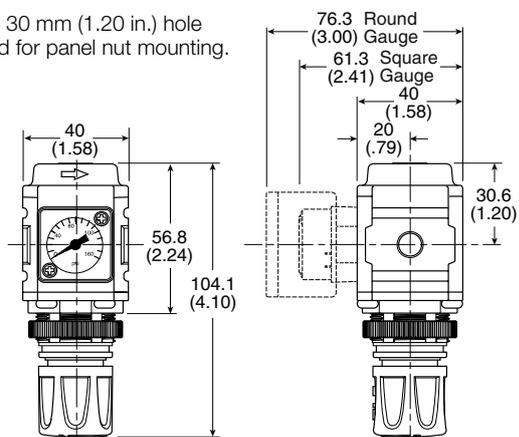
† Units with square gauges: -15°C to 65.5°C (5°F to 150°F)

### Material Specifications

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

### Dimensions mm (inches)

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



#### WARNING

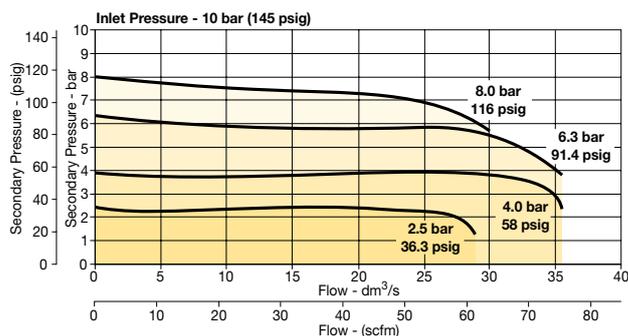
**Product rupture can cause serious injury.  
Do not connect regulator to bottled gas.  
Do not exceed Maximum primary pressure rating.**

### 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.

### Flow Charts

#### 1/4 Regulator



### 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>

### 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

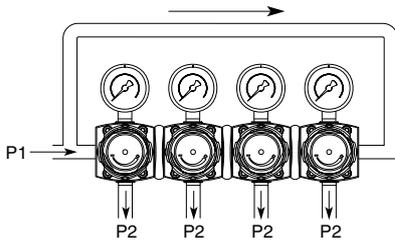
0-4 bar	<b>P6G-PR11040</b>
0-11 bar	<b>P6G-PR11110</b>
0-60 psig	<b>P6G-PR90060</b>
0-160 psig	<b>P6G-PR90160</b>

#### 40mm Round 1/8" center back mount

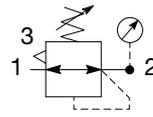
0-30 psig / 0-2 bar	<b>P3D-KAB1AYN</b>
0-60 psig / 0-4 bar	<b>P3D-KAB1ALN</b>
0-160 psig / 0-11 bar	<b>P3D-KAB1ANN</b>
0-300 psig / 0-20 bar	<b>P3D-KAB1AHN</b>

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

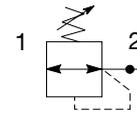
**Mini Common - P1 Regulator - P31**



**Symbols**



Self relieving regulator with gauge



Non relieving regulator

- 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 0-2 bar (0-30 psig), 0-4 bar, (0-60 psig), 0-8 bar (0-125 psig), 0-16 bar (0-232 psig)
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation
- Relieving & Non-relieving types
- Non-rising knob

**Options:**

<b>P31HB</b>		<b>2</b>		<b>N</b>		<b>P</b>
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**Basic series**  
Global modular mini common regulator **P31HB**

**Thread type**  
BSPP **1**  
NPT **9**

**Port size †**  
1/4 **2**  
† Working port 1/8".

**Mounting**  
**P** Plastic panel mount nut

**Relief**

Relieving	<b>B</b>
Non-relieving	<b>N</b>
Reverse flow / Relieving	<b>R</b>

**Adjustment range**

With square gauge		Without gauge	
psig	bar	Y	Without gauge
1 = 30*	V = 2*	L	<b>4 bar; 60 psig; 0.4 MPa</b>
3 = 60	S = 4	N	<b>8 bar; 125 psig; 0.8 MPa</b>
5 = 125	T = 8	H	<b>16 bar; 232 psig; 1.6 MPa</b>

\* Unit comes with 0-4 bar or 0-60 psig gauge respectively.  
 Bar gauges fitted to BSPP  
 PSI gauges fitted to NPT

Bold items are most common.

Port size	Description	Flow† dm <sup>3</sup> /s (scfm)	Max. bar (psig)	Height mm (inches)	Width mm (inches)	Depth mm (inches)	Part number†
1/4"	8 bar (125 psig) relieving	20 (42)	20 (300)	104.1 (4.1)	40 (1.58)	40 (1.58)	<b>P31HB12BNNP</b>

† Standard part numbers shown in bold. For other models refer to Options chart above.  
 ‡ Flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

### Specifications

Flow capacity*	1/4	20 dm <sup>3</sup> /s (42 scfm)
Operating temperature	-20°C to 65.5°C (-4°F to 150°F)	
Max. supply pressure	20 bar (300 psig)	
Adjusting range pressure	0-2 bar (30 psig) 0-4 bar (60 psig) 0-8 bar (125 psig) 0-16 bar (232 psig)	
P1 Port size (Inlet / Outlet)	BSPP / NPT	1/4
P2 Regulated ports (2 ea.)	BSPP / NPT	1/8
Weight	0.30 kg (0.66 lbs)	

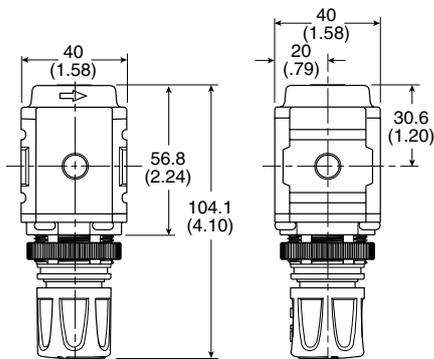
\* Inlet pressure 10 bar (145 psig). Secondary pressure 6.3 bar (91.3 psig).

### Materials of Construction

Body	Aluminum
Adjustment knob	Acetal
Bonnet	33% Glass-filled PBT
Diaphragm assembly	Brass / Nitrile
Valve assembly	Brass / Nitrile

### Dimensions mm (inches)

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



### WARNING

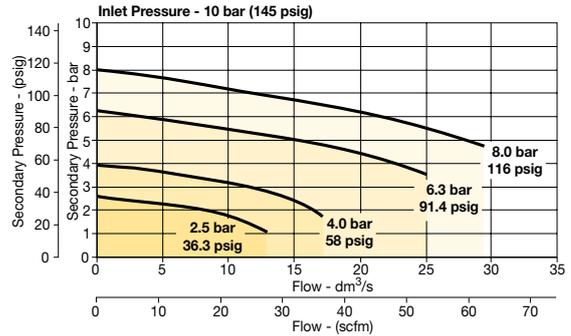
**Product rupture can cause serious injury.  
Do not connect regulator to bottled gas.  
Do not exceed Maximum primary pressure rating.**

### 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.

### Flow Charts

#### 1/4 Common Regulator



### 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>

### Gauges

#### Square with adapter kit

0-4 bar	<b>P6G-PR11040</b>
0-11 bar	<b>P6G-PR11110</b>
0-60 psig	<b>P6G-PR90060</b>
0-160 psig	<b>P6G-PR90160</b>

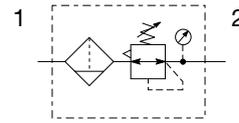
#### 40mm Round 1/8" center back mount

0-30 psig / 0-2 bar	<b>P3D-KAB1AYN</b>
0-60 psig / 0-4 bar	<b>P3D-KAB1ALN</b>
0-160 psig / 0-11 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.

**Mini Filter / Regulator - P31**

**Symbols**



- Integral 1/4" ports (NPT & BSPP)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminum construction
- Positive bayonet latch to ensure correct & safe fitting
- Secondary pressure ranges 0-2 bar (0-30 psig), 0-4 bar, (0-60 psig), 0-8 bar (0-125 psig), 0-16 bar (0-232 psig)
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation

**Options:**

**P31EB** **2** **E** **N** **P**

<b>Basic series</b> Global modular mini filter / regulator P31EB	<b>Thread type</b> BSPP 1 NPT 9	<b>Element</b> 5µ Element E	<b>Relief</b> B Relieving N Non-relieving	<b>Mounting</b> P Plastic panel mount nut																								
	<b>Port size</b> 1/4 2		<b>Drain type</b> B Pulse drain M Manual drain																									
	<b>Bowl type</b> Poly bowl with bowl guard G Metal bowl without sight gauge M		<b>Adjustment range</b>																									
			<table border="1"> <thead> <tr> <th colspan="2">With square gauge</th> <th colspan="2">With round gauge</th> </tr> <tr> <th>psig</th> <th>bar</th> <th>Z</th> <th>Without gauge</th> </tr> </thead> <tbody> <tr> <td>1 = 30*</td> <td>V = 2*</td> <td>M</td> <td>2 bar; 30 psig; 0.2 MPa</td> </tr> <tr> <td>3 = 60</td> <td>S = 4</td> <td>G</td> <td>4 bar; 60 psig; 0.4 MPa</td> </tr> <tr> <td>5 = 125</td> <td>T = 8</td> <td>J<sup>§</sup></td> <td>8 bar; 125 psig; 0.8 MPa</td> </tr> <tr> <td></td> <td></td> <td></td> <td>16 bar; 232 psig; 1.6 MPa</td> </tr> </tbody> </table>		With square gauge		With round gauge		psig	bar	Z	Without gauge	1 = 30*	V = 2*	M	2 bar; 30 psig; 0.2 MPa	3 = 60	S = 4	G	4 bar; 60 psig; 0.4 MPa	5 = 125	T = 8	J <sup>§</sup>	8 bar; 125 psig; 0.8 MPa				16 bar; 232 psig; 1.6 MPa
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\* Unit comes with 0-4 bar or 0-60 psig gauge respectively.  
 § Not available with poly bowl with bowl guard.  
 Bar gauges fitted to BSPP  
 PSI gauges fitted to NPT

**Bold items are most common.**

Port size	Description	Flow <sup>†</sup> dm <sup>3</sup> /s (scfm)	Max. bar (psig)	Height mm (inches)	Width mm (inches)	Depth mm (inches)	Part number <sup>†</sup>
1/4"	8 bar (125 psig) relieving - poly bowl - manual drain	10 (22)	10 (150)	176.9 (6.96)	40 (1.58)	61.3 (2.41)	<b>P31EB12EGMBNTP</b>
1/4"	8 bar (125 psig) relieving - poly bowl - pulse drain	10 (22)	10 (150)	172.0 (6.77)	40 (1.58)	61.3 (2.41)	<b>P31EB12EGBBNT</b>
1/4"	8 bar (125 psig) relieving - metal bowl - manual drain	10 (22)	17 (250)	176.9 (6.96)	40 (1.58)	61.3 (2.41)	<b>P31EB12EMMBNTP</b>
1/4"	8 bar (125 psig) relieving - metal bowl - pulse drain	10 (22)	17 (250)	172.0 (6.77)	40 (1.58)	61.3 (2.41)	<b>P31EB12EMBBNTP</b>

<sup>†</sup> Standard part numbers shown in bold. For other models refer to Options chart above.  
<sup>‡</sup> Flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

### Specifications

Flow capacity*	1/4	10 dm <sup>3</sup> /s (22 scfm)
Operating temperature†	Plastic bowl	-10°C to 52°C (14°F to 125°F)
	Metal bowl	-10°C to 65.5°C (14°F to 150°F)
Max. supply pressure	Plastic bowl	10 bar (150 psig)
	Metal bowl	17 bar (250 psig)
Standard filtration		5 micron
Useful retention		12 cm <sup>3</sup> (0.4 US oz.)
Adjusting range pressure		0-2 bar (30 psig)
		0-4 bar (60 psig)
		0-8 bar (125 psig)
		0-16 bar (232 psig)
Port size	BSPP / NPT	1/4
Gauge port (2 ea.)**	BSPP / NPT	1/8
Weight		0.19 kg (0.42 lbs)

\* Inlet pressure 10 bar (145 psig). Secondary pressure 6.3 bar (91.3 psig).

\*\* Non-gauge option only.

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

#### Air quality:

Within ISO 8573-1: 1991 Class 3 (Particulates)

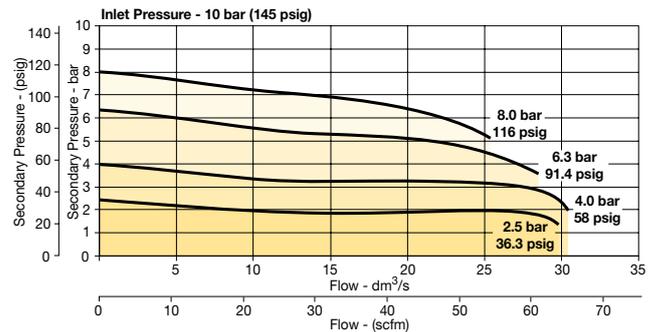
Within ISO 8573-1: 2001 Class 6 (Particulates)

**⚠ WARNING**

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

### Flow Charts

#### 1/4 Filter / Regulator

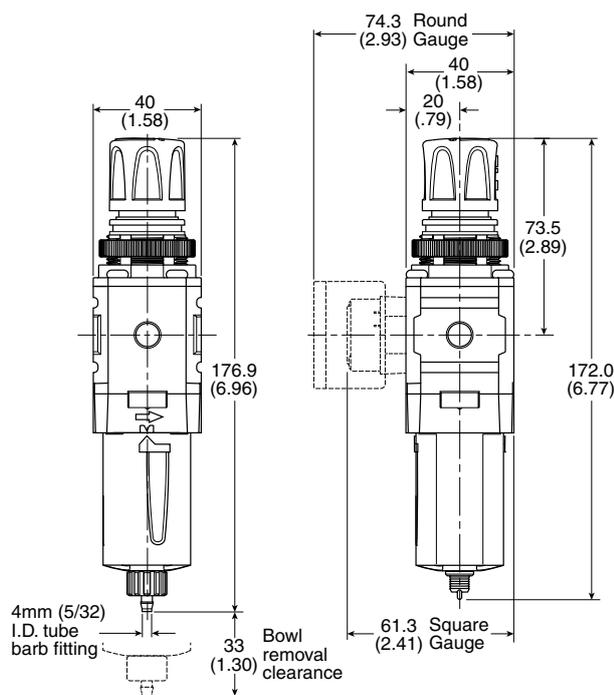


### Material Specifications

Body	Aluminum	
Adjustment knob	Acetal	
Body cap	ABS	
Bonnet	PBT	
Bowl	Plastic bowl	Polycarbonate
	Metal bowl	Aluminum
Bowl guard	Nylon	
Filter element	Polyethylene	
Seals	Nitrile	
Springs	Steel	
Valve assembly	Brass / Nitrile	
Diaphragm assembly	Brass / Nitrile	
Panel nut	Acetal	

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

### Dimensions mm (inches)



Manual Drain

Pulse Drain

### 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>

### 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>

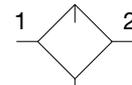
For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

#### Square with adapter kit

0-4 bar	<b>P6G-PR11040</b>
0-11 bar	<b>P6G-PR11110</b>
0-60 psig	<b>P6G-PR90060</b>
0-160 psig	<b>P6G-PR90160</b>

**Mini Lubricator - P31**

**Symbol**



Lubricator with drain

- Integral 1/4" ports (NPT & BSPP)
- Robust but lightweight aluminum construction
- Proportional oil delivery over a wide range of air flows
- Finger tip ratchet control for precise oil drip rate adjustment

**Options:**

**P31LB** **2** **L** **N** **N**

<b>Basic series</b> Global modular mini lubricator P31LB	<b>Thread type</b> BSPP 1 NPT 9	<b>Port size</b> 1/4 2	<b>Lube type</b> Oil mist standard sight dome L	<b>Drain type</b> N No drain closed end	<b>Bowl type</b> G Poly bowl with bowl guard M Metal bowl without sight gauge	<b>Mounting</b> N No bracket
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Bold items are most common.

Port size	Description	Flow <sup>†</sup> dm <sup>3</sup> /s (scfm)	Max. bar (psig)	Height mm (inches)	Width mm (inches)	Depth mm (inches)	Part number <sup>†</sup>
1/4"	Poly bowl - No drain	19 (40)	10 (150)	153.3 (6.04)	40 (1.58)	40 (1.58)	<b>P31LB12LGNN</b>
1/4"	Metal bowl - No drain	19 (40)	17 (250)	153.3 (6.04)	40 (1.58)	40 (1.58)	<b>P31LB12LMNN</b>

<sup>†</sup> Standard part numbers shown in bold. For other models refer to Options chart above.

<sup>‡</sup> Flow with 6.3 bar (91.3 psig) inlet pressure and 0.34 bar (4.9 psig) pressure drop.

### Specifications

Flow capacity*	1/4	19 dm <sup>3</sup> /s (40 scfm)
Operating temperature	Plastic bowl	-10°C to 52°C (14°F to 125°F)
	Metal bowl	-10°C to 65.5°C (14°F to 150°F)
Max. supply pressure	Plastic bowl	10 bar (150 psig)
	Metal bowl	17 bar (250 psig)
Useful retention		18 cm <sup>3</sup> (0.6 US oz.)
Port size	BSP / NPT	1/4
Weight		0.13 kg (0.29 lbs)

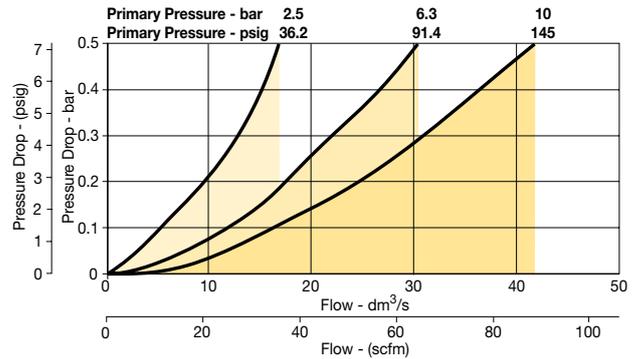
\* Inlet pressure 6.3 bar (91.3 psig). Pressure drop 0.34 bar (4.9 psig).

### Material Specifications

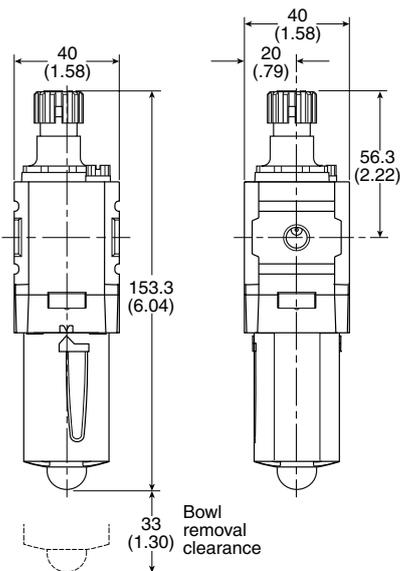
Body	Aluminum	
Body cap	ABS	
Bowl	Plastic bowl	Polycarbonate
	Metal bowl	Aluminum
Seals	Nitrile	
Sight dome	Polycarbonate	
Suggested lubricant	ISO / ASTM VG32	
Pick-up filter	Sintered bronze	

### Flow Charts

#### P31LB 1/4" Lubricator



### Dimensions mm (inches)



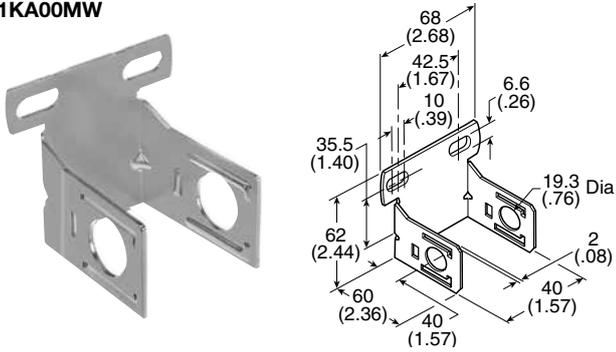
### Repair and Service Kits

Plastic bowl / Bowl guard no drain	<b>P31KB00BGN</b>
Metal bowl / w/o sight gauge no drain	<b>P31KB00BMN</b>
Drip control assembly	<b>P32KA00PG</b>
Fill plug	<b>P31KA00PL</b>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>
Lubricator oil - VG15: ISO 3448 - 100 ml	<b>P3XKA00PPA</b>
Lubricator oil - VG32 - 1 litre	<b>P3YKA00PPBB</b>

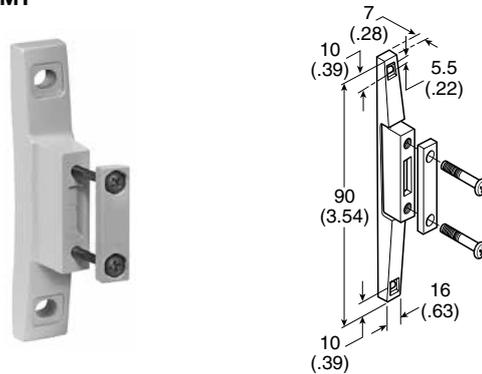
(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

**Accessories - P31 Series**

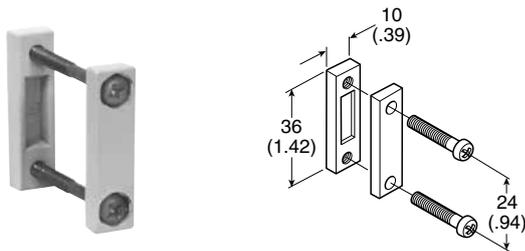
**C-Bracket**  
 (Fits to filter and lubricator body)  
**P31KA00MW**



**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 ..... **P31KA91CP**
- 1/4 NPT ..... **P31KA92CP**
- 3/8 NPT ..... **P31KA93CP**
- 1/8 BSPP ..... **P31KA11CP**
- 1/4 BSPP ..... **P31KA12CP**
- 3/8 BSPP ..... **P31KA13CP**



**Port Block Kit w/ T-Bracket**  
 (O-ring not shown)

- 1/8 NPT ..... **P31KA91CN**
- 1/4 NPT ..... **P31KA92CN**
- 3/8 NPT ..... **P31KA93CN**
- 1/8 BSPP ..... **P31KA11CN**
- 1/4 BSPP ..... **P31KA12CN**
- 3/8 BSPP ..... **P31KA13CN**



**Angle Bracket**  
 (Fits to regulator and filter/regulator body)

**P31KB00MR**  
**P31KB00MS - with Metal Nut**

