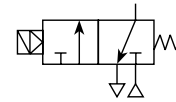


**Dump Valve**



**Symbol**



- Modular design with 1/4" or 1/2" integral ports (NPT & BSPP)
- The 3-way, 2-position function automatically dumps downstream pressure on the loss of pilot signal
- Solenoid or air pilot options
- High flow & exhaust capability
- Silencer included

Remotely operated dump valves automatically shut off upstream pressure and exhaust the downstream pressure when the pilot pressure is released.

To maintain these units in the open position a pilot supply to the air pilot operated version or an electrical signal to the solenoid operated version must be maintained. The valve will automatically dump when the holding signal is removed.

**Options:**

**P31DA** [ ] [ ] [ ] [ ] **N**

**Body size**

Dump valve (1/4")	<b>P31DA</b>
Dump valve (1/2")	<b>P32DA</b>

**Thread type**

<b>BSPP</b>	<b>1</b>
NPT	9

**Actuator interface**

<b>G</b>	15mm solenoid (P31 only)
C	30mm solenoid
P	Threaded Air Pilot

**Solenoid voltage**

<b>000</b>	Solenoid / Coil not fitted
2CN	24VDC non locking manual override
3GN	120VAC non locking manual override
1FN	120VAC non locking manual override (P31 series only)

**Pilot type**

<b>P</b>	External air pilot
S	Solenoid pilot

**Solenoid type only**

<b>0</b>	None (For P32 series - operator is fitted to valve)
C	15mm (P31 series only)
A	30mm CNOMO coil (P32 only)
<b>D</b>	30mm CNOMO coil (M12 connection) (P32 only)

**Port size**

Global modular mini (1/4")	<b>2</b>
Global modular compact (1/2")	<b>4</b>

**Note:**  
P32 unit used for both P32 & P33 series  
**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)	Weight kg (lbs)	Part number†
1/4"	Solenoid operated (not included)	17 (36)	10 (150)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37 (0.8)	<b>P31DA12SGN0000</b>
1/4"	24VDC Solenoid & cable plug	17 (36)	10 (150)	166‡ (6.5)	57 (2.2)	40 (1.5)	0.41 (0.9)	<b>P31DA12SGNC2CN</b>
1/4"	External air pilot operated	17 (36)	17 (250)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37 (0.8)	<b>P31DA12PPN</b>
1/2"	Solenoid operated (not included)	51 (108)	10 (150)	162.5‡ (6.3)	75 (2.9)	57.2 (2.2)	0.69 (1.5)	<b>P32DA14SCN0000</b>
1/2"	24VDC 30mm coil & cable plug incl.	51 (108)	10 (150)	227.5‡ (8.9)	75 (2.9)	57.2 (2.2)	0.91 (2.0)	<b>P32DA14SCNA2CN</b>
1/2"	External air pilot operated	51 (108)	17 (250)	162.5‡ (6.3)	75 (2.9)	57.2 (2.2)	0.87 (1.9)	<b>P32DA14PPN</b>

‡ Includes exhaust silencer  
† **Standard part numbers shown in bold. For other models refer to Options chart above.**

**Technical Information**

Fluid:	Compressed air
Max. pressure solenoid operated:	10 bar (150 psig)
Max. pressure air pilot operated:	17 bar (250 psig)
Min. operating pressure:	3 bar (44 psig)
Temperature Max.* solenoid operated:	-10°C to 50°C (14°F to 122°F)
Temperature Max.* air pilot operated:	-20°C to 80°C (-4°F to 176°F)
Air pilot port:	1/8"
Exhaust port:	<b>P31D</b> - 1/4" / <b>P32D</b> - 1/2"
Gauge port:	<b>P31D</b> - 1/8" / <b>P32D</b> - 1/4"

Typical flow with 6.3 bar inlet pressure and 1 bar pressure drop: **P31D** 17 dm<sup>3</sup>/s (36 scfm) / **P32D** 51 dm<sup>3</sup>/s (108 scfm)

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C  
 Snap pressure: Full flow when downstream pressure reaches 50% of the inlet pressure

**Material Specifications**

Body:	Aluminum
Body cover:	Polyester
Seals:	Nitrile NBR

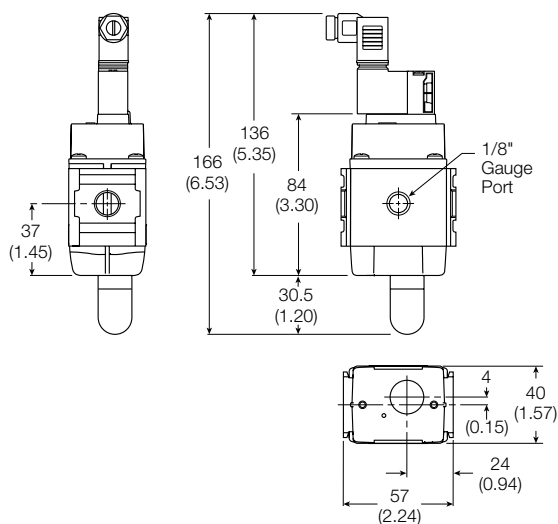
**Mounting Brackets**

Description	Part number
L-bracket mounting kit	<b>P3HKA00ML</b>
Foot bracket mounting kit	<b>P3HKA00MC</b>

**Note:**  
 For solenoid operators and cable plugs (connectors) see pages 74 to 75.

**Dimensions mm (inches)**

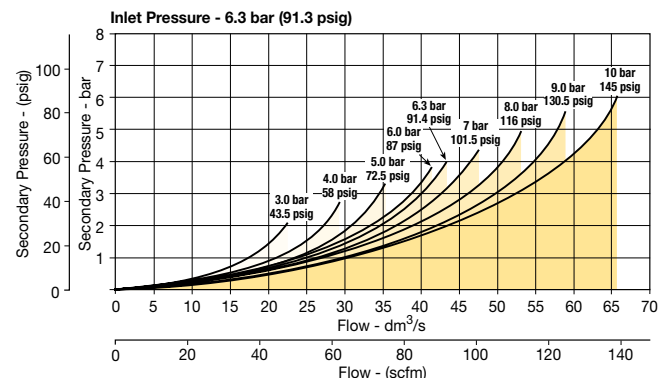
**P31D**



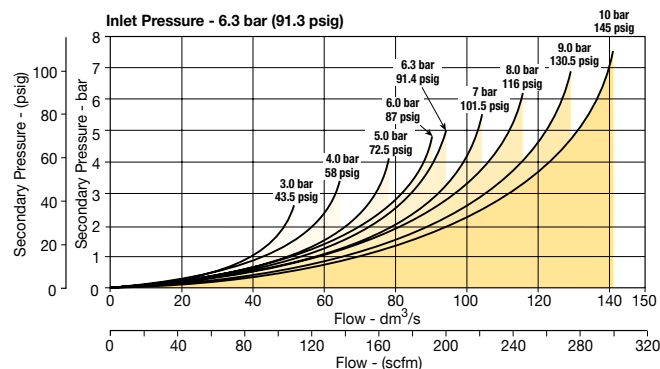
For mounting brackets see page 86.

**Flow Charts**

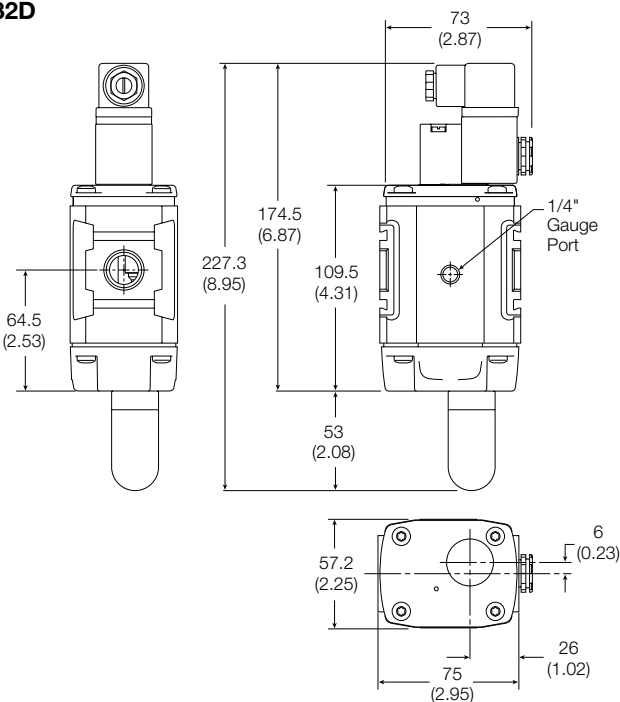
**P31DA 1/4" Remote Dump Valve**



**P32DA 1/2" Remote Dump Valve**



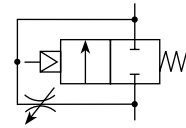
**P32D**



**Soft Start Valve**



**Symbol**



- Modular design with 1/4" or 1/2" integral ports (NPT & BSPP)
- The 2-way, 2-position function provides for the safe introduction of pressure
- Adjustable slow start
- Solenoid or air pilot options
- High flow

Parker Global Series Soft Start Valves, provide for the safe introduction of pressure to machines or systems. Soft Start Valves, allow the pressure to gradually build to the set point before fully opening to deliver full flow at line pressure.

The controlled introduction of pressure can be an important safety factor and prevent damage to tooling when air pressure is introduced at machine or system start up.

**Note:** Soft Start Valves must be installed downstream of a 3/2 valve with exhaust capability

**Options:**

**P31SA** [ ] [ ] [ ] [ ] **N** [ ] [ ]

**Body size**

Soft start	<b>P31SA</b>
Soft start	P32SA

**Thread type**

BSPP	<b>1</b>
NPT	9

**Port size**

Global modular mini (1/4")	<b>2</b>
Global modular compact (1/2")	4

**Actuator interface**

<b>0</b>	Internal Pilot
G	15mm solenoid (P31 only)
C	30mm solenoid
P*	Threaded air pilot

**Pilot type**

<b>P</b>	External air pilot
S	Solenoid pilot
Y	Internal air pilot

**Solenoid type only**

**Solenoid voltage**

<b>000</b>	Solenoid / Coil not fitted
2CN	24VDC non locking manual override
3GN	120VAC non locking manual override
1FN	120VAC non locking manual override (P31 series only)

**Solenoid type**

<b>0</b>	None (For P32 series - Operator is fitted to valve)
C	15mm (P31 series only)
A	30mm CNOMO coil (P32 only)
D	30mm CNOMO coil (M12 connection) (P32 only)

**Note:**  
P32 unit used for both P32 & P33 series  
**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)	Weight kg (lbs)	Part number†
1/4"	Solenoid operated (not included)	17 (36)	10 (150)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37 (0.8)	<b>P31SA12SGN0000</b>
1/4"	24VDC Solenoid & cable plug	17 (36)	10 (150)	166.0 (6.5)	57 (2.2)	40 (1.5)	0.41 (0.9)	<b>P31SA12SGNC2CN</b>
1/4"	Internal air pilot operated	17 (36)	17 (250)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37 (0.8)	<b>P31SA12Y0N</b>
1/4"	External air pilot (1/8" threaded)	17 (36)	17 (250)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37 (0.8)	<b>P31SA12PPN</b>
1/2"	Solenoid operated (not included)	48 (101)	10 (150)	162.5 (6.3)	88 (3.4)	57.2 (2.28)	0.87 (1.5)	<b>P32SA14SCN0000</b>
1/2"	24VDC 30mm coil & cable plug	48 (101)	10 (150)	227.5 (8.9)	88 (3.4)	57.2 (2.28)	0.90 (2.0)	<b>P32SA14SCNA2CN</b>
1/2"	Internal air pilot operated	48 (101)	17 (250)	162.5 (6.3)	75 (2.9)	57.2 (2.28)	0.90 (2.0)	<b>P32SA14Y0N</b>
1/2"	External air pilot (1/8 threaded)	48 (101)	17 (250)	162.5 (6.3)	75 (2.9)	57.2 (2.28)	0.87 (1.5)	<b>P32SA14PPN</b>

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

**Technical Information**

Fluid:	Compressed air
Max. pressure solenoid operated:	10 bar (150 psig)
Max. pressure air pilot operated:	17 bar (250 psig)
Min. operating pressure:	3 bar (44 psig)
Temperature Max.* solenoid operated:	-10°C to 50°C (14°F to 122°F)
Temperature Max.* air pilot operated:	-20°C to 80°C (-4°F to 176°F)
Air pilot port:	1/8"
Gauge port:	<b>P31S - 1/8" / P32S - 1/4"</b>

Typical flow with 6.3 bar inlet pressure and 1 bar pressure drop:	<b>P31S</b>	17 dm <sup>3</sup> /s (36 scfm)
	<b>P32S</b>	48 dm <sup>3</sup> /s (101 scfm)

\* Air supply must be dry enough to avoid ice formation at temperatures below +2°C  
 Snap pressure: Full flow when downstream pressure reaches 50% of the inlet pressure

**Material Specifications**

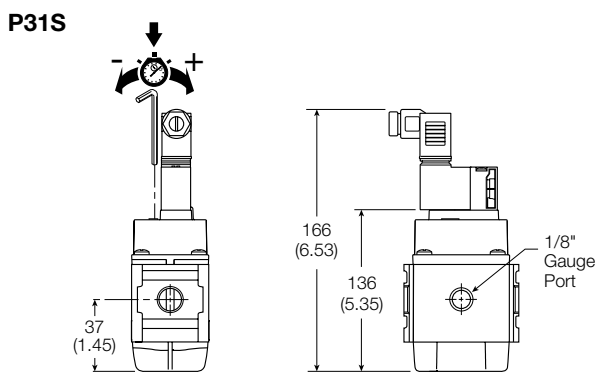
Body:	Aluminum
Body cover:	Polyester
Seals:	Nitrile NBR

**Mounting Brackets**

Description	Part number
	<b>P31S</b>
L-bracket mounting kit	<b>P3HKA00ML</b>
Foot bracket mounting kit	<b>P3HKA00MC</b>

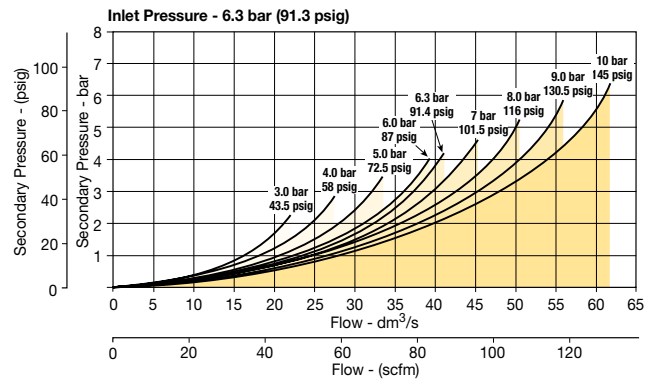
**Note:**  
 For solenoid operators and cable plugs (connectors) see pages 74 to 75.

**Dimensions mm (inches)**

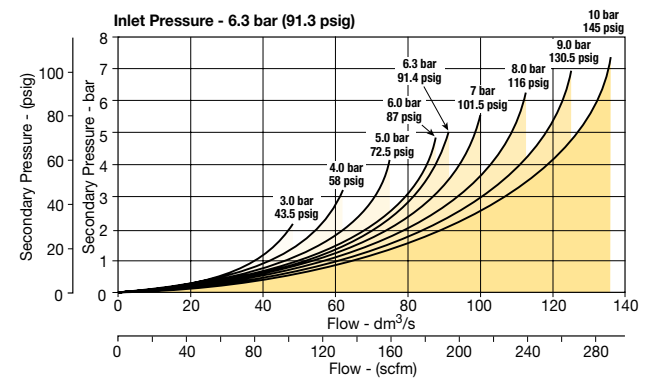


**Flow Charts**

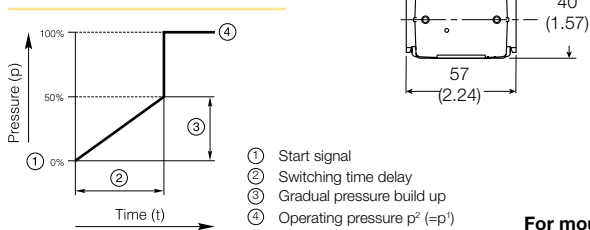
**P31SA 1/4" Soft Start Valve**



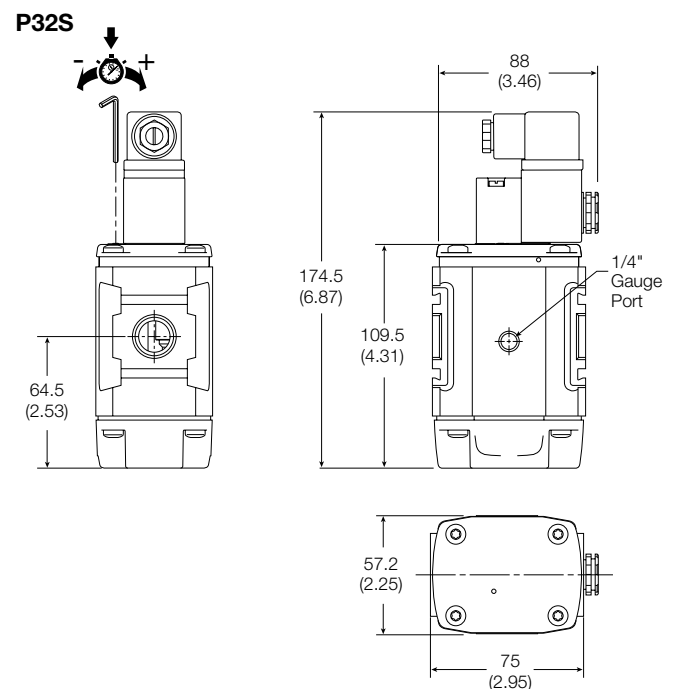
**P32SA 1/2" Soft Start Valve**



**Soft Start Function:**

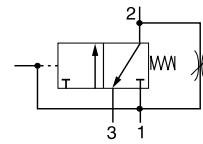
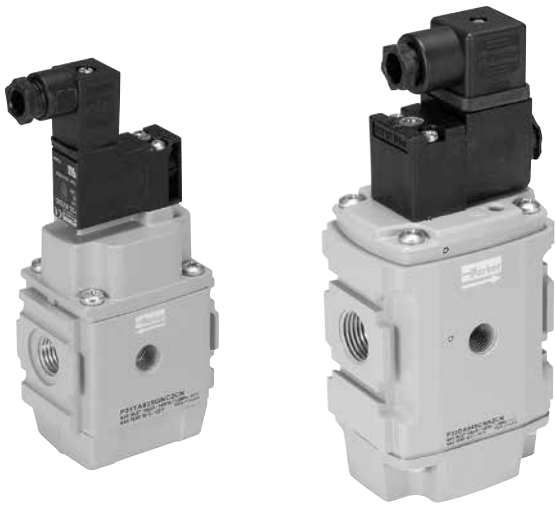


For mounting brackets see page 86.



**Combined Soft Start / Dump Valve**

**Symbol**



- Modular design with 1/4" or 1/2" integral ports (NPT & BSPP)
- Provides for the safe introduction of pressure
- The 3-way, 2-position function automatically dumps downstream pressure on the loss of pilot signal
- Adjustable slow start
- Solenoid or air pilot options
- High flow & exhaust capability
- Silencer included

Parker Global Series Combined Soft Start / Dump Valves, provide for the safe introduction of pressure to machines or systems. Soft Start / Dump Valves when set, allow the pressure to gradually build to the set point before fully opening to deliver full flow at line pressure.

The controlled introduction of pressure can be an important safety factor and prevent damage to tooling when air pressure is introduced at machine or system start up.

To maintain these units in the open position a pilot supply to the air pilot operated version or an electrical signal to the solenoid operated version must be maintained. The valve will automatically dump when the holding signal is removed.

**Options:**

**P31TA** [ ] [ ] [ ] [ ] **N**

<b>Body size</b>	Soft start / dump valve (1/4")	<b>P31TA</b>
	Soft start / dump valve (1/2")	<b>P32TA</b>

<b>Thread type</b>	BSPP	<b>1</b>
	NPT	<b>9</b>

<b>Port size</b>	Global modular mini (1/4")	<b>2</b>
	Global modular compact (1/2")	<b>4</b>

<b>Actuator interface</b>	G 15mm solenoid (P31 only)	
	C 30mm solenoid	
	P Threaded air pilot	

<b>Pilot type</b>	P External air pilot	
	S Solenoid pilot	

<b>Solenoid type only</b>	
<b>Solenoid voltage</b>	000 Solenoid / Coil not fitted
	2CN 24VDC non locking manual override
	3GN 120VAC non locking manual override
	1FN 120VAC non locking manual override (P31 series only)

<b>Solenoid type</b>	
<b>0</b>	None (For P32 series - Operator is fitted to valve)
<b>C</b>	15mm (P31 series only)
<b>A</b>	30mm CNOMO coil (P32 only)
<b>D</b>	30mm CNOMO coil (M12 connection) (P32 only)

Note:  
P32 unit used for both P32 & P33 series  
**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)	Weight kg (lbs)	Part number <sup>†</sup>
1/4"	Solenoid operated (not included)	17 (36)	10 (150)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37 (0.8)	<b>P31TA12SGN0000</b>
1/4"	24VDC Solenoid & cable plug	17 (36)	10 (150)	166 <sup>‡</sup> (6.5)	57 (2.2)	40 (1.5)	0.41 (0.9)	<b>P31TA12SGNC2CN</b>
1/4"	External air pilot operated	17 (36)	17 (250)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37 (0.8)	<b>P31TA12PPN</b>
1/2"	Solenoid operated (not included)	46 (97)	10 (150)	162.5 <sup>‡</sup> (6.3)	88 (3.4)	57.2 (2.2)	0.87 (1.9)	<b>P32TA14SCN0000</b>
1/2"	24VDC 30mm coil & cable plug incl.	46 (97)	10 (150)	227.5 <sup>‡</sup> (8.9)	88 (3.4)	57.2 (2.2)	0.91 (2.0)	<b>P32TA14SCNA2CN</b>
1/2"	External air pilot operated	46 (97)	17 (250)	162.5 <sup>‡</sup> (6.3)	75 (2.9)	57.2 (2.2)	0.87 (1.9)	<b>P32TA14PPN</b>

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