

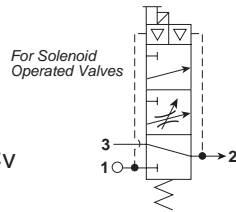
Soft Start / Quick Dump Valve

A

06S & 07S Soft Start / Quick Dump Valve

Features

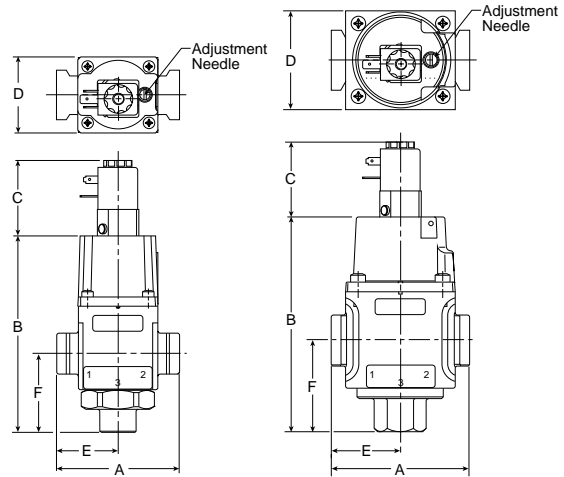
- Combines Soft Start and Quick Dump Valve in the same body
- Large flow capacities up to 5.7 Cv
- Inline or Modular mounting
- Soft Start flow easily adjusted



06S



07S



06S

07S

Dimensions:

| Model | Port Size | A | B | C | D | E | F |
|-------|-----------|--------------|---------------|--------------|--------------|--------------|--------------|
| 06S | 3/8" | 3.36 (85) | 5.40 (137) | 2.07 (53) | 2.08 (53) | 1.68 (43) | 2.17 (55) |
| 07S | 1/2" | 3.81 (96) | 5.96 (151) | 2.07 (53) | 2.74 (70) | 1.91 (48) | 2.54 (65) |

Inches (mm)

Operation

When the valve is installed into the pneumatic system and pilot operator receives no signal, the air is blocked at Port 1. When a pilot signal is received at pilot operator, the valve shifts closing the connection between Ports 2 and 3. At the same time air flow begins between Ports 1 and 2 at a slow rate controlled by the needle valve located on the top of the valve. When the down stream pressure reaches approximately 60% of the supply pressure, the main valve spool opens allowing full flow through the valve into the system. If pilot signal or system pressure is lost, the valve returns to it's initial state venting the down stream pressure through Port 3.

Pressure supply piping must be the same size as the inlet port or larger to insure that the pilot valve receives sufficient pressure supply during high flow conditions.

The valves pilot signal is through a solenoid pilot mounted on the head. The valve should be mounted downstream of the FRL and with the soft start adjustment needle easily accessible.

CAUTION: Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

CAUTION: Do not restrict the inlet of valves.

Ordering Information



| Series | |
|--------|-------------------------------|
| 06S | Soft Start / Quick Dump Valve |
| 07S | Soft Start / Quick Dump Valve |

| Port Size |
|------------------|
| 2 3/8 Inch (06S) |
| 3 1/2 Inch (07S) |

| Operator / Voltage |
|--|
| 30-145 PSI |
| 49 24VDC* |
| 53 120/60 Hz* |
| 145-200 PSI |
| 69 24VDC** |
| 73 120/60 Hz** |
| MDB1 M12 Male Connector, 4 Pole |

| Engineering Level |
|------------------------------|
| * Will be Entered at Factory |

| Thread Type / Label |
|---------------------|
| Blank NPT |
| 1* BSPP (G) |

* 3/8 & 1/2 inch meet ISO 1179-1 Standard.

* For Voltage Options 49 and 53, use 22mm connectors

** For Voltage Options 69 and 73, use 30mm connectors



Performance Characteristics

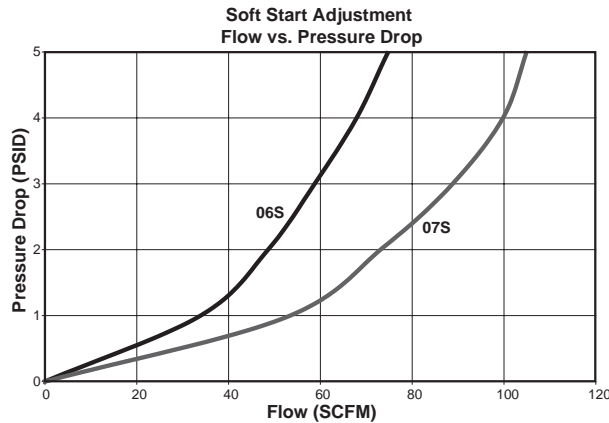


Table 1: Shows the relationship between the inlet pressure and downstream pressure at which the main valve opens.

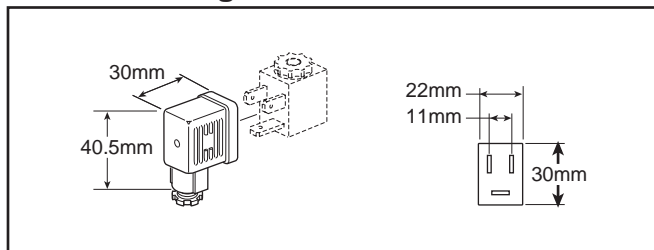
| Inlet Pressure PSIG | Downstream Pressure PSIG | |
|---------------------|--------------------------|-----|
| | 06S | 07S |
| 75 | 55 | 52 |
| 100 | 67 | 68 |
| 125 | 80 | 82 |

Table 2: Product forward Flow Cv and Exhaust Flow Cv.

| Series | Flow Cv | Exhaust Flow Cv |
|--------|---------|-----------------|
| 06S | 4.1 | 3.4 |
| 07S | 5.7 | 4.6 |



22mm Rectangular 3-Pin



| Connector | Connector with 6' (2m) Cord | Description |
|------------|-----------------------------|-------------------|
| PS2429BP | PS2429JBP | Unlighted |
| PS243079BP | PS2430J79BP* | Light – 24VDC |
| PS243083BP | PS2430J83BP* | Light – 120V/60Hz |

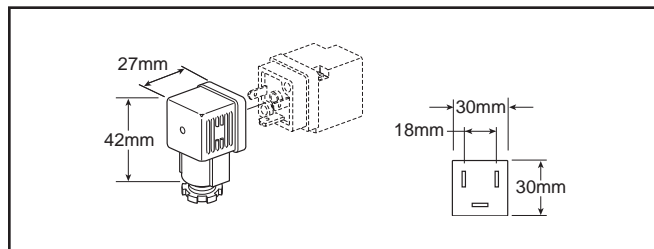
* LED with surge suppression.

Note: Max ϕ 6.5mm cable size required for connector w/o 6' (2m) cord. IP65 rated when properly installed.

Engineering Data:

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 6 to 8mm (0.24 to 0.31 Inch); Contact Spacing: 11mm

30mm Square 3-Pin



| Connector | Connector with 6' (2m) Cord | Description |
|------------|-----------------------------|-------------------|
| PS2028BP | PS2028JBP | Unlighted |
| PS203279BP | PS2032J79BP* | Light – 24VDC |
| PS203283BP | PS2032J83BP* | Light – 120V/60Hz |

* LED with surge suppression.

Note: Max ϕ 6.5mm cable size required for connector w/o 6' (2m) cord. IP65 rated when properly installed.

Engineering Data:

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 8 to 10mm (0.31 to 0.39 Inch); Contact Spacing: 18mm

Kits & Accessories

- 06 Modular Body Connectors PS754P
- 07 Modular Body Connectors PS854P
- 1/2" Exhaust Silencer ES50MB
- 3/4" Exhaust Silencer ES75MB

Specifications

- Exhaust Ports**
 - 06S 1/2 Inch
 - 07S 3/4 Inch
- Inlet and Outlet Ports**
 - 06S 3/8 Inch
 - 07S 1/2 Inch
- Maximum Pressure –**
 - Standard Coil 145 PSIG (10.0 bar)
 - High Pressure Coil 200 PSIG (13.8 bar)
- Minimum Operating Pressure** 30 PSIG (2.1 bar)
- Temperature Ratings** 40°F to 120°F (4°C to 49°C)
- Weight**
 - 06S 2.25 lbs. (1.02 kg)
 - 07S 3.75 lbs. (1.70 kg)

Materials of Construction

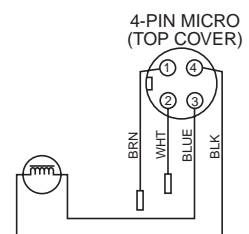
- Body Aluminum
- Bottom Plug Brass

Connections

Central M12 Male Connector, 4 Pole

ISO 20401

| Pin Number | Function | Color |
|------------|--|-------|
| 1 | 24V Supply | Brown |
| 2 | 0 to 10V or 4 to 20mA Control Signal Ri = 100k Ω | White |
| 3 | 0V (GND) Supply | Blue |
| 4 | 24V Alarm Output Signal | Black |



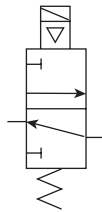
Solenoid Quick Dump Valve

A

06T & 07T Solenoid Quick Dump Valve

Features

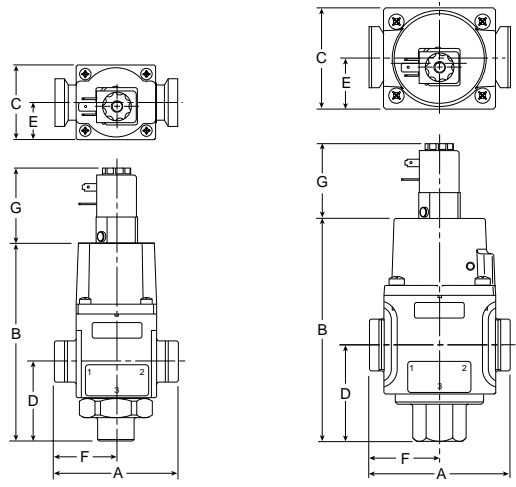
- Shuts off incoming pressure while rapidly exhausting downstream pressure
- Large exhaust flow capacities up to 5.0 Cv
- Solenoid operation
- Non-locking manual override
- Inline or Modular Mounting



06T



07T



06T

07T

Dimensions:

| Model | Port Size | A | B | C | D | E | F | G | H |
|-------|-----------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 06T | 3/8" | 3.36 (85) | 5.40 (137) | 2.08 (53) | 2.17 (26) | 1.04 (43) | 1.68 (43) | 2.07 (53) | 1.90 (48) |
| 07T | 1/2" | 3.81 (96) | 5.96 (151) | 2.74 (70) | 2.55 (65) | 1.37 (35) | 1.91 (48) | 2.07 (53) | 1.90 (48) |

Inches (mm)

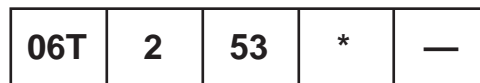
Operation

The solenoid quick dump valves are high flow, normally closed, 3-Port, 2-Position directional control valves. Upon energizing the solenoid, inlet air is applied to the top of the piston. The piston pushes against the spring and opens the main valve providing full flow air to the downstream. When the solenoid is de-energized, the main valve closes allowing downstream air to exhaust rapidly through the bottom plug. The bottom plug is tapped so that exhaust may be piped away or fitted with a muffler.

CAUTION: Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

CAUTION: Do not restrict the inlet of valves having an internal pilot supply. Pressure supply piping must be the same size as the inlet port or larger to insure that the pilot valve receives sufficient pressure supply during high flow conditions.

Ordering Information



| Series | |
|--------|---------------------------|
| 06T | Solenoid Quick Dump Valve |
| 07T | Solenoid Quick Dump Valve |

| Port Size |
|------------------|
| 2 3/8 Inch (06T) |
| 3 1/2 Inch (07T) |

| Operator / Voltage |
|--|
| 30-145 PSI |
| 49 24VDC* |
| 53 120/60 Hz* |
| 145-200 PSI |
| 69 24VDC** |
| 73 120/60 Hz** |
| MDB1 M12 Male Connector, 4 Pole |

| Engineering Level |
|------------------------------|
| * Will be Entered at Factory |

| Thread Type / Label |
|---------------------|
| Blank NPT |
| 1* BSPP (G) |

* 3/8 & 1/2 inch meet ISO 1179-1 Standard.

* For Voltage Options 49 and 53, use 22mm connectors

** For Voltage Options 69 and 73, use 30mm connectors



Solenoid Quick Dump Valve

Performance Characteristics

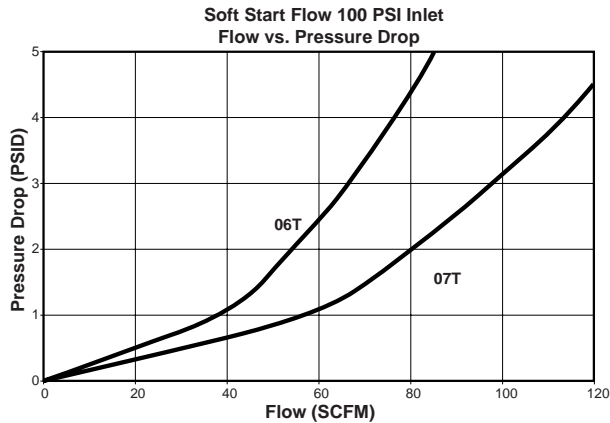
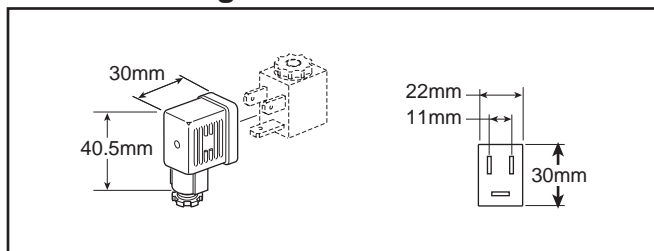


Table 2: Product forward Flow Cv (1 to 2).

| Series | Flow Cv | Exhaust Flow Cv |
|--------|---------|-----------------|
| 06T | 3.7 | 4.1 |
| 07T | 5.5 | 5.0 |



22mm Rectangular 3-Pin



| Connector | Connector with 6' (2m) Cord | Description |
|------------|-----------------------------|-------------------|
| PS2429BP | PS2429JBP | Unlighted |
| PS243079BP | PS2430J79BP* | Light – 24VDC |
| PS243083BP | PS2430J83BP* | Light – 120V/60Hz |

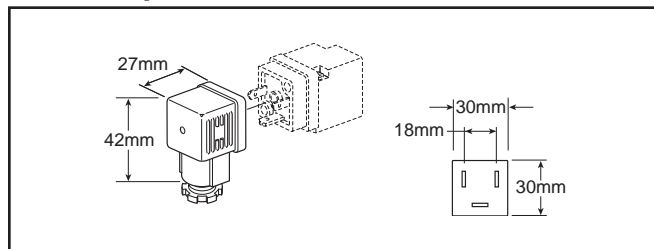
* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord. IP65 rated when properly installed.

Engineering Data:

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 6 to 8mm (0.24 to 0.31 Inch); Contact Spacing: 11mm

30mm Square 3-Pin



| Connector | Connector with 6' (2m) Cord | Description |
|------------|-----------------------------|-------------------|
| PS2028BP | PS2028JBP | Unlighted |
| PS203279BP | PS2032J79BP* | Light – 6-24VDC |
| PS203283BP | PS2032J83BP* | Light – 120V/60Hz |

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord. IP65 rated when properly installed.

Engineering Data:

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 8 to 10mm (0.31 to 0.39 Inch); Contact Spacing: 18mm

Kits & Accessories

- 06T Repair Kit PHRKS75
- 07T Repair Kit PHRKS105
- 06 Modular Body Connectors PS754P
- 07 Modular Body Connectors PS854P
- 1/2" Exhaust Silencer ES50MB
- 3/4" Exhaust Silencer ES75MB

Specifications

- Exhaust Ports**
- 06T 1/2 Inch
 - 07T 3/4 Inch

- Inlet and Outlet Ports**
- 06T 3/8 Inch
 - 07T 1/2 Inch

- Maximum Pressure –**
- Standard Coil 145 PSIG (10.0 bar)
 - High Pressure Coil 200 PSIG (13.8 bar)

Minimum Operating Pressure 30 PSIG (2.1 bar)

Temperature Ratings 40°F to 120°F (4°C to 49°C)

- Weight**
- 06T 2.25 lbs. (1.02 kg)
 - 07T 3.75 lbs. (1.70 kg)

Materials of Construction

- Body Aluminum
- Bottom Plug Brass

Connections

Central M12 Male Connector, 4 Pole

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| Pin Number | Function | Color |
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| 1 | 24V Supply | Brown |
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