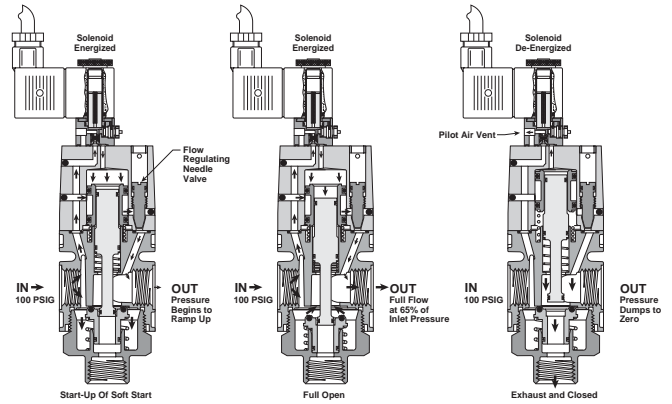
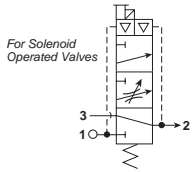


# SC75 & SC105 Series Solenoid Soft Start / Quick Dump Valves

**A**



## Features

- Connects to Other QUBE Units Using Just Screws and O-Rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Combines Soft Start and Quick Dump Valve in the Same Body
- Unit is Installed Downstream of Lubricator (If Used)
- Large Flow Capacities up to 4.2 Cv
- Inline or Modular Mounting
- Soft Start Flow Easily Adjusted

## Operation

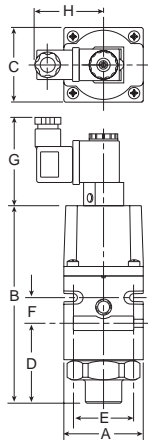
When the valve is installed into the pneumatic system, and pilot operator receives no signal, the air is blocked at Port 1. When a pilot signal is received at pilot operator, the valve shifts, closing the connection between Ports 2 and 3. At the same time, air flow begins between Ports 1 and 2 at a slow rate controlled by the needle valve, located on the top of the valve. When the downstream 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 its initial state, venting the downstream pressure through Port 3.

**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.

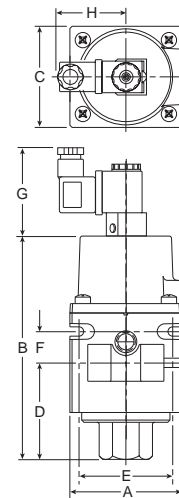
## Ordering Information / Dimensions

75 Series		
Model Number	Port (NPT)	Flow* Cv
24VDC / 48VAC		
SC75-03M	3/8"	4.1
SC75-04M	1/2"	4.2
12VDC / 24VAC		
SC75-03Z	3/8"	4.1
SC75-04Z	1/2"	4.2
120VAC		
SC75-03K	3/8"	4.1
SC75-04K	1/2"	4.2



\*Exhaust Flow

105 Series		
Model Number	Port (NPT)	Flow* Cv
24VDC / 48VAC		
SC105-04M	1/2"	5.3
SC105-06M	3/4"	5.7
12VDC / 24VAC		
SC105-04Z	1/2"	5.3
SC105-06Z	3/4"	5.7
120VAC		
SC105-04K	1/2"	5.3
SC105-06K	3/4"	5.7



\*Exhaust Flow

Model	A	B	C	D	E	F	G	H
SC75	2.19 (56)	5.43 (138)	2.06 (52)	1.50 (38)	1.66 (42)	.72 (18)	2.56 (65)	1.91 (48)

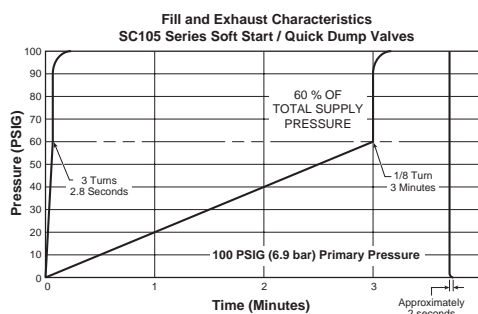
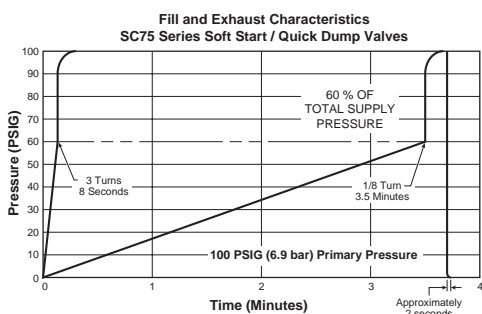
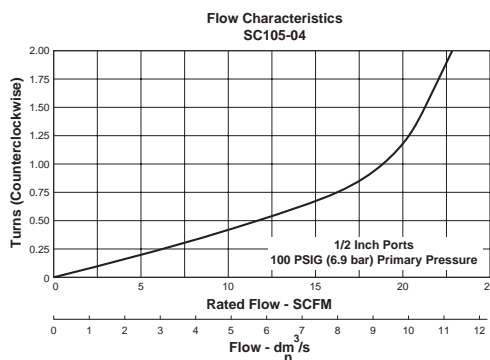
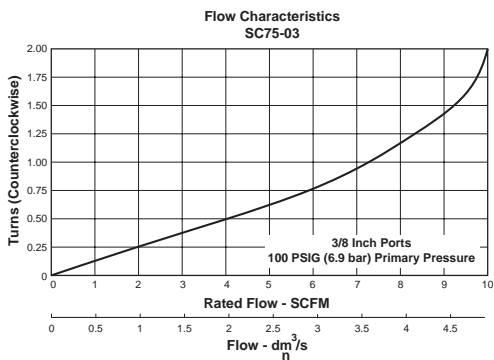
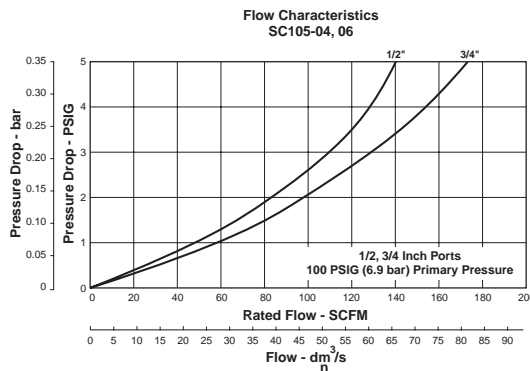
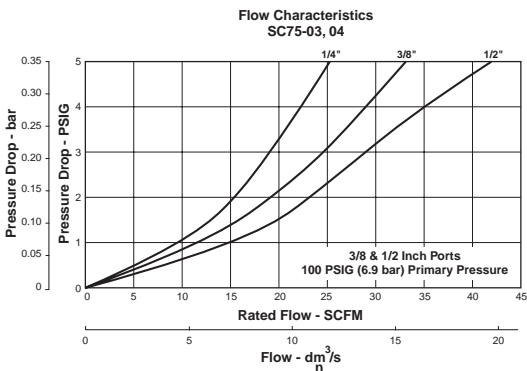
Inches (mm)

Model	A	B	C	D	E	F	G	H
SC105	3.03 (77)	6.03 (153)	2.75 (70)	1.84 (47)	2.53 (64)	.84 (21)	2.56 (65)	1.90 (48)

Inches (mm)



**Technical Information**



**QUBE SC75 & SC105 Series Kits & Accessories**

- Coil Kits –**  
 24VDC / 48VAC Coil.....2EV103  
 12VDC / 24VAC Coil.....2EV102  
 120 VAC Coil .....2EV105

- Seal Repair Kits –**  
 SC75 Series ..... RKSC75  
 SC105 Series ..... RKSC105

- Exhaust Mufflers**  
 SC75 (1/2" Exhaust) ..... M60-04  
 SC105 (3/4" Exhaust) ..... M60-06

**Specifications**

- Exhaust Ports –**  
 SC75..... 1/2 Inch NPT  
 SC105..... 3/4 Inch NPT

- Gauge Ports –**  
 SC75 (2) ..... 1/8 Inch NPT  
 SC105 (2) ..... 1/4 Inch NPT

**Inlet & Outlet Port Threads –**

- SC75.....3/8 Inch NPTF  
 SC105.....1/2 Inch NPTF  
 (BSPP and BSPT port threads are available through the use of Modular Port Block Kits)

**Pressure & Temperature Ratings –**

- Solenoid.....60 to 145 PSIG (4.1 to 10.0 bar)  
 32°F to 140°F (0°C to 60°C)

**Weight –**

- SC75..... 3.25 lb. (1.47 kg)  
 SC105..... 5.5 lb. (2.49 kg)

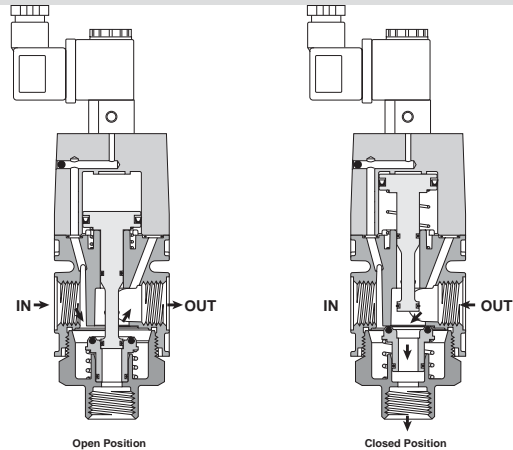
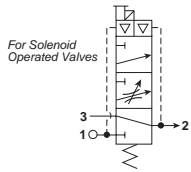
**Materials of Construction**

- Body** ..... Zinc  
**Bottom Plug** ..... Brass  
**Seals** ..... Nitrile  
**Springs** ..... Stainless Steel  
**Internal Components** ..... Brass / Aluminum  
**Top Cover** ..... Aluminum



## S75 & S105 Solenoid Quick Dump Valves

**A**



### Features

- Connects to Other QUBE Units Using Just Screws & O-Rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Shuts Off Incoming Pressure While Rapidly Exhausting Downstream Pressure
- Unit is Installed Downstream of Lubricator (If Used)
- Large Exhaust Flow Capacities Up to 5.7 Cv
- Solenoid Operation
- Non-locking Manual Override
- Inline or Modular Mounting

### 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.

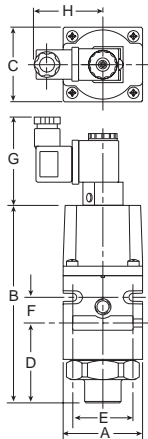
**CAUTION**  
 Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

**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 / Dimensions

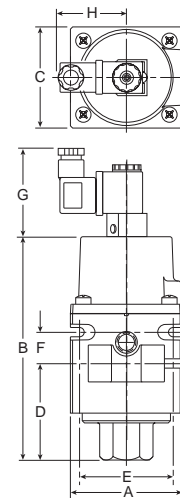
75 Series		
Model Number	Port (NPT)	Flow* Cv
24VDC / 48VAC		
S75-03M	3/8"	4.1
S75-04M	1/2"	4.2
12VDC / 24VAC		
S75-03Z	3/8"	4.1
S75-04Z	1/2"	4.2
120VAC		
S75-03K	3/8"	4.1
S75-04K	1/2"	4.2

\*Exhaust Flow



105 Series		
Model Number	Port (NPT)	Flow* Cv
24VDC / 48VAC		
S105-04M	1/2"	5.3
S105-06M	3/4"	5.7
12VDC / 24VAC		
S105-04Z	1/2"	5.3
S105-06Z	3/4"	5.7
120VAC		
S105-04K	1/2"	5.3
S105-06K	3/4"	5.7

\*Exhaust Flow



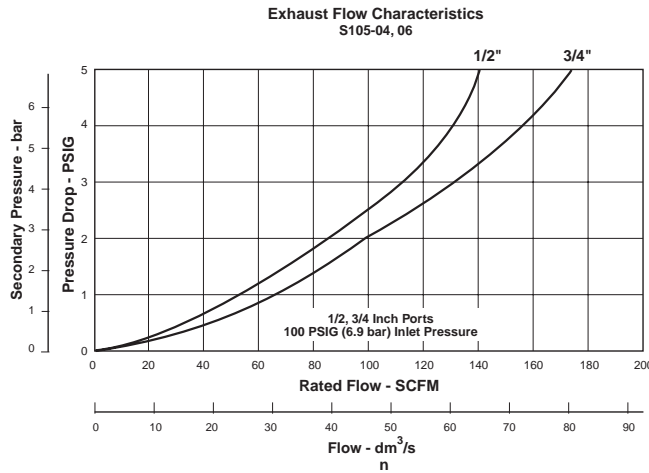
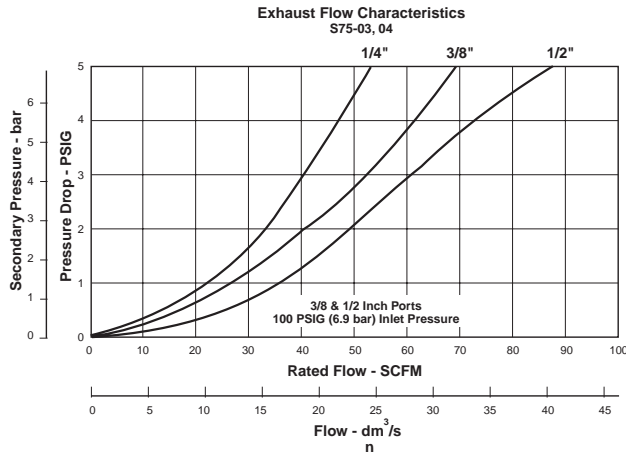
Model	A	B	C	D	E	F	G	H
SC75	2.19 (56)	5.43 (138)	2.06 (52)	1.50 (38)	1.66 (42)	.72 (18)	2.56 (65)	1.91 (48)

Inches (mm)

Model	A	B	C	D	E	F	G	H
SC105	3.03 (77)	6.03 (153)	2.75 (70)	1.84 (47)	2.53 (64)	.84 (21)	2.56 (65)	1.90 (48)

Inches (mm)

**Technical Information**



**QUBE S75 & S105 Series Kits  
 & Accessories**

**Coil Kits –**

- 24VDC / 48VAC Coil.....2EV103
- 12VDC / 24VAC Coil.....2EV102
- 120 VAC Coil .....2EV105

**Seal Repair Kits –**

- S75 Series ..... RKS75
- S105 Series ..... RKS105

**Exhaust Mufflers**

- S75 (1/2" Exhaust) ..... M60-04
- S105 (3/4" Exhaust) ..... M60-06

**Specifications**

**Exhaust Ports**

- S75 ..... 1/2 Inch
- S105 ..... 3/4 Inch

**Gauge Ports (Downstream pressure)**

- S75 (2) ..... 1/8 Inch
- S105 (2) ..... 1/4 Inch

- Maximum Pressure** ..... 145 PSIG (9.9 bar)
- Minimum Operating Pressure** ..... 30 PSIG (2.1 bar)
- Temperature Ratings** ..... 40°F to 120°F (4°C to 49°C)
- Weight –**
- S75 ..... 3.25 lb. (1.47 kg)
- S105 ..... 5.50 lb. (2.49 kg)

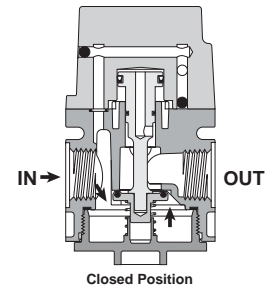
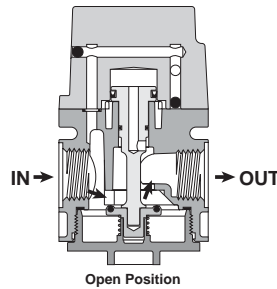
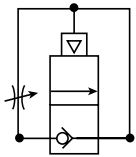
**Materials of Construction**

- Body**.....Zinc
- Bottom Plug** ..... Brass
- Internal Components** ..... Brass
- Seals** ..... Nitrile
- Springs** ..... Stainless Steel
- Top Cover** ..... Aluminum



**SSA75 & SSA105 Auto Pilot Soft Start Valve**

**A**



**Features**

- Connects to Other QUBE Units Using Just Screws & O-Rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Smooth Start-up of Pneumatic System
- Unit is Installed Downstream of Lubricator (If Used)
- Air Pilot Operation
- Large Flow Capacities Up to 5.5 Cv
- Inline or Modular Mounting

**Operation**

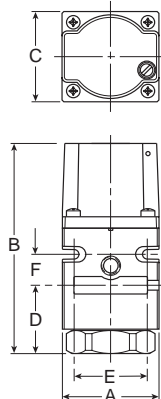
When pressure is supplied to the inlet port, gradual filling of the downstream system occurs through the adjustable needle valve. The piston opens the main valve when the downstream side of the valve reaches approximately 60% of the supply pressure. The ramp up time to reach the switch over pressure is adjustable via the needle valve in the cover. The Auto pilot soft start valve is not intended to be used as a shut off valve and should always be placed after a shut off valve.

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

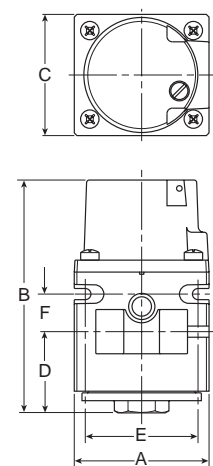
**CAUTION**  
Do not restrict the inlet of valves having an internal pilot supply. Pressure supply piping must be the same size as the inlet port or larger to insure that the pilot valve receives sufficient pressure supply during high flow conditions.

**Ordering Information / Dimensions**

SSA75 Series		
Model Number	Port (NPT)	Flow* Cv
SSA75-03	3/8"	3.4
SSA75-04	1/2"	3.8



SSA105 Series		
Model Number	Port (NPT)	Flow* Cv
SSA105-04	1/2"	6.8
SSA105-06	3/4"	8.1



Model	A	B	C	D	E	F
SSA75	2.19 (56)	4.72 (120)	2.06 (52)	1.50 (38)	1.66 (42)	.72 (18)

Inches (mm)

Model	A	B	C	D	E	F
SSA105	3.03 (77)	5.25 (133)	2.75 (70)	1.50 (38)	2.53 (64)	.84 (21)

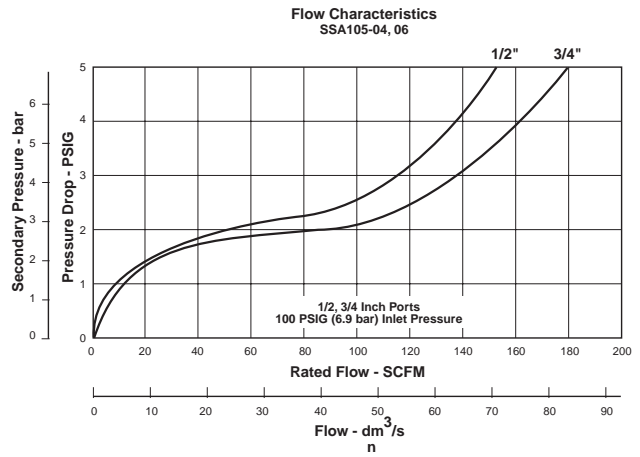
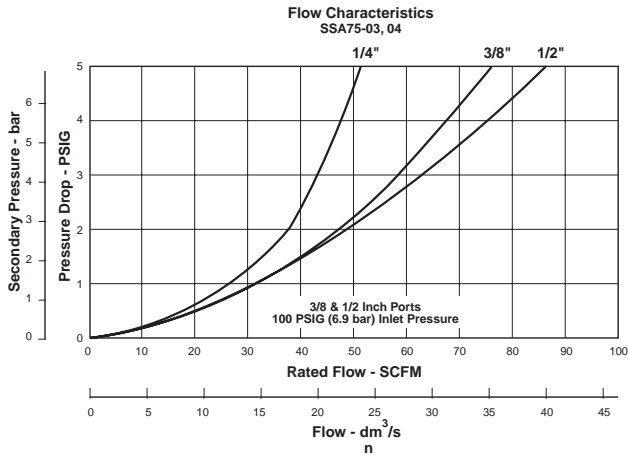
Inches (mm)



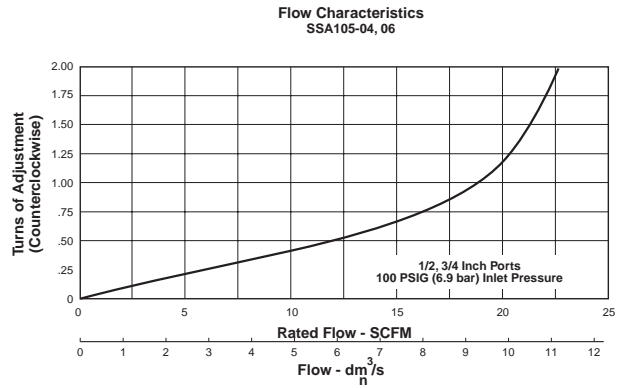
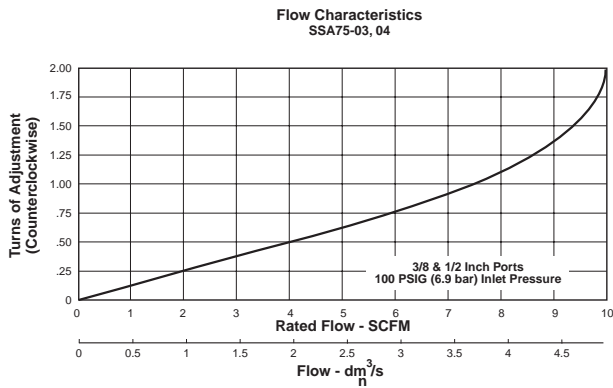
**Technical Information**



**Flow Characteristics**



**Soft Start Adjustment**



**QUBE SSA75 & SSA105 Series Kits & Accessories**

- Repair Kits –  
 SSA75 Series .....RKSS75  
 SSA105 Series .....RKSS105

**Specifications**

- Gauge Ports (Downstream Pressure)  
 SSA75 (2) ..... 1/8 Inch  
 SSA105 (2) ..... 1/4 Inch
- Maximum Pressure ..... 300 PSIG (20.7 bar)  
 Minimum Operating Pressure ..... 30 PSIG (2.1 bar)  
 Temperature Ratings ..... 40°F to 120°F (4°C to 49°C)  
 Opens to Full Flow ..... 60% Supply Pressure
- Weight –  
 SSA75 ..... 2.75 lb. (1.25 kg)  
 SSA105 ..... 4.50 lb. (2.04 kg)

**Materials of Construction**

- Body ..... Zinc  
 Bottom Plug –  
 SSA75 ..... Brass  
 SSA105 ..... Zinc  
 Internal Components ..... Brass  
 Seals ..... Nitrile  
 Springs ..... Stainless Steel  
 Top Cover ..... Aluminum

