

# spirax/sarco®

## Acoustic Silencers

### Description

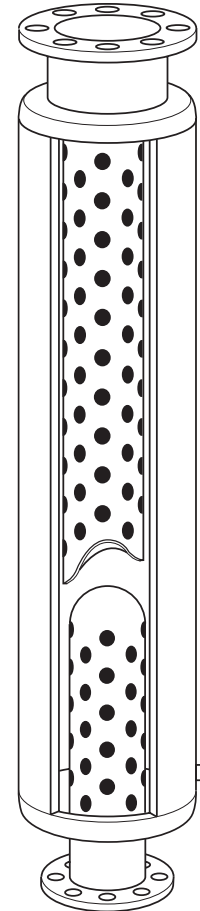
The Spirax Sarco acoustic silencer is designed to attenuate noise generated by control valves and/or pilot operated regulators. The silencers are particularly effective in limiting the propagation of valve generated noise into the downstream piping. Upon flow and piping configuration, noise attenuation of up to 35 dBa can be expected.

### Limiting Operating Conditions

|                                   |  |
|-----------------------------------|--|
| <b>Max. Operating Pressure</b>    | 300 psig (20 barg)   |
| <b>Max. Operating Temperature</b> | 650°F (343°C)  |
| <b>Standard Range</b>             | 1/2" to 24" LCV Acoustic Silencers.  |
| <b>Connections:</b>               | Standard connections ANSI 300 lb. raised face flange.<br>3/4" - 3000 lb. drain with plug.<br>Options of ANSI 150 lb. raised face flange available. |

### Construction Materials

| Part           | Material                                     |
|----------------|--|
| Silencer       | All welded steel.<br>ASME Section VIII Div I |
| Insulation Mat | Fiberglass                                   |



LCV SERIES

### Dimensions (nominal) in inches

| Model  | A            | B      | C    | D   | Weight (lb.) |
|--------|--------------|--------|------|-----|--------------|
| LCV-2  | 1/2" to 2"   | 5"     | 35"  | 2"  | 120          |
| LCV-3  | 1/2" to 3"   | 6-1/2" | 46"  | 3"  | 150          |
| LCV-4  | 1/2" to 4"   | 10"    | 52"  | 4"  | 200          |
| LCV-5  | 3/4" to 4"   | 12"    | 60"  | 5"  | 250          |
| LCV-6  | 2" to 6"     | 12"    | 66"  | 6"  | 400          |
| LCV-8  | 2" to 6"     | 14"    | 72"  | 8"  | 550          |
| LCV-10 | 1-1/4" to 6" | 16"    | 78"  | 10" | 650          |
| LCV-12 | 2" to 6"     | 18"    | 90"  | 12" | 800          |
| LCV-14 | 2-1/2" to 6" | 20"    | 104" | 14" | 1200         |
| LCV-16 | 2-1/2" to 6" | 22"    | 116" | 16" | 1500         |
| LCV-18 | 3" to 6"     | 24"    | 132" | 18" | 1750         |
| LCV-20 | 4" to 6"     | 26"    | 146" | 20" | 2200         |
| LCV-22 | 6"           | 30"    | 158" | 22" | 2800         |
| LCV-24 | 6"           | 30"    | 174" | 24" | 3100         |
| LCV-26 | 6"           | 32"    | 186" | 26" | 3500         |
| LCV-28 | 6"           | 36"    | 202" | 28" | 4850         |
| LCV-30 | 6"           | 36"    | 216" | 30" | 5000         |

### Installation

Connect the inlet of the silencer directly to the outlet connection of the valve. The required pipeline expansion takes place within the silencer. This expanded outlet feature eliminates the expense associated with separate expansion fittings.



Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.  
In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-3-036-US 01.11

# Acoustic Silencers

## Sizing Acoustic Silencers

Select correct silencer by known flow rates (lb/hr), inlet, outlet pressure (psig) and size of regulator or control valve. Example: Inlet pressure to IN 25P regulator is 100 psig, outlet pressure is 60 psig @ 2400 lb/hr. Move horizontal across the 100 psig inlet line to 60 psig outlet to vertically intersect with a 1" regulator to meet or exceed capacity of 2400 lb/hr. Selection 1" LCV-2.

| Inlet Pressure (psig) | Flow Rate |      |      |      |      |      |      |      |      |      |
|-----------------------|-----------|------|------|------|------|------|------|------|------|------|
|                       | 12"       | 12"  | 12"  | 12"  | 12"  | 12"  | 12"  | 12"  | 12"  | 12"  |
| 15                    | 865       | 865  | 865  | 865  | 865  | 865  | 865  | 865  | 865  | 865  |
| 20                    | 970       | 970  | 970  | 970  | 970  | 970  | 970  | 970  | 970  | 970  |
| 25                    | 1075      | 1075 | 1075 | 1075 | 1075 | 1075 | 1075 | 1075 | 1075 | 1075 |
| 30                    | 1180      | 1180 | 1180 | 1180 | 1180 | 1180 | 1180 | 1180 | 1180 | 1180 |
| 40                    | 1485      | 1485 | 1485 | 1485 | 1485 | 1485 | 1485 | 1485 | 1485 | 1485 |
| 50                    | 1790      | 1790 | 1790 | 1790 | 1790 | 1790 | 1790 | 1790 | 1790 | 1790 |
| 60                    | 2095      | 2095 | 2095 | 2095 | 2095 | 2095 | 2095 | 2095 | 2095 | 2095 |
| 75                    | 2400      | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 |
| 85                    | 2705      | 2705 | 2705 | 2705 | 2705 | 2705 | 2705 | 2705 | 2705 | 2705 |
| 100                   | 3010      | 3010 | 3010 | 3010 | 3010 | 3010 | 3010 | 3010 | 3010 | 3010 |
| 125                   | 3315      | 3315 | 3315 | 3315 | 3315 | 3315 | 3315 | 3315 | 3315 | 3315 |
| 150                   | 3620      | 3620 | 3620 | 3620 | 3620 | 3620 | 3620 | 3620 | 3620 | 3620 |
| 175                   | 3925      | 3925 | 3925 | 3925 | 3925 | 3925 | 3925 | 3925 | 3925 | 3925 |
| 200                   | 4230      | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 |
| 225                   | 4535      | 4535 | 4535 | 4535 | 4535 | 4535 | 4535 | 4535 | 4535 | 4535 |
| 250                   | 4840      | 4840 | 4840 | 4840 | 4840 | 4840 | 4840 | 4840 | 4840 | 4840 |
| 275                   | 5145      | 5145 | 5145 | 5145 | 5145 | 5145 | 5145 | 5145 | 5145 | 5145 |
| 300                   | 5450      | 5450 | 5450 | 5450 | 5450 | 5450 | 5450 | 5450 | 5450 | 5450 |

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TI-3-036-US 01.11