



## LC SERIES REDUCING VALVE

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SIZES 1/2"

PRESSURES to 1000 PSIG at 750°F

- Steam, Air, Gas and Liquid Service
- Packless Construction
- Four Trim Sizes
- Corrosion Resistant Diaphragm
- 75% Accuracy of Regulation

### MODELS

- See Table Below

### APPLICATION DATA

- Plastic Molding Presses
- Steam Sterilization
- Laboratory Units
- Pilot Plants

### VALVE RATINGS

| Valve Ends<br>ASME/ANSI | Pressure<br>PSIG (bar) | Temperature<br>°F (°C) |
|-------------------------|------------------------|------------------------|
| B16.24 Class 300 NPT    | 300 (21.0)             | @ 550 (288)            |
| B16.34 Class 600 NPT    | 500 (41.4)             | @ 750 (400)            |

For Sizing Capacity Tables see page 46

### PRESSURE RANGES AND CONSTRUCTION

| Body Materials and Construction                | Class  | Max. Inlet Pressure<br>PSI/bar |                                 | Max.<br>Temp.<br>°F/°C | Min.<br>Pressure<br>Drop<br>PSI/bar | Reduced<br>Pressure<br>Range<br>PSI/bar | Trim Parts and Materials                       |                                     |                            |                 |
|------------------------------------------------|--------|--------------------------------|---------------------------------|------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------|-------------------------------------|----------------------------|-----------------|
|                                                |        | Steam                          | Cold<br>Liquid<br>Air or<br>Gas |                        |                                     |                                         | Orifice Size<br>and<br>Designation             | Controlling<br>Valve<br>Material    | Valve<br>Seat <sup>3</sup> | Valve<br>Spring |
| BRONZE<br>Screwed Bonnet<br>1/2" Threaded      | LCA    | —                              | 400/28                          | 150/65                 | 10/0.5                              | 5-285/0.3-20                            | 3/32" (A)<br>1/4" (B)<br>5/16" (C)<br>1/8" (D) | Bronze                              | Resilient                  | Bronze          |
|                                                | LCB    | 300/21                         | 400/28                          | 550/287                | 10/0.5                              | 10-285/0.5-20                           |                                                | 17-4-PH*                            | 18-8*                      | INCONEL®        |
|                                                | LCC    |                                |                                 |                        |                                     |                                         |                                                | Stainless,<br>(hardened)            | Stainless                  |                 |
|                                                | LCD    |                                |                                 |                        |                                     |                                         |                                                | Bronze                              | Resilient                  | Bronze          |
|                                                | LCLA   | —                              | 400/28                          | 150/65                 | 10/0.5                              | 2-35/0.1-2.5                            | 1/4" (B)<br>5/16" (C)<br>1/8" (D)              | 17-4-PH*<br>Stainless<br>(hardened) | 18-8*<br>Stainless         | INCONEL®        |
| LCLB                                           | 300/21 | 400/28                         | 550/287                         | 10/0.5                 | 2-35/0.1-2.5                        |                                         |                                                |                                     |                            |                 |
| LCLC                                           |        |                                |                                 |                        |                                     |                                         |                                                |                                     |                            |                 |
| LCLD                                           |        |                                |                                 |                        |                                     |                                         |                                                |                                     |                            |                 |
| LCLD                                           |        |                                |                                 |                        |                                     |                                         |                                                |                                     |                            |                 |
| STEEL*<br>Thru bolted<br>Bonnet<br>1/2" bolted | LCBS   | 600/41                         | 1000/69                         | 750/398                | 10/0.5                              | 25-400/2-28                             | 1/4" (B)<br>5/16" (C)<br>1/8" (D)              | 17-4-PH*<br>Stainless<br>(hardened) | 18-8*<br>Stainless         | INCONEL®        |
|                                                | LCCS   |                                |                                 |                        |                                     |                                         |                                                |                                     |                            |                 |
|                                                | LCDS   |                                |                                 |                        |                                     |                                         |                                                |                                     |                            |                 |
|                                                | LCLBS  |                                |                                 |                        |                                     |                                         |                                                |                                     |                            |                 |
|                                                | LCLCS  | 600/41                         | 1000/69                         | 750/398                | 10/0.5                              | 10-50/0.5-3.5                           |                                                |                                     |                            |                 |

\* Also available in 316 stainless steel. Add "S" to class designation - LCBSS, etc.

<sup>3</sup> Soft seat configuration required for dead end service.

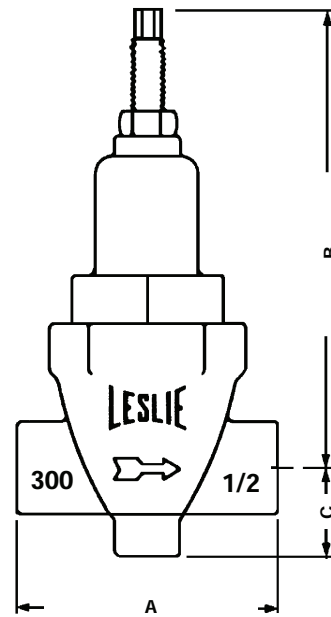
\* See page 15 for listing of trademarks and their owners.

# LC SERIES REDUCING VALVE SPECIFICATION

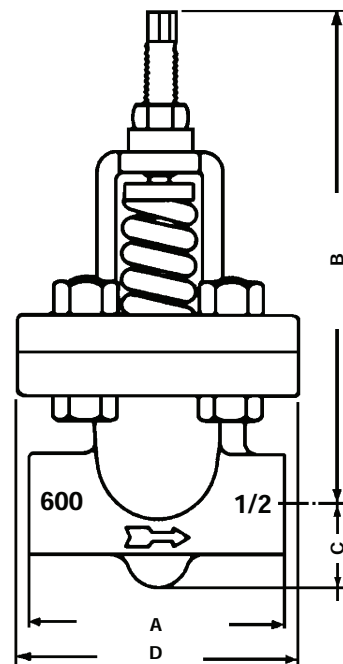
Spring and diaphragm pressure reducing valve are self contained and direct operated. Body is Cast Iron, Bronze, Cast Steel or Stainless Steel. Unit to be fully adjustable within operating range with changing springs. Unit comes without stuffing box or bellows seals.

## MATERIALS OF CONSTRUCTION

Body, Cast Iron .....ASTM A126 Cl. B  
Body, Cast Bronze .....ASTM B-61 UNS C92200  
Body, Cast Steel .....ASTM A216 WCB  
Body, Stainless Steel.....ASTM 316 A351 CF8M  
Trim .....17-4 PH PLUG, 18-8 Seat  
'A' Trim .....Resilient  
Diaphragm .....300 Series 316 Stainless Steel



**CLASSES LCA, LCB,  
LCC, LCD, LCLA, LCLB,  
LCLC and LCLD**



**CLASSES LCAS, LCBS,  
LCCS, LCDS, LCLAS,  
LCLBS, LCLCS and  
LCLDS**

## DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

| Size        | A                                       |                                        | B<br>Maximum                             |                                        | C                                      |                                       | D                                      | Weight    |
|-------------|-----------------------------------------|----------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------|----------------------------------------|-----------|
|             | 300                                     | 600                                    | 300                                      | 600                                    | 300                                    | 600                                   | 600                                    |           |
| 1/2<br>(12) | 4 <sup>3</sup> / <sub>16</sub><br>(106) | 4 <sup>3</sup> / <sub>8</sub><br>(111) | 6 <sup>13</sup> / <sub>16</sub><br>(173) | 7 <sup>3</sup> / <sub>8</sub><br>(187) | 1 <sup>5</sup> / <sub>16</sub><br>(33) | 1 <sup>1</sup> / <sub>4</sub><br>(32) | 4 <sup>3</sup> / <sub>8</sub><br>(111) | 6<br>(.4) |