

# spirax sarco

## LCV1 Bronze Lift Check Valve

**TI-P029-01**  
ST Issue 8

### Description

The LCV1 is a bronze lift check valve which is installed in horizontal lines to prevent reverse flow.

### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

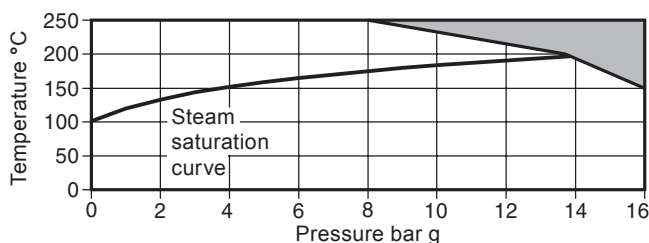
### Certification

This product is available with certification to EN 10204 2.2.  
**Note:** All certification/inspection requirements must be stated at the time of order placement.

### Sizes and pipe connections

1/2", 3/4", 1", 1 1/4", 1 1/2", 2" and 3". Screwed BSP or NPT

### Pressure/temperature limits

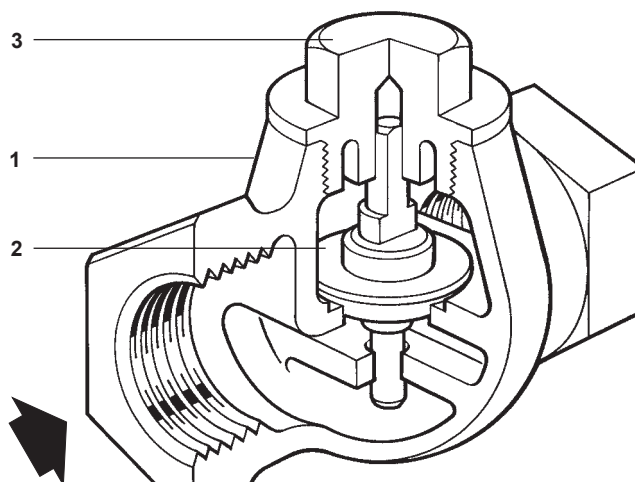


The product **must not** be used in this region.

|  |                  |
|--|------------------|
| Body design conditions                                     | PN16             |
| PMA Maximum allowable pressure                             | 16 bar g @ 180°C |
| TMA Maximum allowable temperature                          | 250°C @ 8 bar g  |
| Minimum allowable temperature                              | -29°C            |
| PMO Maximum operating pressure for saturated steam service | 14 bar g         |
| TMO Maximum operating temperature                          | 250°C @ 8 bar g  |
| Minimum operating temperature                              | 0°C              |

**Note:** For lower operating temperatures consult Spirax Sarco.

Designed for a maximum cold hydraulic test pressure of 28 bar g



### Materials

| No. | Part   | Material        |                 |
|-----|--------|-----------------|-----------------|
| 1   | Body   | Bronze          | EN 1982 CC491K  |
| 2   | Cone   | Brass           | BS 2874 CZ 114  |
| 3   | Cap    | Brass           | EN 12165 CW617N |
| 4*  | Spring | Stainless steel | BS 2056 302 S26 |

\* Not illustrated

### K<sub>v</sub> values

| Size           | 1/2" | 3/4" | 1"  | 1 1/4" | 1 1/2" | 2"   | 3"   |
|----------------|------|------|-----|--------|--------|------|------|
| K <sub>v</sub> | 1.9  | 4.3  | 8.5 | 11.9   | 18.8   | 30.8 | 68.4 |

For conversion: C<sub>v</sub> (UK) = K<sub>v</sub> x 0.963    C<sub>v</sub> (US) = K<sub>v</sub> x 1.156

### Opening pressures in mbar

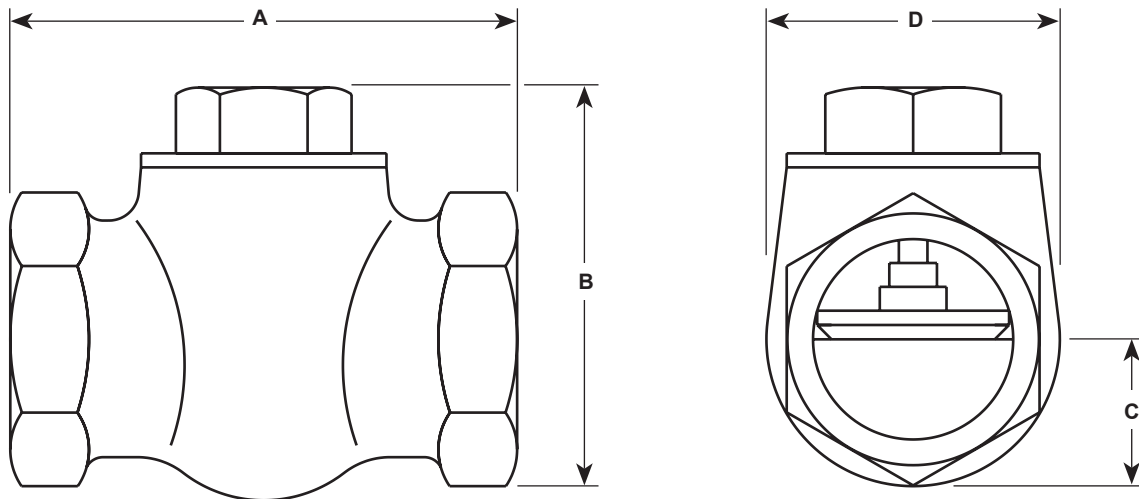
| Without springs | → Flow pressures |      |     |        |        |     |
|-----------------|------------------|------|-----|--------|--------|-----|
| Size            | 1/2"             | 3/4" | 1"  | 1 1/4" | 1 1/2" | 2"  |
| →               | 6.2              | 7.4  | 6.5 | 7.1    | 7.1    | 6.9 |

With springs fitted the opening pressure is the same as the spring strength.

**First for Steam Solutions**

## Dimensions/weights (approximate) in mm and kg

| Size | A   | B   | C  | D   | Weight |
|------|-----|-----|----|-----|--------|
| ½"   | 52  | 46  | 18 | 36  | 0.2    |
| ¾"   | 71  | 58  | 20 | 41  | 0.5    |
| 1"   | 86  | 71  | 28 | 56  | 0.8    |
| 1¼"  | 108 | 71  | 28 | 56  | 0.8    |
| 1½"  | 106 | 91  | 36 | 71  | 1.9    |
| 2"   | 131 | 104 | 43 | 86  | 2.7    |
| 3"   | 180 | 152 | 61 | 122 | 6.9    |



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P029-06) supplied with the product.

### Installation note:

Always install the LCV1 horizontally with the flow in the direction indicated on the body.

## Disposal

This product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

## Spare parts

There are no spare parts available for this product.

## How to order

**Example:** 1 off Spirax Sarco 1¼" LCV1 lift check valve having screwed BSP connections.