

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.

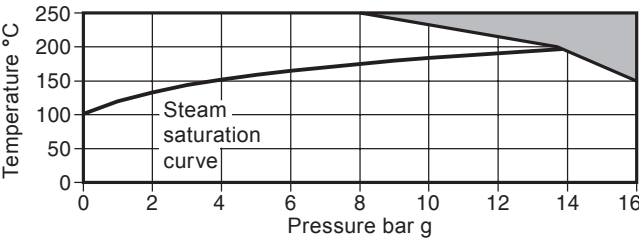
Certification

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

½", ¾", 1", 1¼", 1½", 2" and 3". Screwed BSP or NPT

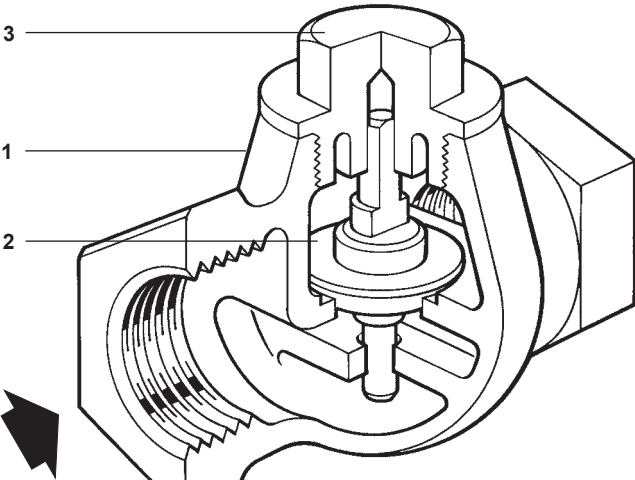
Pressure/temperature limits



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	½"	¾"	1"	1¼"	1½"	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

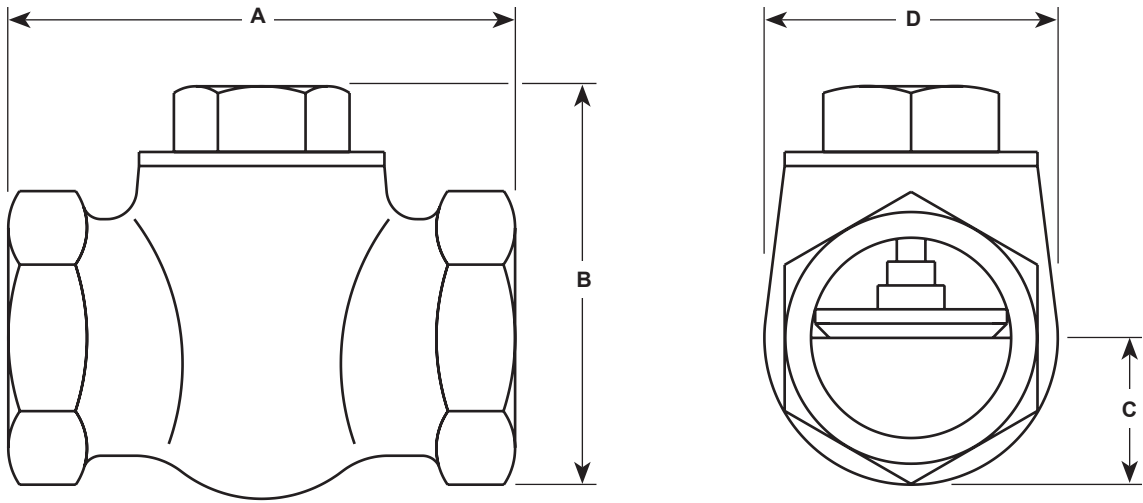
Without springs					→ Flow pressures	
Size	½"	¾"	1"	1¼"	1½"	2"
→	6.2	7.4	6.5	7.1	7.1	6.9

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

Pipeline ancillaries  
Lift check valves

Dimensions/weights (approximate) in mm and kg

Size	A	B	C	D	Weight
1/2"	52	46	18	36	0.2
3/4"	71	58	20	41	0.5
1"	86	71	28	56	0.8
1 1/4"	108	71	28	56	0.8
1 1/2"	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 1 1/4" LCV1 lift check valve having screwed BSP connections.