



TI-P029-01
CTLS Issue 12

LCV1 Bronze Lift Check Valve

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 2014/68/EU.

Certification

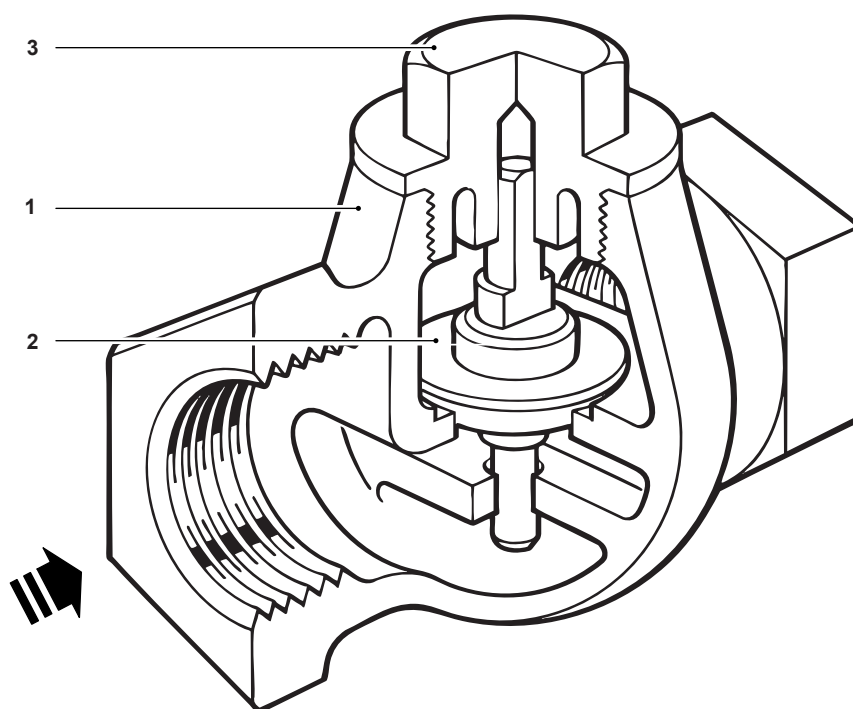
This product is available with certification to EN 10204 2.2.

Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

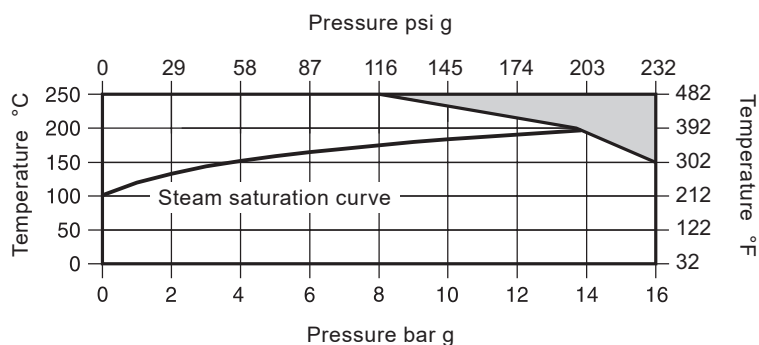
½", ¾", 1", 1¼", 1½" and 2". Screwed BSP T Rp (ISO 7-1) or NPT

Materials



No.	Part	Material	
1	Body	Bronze	EN 1982 CC491K
2	Cone	Brass	BS 2874 CZ 114
3	Cap	Brass	EN 12165 CW617N

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	232 psi g @ 356 °F
TMA	Maximum allowable temperature	250 °C @ 8 bar g	482 °F @ 116 psi g
Minimum allowable temperature		-29 °C	-20.2 °F
PMO	Maximum operating pressure for saturated steam service	14 bar g	203 psi g
TMO	Maximum operating temperature	250 °C @ 8 bar g	482 °F @ 116 psi g
Minimum operating temperature		0 °C	32 °F
Note: For lower operating temperatures consult Spirax Sarco.			
Designed for a maximum cold hydraulic test pressure of		28 bar g	406 psi g

Kv values

Size	½"	¾"	1"	1¼"	1½"	2"
Kv	1.9	4.3	8.5	11.9	18.8	30.8

For conversion:

$C_v \text{ (UK)} = K_v \times 0.963$

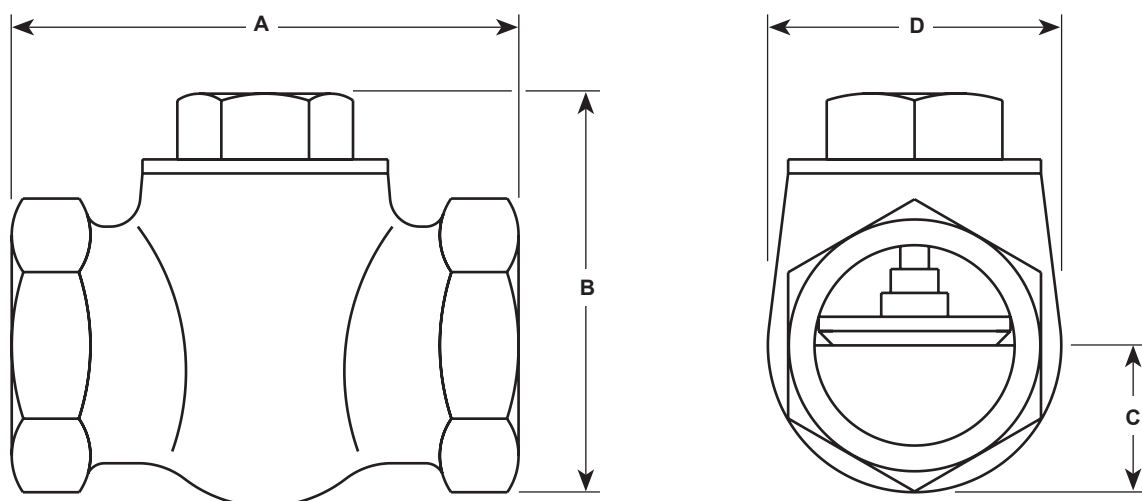
$C_v \text{ (US)} = K_v \times 1.156$

Opening pressures in mbar (psi g)

→ Flow pressures

Size	½"	¾"	1"	1¼"	1½"	2"
→	6.2 (0.090)	7.4 (0.107)	6.5 (0.094)	7.1 (0.103)	7.1 (0.103)	6.9 (0.10)

Dimensions/weights (approximate) in mm (inches) and kg (lbs)



Size	A	B	C	D	Weight
1/2"	52 (2.0)	46 (1.8)	18 (0.71)	36 (1.4)	0.2 (0.44)
3/4"	71 (2.8)	58 (2.3)	20 (0.79)	41 (1.6)	0.5 (1.1)
1"	86 (3.4)	71 (2.8)	28 (1.1)	56 (2.2)	0.8 (1.8)
1 1/4"	108 (4.3)				
1 1/2"	106 (4.2)	91 (3.6)	36 (1.4)	71 (2.8)	1.9 (4.2)
2"	131 (5.2)	104 (4.1)	43 (1.7)	86 (3.4)	2.7 (6.0)

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.