

LK Antilegionella Manifold

PERFORMANCE / APPLICATION AREA

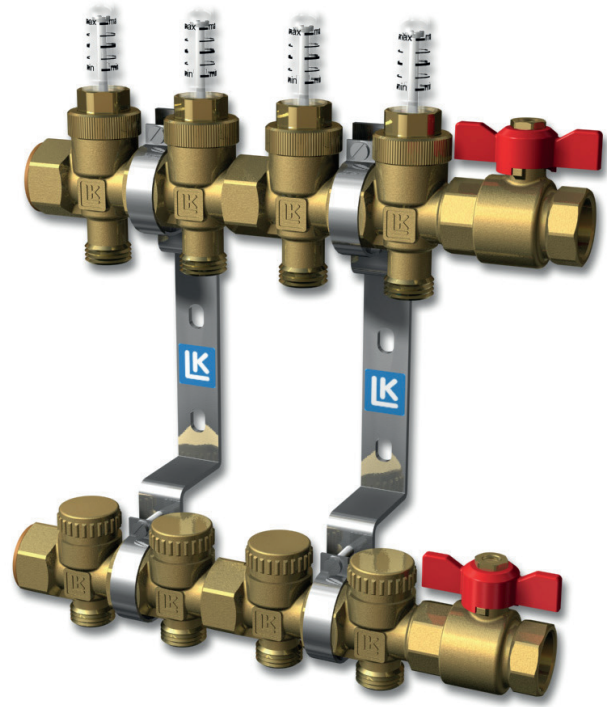
The LK Antilegionella Manifold is made of de-zincification resistant brass as per CW 602N EN 12165 with a Pb content of less than 2 %. The manifolds are delivered in modules of two, three and four circuits; each include pre-assembled ball valves. Manifolds can be extended by addition of 1-circuit valve set.

The manifold allows for a controlled circulation of both hot and cold potable water as well as water from heat exchangers and refrigeration plant to faucets via the LK Antilegionella manifold. Connect a t-piece as close as possible to the water mixers/taps to create recirculation of cold water and hot water back to the manifold.

In the lower manifold body (feed) there is an adjustable (by Allen Key) isolation valve. The valve is used as a shut-off valve when, for example, mixers are replaced. On the upper manifold body (return), there are adjustment valves with flow indicators that are adjusted by using a spanner.

LK Antilegionella manifolds can be supplied from both the right and left. Valves on both flow and return are metalically sealed. A capillary in the flow indicator ensures guarantees circulation through the whole indicator to prevent water stagnation.

Any unused circuits are fitted with specially manufactured brass blanking caps/hoods to prevent the risk of water stagnation. The LK Antilegionella manifold can be supplemented with fixing brackets, waterproof manifold cabinet and insulation, as necessary.



ITEM DATA

Name	Article no
LK Antilegionella Manifold 4-1/2"	187 77 94
LK Antilegionella Manifold 3-1/2"	187 77 93
LK Antilegionella Manifold 2-1/2"	187 77 92
LK Antilegionella additional outlet 1-1/2"	187 77 91
LK Antilegionella Plug 3/4"	187 77 90
LK Antilegionella Plug 1/2"	187 77 89
LK Antilegionella Ball valve 3/4"	187 77 88
LK Antilegionella Manifold Bracket	187 77 87

CONNECTION OPTIONS



- | Article no | Article |
|------------|-------------------------------------|
| 481 43 73 | LK Compression Connection 1/2"xAX16 |
| 481 43 74 | LK Compression Connection 1/2"xAX16 |



- | Article no | Article |
|------------|--|
| 187 77 91 | LK Antilegionella additional outlet 1-1/2" |

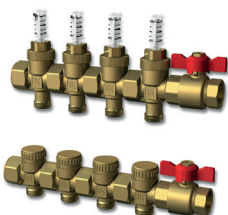


- | Article no | Article |
|------------|-------------------------------|
| 187 66 08 | LK Press Connection 1/2"xAX16 |
| 187 66 05 | LK Press Connection 1/2"xAX20 |



- | Article no | Article |
|------------|-----------------------------|
| 187 77 90 | LK Antilegionella Plug 3/4" |

ACCESSORIES



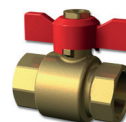
- | Article no | Article |
|------------|-----------------------------------|
| 187 77 94 | LK Antilegionella Manifold 4-1/2" |



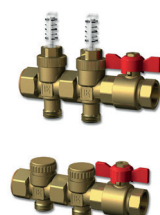
- | Article no | Article |
|------------|-----------------------------|
| 187 77 89 | LK Antilegionella Plug 1/2" |



- | Article no | Article |
|------------|-----------------------------------|
| 187 77 93 | LK Antilegionella Manifold 3-1/2" |



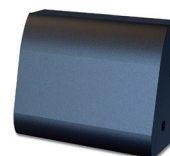
- | Article no | Article |
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| 187 77 88 | LK Antilegionella isolation valve 3/4" |



- | Article no | Article |
|------------|-----------------------------------|
| 187 77 92 | LK Antilegionella Manifold 2-1/2" |



- | Article no | Article |
|------------|------------------------------------|
| 187 77 87 | LK Antilegionella Manifold Bracket |



- | Article no. | Artikel |
|-------------|------------------------------------|
| 187 77 95 | Antilegionella manifold insulation |

ASSEMBLING LK ANTILEGIONELLA MANIFOLD INSULATION

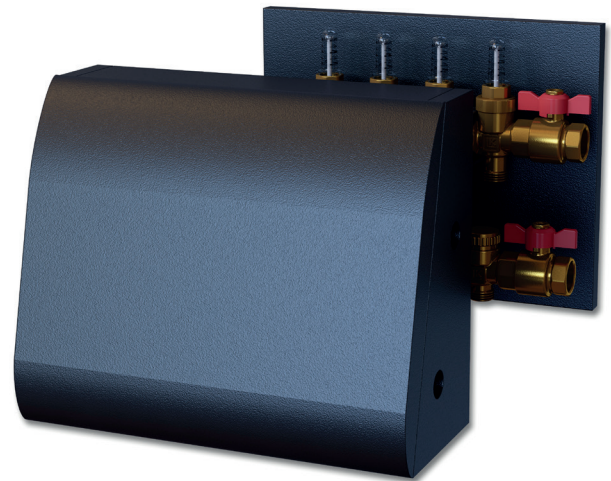
Step 1

Mount the brackets to the wall and place the back of the insulation over the brackets.



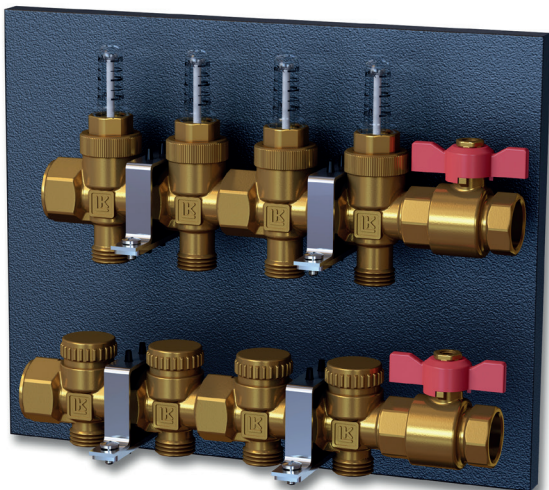
Step 3

Attach the insulation cover.

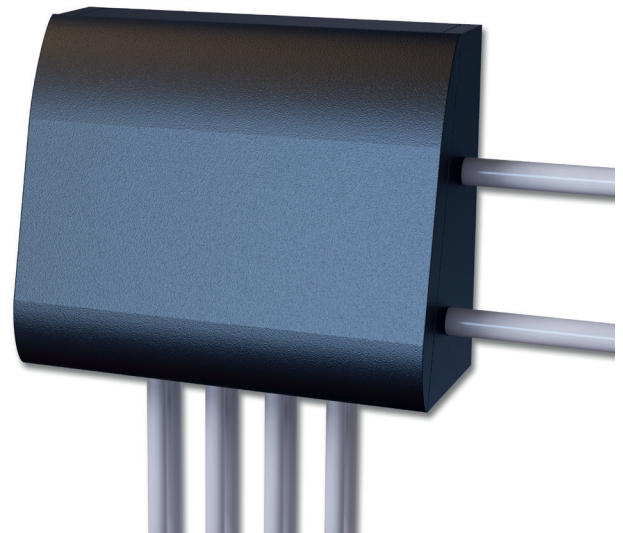


Step 2

Assemble the manifold.



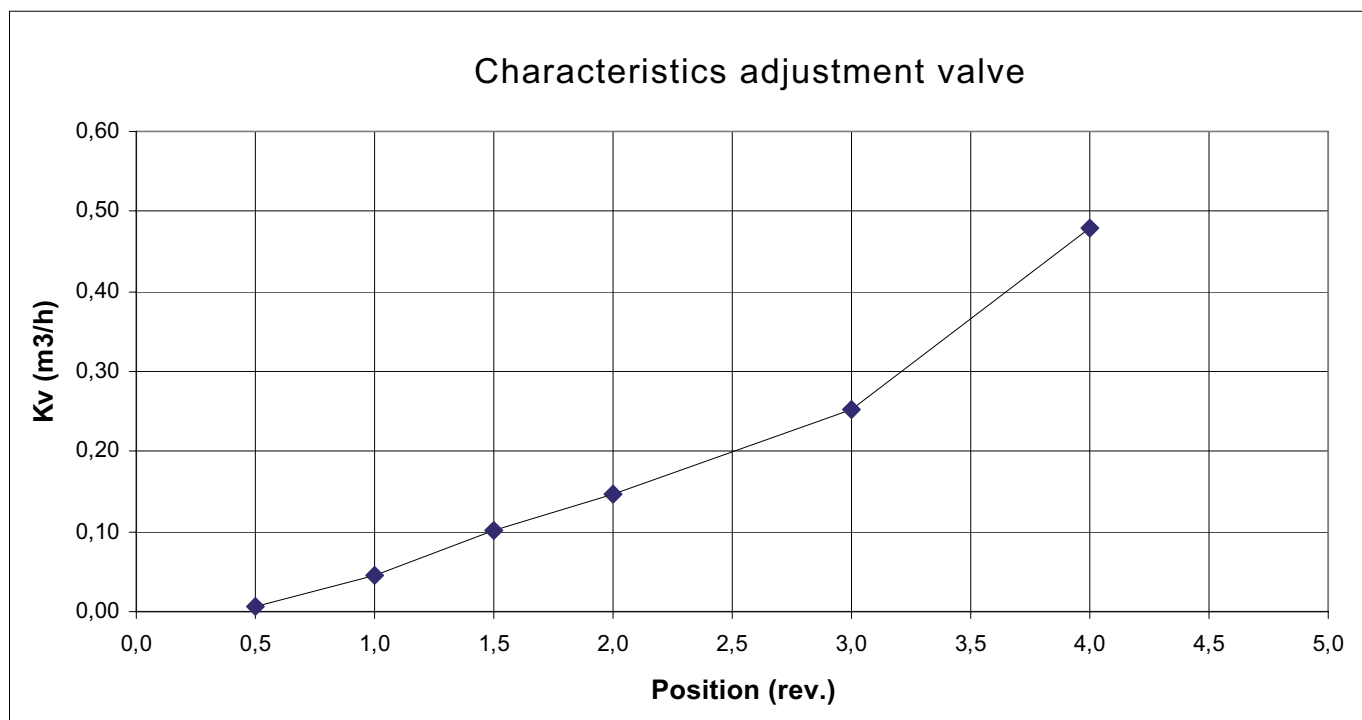
Pre-assembled insulation on LK Antilegionella manifolds.



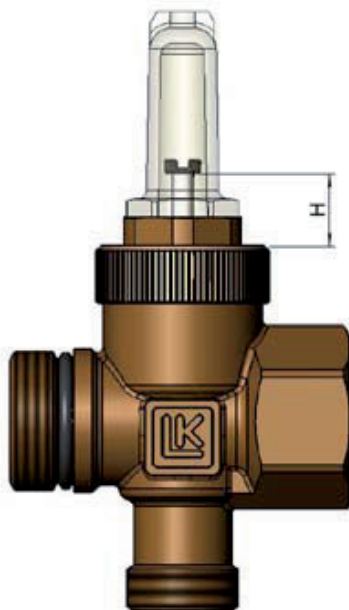
TECHNICAL DATA

General:	
Max working pressure	10 bar (1MPa)
Min / Max operating temperature	1 °C – 70 °C continuous
Max operating temperature 90°C short time	max 30 min – 2 times per day
Max differential pressure	0.15 MPa (1.5 bar)
Dim. connection main circuit	G3/4" ISO 228 int x ext
Dim. connection secondary circuit	D15 compression fitting (G1/2" ISO 228 ext)
Installation position	Horizontal
Isolation valve - manifold flow:	
Flow coefficient	Kvs = 2.7 m3/h (1)
Max flow	0.3 l/s
Max permitted leakage when cone is closed	0.1 % Kvs (metal seal)
Control valve and flow indicator - manifold return:	
Flow coefficient	Kvs = 0.45 m3/h
Regulatory area	1:10 (Kv = 0.05 ... 0.45 m3/h) in four runs
Accuracy of flow indicator	+/- 20 % max flow

Control Valve Features



Flow Indication Features



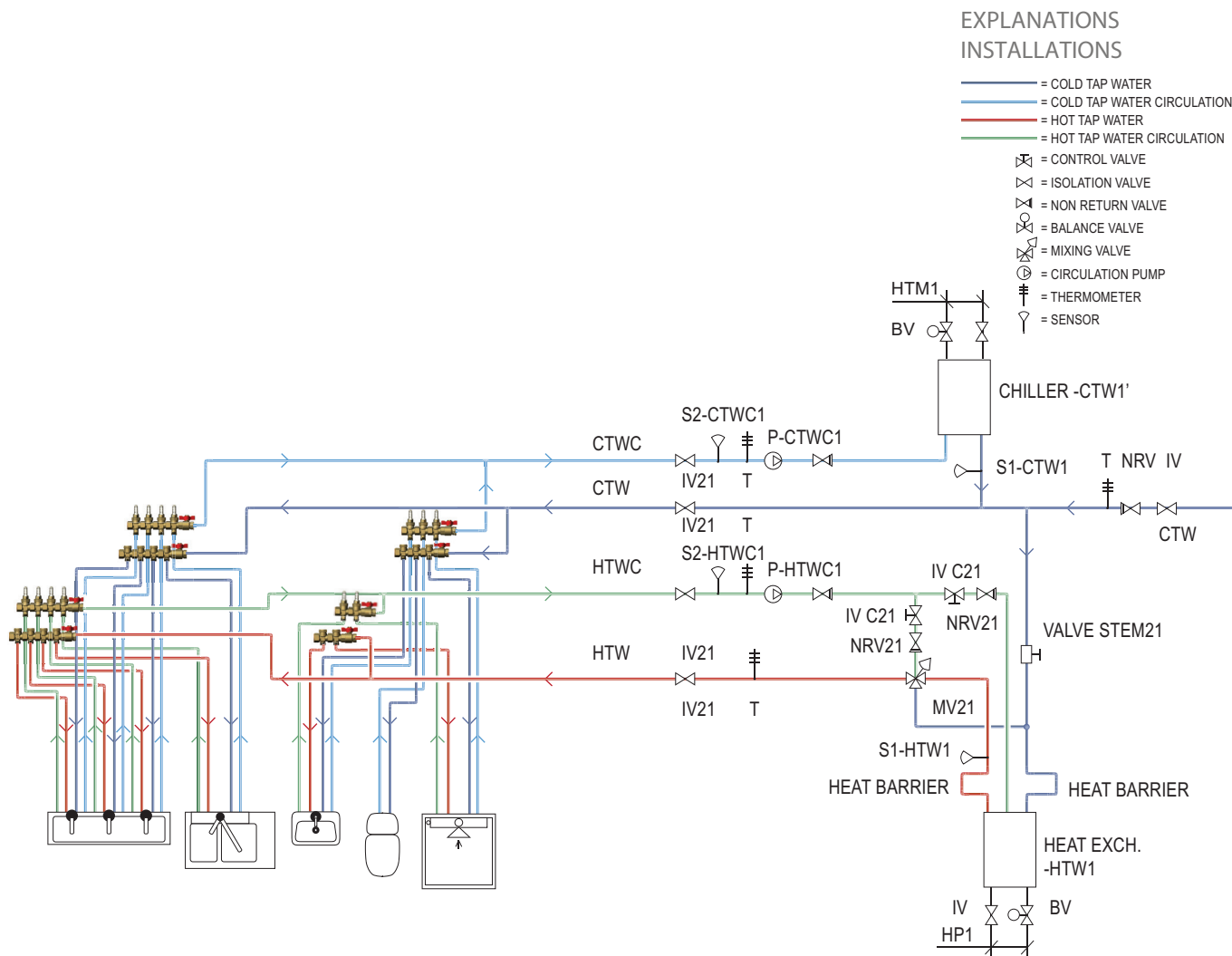
LK Antilegionella Return Valve

Position H mm	Flow l/min	Flow l/s
13	0	0
15	0.15	0.002
20	0.52	0.009
25	0.89	0.015
30	1.26	0.021

MATERIAL SPECIFICATION:

Brass valve house	CW 602N EN 12165 (CR) Pb <= 2 %
Brass pins	CW 602N EN 12164 (CR) (not Pb < 2 %)
Brass nuts	CW 617N EN 12165 (MS58)
Brass fittings in contact with water:	CW 602N EN 12164 (CR) (not Pb < 2 %)
Brass details not touching the water:	CW 617N EN 12165 (MS58)
Flow rate stainless (capillary tube)	CW 602N EN 12164 (CR) (choking)
Display Tray	PPS Fortron 1140 L (certificate KTW C113117-03 SF/unit)
Sight glass	PSU polysulfone S3010 (declaration BASF KT/KS E100)
O-rings	Rubber EPDM 70 WRc
Brackets	Steel – electro-zink plated; attenuator in NBR rubber
Insulation	EPS (closed cells) – not flame protected
Ball valve	CW 602N EN 12165 (CR) (not Pb < 2 %)
Brass house and lock	CW 602N EN 12165 (CR) (not Pb < 2 %)
Brass ball	CW 614N EN 12164 (MS58) chromium-plate
Brass spindle	CW 614N EN 12164 (MS58)
Knob	Aluminium
Nut	Steel – electro-zink plated
Manifold insulation	Polyethylene, LD18

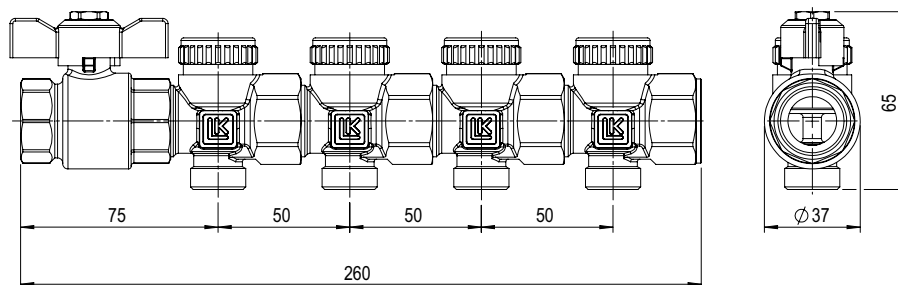
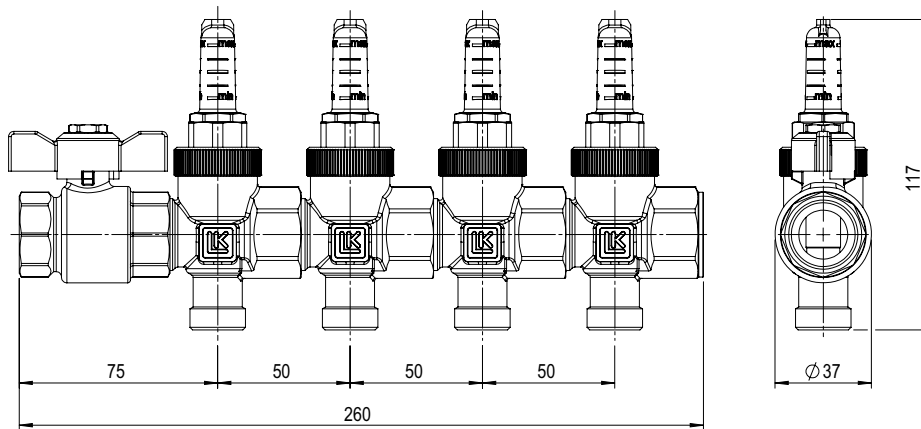
PRINCIPLE DIAGRAM



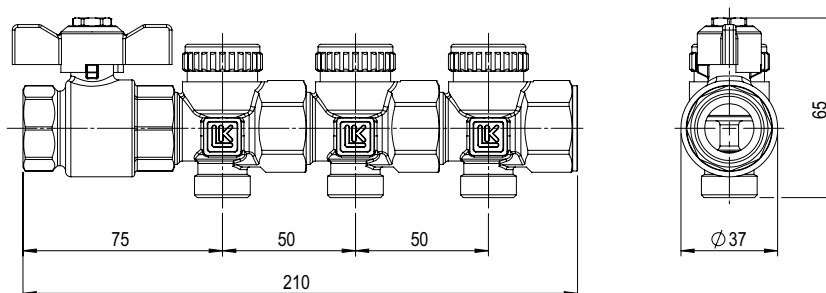
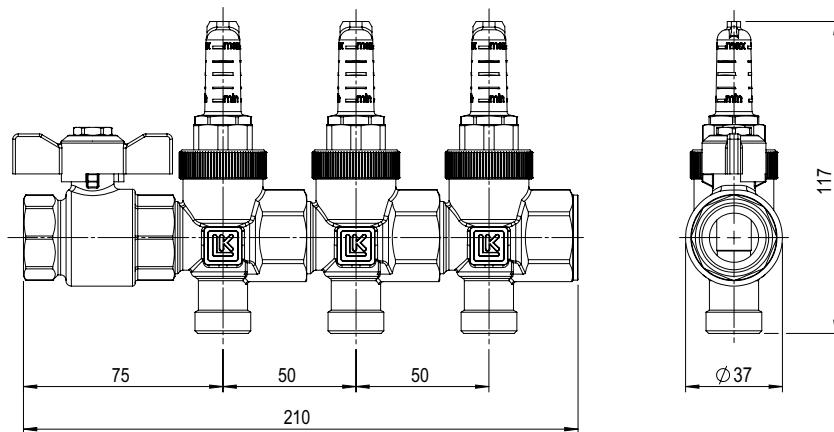
Mounting and Fitting Provisions:

- Installation must be carried out according to the industry rules.
- Antilegionella manifolds must be mounted horizontally.
- Fitting should take place when all faucets are closed, that is, when there is no flow in the system.
- Fixing the pipes to be carried out according to LK's general assembly instructions for LK Universal.

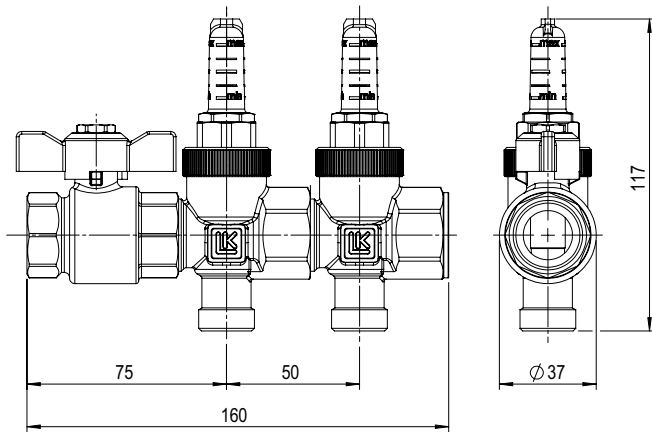
DIMENSIONS



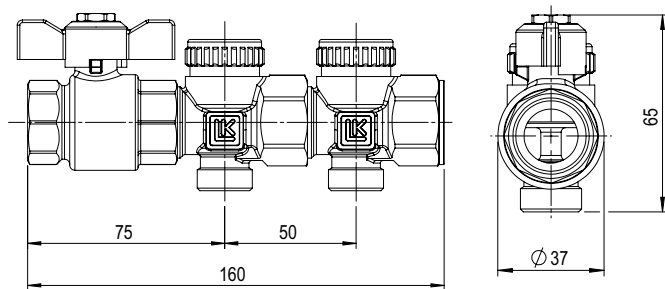
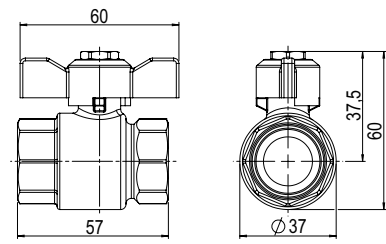
LK Antilegionella Manifold 4-1/2" (ALGF-4)



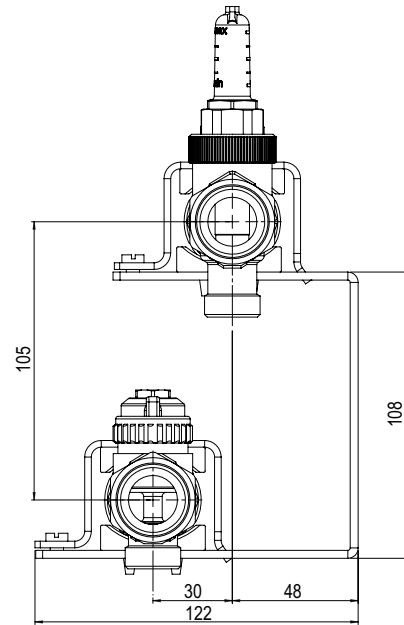
LK Antilegionella Manifold 3-1/2" (ALGF-3)



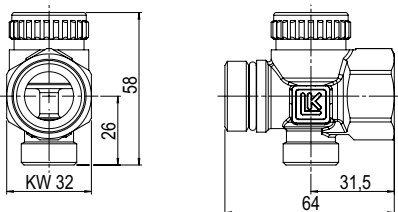
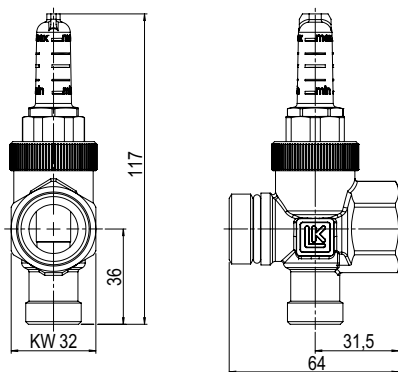
LK Antilegionella Manifold with LK Ball Valve



LK Antilegionella Manifold 2-1/2" (ALGF-2)



LK Antilegionella Manifold with LK Wall Brackets



LK Antilegionella additional outlet 1-1/2" (ALGF-1)