

# Assembly Instructions for Manifolds and Accessories

## Products and Accessories

Art. No.	Product Name
4814420	LK Ball Valve 507 K, straight B
4814421	LK Ball Valve 507 K, straight, R
4814424	LK Ball Valve 509, angled female/ male, B
4814425	LK Ball Valve 509, angled female/ male, R
4814376	LK Ball Valve 1/2" x AX16
4814377	LK Ball Valve 3/4" x AX20
1882346	LK Ball Valve 427, straight female/ male B
1882347	LK Ball Valve 427, straight female/ male R
1875893	LK Manifold UNI-Valve 2-1/2"
1875894	LLK Manifold UNI-Valve 3-1/2"
1878217	LK Manifold UNI-Valve 4-1/2"
1870688	LK Manifold UNI 2-1/2"
1870690	LK Manifold UNI 3-1/2"
1870691	LK Manifold UNI 4-1/2"
1870689	LK Manifold UNI 2-3/4"
1870785	LK Manifold UNI 2+2-1/2"
1875287	LK Manifold UNI-25-c/c 50, 2-3/4"
1875288	LK Manifold UNI-25-c/c 50, 3-3/4"
1876893	LK Angle Fitting w. loose nut, 1/2" male./ 3/4" female.
1875891	LK Manifold UNI-25-c/c 100, 2-3/4"
1875892	LK Manifold UNI-25-c/c 100, 3-3/4"
1881205	LK Manifold End UNI 2-1/2"
1881206	LK Manifold End UNI 3-1/2"
1881204	LK Manifold Angle UNI
1882564	LK Manifold Angle VM 1/2"
1882563	LK Manifold Angle VM 3/4"
1882561	LK Manifold Angle VM
1882565	LK Ball Valve 827, straight, B
1882566	LK Ball Valve 827, straight, R
481104	LK Ball Valve 1434 B
4811012	LK Ball Valve 1434 R
1875698	LK End Cap, male. G25 (UNI-25)
1882704	UNI Adapter Eco
1882351	UNI Adapter
1878206	LK Jointing Nipple UNI 3/4"
4814426	LK Ball Valve 276, straight male/ Fitting w. loose nut, 3/4", B

4814427	LK Ball Valve 276, straight male/ Fitting w. loose nut., 3/4", R
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Art. No.	Product Name
1882746	LK Manifold Angle VM E2
1882748	LK Manifold Nipple Angle 1/2" E2
1882749	LK Manifold Nipple Angle 3/4" E2
1882747	LK Manifold Angle UNI E2
1882743	LK Manifold Angle UNI Utv. E2
1882767	LK Manifold UNI 1+1 E2
1882768	LK Manifold UNI 2+2 E2
1882761	LK Manifold End UNI 2-1/2" E2
1882762	LK Manifold End UNI 3-1/2" E2
1882764	LK Manifold UNI 2-1/2" E2
1882765	LK Manifold UNI 3-1/2" E2
1882734	LK End Cap 3/4" E2
1882772	LK Manifold UNI 1-1/2" E2
1882773	LK Manifold UNI 2-1/2" E2
1882774	LK Manifold UNI 3-1/2" E2
1882775	LK Manifold UNI 4-1/2" E2
1882776	LK Manifold UNI 5-1/2" E2
1882416	Eco Manifold UNI 1-1/2"
1882377	Eco Manifold UNI 2-1/2"
1882378	Eco Manifold UNI 3-1/2"
1882379	Eco Manifold UNI 4-1/2"
1882417	Eco Manifold UNI 5-1/2"
1882360	Manifold VVC
1882418	T-Pipe UNI 3/4"
1882523	Manifold UNI Push 1-AX16
1882499	Manifold UNI Pushfit 2-AX16
1882500	Manifold UNI Pushfit 3-AX16
1882524	Manifold UNI Push 1-AX20
1882525	Manifold UNI Push 1-AX25
1882501	Manifold UNI Pushfit 2+2-AX16
1882502	Manifold Push 2-AX16
1882503	Manifold Push 3-AX16
1870667	LK Cap 1/2"
1870668	LK Cap G20
1875697	LK Cap G25
1882314	LK Pressure test plug 1/2"
1870686	LK End Cap 3/4"



## Product Range

The standard product range features nickel-plated fittings, manifolds, and valves. The lead-free product range generally has no surface treatment and is made of yellow brass.

- This product can be used with water and air, within the pressure and temperature limits specified under the Technical Data section.
- When water is used in heating systems, the water quality must comply with the VDI 2035 standard.
- If media other than water or air is to be used, or for special installations, contact LK Systems at <https://www.lksystems.se/en/> or an LK representative.
- Under certain conditions, the material may be damaged without LK Systems being held liable, for example: when used in environments containing chlorine, ammonia, or sulfur dioxide.

**NOTE!**

All installations must be carried out in accordance with industry regulations for HVAC installations.

**NOTE!**

The seal between fittings and other types of connections to the valves must be checked after installation and before the system is commissioned. This is also necessary when the valve is delivered with the above-mentioned components preassembled.

## Sealing Options

- Manifolds or fittings equipped with an O-ring can be assembled without additional sealing materials. Thread the pipe components together fully and align them, then tighten the nut against the mating part to achieve a sealed connection.
- Seal threaded joints using sealing compound and flax (hemp) or thread seal tape.



End cap and manifold (Art. No.1870686 and Art. No.1870785). Manifold and valve (Art. No.1875893 and Art. No.4810038)



Two manifolds assembled (Art. No.1870688 and 1870690).

- Modular manifold (made of dezincification-resistant brass) for wall or ceiling installation in the LK Manifold Bracket or the LK Manifold Cabinet UNI. The manifold features a G20 male EuroCone thread for the supply line and G15 male Conex/EuroCone connections at 50 mm centres for the outlets.
- Pipes X16, A16, X20, and A20 can be connected to the outlets using either the LK Connection Kit (Art. No.4814397–98, 4814405, 4814373–74, 4814451–52) or the LK PressPex press fitting (Art. No.1876605–08, 1877782, 1878459, 1878460–62, 1888501, 1882362, 1880977).



Nipple mounted at the bottom (Art. No.1882746 and 1882748). Manifold angle and manifold assembled (Art. No.1882747 and 1882762).



Two manifolds assembled (Art. No.1882765 and 1882764).



## Installation of Ball Valves

1. Use the valve's wrench flats. Use open-end or adjustable wrenches.  
Do not use a pipe wrench, as it may damage the valve.
2. Tighten the valve. Note: Excessive tightening torque may damage the valve.
3. After installation, flush the system (valves, pipes, etc.) to remove any impurities .
4. Ensure there are no leaks before the system is put into operation. Perform a leak test.  
Refer to the Installation Instructions for LK PressPex and PressPex ECO for guidance.

## Operating Instructions – Ball Valves

Turn the handle slowly 90 degrees. The handle position indicates the valve position. Rapid operation of the handle may cause water hammer.

- When the handle is parallel to the pipe, the valve is open.
- When the handle is perpendicular to the pipe, the valve is closed.

## Regular Inspections

Operate the valve regularly to ensure proper functionality (in the fully closed position, media flow must cease and no leakage must occur). More frequent inspections are recommended under demanding operating conditions, i.e.:

- Conditions approaching the temperature and/or pressure limits specified in the product specifications.
- If the valves are exposed to vibrations or other mechanical forces, as well as aggressive water quality, the frequency of inspections must be increased.
- A combination of two or more factors must be regarded as demanding operating conditions.  
The frequency of inspections must then be increased.

## Defects and Returns

- No claims will be accepted in cases of incorrect use, installation, or maintenance.
- If any part of the valve is damaged or broken, the entire valve must be replaced.
- Replacement or modification of valve parts/components (including mounted devices) will void LK Systems' liability, warranty, and certification.

## Technical Data

Operating Pressure (excluding cold shock conditions)	MAX 10 BAR
Operating Temperature	0°C to 100°C

## Recycling

The packaging material and, if necessary, the valve must be disposed of and recycled in accordance with applicable legislation.

