



# LK Armatur

# Product Catalogue

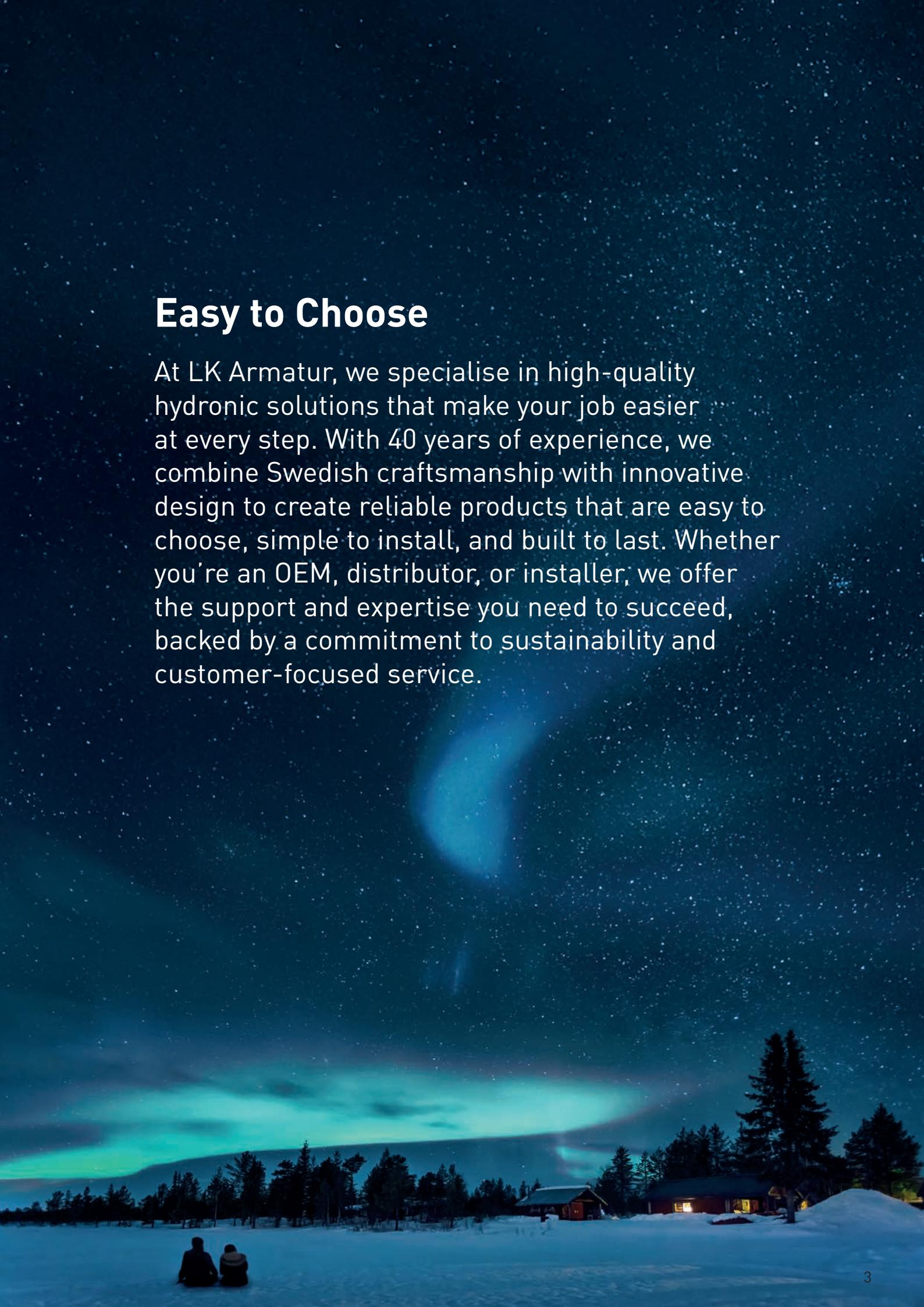


2026



## Easy to Choose

At LK Armatur, we specialise in high-quality hydronic solutions that make your job easier at every step. With 40 years of experience, we combine Swedish craftsmanship with innovative design to create reliable products that are easy to choose, simple to install, and built to last. Whether you're an OEM, distributor, or installer, we offer the support and expertise you need to succeed, backed by a commitment to sustainability and customer-focused service.



# New products 2026

## Supplementary heating



### LK HeatBooster

The LK HeatBooster adds supplementary heating when demand rises or when no immersion heater is fitted. Available in two versions: LK 471 delivers 3 kW and connects to one supply line and LK 472 delivers 9 kW and connects to two supply lines with an integrated zone valve that directs flow to the prioritised heat source.

- Extra power when needed
- Complete unit
- Integrated zone valve (LK 472)
- Two versions: LK 471 (3 kW) and LK 472 (9 kW)

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## Electric portable boiler



### LK 440 EasyHeat 2.0

LK 440 EasyHeat 2.0 is a portable electric boiler for fast, reliable temporary heat on site. Delivers 9 kW with 3-phase 400 V or 3 kW with 1-phase 230 V using an adapter, with a constant setpoint from 8 to 60 °C. Compact, lightweight and protected in a durable blue cabinet for easy transport.

- Complete portable electrically heated boiler
- Convertible from 9 kW to 3 kW with adapter
- Easy installation

p. 169

## Heat exchanger



### LK 868 HeatExchanger 125

- Quick, simple, and pre-insulated installation
- Available in two capacities – 15 kW and 30 kW
- Seamless pairing with LK HydronicGroup H/C 125 DN 25

p. 46

## Filling valve



### LK 524 MultiFill® Plus

- Recharges the borehole in summer
- Dual functionality
- Compact and easy to install even in tight spaces
- Insulation to protect against condensation and possible icing
- Connections for running the brine in the collector hose to a fan coil

p. 127

## Pump group



### LK HydronicGroup H/C 125 DN 32

- For both cooling and heating applications
- Pipe is cataphoresis-treated to resist corrosion
- Easy to combine with electronic regulation

p. 42

# Easy to Choose

## Accessible anytime, anywhere



### Comprehensive Product Information

Find specifications, dimensions, assembly guides and more.



### Contact Information

Quickly find contact info to get in touch with us.



### Always Updated

Always current with the latest product details.



### Accessible Anytime, Anywhere

Access the information you need, whether you're in the office, on-site, or on the go.



### Printable Product Sheets

Print your own product and assortment sheets.



### Video Guides

View helpful product overviews and guides.



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### LK Armatur - Your Partner for Heating and Hot Water Solutions

At LK Armatur, we're more than just a valve manufacturer; we're your partner in creating efficient heating and hot water solutions. With millions of valves produced annually, we understand how every component interacts in your unique applications. From standard products to custom solutions in Valves, Electronic Heat Regulation, Prefabrication, and Accessories, we're here to meet your specific needs. Our focus on energy efficiency and environmental responsibility helps you address the challenges of energy shortages and climate change. Choose LK Armatur for quality, customization, and reliability in every project.

# Loading Unit

## LK 810 ThermoMat 2.0

- Improved regulation
- Compact design
- High efficiency pump from Grundfos / Wilo



### TEKNISK DATA

Voltage	230 VAC 50 Hz
Power consumption	G: 5-52 W, depending on pump speed W: 3-75 W, depending on pump speed
Max. boiler efficiency	65 kW at 20 °C ΔT
Max. working pressure	0.6 MPa (6 bar)
Working temperature	G: Min. 5 °C/Max. 110 °C W: Min. 5 °C/Max. 95 °C
Return temperature	55 °C, 60 °C, 65 °C or 70 °C
Ambient temperature	G: Min. 0 °C/Max. 70 °C W: Min. 5 °C/Max. 60 °C
Thread standard	Rp - female thread
Media	Water - Glycol mixture max. 50%
Circulating pump	Grundfos UPM3 AUTO xx-70, Wilo Para /8 SC FS14 EEI < 0.23 (see pump datasheet/label for exact value)
Material valve body	Brass EN 1982 CB753S
Material insulation	Expanded Polypropylene EPP
Flow	Max. 5900 l/h

LK 810 ThermoMat 2.0 is a loading unit for heating applications with solid fuel boilers and storage tanks. The loading unit is intended to ensure a high return temperature as well as an optimal temperature stratification in the storage tank, thus increasing the efficiency of the system. Tarring and condensation are prevented which prolongs boiler life.

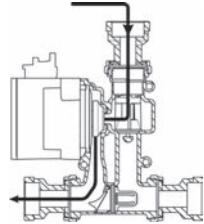
The LK 810 ThermoMat 2.0 is a compact design with an integrated low-energy circulating pump and a thermic loading valve that regulates on two ports. The loading unit has three ball valves to simplify installation and maintenance, three thermometers that allow for simple control of the loading process and an insulation to minimize heat loss. The loading unit is available in two versions - with or without check valve. With a check valve the functions described under phase 4 will be obtained. The loading unit is reversible and can easily be adapted for mounting to the right or left of the boiler. Thanks to the three ball valves any part can be changed without draining the system in case of servicing.

LK 810 ThermoMat 2.0 is also available with a circulating pump that is controlled by a PWM-signal. For more information please contact our sales department.

### THE FUNCTION OF THE LOADING UNIT DURING THE DIFFERENT PHASES OF HEATING:

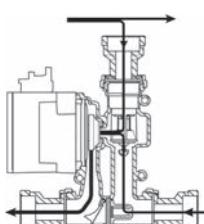
#### 1. HEAT UP PHASE

The water circulates between boiler and loading unit while the temperature of the boiler is rising.



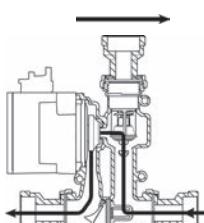
#### 2. LOADING PHASE

The thermostatic element starts to open and allows return water from the storage tank to be mixed with supply water before it returns to the boiler. The return temperature to the boiler is kept constant.



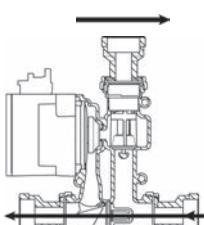
#### 3. END PHASE

The thermostatic element is fully open and the bypass is closed. This results in an optimal transfer of heat from the boiler and the storage tank is filled with supply water.

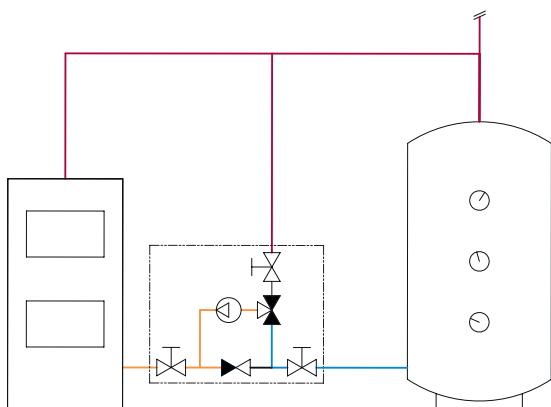


#### 4. SELF-CIRCULATION WITH CHECK VALVE

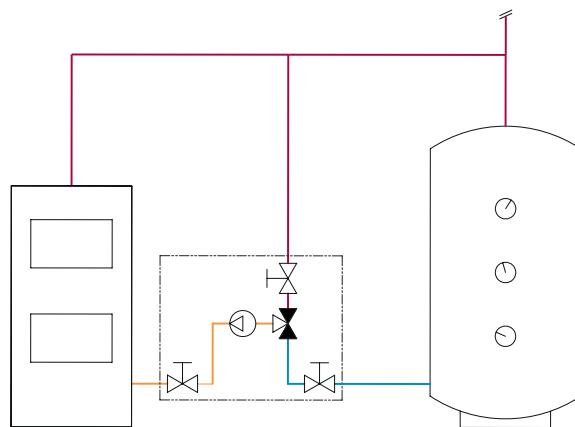
Self-circulation will be obtained as soon as the fire has gone out and the circulating pump has stopped. The remaining hot water is loaded to the storage tank. In case of power failure or pump breakdown the check valve automatically opens to allow self-circulation. The check valve also stops recirculation from storage tank to boiler.



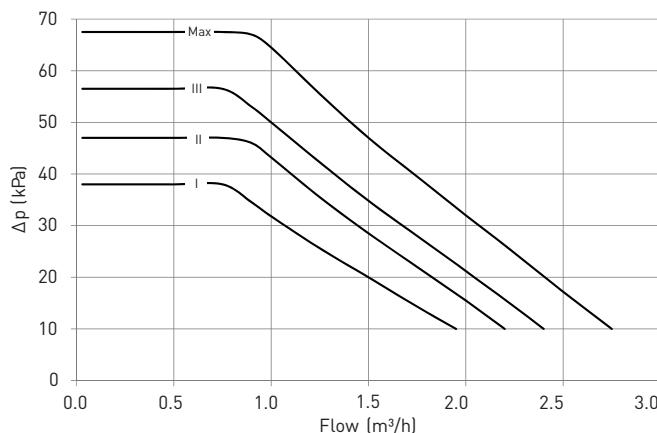
### WITH CHECK VALVE



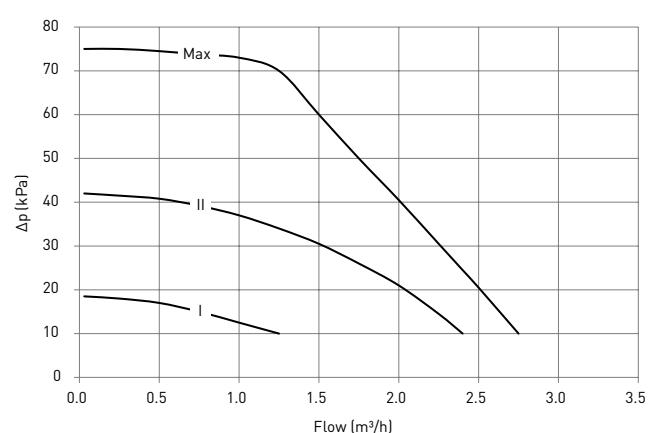
### WITHOUT CHECK VALVE



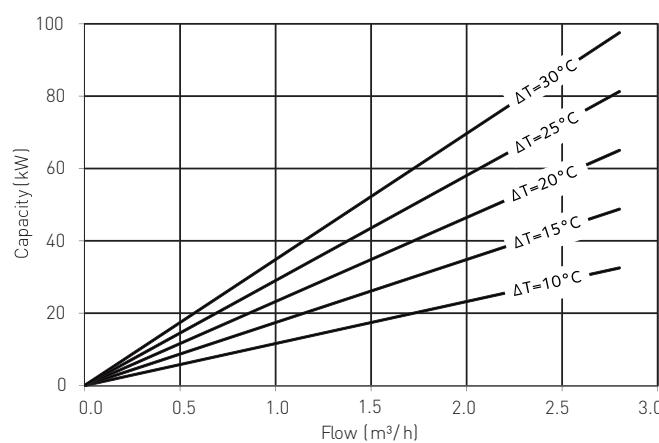
PUMP CHARACTERISTICS - GRUNDFOS UPM3 AUTO XX-70



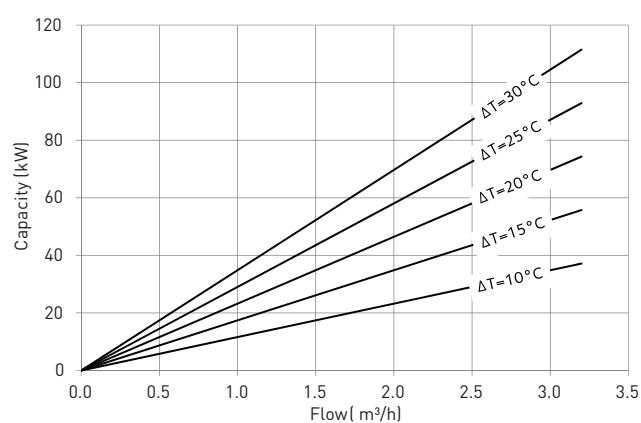
PUMP CHARACTERISTICS - WILO PARA \*/8 SC FS14



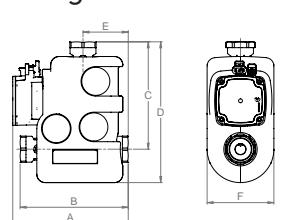
BOILER CAPACITY DIAGRAM - GRUNDFOS UPM3 AUTO XX-70



BOILER CAPACITY DIAGRAM - WILO PARA \*/8 SC FS14



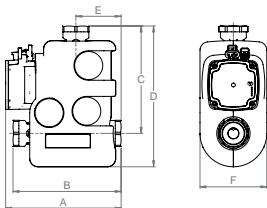
LK 810 2.0 Grundfos - Compression fitting



Article no.	Type	Return temp.	Dim.	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181644	with check valve	55 °C	28 mm	208	195	195	255	82	120	4.0
181650	with check valve	60 °C	28 mm	208	195	195	255	82	120	4.0

Other temperatures and dimensions on request.

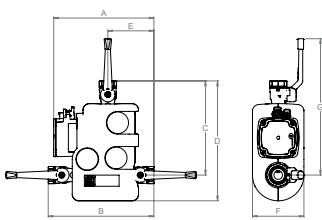
## LK 810 2.0 Grundfos - Female thread



Article no.	Type	Return temp.	Dim.	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181640	with check valve	55 °C	F 1"	208	195	195	255	82	120	4.0
181642	with check valve	55 °C	F 1¼"	208	195	195	255	82	120	4.0
181646	with check valve	60 °C	F 1"	208	195	195	255	82	120	4.0
181648	with check valve	60 °C	F 1¼"	208	195	195	255	82	120	4.0
181651	without check valve	65 °C	F 1"	208	195	195	255	82	120	4.0
181652	with check valve	65 °C	F 1"	208	195	195	255	82	120	4.0
181654	with check valve	65 °C	F 1¼"	208	195	195	255	82	120	4.0
181658	with check valve	70 °C	F 1"	208	195	195	255	82	120	4.0
181660	with check valve	70 °C	F 1¼"	208	195	195	255	82	120	4.0

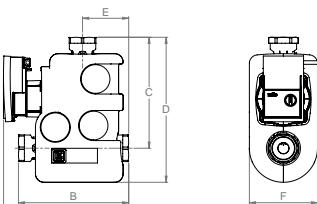
Other temperatures and dimensions on request.

## LK 810 2.0 Grundfos - Female thread



Article no.	Type	Return temp.	Dim.	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
181839	with check valve	55 °C	F 1"	234	247	222	282	108	120	300	4.0
181840	without check valve	55 °C	F 1"	234	247	222	282	108	120	300	4.0
181825	with check valve	60 °C	F 1"	234	247	222	282	108	120	300	4.0
181841	without check valve	60 °C	F 1"	234	247	222	282	108	120	300	4.0
181827	with check valve	65 °C	F 1"	234	247	220	280	108	120	300	4.0
181842	without check valve	65 °C	F 1"	234	247	222	282	108	120	300	4.0
181829	with check valve	70 °C	F 1"	234	247	222	282	108	120	300	4.0
181843	without check valve	70 °C	F 1"	234	247	222	282	108	120	300	4.0
182352	with check valve	55 °C	F 1¼"	234	247	222	282	108	120	300	4.0
182353	without check valve	55 °C	F 1¼"	234	247	222	282	108	120	300	4.0
182354	with check valve	60 °C	F 1¼"	234	247	222	282	108	120	300	4.0
182355	without check valve	60 °C	F 1¼"	234	247	222	282	108	120	300	4.0
182356	with check valve	65 °C	F 1¼"	234	247	222	282	108	120	300	4.0
182357	without check valve	65 °C	F 1¼"	234	247	222	282	108	120	300	4.0
182358	with check valve	70 °C	F 1¼"	234	247	222	282	108	120	300	4.0
182359	without check valve	70 °C	F 1¼"	234	247	222	282	108	120	300	4.0

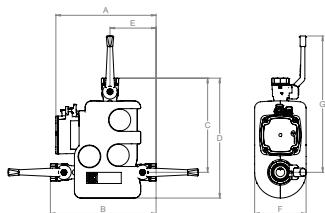
## LK 810 2.0 Wilo - Female thread



Article no.	Type	Return temp.	Dim.	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181664	with check valve	55 °C	F 1"	216	195	195	255	82	120	4.0
181669	without check valve	60 °C	F 1"	216	195	195	255	82	120	4.0

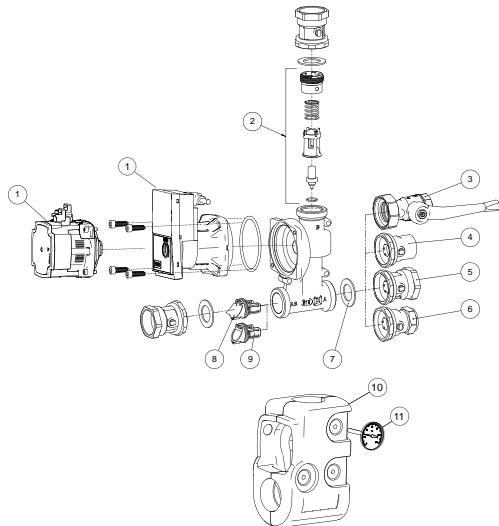
Other temperatures and dimensions on request.

## LK 810 2.0 Wilo - Female thread



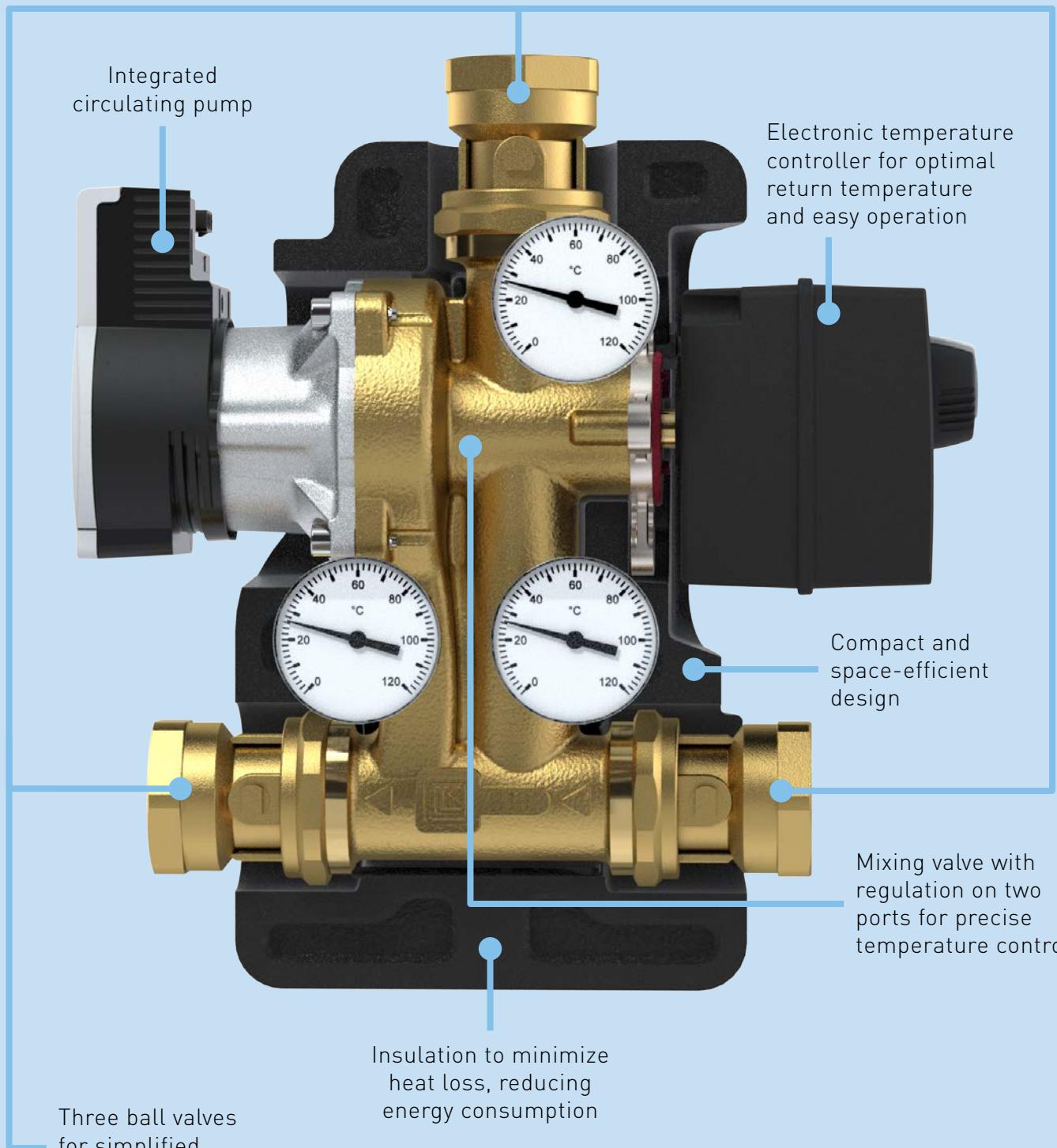
Article no.	Type	Return temp.	Dim.	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
181844	with check valve	55 °C	F 1"	248	250	222	282	108	120	302	4.0
181848	without check valve	55 °C	F 1"	248	250	222	282	108	120	302	4.0
181845	with check valve	60 °C	F 1"	248	250	222	282	108	120	302	4.0
181849	without check valve	60 °C	F 1"	248	250	222	282	108	120	302	4.0
181846	with check valve	65 °C	F 1"	248	250	222	282	108	120	302	4.0
181850	without check valve	65 °C	F 1"	248	250	222	282	108	120	302	4.0
181847	with check valve	70 °C	F 1"	248	250	222	282	108	120	302	4.0
181851	without check valve	70 °C	F 1"	248	250	222	282	108	120	302	4.0
182360	with check valve	55 °C	F 1¼"	248	279	238	282	124	120	302	4.0
182361	without check valve	55 °C	F 1¼"	248	279	238	282	124	120	302	4.0
182362	with check valve	60 °C	F 1¼"	248	279	238	282	124	120	302	4.0
182363	without check valve	60 °C	F 1¼"	248	279	238	282	124	120	302	4.0
182364	with check valve	65 °C	F 1¼"	248	279	238	282	124	120	302	4.0
182365	without check valve	65 °C	F 1¼"	248	279	238	282	124	120	302	4.0
182366	with check valve	70 °C	F 1¼"	248	279	238	282	124	120	302	4.0
182367	without check valve	70 °C	F 1¼"	248	279	238	282	124	120	302	4.0

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187168	Grundfos UPM3 Auto xx-70	1
187347	Wilo Para */8 SC FS14	1
187163	Thermostatic element 55 °C	2
187164	Thermostatic element 60 °C	2
187165	Thermostatic element 65 °C	2
187166	Thermostatic element 70 °C	2
055577	Ball valve F 1" with handles	3
187329	Ball valve F 1¼" with handles	3
187017	Ball valve F 1"	4
187018	Ball valve F 1¼"	5
187019	Ball valve 28 mm	6
013057	Sealing EPDM 44x32x2 mm	7
187021	Check valve 810 / 811	8
187022	Plug 810 / 811	9
187167	EPP Insulation	10
180352	Thermometer 120 °C	11

# LK 811 ThermoMat 2.0 W



The **LK 811 ThermoMat 2.0 W** loading unit is your solution for improved heating performance. Designed for use with solid fuel boilers and storage tanks, this compact unit maintains high return temperature, extending the life of your boiler. Install with ease between your solid fuel boiler and storage tank, making it adaptable to your system's needs.

# Loading Unit

## LK 811 ThermoMat 2.0 W



- Adjustable return temperature
- Electronic regulation ensures an easy operation



### TEKNISK DATA

Voltage	230 VAC 50 Hz
Power consumption	10-75 W, depending on pump speed
Max. boiler efficiency	65 kW at 20 °C ΔT
Max. working pressure	0.6 MPa (6 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Return temperature	5-99 °C with LK 100 SmartComfort CT
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	Rp - female thread
Media	Water - Glycol mixture max. 50%
Circulating pump	Wilo Para /6 SC FS14, Wilo Para /8 SC FS14 EEI < 0.23 (see pump datasheet/label for exact value)
Material valve body	Brass EN 1982 CB753S
Material insulation	Expanded Polypropylene EPP

LK 811 ThermoMat 2.0 W is a loading unit for heating applications with solid fuel boilers and storage tanks. The loading unit is intended to ensure a high return temperature as well as an optimal temperature stratification in the storage tank, thus increasing the efficiency of the system. Tarring and condensation are prevented which prolongs boiler life.

The LK 811 ThermoMat 2.0 W is a compact design with an integrated low-energy circulating pump and a mixing valve that regulates on two ports. The loading unit has three ball valves to simplify installation and maintenance and an insulation to minimize heat loss. Three thermometers that allow for simple control of the loading process can be ordered as accessories. The loading unit is available in two versions - with or without check valve. With a check valve the functions described under phase 4 will be obtained. The loading unit is reversible and can easily be adapted for mounting to the right or left of the boiler. Thanks to the three ball valves any part can be changed without draining the system in case of servicing.

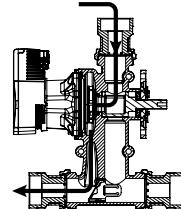
LK 811 ThermoMat 2.0 W is available with or without an electronic temperature controller. Mounting kits for controllers of other brands are available - see section Temperature Controllers - Mounting Kits.

Please contact our Sales Department for more information.

### THE FUNCTION OF THE LOADING UNIT DURING THE DIFFERENT PHASES OF HEATING:

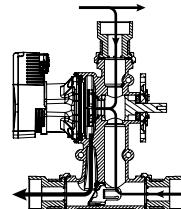
#### 1. HEAT UP PHASE

The water circulates between boiler and loading unit while the temperature of the boiler is rising.



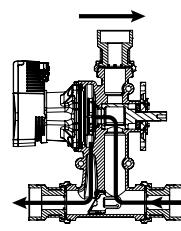
#### 2. LOADING PHASE

The electronic temperature controller starts to open the mixing valve at the chosen temperature and allows return water from the storage tank to be mixed with supply water before it returns to the boiler. The return temperature to the boiler is kept constant.



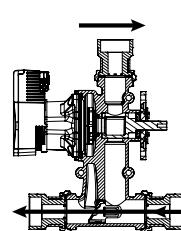
#### 3. END PHASE

The mixing valve is fully open towards the storage tank. This results in an optimal transfer of heat from the boiler and the storage tank is filled with supply water. When the boiler has cooled the electronic controller LK 100 SmartComfort CT prevents re-circulation from storage tank to boiler.

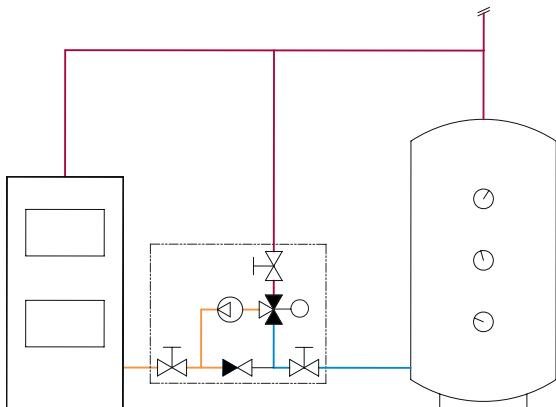


#### 4. SELF-CIRCULATION WITH CHECK VALVE

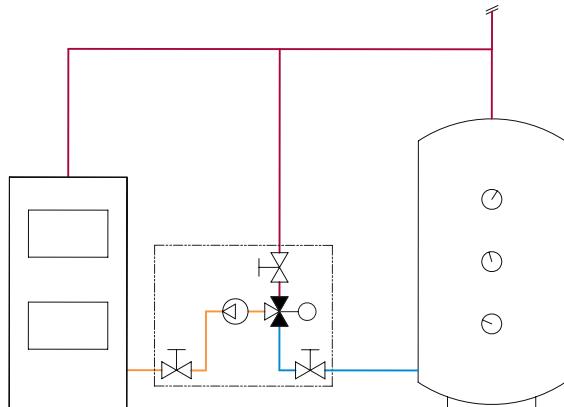
Self-circulation will be obtained as soon as the fire has gone out and the circulating pump has stopped. The remaining hot water is loaded to the storage tank. In case of power failure or pump breakdown the check valve automatically opens to allow self-circulation. The check valve also stops recirculation from storage tank to boiler.



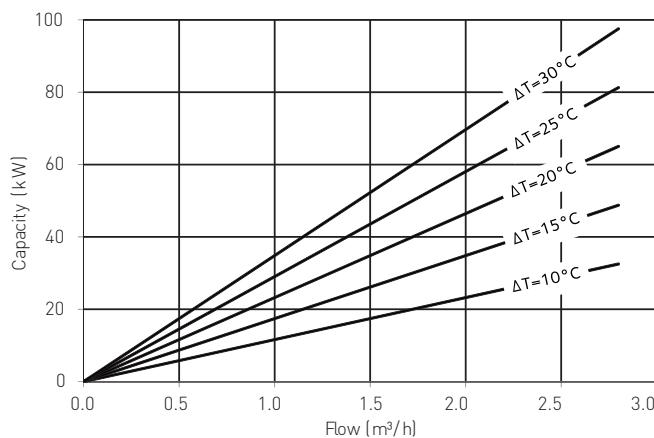
### WITH CHECK VALVE



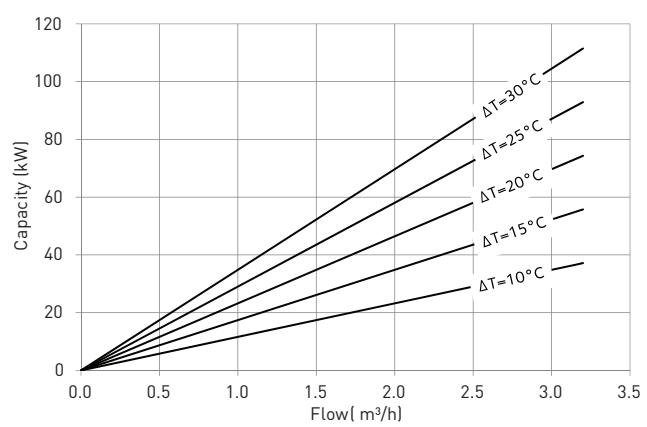
### WITHOUT CHECK VALVE



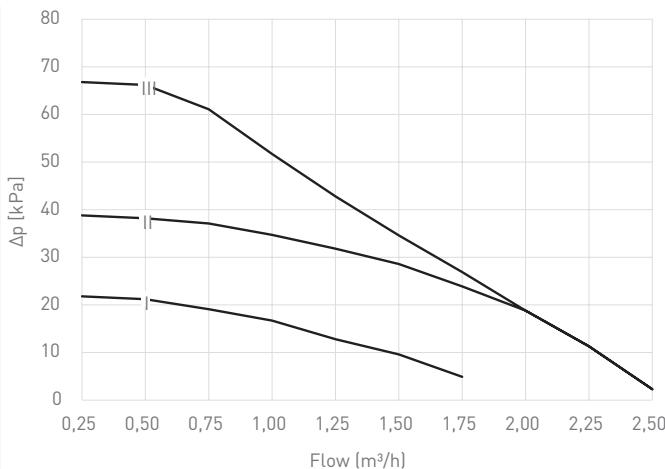
BOILER CAPACITY DIAGRAM, WILO PARA\*/6 SC FS14



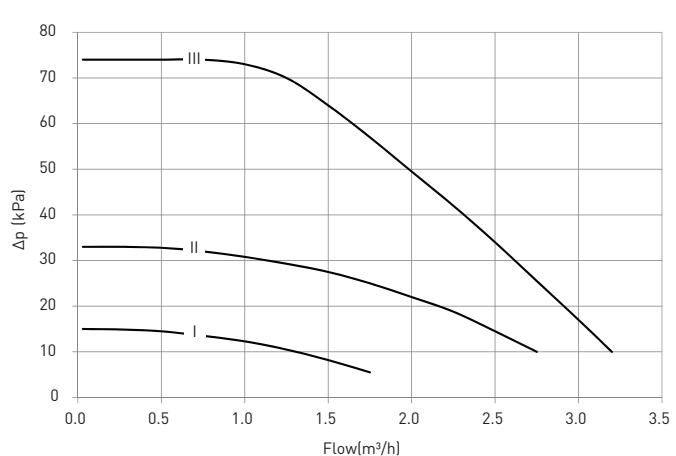
BOILER CAPACITY DIAGRAM - WILO PARA \*/8 SC FS14



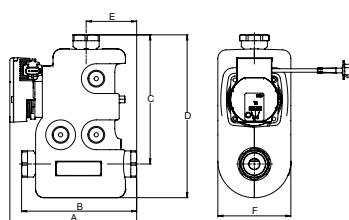
PUMP CHARACTERISTICS, WILO PARA \*/6 SC FS14



PUMP CHARACTERISTICS, WILO PARA \*/8 SC FS14

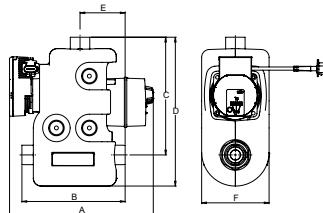


LK 811 - Female thread



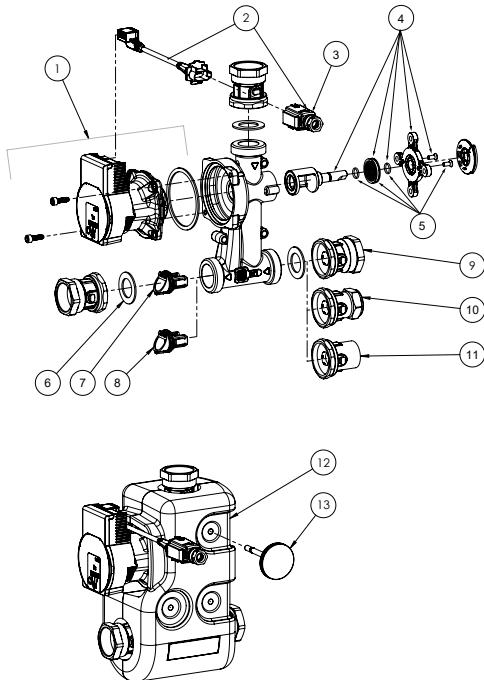
Article no.	Type	Dim.	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
182772	without check valve	F 1"	226	205	230	290	90	130	4.2
182770	without check valve	F 1 1/4"	226	205	230	290	90	130	4.2

## LK 811 - Female thread - with LK 100 SmartComfort CT



Article no.	Type	Dim.	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
182779	without check valve + CT 100	F 1"	277	199	227	287	87	130	4.2
182780	without check valve + CT 100	F 1 1/4"	277	199	227	287	87	130	4.2

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187347	Wilo Para */8 SC FS14	1
187960	Wilo Para */6 SC FS14	1
095443	Cable Wilo Para 200 mm + Connector	2
095220	Connector	3
187110	Repair kit 811	4
187066	Sealing kit 811/840/841, DN 15-20	5
013025	Gasket EPDM 1 1/2" - Ø44 x Ø27 x 2 mm	6
187021	Check valve 810 / 811	7
187022	Plug 810 / 811	8
187018	Ball valve F 1 1/4"	9
187019	Ball valve 28 mm	10
187017	Ball valve F 1"	11
187351	EPP Insulation, 811	12
058126	Thermometer 120 °C	13

# Loading Unit

## LK 815 ThermoKit T

- Complete kit
- Low-energy pump



### TEKNISK DATA

Voltage	230 VAC 50/60 Hz
Power consumption	12-140 W depending on pump speed
Max. boiler efficiency	140 kW at 20 °C ΔT
Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Flow	Max. 5900 l/h
Return temperature	45 °C, 50 °C, 55 °C, 60 °C, 65 °C or 70 °C
Ambient temperature	Min. 5 °C/Max. 40 °C
Thread standard	Rp - female thread, G - female thread
Media	Water - Glycol mixture max. 50%
Circulating pump	Grundfos UPML 25-95 180 EEI < 0.23 (see pump datasheet/label for exact value)
Material valve body	Brass EN 1982 CB753S
Material insulation	Expanded Polypropylene EPP

LK 815 ThermoKit T Eco is a loading group for heating applications with solid fuel boilers and storage tanks. The loading group is intended to ensure a high return temperature as well as an optimal temperature stratification in the storage tank, thus increasing the efficiency of the system. Tarring and condensation are prevented which prolongs boiler life.

LK 815 ThermoKit T Eco consists of a low-energy circulating pump, an LK 823 ThermoVar thermic loading valve with insulation, a check valve, a thermometer for reading return temperature and three ball valves to simplify installation and maintenance. The loading group is reversible and can easily be adapted for mounting to the right or left of the boiler. Thanks to the three ball valves any part can be changed without draining the system, if the need for servicing arise.

Thermometers are available as accessory, art. no. 181736.

### THE FUNCTION OF THE LOADING UNIT DURING THE DIFFERENT PHASES OF HEATING:

#### 1. HEAT UP PHASE

The water circulates between boiler and loading group while the temperature of the boiler is rising.

#### 2. LOADING PHASE

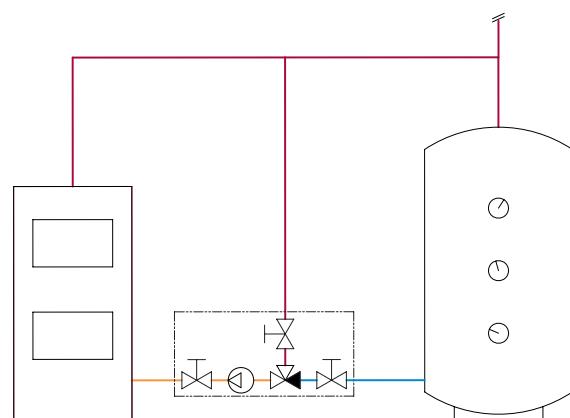
The thermic valve starts to open and allows return water from the storage tank to be mixed with supply water before it returns to the boiler. The return temperature to the boiler is kept constant.

#### 3. END PHASE

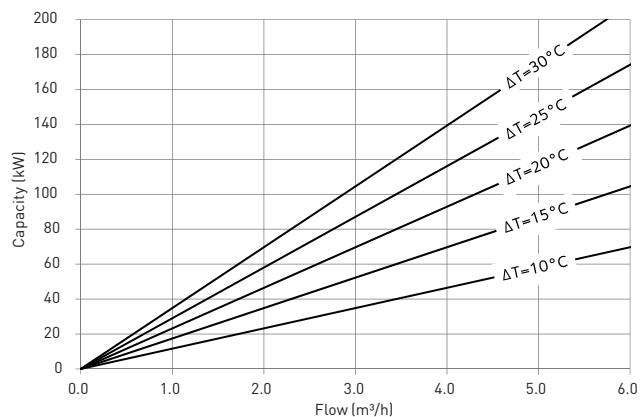
The thermostatic element is fully open. This results in an optimal transfer of heat from the boiler and the storage tank is filled with supply water.

#### 4. SELF-CIRCULATION

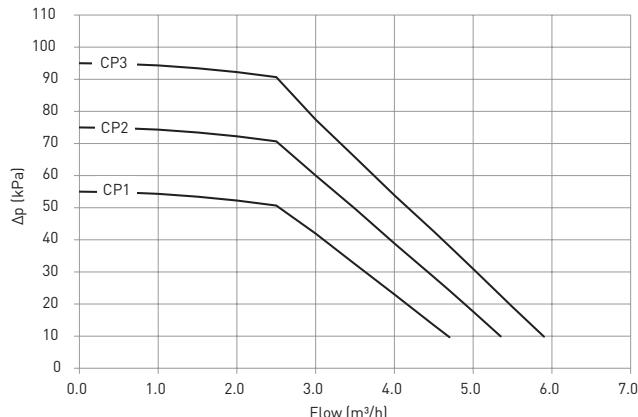
As soon as the fire has gone out and the circulating pump has stopped the remaining hot water in the boiler is loaded to the storage tank as long as the thermic valve remains open. When the boiler has cooled the thermic valve closes. The check valve prevents recirculation from storage tank to boiler.



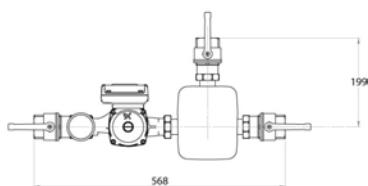
### BOILER CAPACITY DIAGRAM



### PUMP CHARACTERISTICS

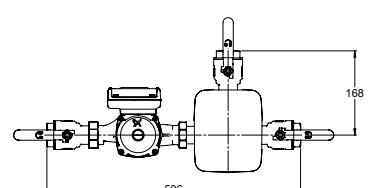


### LK 815 - Grundfos UPML 25-95 - Female thread



Article no.	Return temp.	Dim.	Weight kg
181572	45 °C	F 1½"	7.1
181573	50 °C	F 1½"	7.1
181574	55 °C	F 1½"	7.1
181575	60 °C	F 1½"	7.1
181576	65 °C	F 1½"	7.1
181577	70 °C	F 1½"	7.1

### LK 815 - Grundfos UPML 25-95 - Female thread



Article no.	Return temp.	Dim.	Weight kg
182390	45 °C	F 1¼"	7.1
182391	50 °C	F 1¼"	7.1
182392	55 °C	F 1¼"	7.1
182393	60 °C	F 1¼"	7.1
182394	65 °C	F 1¼"	7.1
182395	70 °C	F 1¼"	7.1

# Loading Unit

## LK 816 ThermoKit E

- Complete kit
- Low-energy pump



### TEKNISK DATA

Voltage	230 VAC 50/60 Hz
Power consumption	10-180 W depending on pump speed LK 100 SmartComfort CT Electronic Controller, 3 VA
Primary voltage adapter	100-240 VAC 50/60 Hz
Secondary voltage adapter	24 VDC 250 mA
Max. boiler efficiency	Dependent on circulating pump
Flow	Dependent on circulating pump
Angle of rotation	Temperature Controller: 90°
Torque	Temperature Controller: 5 Nm
Operation time	140 sec.
Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Return temperature	5 - 99 °C
Ambient temperature	Min. 5 °C/Max. 40 °C
Thread standard	Rp - female thread, G - female thread
Protection class	IP 40
Media	Water - Glycol mixture max. 50%
Circulating pump	Grundfos Magna 32-80 180, Grundfos UPML 25-95 180, Grundfos UPMXL 32-105 180 EEI < 0.23 (see pump datasheet/ label for exact value)
Material valve body	Brass EN 12165 CW617N
Material insulation	Expanded Polypropylene EPP

LK 816 ThermoKit E Eco is a loading group for heating applications with solid fuel boilers and storage tanks. The loading group is intended to ensure a high return temperature as well as an optimal temperature stratification in the storage tank, thus increasing the efficiency of the system. Tarring and condensation are prevented which prolongs boiler life.

LK 816 ThermoKit E Eco is a unit consisting of a low-energy circulating pump, an LK 840 ThermoMix mixing valve, an LK 100 SmartComfort CT controller with adjustment of the lowest return temperature 5 - 99 °C and three ball valves to simplify installation and maintenance. Articles number 181578 and 181579 are delivered with an insulation for the mixing valve. The loading group is reversible and can easily be adapted for mounting to the right or left of the boiler.

Thanks to the three ball valves any part can be changed without draining the system, should the need for servicing arise.

### THE FUNCTION OF THE LOADING UNIT DURING THE DIFFERENT PHASES OF HEATING:

#### 1. HEAT UP PHASE

The water circulates between boiler and loading group while the temperature of the boiler is rising.

#### 2. LOADING PHASE

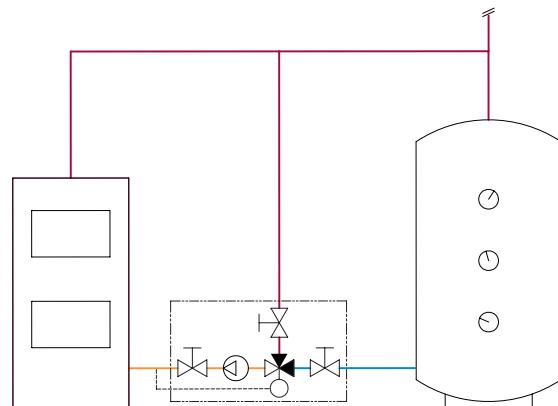
The mixing valve starts to open and allows return water from the storage tank to be mixed with supply water before it returns to the boiler. The return temperature to the boiler is kept constant.

#### 3. END PHASE

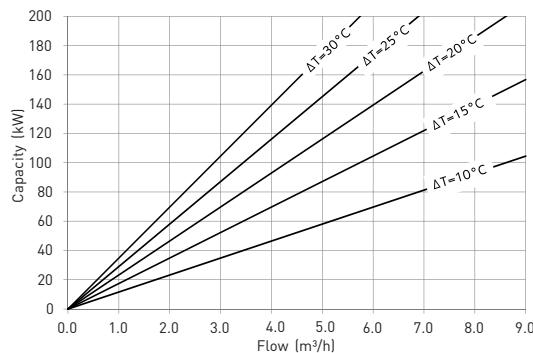
The mixing valve is fully open towards the storage tank. This results in an optimal transfer of heat from the boiler and the storage tank is filled with supply water. When the boiler has cooled the electronic controller prevents re-circulation from storage tank to boiler.

#### 4. SELF-CIRCULATION

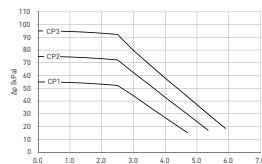
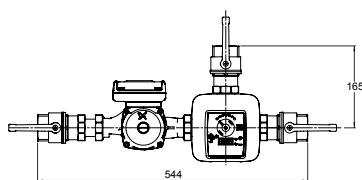
In case of power failure or pump breakdown the electronic controller can be manually operated and the storage tank is loaded through self-circulation.



## BOILER CAPACITY DIAGRAM

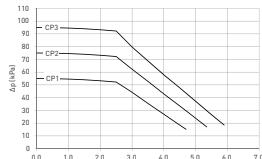
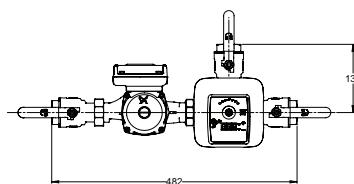


## LK 816 - Grundfos UPML 25-95 - Female thread



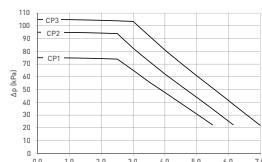
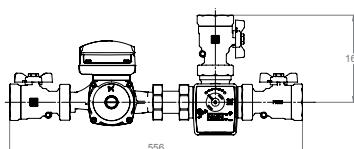
Article no.	Dim.	Note	Weight kg
181578	F 1 1/2"	Adapter - EU	7.1
181579	F 1 1/2"	Adapter - UK	7.1

## LK 816 - Grundfos UPML 25-95 - Female thread



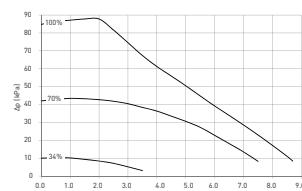
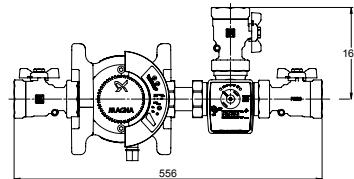
Article no.	Dim.	Note	Weight kg
182396	F 1 1/4"	Adapter - EU	7.1
182397	F 1 1/4"	Adapter - UK	7.1

## LK 816 - Grundfos UPMXL 32-105 - Female thread



Article no.	Dim.	Note	Weight kg
181580	F 2"	Adapter - EU	11.1
181581	F 2"	Adapter - UK	11.1

## LK 816 - Grundfos Magna 32-80 - Female thread



Article no.	Dim.	Note	Weight kg
181410	F 2"	Adapter - EU	12.4



## More than one heating system in your property?

With our wide range, we can ensure correct pump group for your specific need.

If you've more than one heating system in your property, you can easily connect up to five different pump groups. Our pump groups can easily be placed individually and in a group of up to five units. With our electronic controller, SmartComfort, installed on the pump group, the system will be provided with the exact amount of heat required in the building at any given time. You can easily read the temperature on the integrated thermometers.

- All in one
- Easy to install
- Easy to combine with electronic regulation

### Choose according to your needs:

#### **LK 860 - MANIFOLD**

#### **LK 861 - DIRECT SUPPLY**

#### **LK 862 - MIXED SUPPLY**

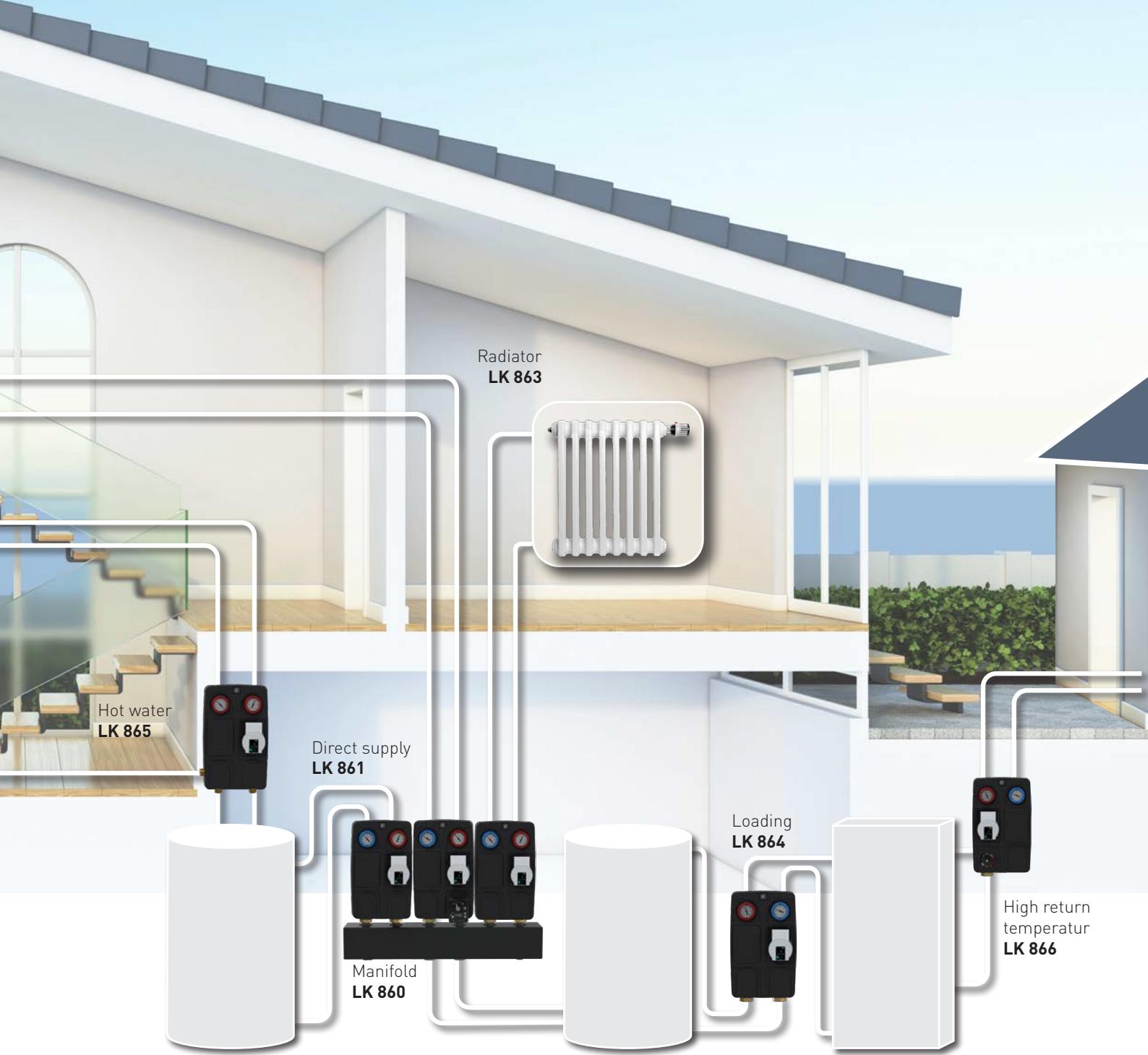
Three-way mixing valve is included.

#### **LK 863 - MIXED SUPPLY**

Thermic mixing valve, LK 551 HydroMix, is included.

#### **LK 864 - LOADING UNIT**

Thermic loading valve LK 823 ThermoVar® is included to ensure both an optimal temperature stratification in the accumulator tank and a high return temperature to the boiler, which increases the system's efficiency.



#### **LK 865 - COMPLETE UNIT FOR HOT WATER CIRCULATION**

Thermic mixing valve LK 551 HydroMix HWC is included.

#### **LK 866 - HIGH RETURN TEMPERATUR**

A four way mixing valve LK 841 ThermoMix® is included. Designed for heating systems where a high return temperature is required to prevent corrosion and thus extend the life length of the heat source.

#### **LK 867 - FOR TWO HEATING UNITS**

A bivalent mixing valve LK 830 ThermoMix® is included. Designed for heating systems, where energy is taken from two heating units connected in series or parallel or for storage tank systems where energy is extracted from two levels.



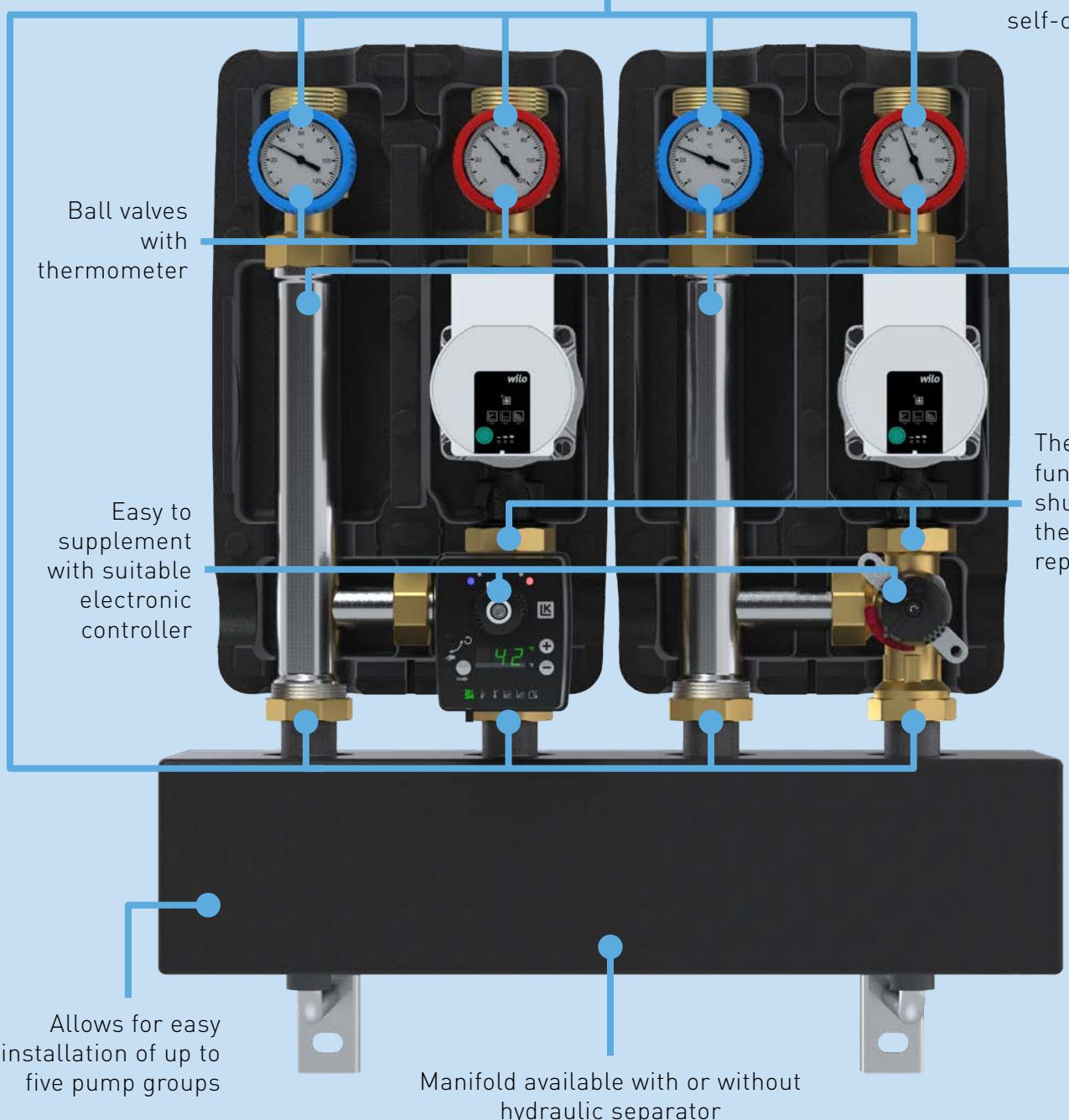
Two heating units  
**LK 867**



# LK HydronicGroup H 125 DN 25

The primary and secondary valves are designed with external 1½" and internal 1" threads for easy and quick installation

Integrated check valve to prevent self-circulation



Efficient, versatile, and easy to install, **LK HydronicGroup H 125 DN 25** meets all your heating needs. Featuring a pump, insulation, two ball valves with a thermometer, and a wall mounting bracket, it's a complete package for direct or mixed supply heating systems. Pictured is the **LK 862 H/C 125 DN 25** pump group, which includes a three-way mixing valve. The LK 860 manifold supports up to five pump groups and includes a mounting bracket, allowing flexible integration of different groups in the same system.

# Pump Group

## LK HydronicGroup H 125 DN 25



- All in one
- Easy to install
- Easy to combine with electronic regulation



### TECHNICAL DATA

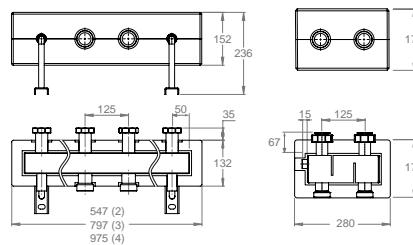
Voltage	230 VAC 50/60 Hz
Power consumption	10-75 W depending on pump speed
Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Ambient temperature	Min. 5 °C/Max. 58 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50%
Circulating pump	Wilo Para 15-130/8-75/SC-9, Wilo Para 25-180/6-43/SC-12, Wilo Para 25-180/8-75/SC-12, Wilo Para zKu 15-130/8 SC EEI < 0.23 (see pump datasheet/label for exact value)
Material valve body	Brass EN 12165 CW617N
Material insulation	Expanded Polypropylene EPP

LK HydronicGroup H 125 DN 25 is a complete pump group that is suitable for heating where direct supply or mixed supply is desirable. Consists of a highly efficient circulation pump, insulation, wall mounting bracket and two ball valves with thermometer, on the return side there is an integrated check valve.

LK 860 H 125 DN 25 Manifold available with or without hydraulic separator for one, two, three optionally four pump groups. Wall mounting bracket are included with the manifold.

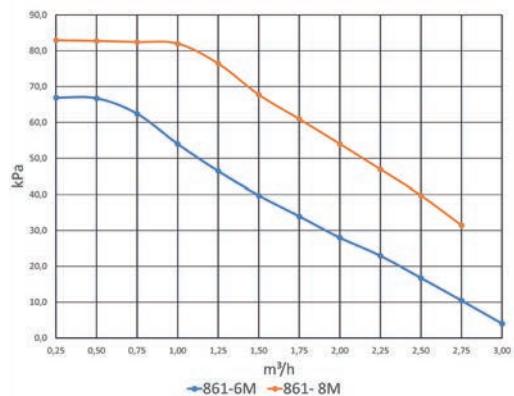
LK 861 H 125 DN 25 - where direct supply is desired.

### LK 860 H 125 DN 25 - Manifold

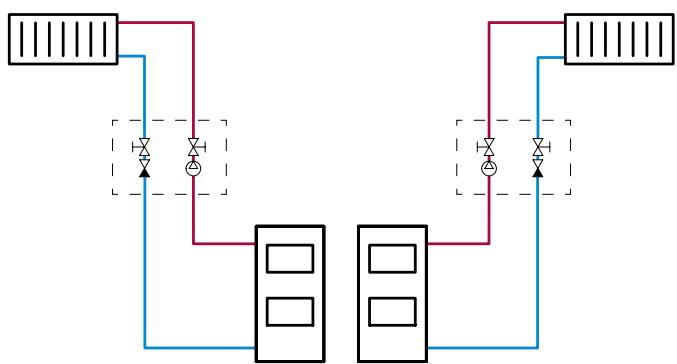


Article no.	Type	Dim.	Note	Weight kg
182419	Manifold, 1 pc groups with hydraulic separator	M 1½"	0.4 MPa (4 bar)	3.5
50802086	Manifold, 2 pc groups, without hydraulic separator	M 1½"	0.4 MPa (4 bar)	6.0
182350	Manifold, 2 pc groups with hydraulic separator	M 1½"	0.4 MPa (4 bar)	7.0
182349	Manifold, 3 pc groups, without hydraulic separator	M 1½"	0.4 MPa (4 bar)	8.0
182351	Manifold, 3 pc groups, with hydraulic separator	M 1½"	0.4 MPa (4 bar)	9.0
182417	Manifold, 4 pc groups, without hydraulic separator	M 1½"	0.4 MPa (4 bar)	9.0
182418	Manifold, 4 pc groups, with hydraulic separator	M 1½"	0.4 MPa (4 bar)	10.0

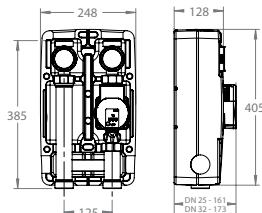
## LK 861 - PUMP CHARACTERISTICS



## LK 861 - DIRECT SUPPLY

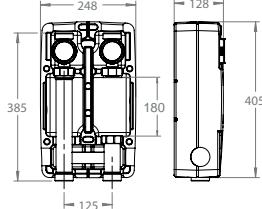


### LK 861 H 125 DN 25 - Direct supply



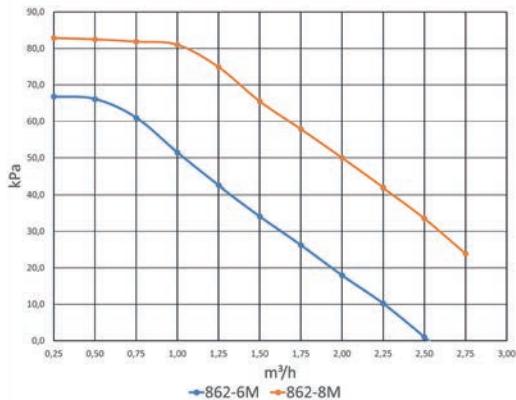
Article no.	Dim.	DN	Circulating pump	Weight kg
299458	M 1 1/2" / F 1" x M 1 1/2"	DN 25	Wilo Para 25-180/6-43/SC-12	5.0
299459	M 1 1/2" / F 1" x M 1 1/2"	DN 25	Wilo Para 25-180/8-75/SC-12	5.2

### LK 861 H 125 DN 25 - Direct supply without pump

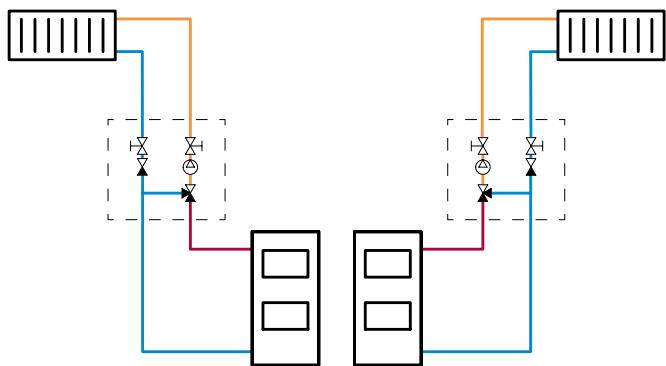


Article no.	Dim.	Weight kg
299460	M 1 1/2" / F 1" x M 1 1/2"	3.1

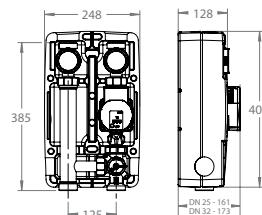
## LK 862 - PUMP CHARACTERISTICS



## LK 862 - MIXED SUPPLY

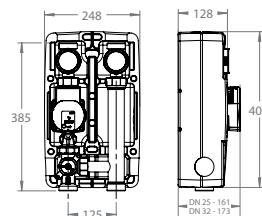


### LK 862 H 125 DN 25 - Mixed supply right version



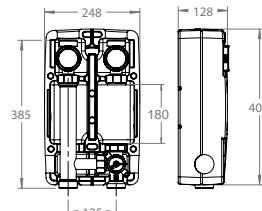
Article no.	Dim.	DN	Kvs m³/h	Circulating pump	Note	Weight kg
299462	M 1 1/2" / F 1" x M 1 1/2"	DN 25	6.3	Wilo Para 25-180/6-43/SC-12		5.3
299464	M 1 1/2" / F 1" x M 1 1/2"	DN 25	10.0	Wilo Para 25-180/8-75/SC-12		5.5
396164	M 1 1/2" / F 1" x M 1 1/2"	DN 25	6.3	Wilo Para 25-180/6-43/SC-12	LK 950 (180759)	5.8
396165	M 1 1/2" / F 1" x M 1 1/2"	DN 25	10.0	Wilo Para 25-180/8-75/SC-12	LK 950 (180759)	6.0

### LK 862 H 125 DN 25 - Mixed supply left version



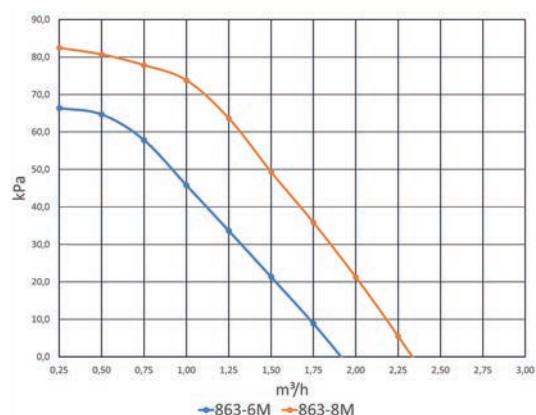
Article no.	Dim.	DN	Kvs m³/h	Circulating pump	Weight kg
299461	M 1 1/2" / F 1" x M 1 1/2"	DN 25	6.3	Wilo Para 25-180/6-43/SC-12	5.3
299463	M 1 1/2" / F 1" x M 1 1/2"	DN 25	10.0	Wilo Para 25-180/8-75/SC-12	5.5

### LK 862 H 125 DN 25 - Mixed supply without pump

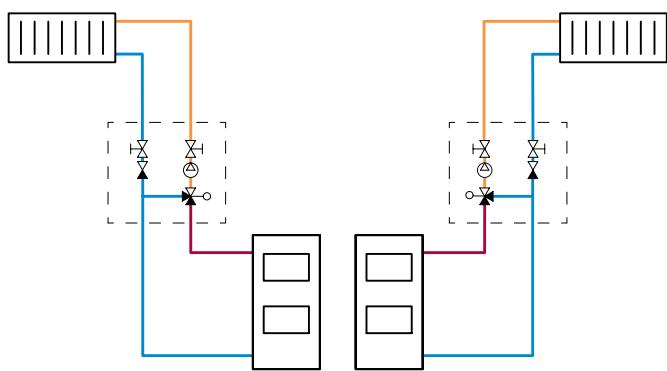


Article no.	Dim.	DN	Kvs m³/h	Weight kg
299465	M 1 1/2" / F 1" x M 1 1/2"	DN 25	6.3	3.1
299466	M 1 1/2" / F 1" x M 1 1/2"	DN 25	10.0	3.1

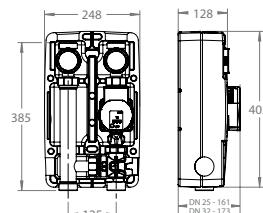
## LK 863 - PUMP CHARACTERISTICS



## LK 863 - THERMIC MIXING VALVE

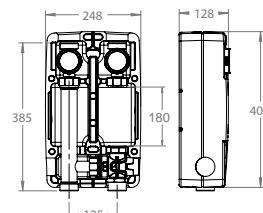


### LK 863 H 125 DN 25 - Thermic mixing valve



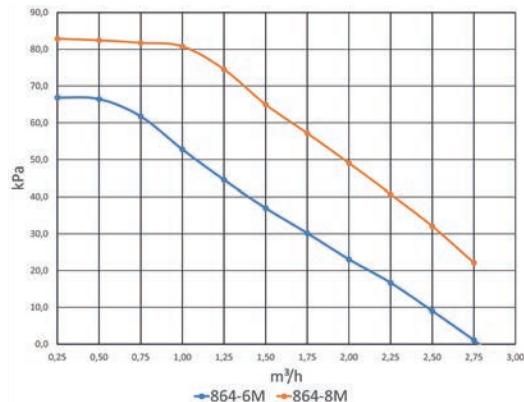
Article no.	Dim.	DN	Circulating pump	Note	Weight kg
299467	M 1 1/2" / F 1" x M 1 1/2"	DN 25	Wilo Para 25-180/6-43/SC-12	Temperature: 25 - 45 °C	5.8
299468	M 1 1/2" / F 1" x M 1 1/2"	DN 25	Wilo Para 25-180/8-75/SC-12	Temperature: 25 - 45 °C	6.0
396243	M 1 1/2" / F 1" x M 1 1/2"	DN 25	Wilo Para 25-180/8-75/SC-12	Temperature: 50 - 70 °C	6.0

### LK 863 H 125 DN 25 - Thermic mixing valve without pump

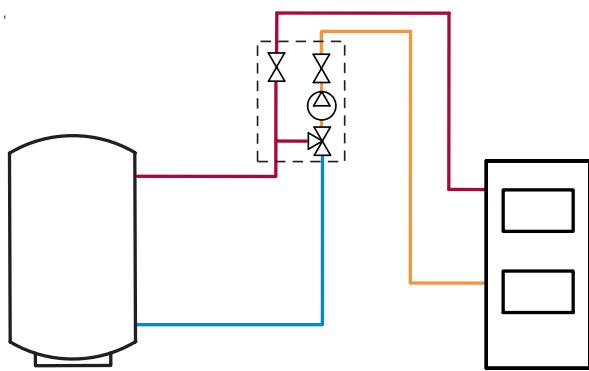


Article no.	Dim.	DN	Note	Weight kg
299469	M 1 1/2" / F 1" x M 1 1/2"	DN 25	Temperature: 25 - 45 °C	4.0
396507	M 1 1/2" / F 1" x M 1 1/2"	DN 25	Temperature: 50 - 70 °C	4.0

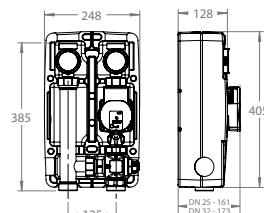
## LK 864 - PUMP CHARACTERISTICS



## LK 864 - THERMIC LOADING VALVE

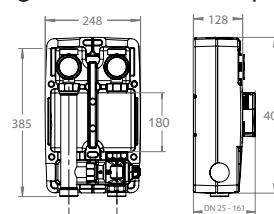


### LK 864 H 125 DN 25 - Thermic loading valve



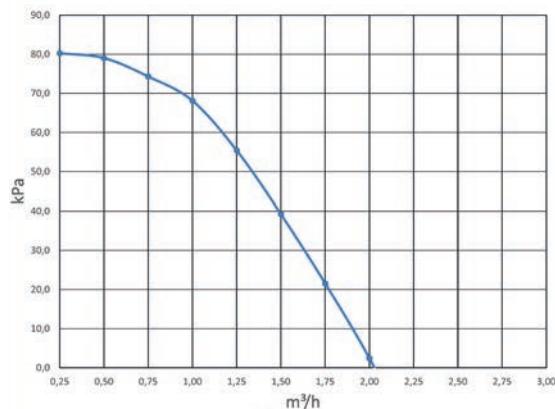
Article no.	Dim.	DN	Kvs m³/h	Circulating pump	Note	Weight kg
299470	M 1½" / F 1" x M 1½"	DN 25	9.0	Wilo Para 25-180/6-43/SC-12	Opening temperature: 55 - 70 °C	5.7
299471	M 1½" / F 1" x M 1½"	DN 25	9.0	Wilo Para 25-180/8-75/SC-12	Opening temperature: 55 - 70 °C	5.9
299787	M 1½" / F 1" x M 1½"	DN 25	9.0	Wilo Para 25-180/6-43/SC-12	Opening temperature: 45 - 60 °C	5.7
299788	M 1½" / F 1" x M 1½"	DN 25	9.0	Wilo Para 25-180/8-75/SC-12	Opening temperature: 45 - 60 °C	5.9

### LK 864 H 125 DN 25 - Thermic loading valve without pump

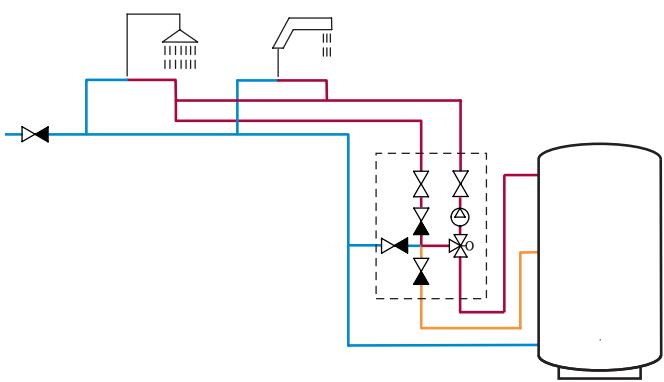


Article no.	Dim.	DN	Kvs m³/h	Note	Weight kg
299962	M 1½" / F 1" x M 1½"	DN 25	9.0	Opening temperature: 55 - 70 °C	3.5

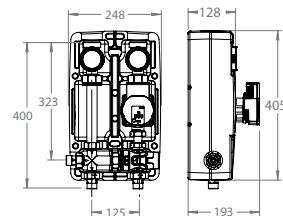
### LK 865 - PUMP CHARACTERISTICS



### LK 865 - HWC

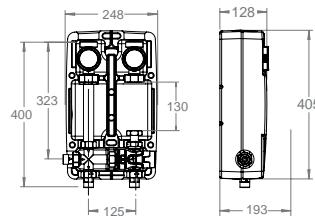


### LK 865 H 125 DN 25 - HWC



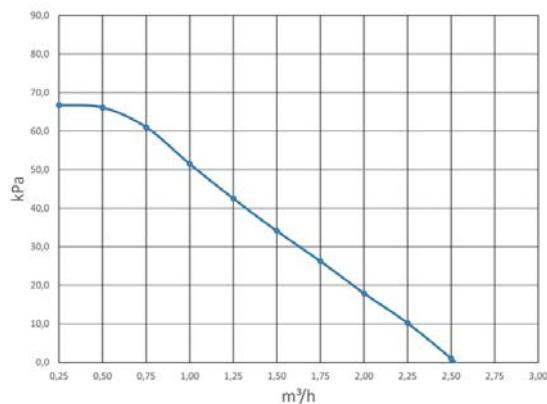
Article no.	Dim.	DN	Circulating pump	Note	Weight kg
299472	F 1" x M 1"	DN 25	Wilo Para zKu 15-130/8 SC	Opening temperature: 35 - 65 °C	4.9

### LK 865 H 125 DN 25 - HWC without pump

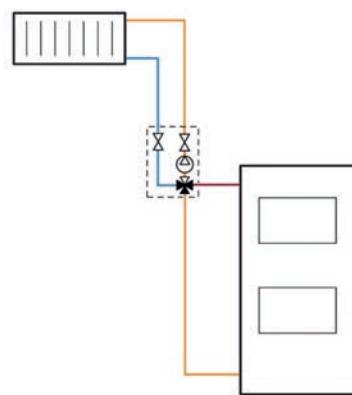


Article no.	Dim.	DN	Note	Weight kg
299963	F 1" x M 1"	DN 25	Opening temperature: 35 - 65 °C	2.7

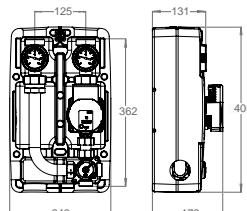
## LK 866 - PUMP CHARACTERISTICS



## LK 866 - FOUR WAY MIXING VALVE, LK 841

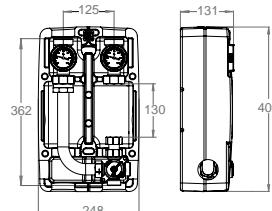


### LK 866 H 125 DN 25 - 4-way mixing valve, LK 841



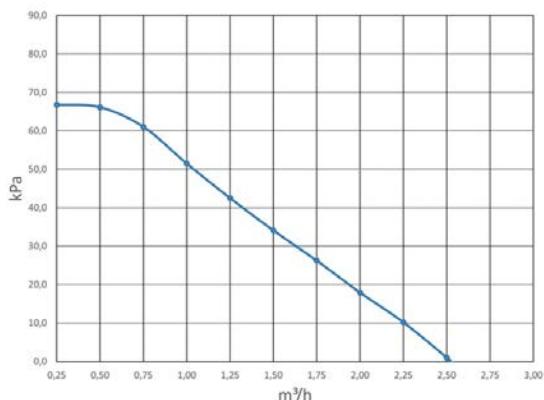
Article no.	Dim.	DN	Kvs m³/h	Circulating pump	Weight kg
299747	M 1½" / F 1" x M 1"	DN 25	6.3	Wilo Para 15-130/8-75/SC-9	5.3

### LK 866 H 125 DN 25 - 4-way mixing valve, LK 841, without pump

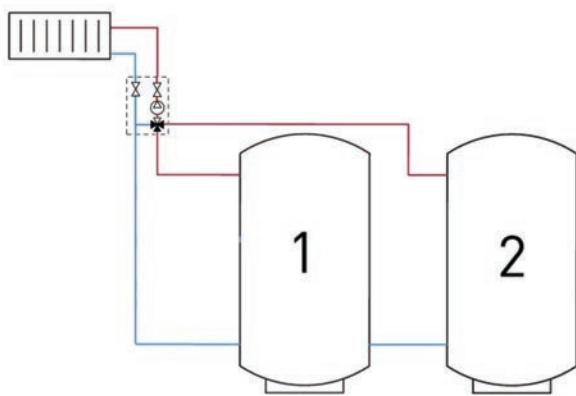


Article no.	Dim.	DN	Kvs m³/h	Weight kg
299964	M 1½" / F 1" x M 1"	DN 25	6.3	3.1

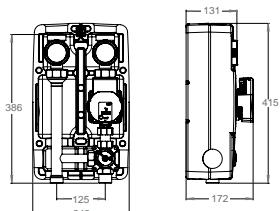
## LK 867 - PUMP CHARACTERISTICS



## LK 867 - 4-WAY MIXING VALVE, LK 830

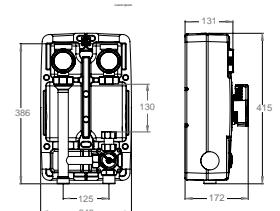


### LK 867 H 125 DN 25 - 4-way mixing valve, LK 830



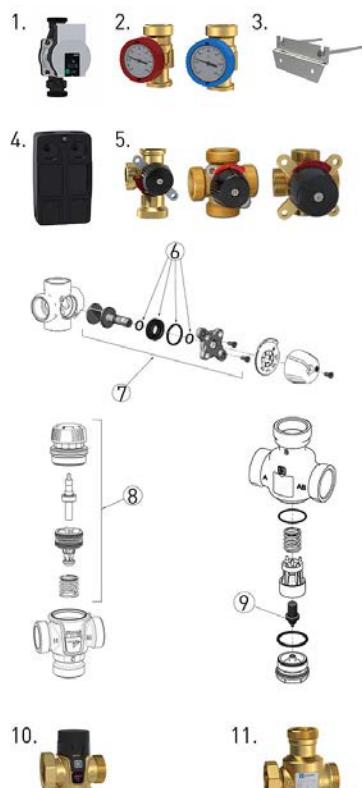
Article no.	Dim.	DN	Kvs m³/h	Circulating pump	Weight kg
299765	M 1½" / F 1" x M 1"	DN 25	6.3	Wilo Para 15-130/8-75/SC-9	5.3

### LK 867 H 125 DN 25 - 4-way mixing valve, LK 830, without pump



Article no.	Dim.	DN	Kvs m³/h	Weight kg
299765	M 1½" / F 1" x M 1"	DN 25	6.3	3.1

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187203	Wilo Para 25-180/8-75/SC-12	1
187322	Wilo Para 25-180/6-43/SC-12	1
187227	Wilo Para 15-130/8-75/SC-9	1
187346	Wilo Para zKu 15-130/8 SC	1
187323	Ballvalve, blue	2
187324	Ballvalve, red	2
187325	Bracket	3
187326	EPP Insulation	4
182766	LK 840 ThermoMix® HG Kvs 6,3	5
182767	LK 840 ThermoMix® HG Kvs 10	5
181949	LK 841 Mixing Valve (866), Kvs 6.3	5
180588	LK 830 Mixing Valve (867), Kvs 6.3	5
187188	Sealing kit LK 840/841 DN 25	6
187062	Repair kit 830, DN 15-20, Kvs 6.3	7
187195	Repair kit 841 2.0, DN 25	7
095349	Repair kit 551, 25 - 45 °C, Kvs 3.2-4.2	8
095350	Repair kit 551, 35 - 65 °C, Kvs 3.2-4.2	8
187330	Repair Kit 823R	9
182431	LK 551 (863), 25 - 45 °C	10
182820	LK 551 (863), 50 - 70 °C	10
182389	LK 823R (864), 55 - 70 °C	11
182447	LK 823R (864), 45 - 60 °C	11

# Pump Group

## LK HydronicGroup H 90



- All in one
- Easy to install
- Easy to combine with electronic regulation



### TECHNICAL DATA

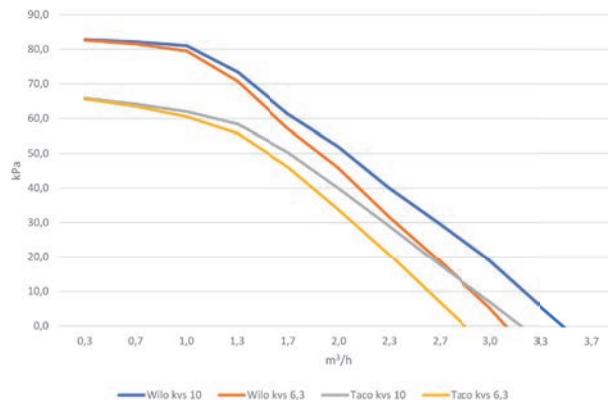
Voltage	230 VAC 50/60 Hz
Power consumption	10-75 W depending on pump speed
Leakage	< 0,2% of Kvs at 100 kPa
Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 100 °C
Ambient temperature	Min. 5 °C/Max. 58 °C
Thread standard	Rp - female thread, G - male thread
Media	Wilo: Water - Glycol mixture max. 50%
Media 2	Taco: Water - Glycol mixture max. 30%
Circulating pump	Wilo Para 15-130/8-75/SC-9, Taco ES2C 15-70-130 EEI < 0.23 (see pump datasheet/label for exact value)
Material valve body	Brass EN 12165 CW617N
Material insulation	Expanded Polypropylene EPP

LK HydronicGroup H 90 is a complete pump group that is suitable for heating systems where direct supply or mixed supply is desirable.

LK HydronicGroup H 90 comprises a high efficient circulation pump, insulation, wall mounting bracket and two ball valves with thermometer. In the model where mixed supply is desired, a three-way mixing valve is included.

A manifold for two, optionally three, pump groups is available as an accessory, see accessories and spare parts. Wall mounting bracket is not included with manifold, it must be ordered separately, see accessories and spare parts.

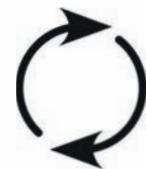
### CAPACITY DIAGRAM



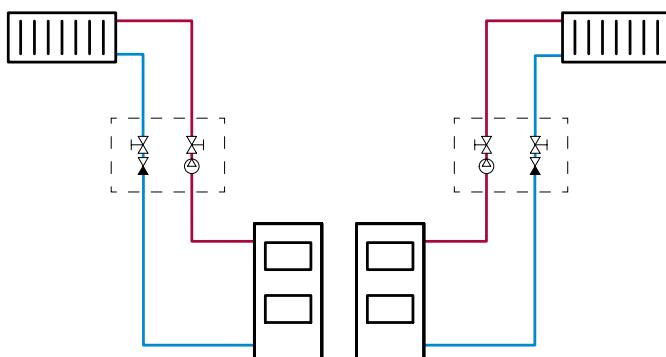
LK 861 RIGHT



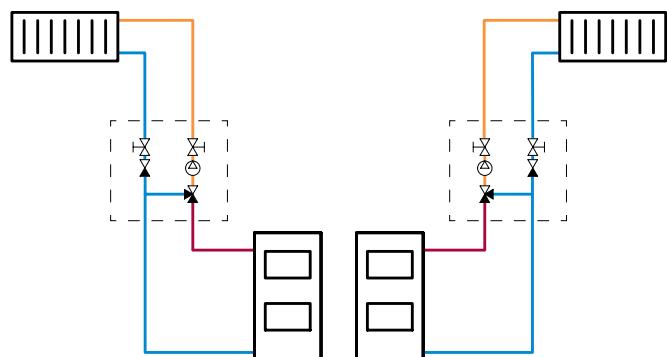
LK 861 LEFT



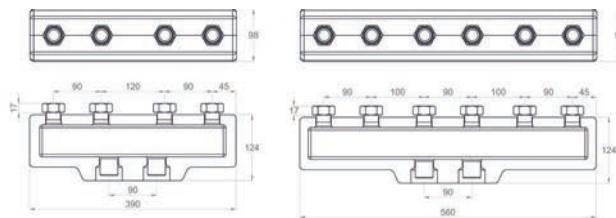
### LK 861 - DIRECT SUPPLY



### LK 862 - MIXED SUPPLY

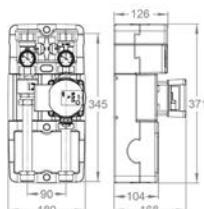


## LK 860 H 90 - Manifold



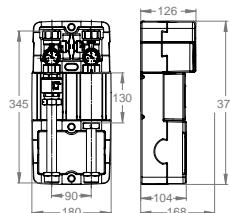
Article no.	Type	Dim.	Note	Weight kg
182125	Manifold 2 pc groups	F 1" x M 1"	0.3 MPa (3 Bar)	3.3
182126	Manifold 3 pc groups	M 1" x F 1"	0.3 MPa (3 Bar)	4.5

## LK 861 H 90 - Direct supply



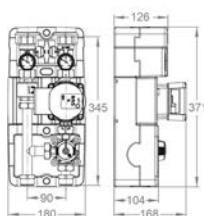
Article no.	Dim.	Circulating pump	Weight kg
299172	F 1" x M 1"	Wilo Para 15-130/8-75/SC-9	3.7
299174	F 1" x M 1"	Taco ES2C 15-70-130	3.7

## LK 861 H 90 - Direct supply without pump



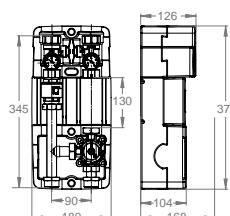
Article no.	Dim.	Weight kg
299842	F 1" x M 1"	1.7

## LK 862 H 90 - Mixed supply



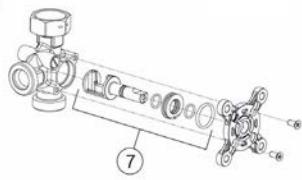
Article no.	Dim.	Kvs m³/h	Circulating pump	Weight kg
299171	F 1" x M 1"	6.3 / 10.0	Wilo Para 15-130/8-75/SC-9	4.0
299173	F 1" x M 1"	6.3 / 10.0	Taco ES2C 15-70-130	4.0

## LK 862 H 90 - Mixed supply without pump

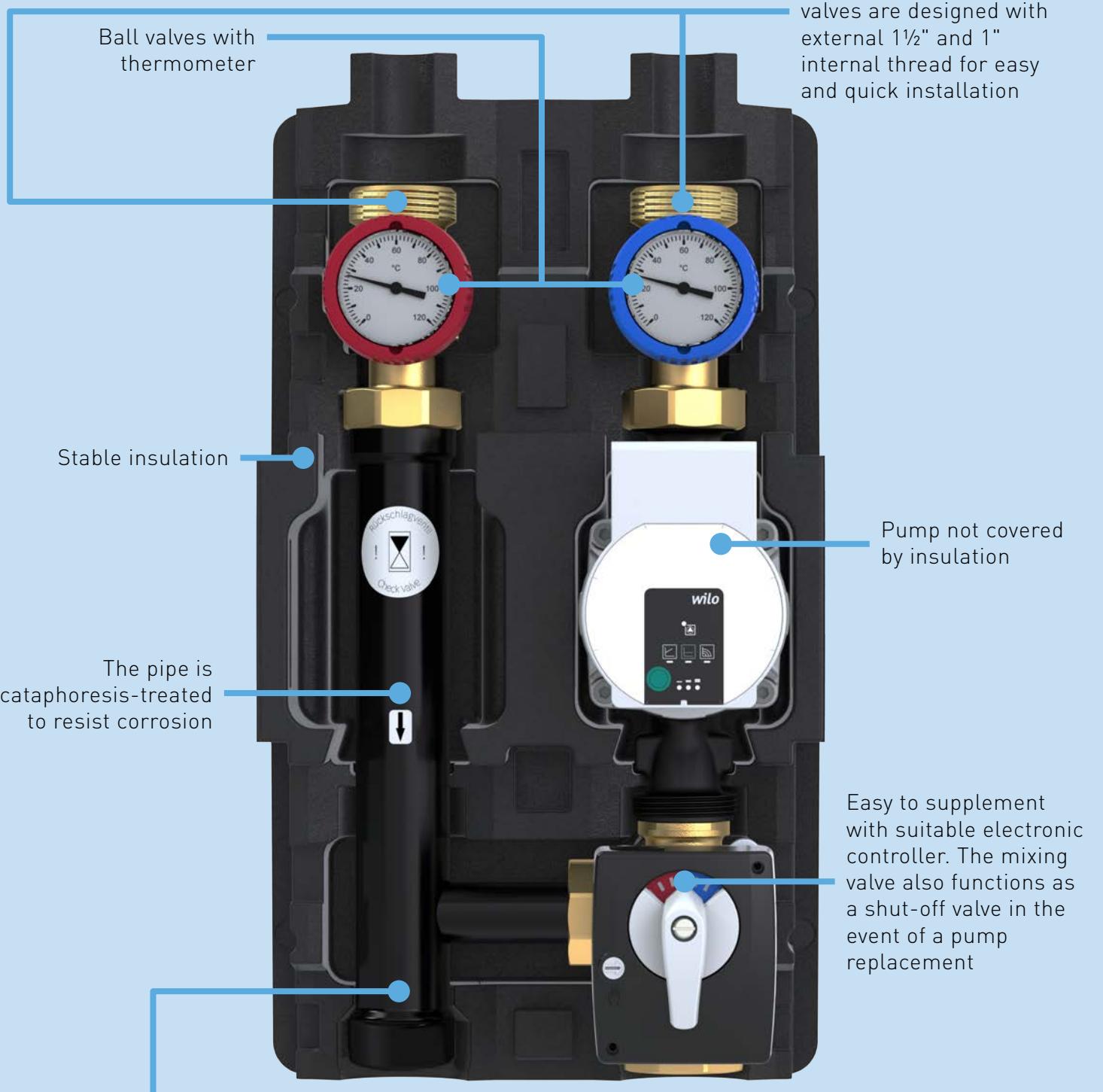


Article no.	Dim.	Kvs m³/h	Weight kg
299841	F 1" x M 1"	6.3 / 10.0	2.0

## SPARE PARTS AND ACCESSORIES

			Article no.	Article	Position
1		2	187227	Wilo Para 15-130/8-75/SC-9	1
			187228	Taco ES2C 15-70-130	1
		3	187229	Bracket for manifold	2
			187230	EPP Insulation	3
4		5	187231	Ballvalve, LK 316 F1" / F1"	4
			095018	Thermometer T40, 0 - 80 °C	5
		6	182765	LK 850 ThermoMix® HG Kvs 6,3/10	6
7			187190	Repair kit LK 840 DN 15-20	7
			092366	LK 322 CoolUnit 1"	8

# LK HydronicGroup H/C 125 DN 25



Integrated check valve to prevent self-circulation, also serves as a gasket between ball valve and pipe

The **LK HydronicGroup H/C 125 DN 25** is a complete pump group for both cooling and heating systems, offering both direct and mixed supply options. It includes a circulation pump, insulation, and ball valves with thermometers. The pipe is cataphoresis-treated to resist corrosion. The pictured **LK 862 H/C 125 DN 25** features a three-way mixing valve and, for cooling, requires an actuator like the LK 950 or LK 100 SmartComfort CT to prevent condensation and frost.

# Pump Group

LK HydronicGroup H/C 125 DN 25

- For both cooling and heating applications
- Pipe is cataphoresis-treated to resist corrosion
- Easy to combine with electronic regulation



## TECHNICAL DATA

Voltage	230 VAC 50/60 Hz
Power consumption	10-75 W depending on pump speed
Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Ambient temperature	Min. 5 °C/Max. 58 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50%
Circulating pump	Wilo Para 25-180/6-43/SC-12, Wilo Para 25-180/8-75/SC-12 EEI < 0.23 (see pump datasheet/label for exact value)
Material valve body	Brass EN 12165 CW617N
Material insulation	Expanded Polypropylene EPP

LK HydronicGroup H/C 125 DN 25 is a complete pump group that is suitable for heating and cooling where direct supply or mixed supply is desirable. Consists of a highly efficient circulation pump, insulation, and two ball valves with thermometer, on the return side there is an integrated check valve. Cataphoresis-treated pipe to resist corrosion. When installing LK HydronicGroup H/C 125 DN 25 onto the LK 860 H/C 125 DN 25 manifold, the mounting kit (part no. 095515) should be used to prevent condensation.

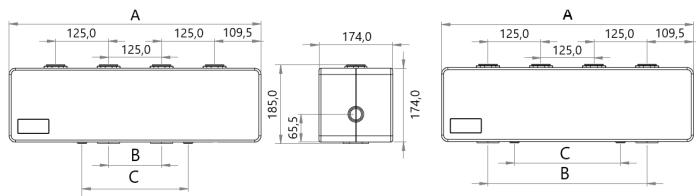
LK 861 H/C 125 DN 25, pump group where direct supply is desired.

LK 862 H/C 125 DN 25, pump group where mixed supply is desired, a three-way mixing valve is included. For cooling applications, LK 862 H/C 125 DN 25 must be supplemented with actuator, LK 950 or LK SmartComfort, so condensation does not leak into the insulation and forms frost.

Insulation is only suitable for Wilo Para 6 and 8 meter.

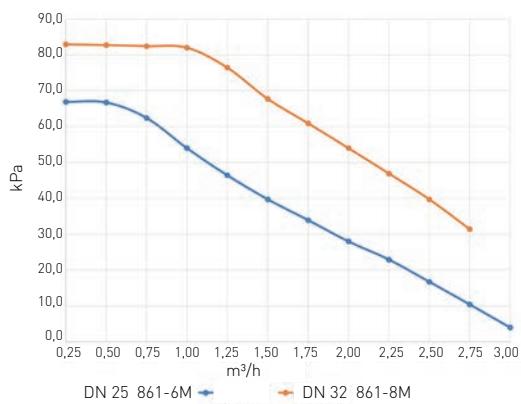


## LK 860 H/C 125 DN 25 - Manifold



Article no.	Type	Dim.	A mm	B mm	C mm	Note	Weight kg
50802085	Manifold, 1 pc groups with hydraulic separator	M 1½"	294	125		0.4 MPa (4 bar)	2.5
50802086	Manifold, 2 pc groups, without hydraulic separator	M 1½"	594	125	500	0.4 MPa (4 bar)	6.0
50802087	Manifold, 2 pc groups with hydraulic separator	M 1½"	594	375	250	0.4 MPa (4 bar)	7.0
50802088	Manifold, 3 pc groups, without hydraulic separator	M 1½"	844	125	500	0.4 MPa (4 bar)	8.0
50802089	Manifold, 3 pc groups, with hydraulic separator	M 1½"	844	625	500	0.4 MPa (4 bar)	9.0
50802090	Manifold, 4 pc groups, without hydraulic separator	M 1½"	1094	125	750	0.4 MPa (4 bar)	9.0
50802091	Manifold, 4 pc groups, with hydraulic separator	M 1½"	1094	875	750	0.4 MPa (4 bar)	10.0

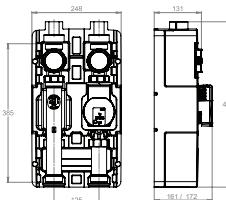
### LK 861 - PUMP CHARACTERISTICS



### LK 861 LEFT - LK 861 RIGHT

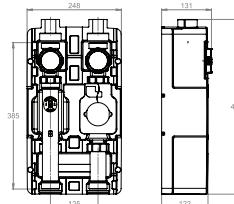


## LK 861 H/C 125 DN 25 - Direct supply



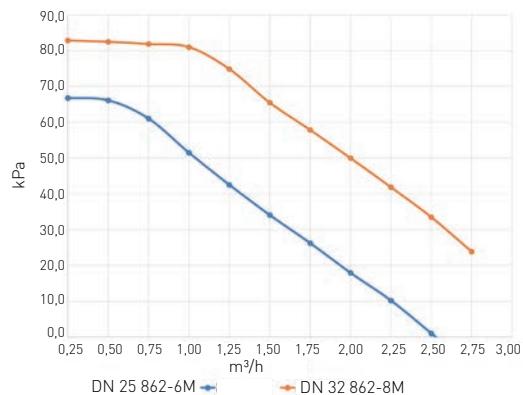
Article no.	Dim.	DN	Circulating pump	Weight kg
396427	M 1½" / F 1" x M 1½"	DN 25	Wilo Para 25-180/6-43/SC-12	5.1
396428	M 1½" / F 1" x M 1½"	DN 25	Wilo Para 25-180/8-75/SC-12	5.3

## LK 861 H/C 125 DN 25 - Direct supply without pump



Article no.	Dim.	Weight kg
396200	M 1½" / F 1" x M 1½"	3.3

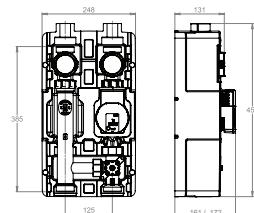
### LK 861 - PUMP CHARACTERISTICS



### LK 862 LEFT - LK 862 RIGHT

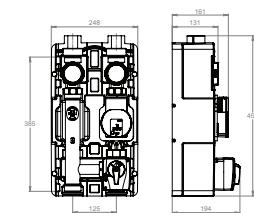


### LK 862 H/C 125 DN 25 - Mixed supply



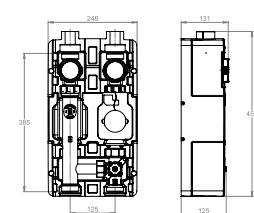
Article no.	Dim.	DN	Kvs m³/h	Circulating pump	Weight kg
396425	M 1½" / F 1" x M 1½"	DN 25	6.3	Wilo Para 25-180/6-43/SC-12	5.8
396426	M 1½" / F 1" x M 1½"	DN 25	10.0	Wilo Para 25-180/8-75/SC-12	5.8

### LK 862 H/C 125 DN 25 - Mixed supply with LK 950 Valve Actuator



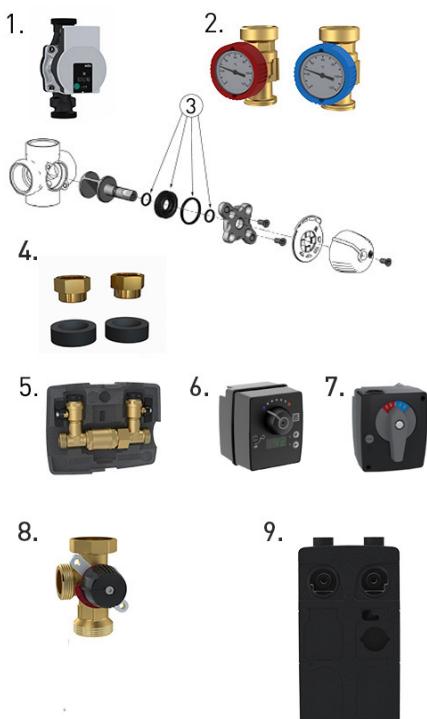
Article no.	Dim.	DN	Kvs m³/h	Circulating pump	Note	Weight kg
396465	M 1½" / F 1" x M 1½"	DN 25	6.3	Wilo Para 25-180/6-43/SC-12	180756 LK 950 Actuator	6.2
396466	M 1½" / F 1" x M 1½"	DN 25	10.0	Wilo Para 25-180/8-75/SC-12	180756 LK 950 Actuator	6.2

### LK 862 H/C 125 DN 25 - Mixed supply without pump



Article no.	Dim.	DN	Kvs m³/h	Weight kg
396199	M 1½" / F 1" x M 1½"	DN 25	6.3	4.0
396424	M 1½" / F 1" x M 1½"	DN 25	10.0	4.0

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187322	Wilo Para 25-180/6-43/SC	1
187203	Wilo Para 25-180/8-75/SC	1
187323	Ballvalve, blue	2
187324	Ballvalve, red	2
187188	Sealing kit LK 840/841 DN 25	3
095515	Connection kit	4
092366	LK 322 CoolUnit 1"	5
181242	LK 100 SmartComfort CT	6
180765	LK 950 Actuator	7
182766	LK 840 ThermoMix® HG Kvs 6,3	8
182767	LK 840 ThermoMix® HG Kvs 10	8
187963	EPP Insulation	9

# Pump Group

LK HydronicGroup H/C 125 DN 32

- For both cooling and heating applications
- Pipe is cataphoresis-treated to resist corrosion
- Easy to combine with electronic regulation



## TECHNICAL DATA

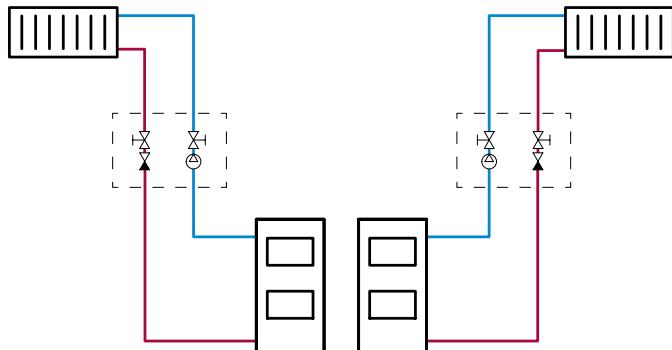
Voltage	230 VAC 50/60 Hz
Power consumption	10-75 W depending on pump speed
Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Ambient temperature	Min. 5 °C/Max. 58 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50%
Circulating pump	Wilo Para MAXO 30-180/10, Wilo Stratos PICO 30-180/6, EEI < 0.23 (see pump datasheet/label for exact value)
Material valve body	Brass EN 12165 CW617N
Material insulation	Expanded Polypropylene EPP
Distance between connections	125 mm

LK HydronicGroup H/C 125 DN 32 is a complete pump group that is suitable for heating and cooling where direct supply or mixed supply is desirable. Consists of a highly efficient circulation pump, insulation, and two ball valves with thermometer, on the return side there is an integrated check valve. The pipes are cataphoresis-treated to resist corrosion.

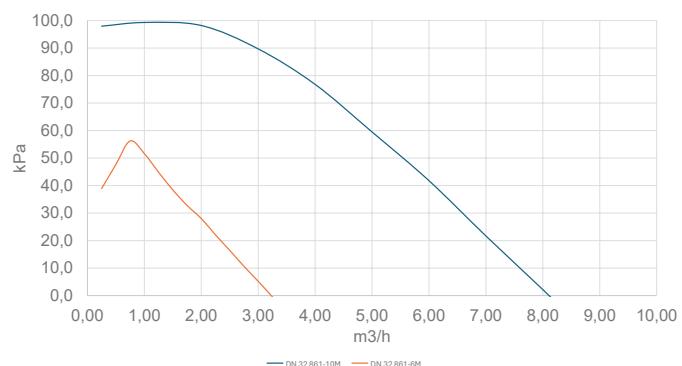
LK 861 H/C 125 DN 32 pump group is used where direct supply is desired.

LK 862 H/C 125 DN 32 pump group is used where mixed supply is desired, a three-way mixing valve is included. For cooling applications, LK 862 H/C 125 DN 32 must be supplemented with an actuator, LK 950 or LK SmartComfort, so that condensation does not leak into the insulation and form frost.

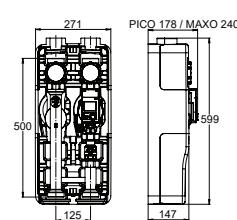
LK 861 - DIRECT SUPPLY



LK 861 - CAPACITY DIAGRAM

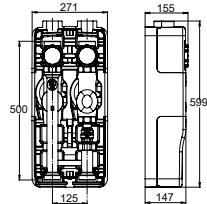


LK 861 H/C 125 DN 32 - Direct supply



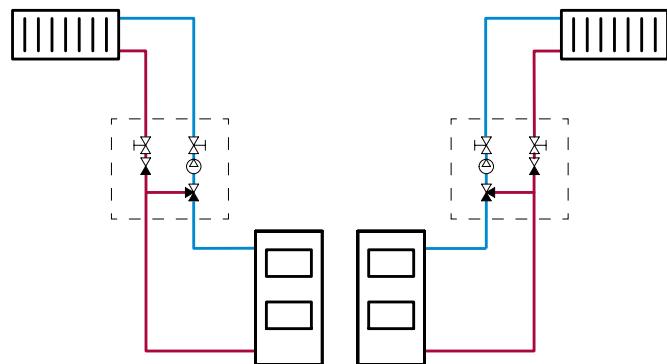
Article no.	Dim.	DN	Circulating pump	Weight kg
396467	M 2" x M 2"	DN 32	Wilo Stratos PICO 30-180/6	7.7
396526	M 2" x M 2"	DN 32	Wilo Para MAXO 30-180/10	9.4

## LK 861 H/C 125 DN 32 - Direct supply without pump

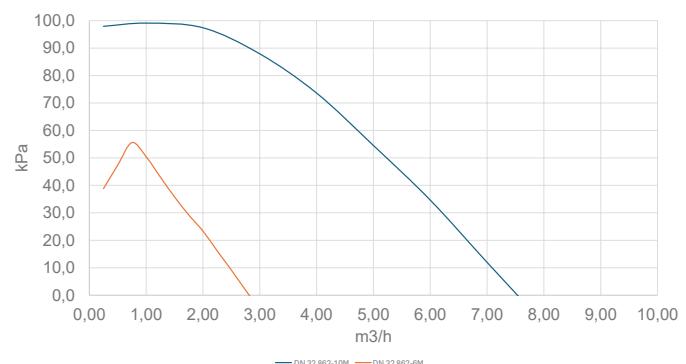


Article no.	Dim.	DN	Weight kg
396468	M 2" x M 2"	DN 32	5.7

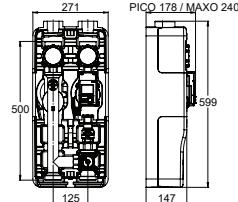
### LK 862 - MIXED SUPPLY



### LK 862 - CAPACITY DIAGRAM

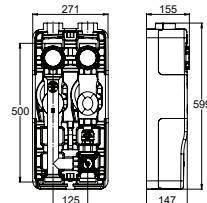


## LK 862 H/C 125 DN 32 - Mixed supply



Article no.	Dim.	DN	Kvs m³/h	Circulating pump	Weight kg
396469	M 2" x M 2"	DN 32	10	Wilo Stratos PICO 30-180/6	8.6
396524	M 2" x M 2"	DN 32	16	Wilo Para MAXO 30-180/10	10.3

## LK 862 H/C 125 DN 32 - Mixed supply without pump

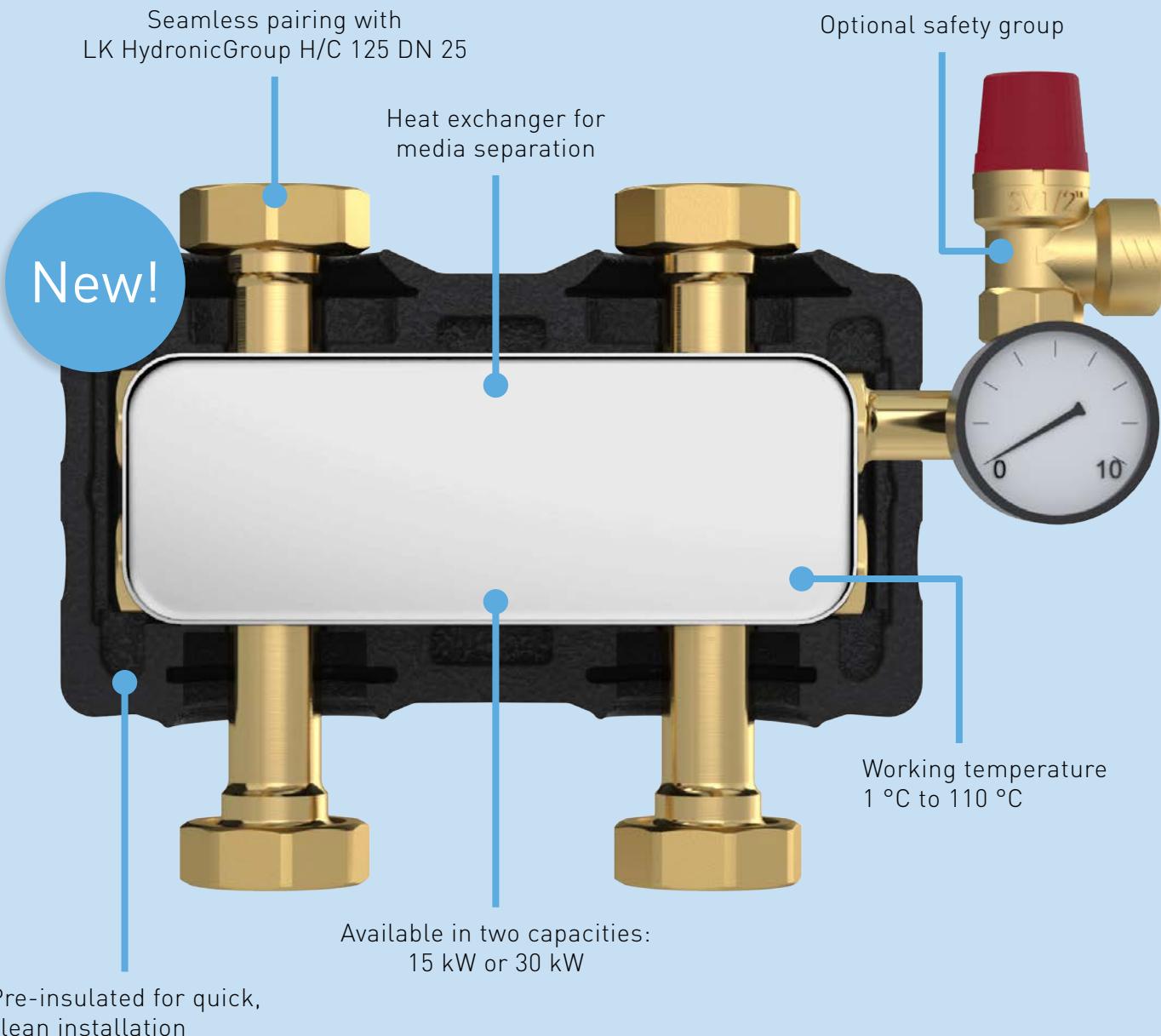


Article no.	Dim.	DN	Kvs m³/h	Weight kg
396470	M 2" x M 2"	DN 32	10	6.6
396525	M 2" x M 2"	DN 32	16	6.4

## SPARE PARTS AND ACCESSORIES

			Article no.	Article	Position
1		2	187978	Wilo Stratos PICO 30/0,5-6	1
		3	187979	Wilo Para MAXO 30-180/10	1
			187980	Ballvalve	2
4		5	187981	Thermometer, red	3
		6	187990	Thermometer, blue	3
			187197	Sealing kit 840/841 2.0, DN 32	4
			181922	LK 840 ThermoMix® G 1½", Kvs 10	5
7		8	181923	LK 840 ThermoMix® G 1½", Kvs 16	5
		9	181242	LK 100 SmartComfort CT	6
			180765	LK 950 Actuator	7
			092366	LK 322 CoolUnit 1"	8
			187976	EPP Insulation	9

# LK 868 HeatExchanger



Protect your system with **LK 868 HeatExchanger 125**. Pre-insulated and adapted for LK HydronicGroup 125 DN 25, it separates media between circuits to prevent frost issues and oxygen-related damage in heating systems. Available in 15 kW and 30 kW, with an optional safety group.

# Heat Exchanger

## LK 868 HeatExchanger 125

- Quick, simple, and pre-insulated installation
- Available in two capacities – 15 kW and 30 kW
- Seamless pairing with LK HydronicGroup 125



### TECHNICAL DATA

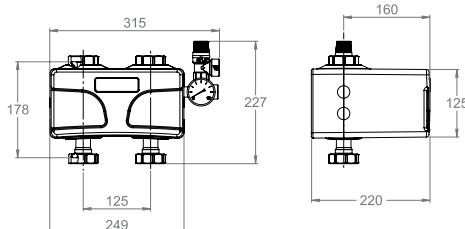
Power consumption	15 kW, ΔT 10 °C flow 1,4 m <sup>3</sup> /h (396516, 15 plates) 30 kW, ΔT 10 °C flow 2,7 m <sup>3</sup> /h (396517, 30 plates)
Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 1 °C/Max. 95 °C
Thread standard	G - female thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Material, insulation	Expanded Polypropylene EPP
Distance between connections	125 mm

LK 868 HeatExchanger is a heat exchanger with connections adapted for the LK HydronicGroup 125 range for a simple and pre-insulated installation. It is used where separation of media in different systems is required, for example for frost protection or in older systems where there is a risk of oxygen presence that could damage the heat source.

The LK 868 HeatExchanger is available in two capacities: 15 kW and 30 kW.

It is also possible to mount a safety group on the secondary side of the exchanger. Under "spare parts and accessories" you find the safety group with article number 092394, which contains a pressure gauge, safety valve (3 bar) and connection for an expansion vessel and connection to the exchanger.

### LK 868 - Male thread / Rotating nut



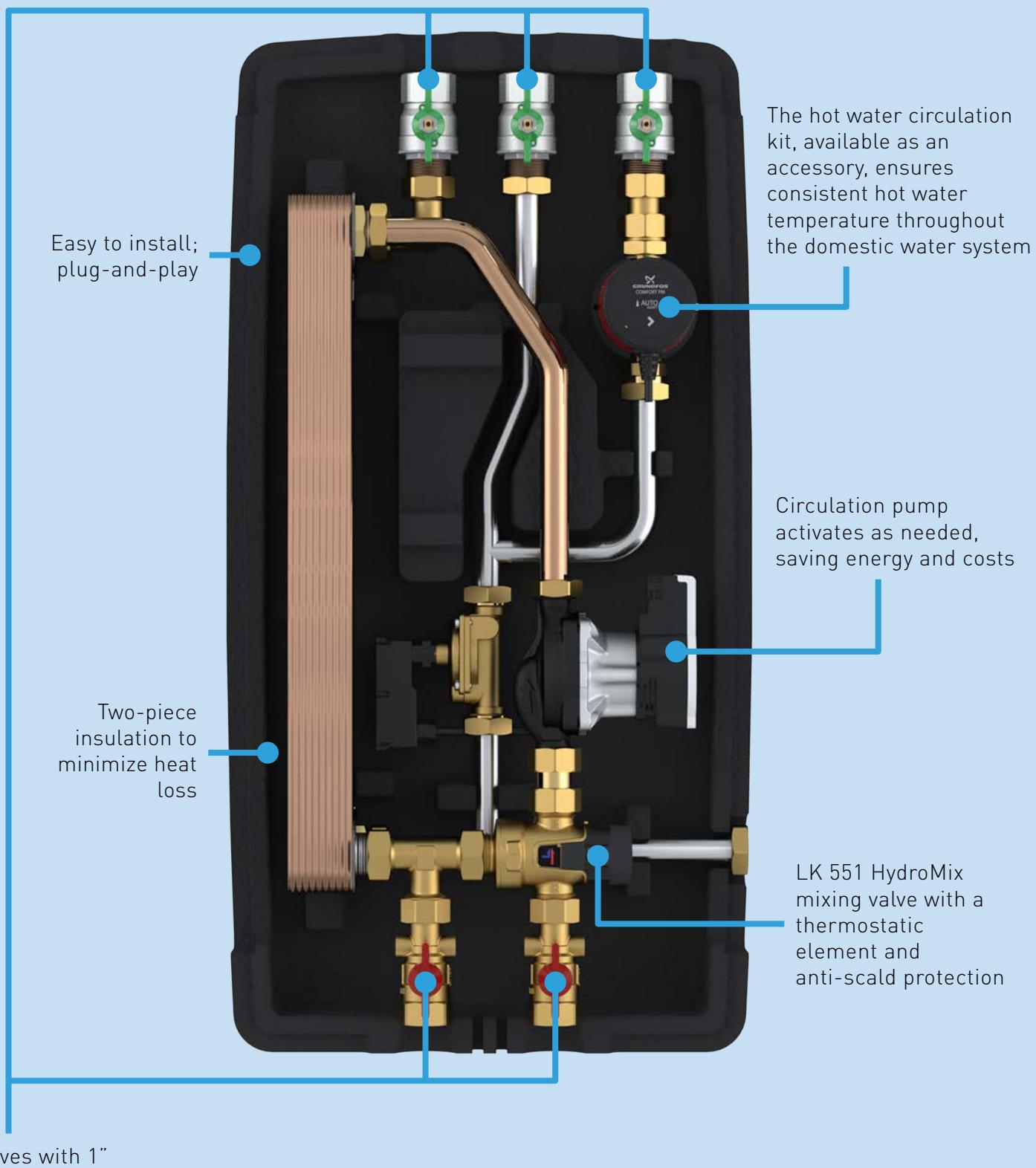
Article no.	Dim.	Power	Weight kg
396516	M 1½"	15 kW	3.15
396517	M 1½"	30 kW	3.76

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
092394	Safety Group, 3 bar	1
187985	15 kW Heat exchanger	2
187986	30 kW Heat exchanger	2
187987	EPP Insulation	3
092366	LK 322 CoolUnit 1"	4

# LK 250 TapWater Unit



**LK 250 TapWater Unit** delivers hot water with precision. Whether you choose the electronic controller or the thermic mixing valve model, both options ensure reliable temperature control. The circulation pump is only active when hot water is required, which reduces energy consumption. A hot water circulation kit is available to maintain a consistent temperature throughout the house.

# Tap Water Unit

## LK 250 TapWater Unit

- Easy to install - Plug-and-Play
- Scald protection with LK 551 HydroMix
- Available with anti-limestone coated heat exchanger.



### TECHNICAL DATA

Voltage	230 VAC 50/60 Hz
Power consumption	10-75 W, depending on pump speed
Max. working pressure	1,0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Ambient temperature	Min. 5 °C/Max. 55 °C
Thread standard	G - female thread
Media	Water - Glycol mixture max. 50%
Circulating pump	Wilo Para 15-130/8-75/SC-9, Wilo Para 15-130/8 IPWM1 EEI < 0.23 (see pump datasheet/label for exact value)
Material insulation	Expanded Polypropylene EPP

### CAPACITY

Hot water primary °C	Tap water temp. °C	Tap water capacity l/min.	Hot water return °C	Performance kW
80	45	52	13	128
75	45	50	13	119
70	45	46	14	112
65	45	43	14	103
60	45	38	15	91
55	45	32	16	76
50	45	26	19	62

The LK 250 TapWater Unit is a device for heating tap water.

LK 250 TapWater Unit P has an electronic controller unit that regulates the desired tap water temperature and at the same time regulates the inlet temperature to the plate heat exchanger to protect it from limestone.

The LK 250 TapWater Unit P consists of a plate heat exchanger, circulation pump, flow sensor, safety valve and an electronic controller.

The temperature of the tap water can be adjusted between 40 and 65 °C. The circulation pump only runs when hot water is required, which reduces energy consumption.

### LK 250 TapWater Unit

Unlike the LK 250 TapWater Unit P, this unit has a thermic mixing valve which, instead of an electronic controller, regulates the tap water temperature and at the same time regulates the inlet temperature to the plate heat exchanger to protect it from limescale deposits.

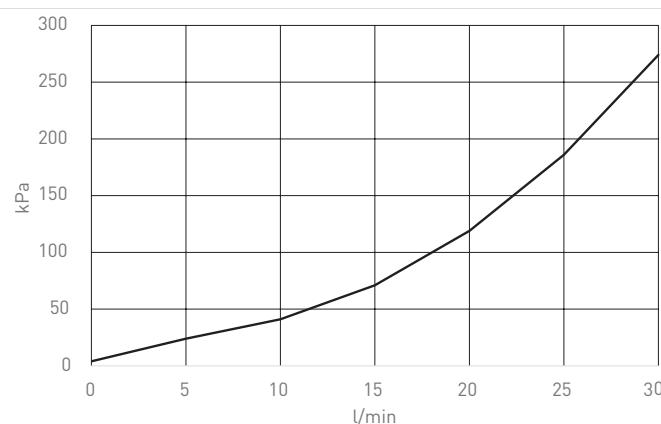
The LK 250 TapWater Unit consists of a plate heat exchanger, circulation pump, flow sensor, safety valve and a mixing valve.

The temperature of the tap water can be adjusted between 35 and 65°C. The circulation pump only runs when tap water is needed, which reduces energy consumption.

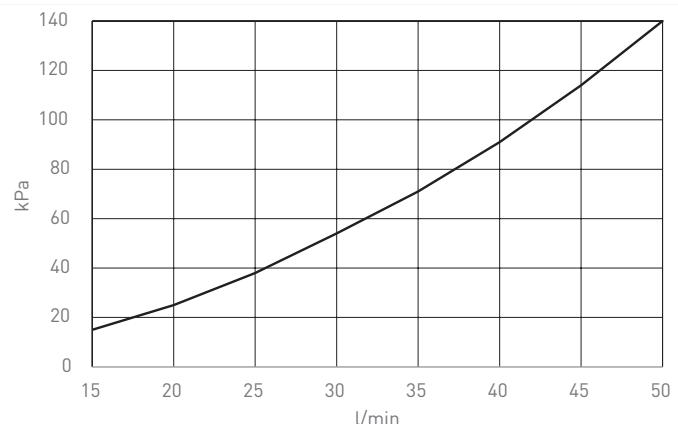
When choosing a tap water unit, it is important to know the water quality in the area where the unit will be installed.

A hot water circulation kit is available as an accessory used to maintain the intended hot water temperature in the entire domestic hot water system, which is particularly suitable in buildings where a tap point is located some distance away.

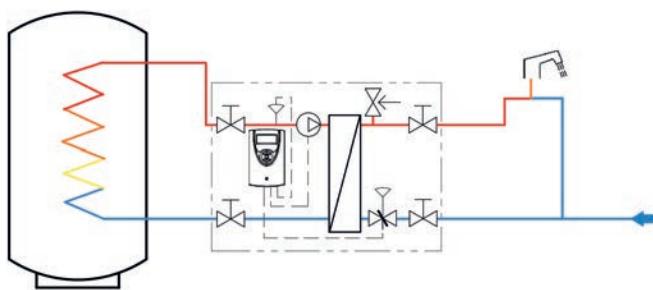
### PRESSURE DROP DIAGRAM - LK 250 M



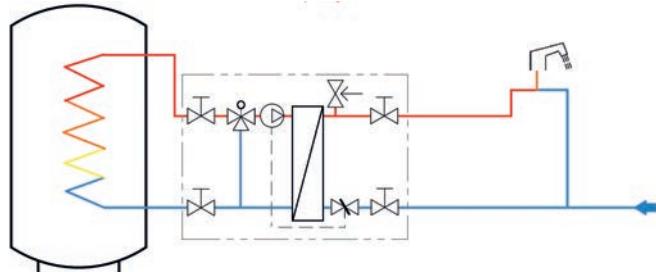
### PRESSURE DROP DIAGRAM - LK 250 P



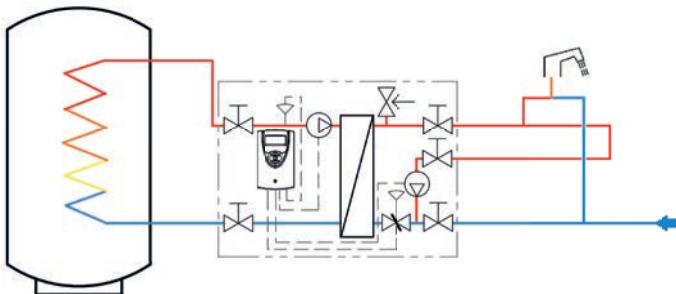
## LK 250 TAPWATER UNIT P - WITH CONTROLLER



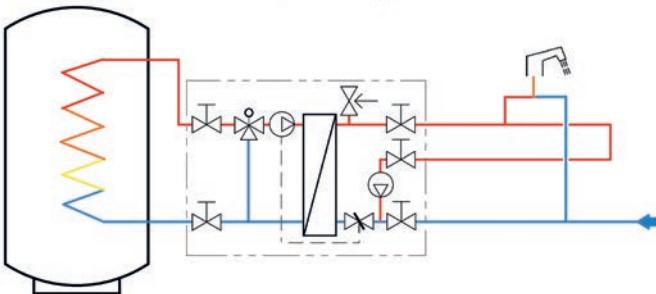
## LK 250 TAPWATER UNIT - WITHOUT CONTROLLER



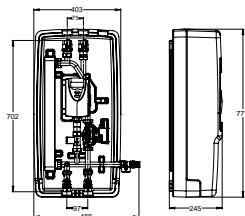
# LK 250 TAPWATER UNIT P - WITH CONTROLLER AND HOT WATER CIRCULATION



# LK 250 TAPWATER UNIT - WITHOUT CONTROLLER WITH HOT WATER CIRCULATION

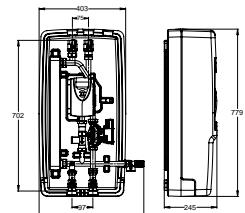


LK 250 P - Female thread



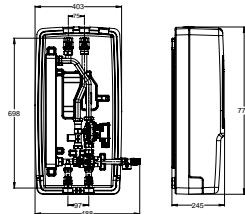
Article no.	Dim.	Weight kg
396003	F 1"	12.4

LK 250 P - Female thread - with anti-limestone coated heat exchanger



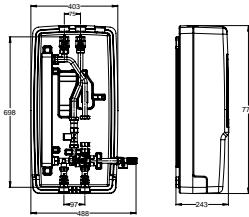
Article no.	Dim.	Note	Weight kg
396008	F 1"	With anti-limestone coated heat ex-changer	12.4

## LK 250 - Female thread - without controller



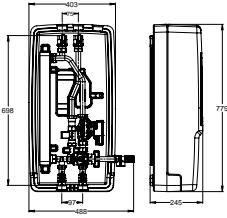
Article no.	Dim.	Note	Weight kg
396001	F 1"	Without controller	12.0

## LK 250 - Female thread - without pump and controller



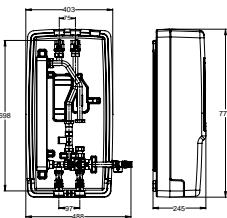
Article no.	Dim.	Note	Weight kg
396002	F 1"	Without pump and controller	11.0

## LK 250 - Female thread - without controller, with anti-limestone coated heat exchanger



Article no.	Dim.	Note	Weight kg
396006	F 1"	Without controller, with anti-limestone coated heat exchanger	12.0

## LK 250 - Female - without pump and controller, with anti-limestone coated heat exchanger



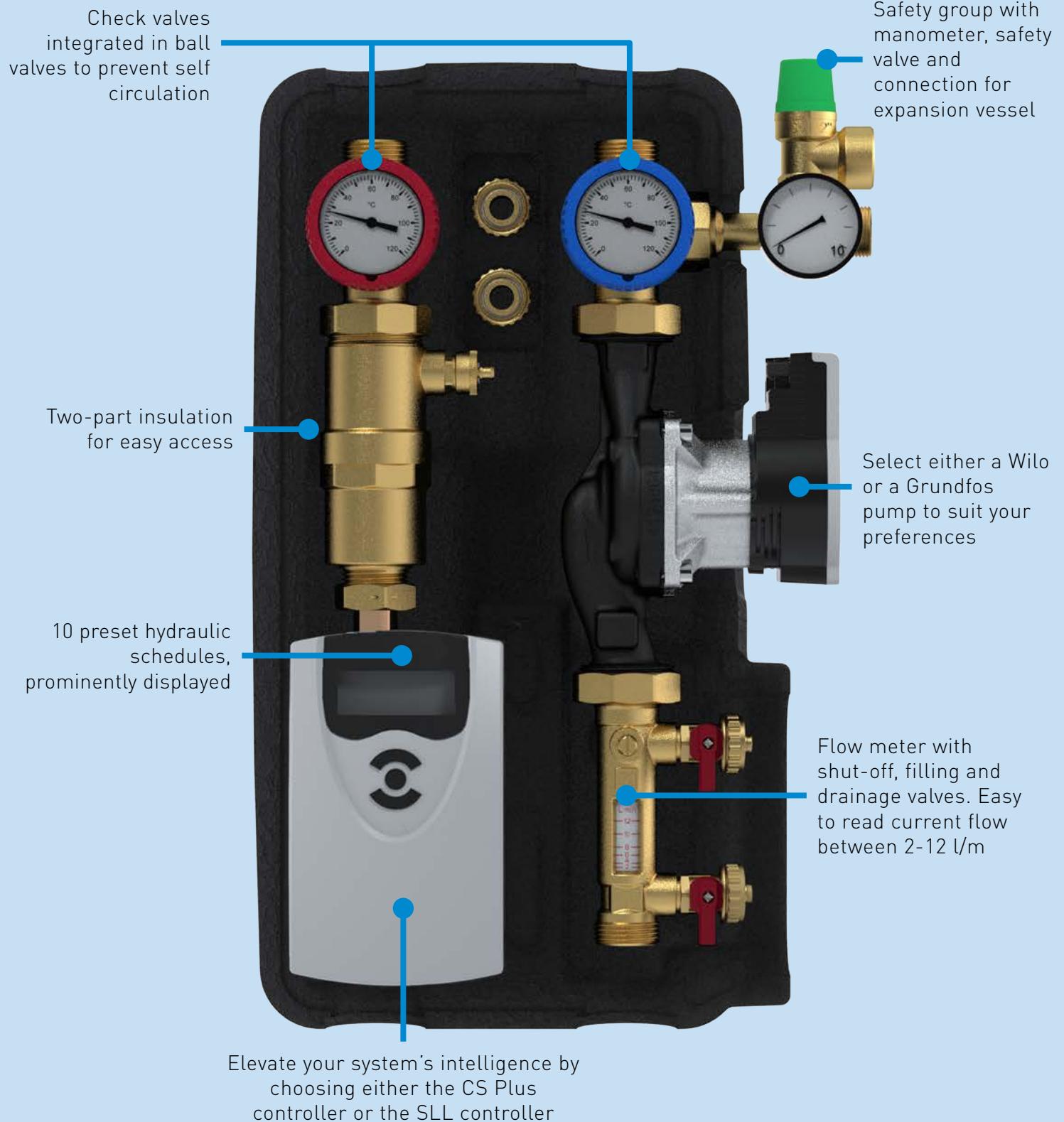
Article no.	Dim.	Note	Weight kg
396007	F 1"	Without pump and controller, with anti-limestone coated heat exchanger	11.0

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
092360	Hot water circulation kit (Grundfos)	1
092395	Hot water circulation kit (Wilo PWM)	1
092397	Hot water circulation kit - Whitout pump	1
182742	Controller, LK TapWater	2
095472	Wilo Para IPWM1 15-130/8	3
187227	Wilo Para 15-130/8-75/SC-9	3
095476	EPP Insulation	4
095480	Flow sensor P	5
095481	Flow sensor	6
182199	LK 551 HydroMix	7

# LK 212 SolarStation



**LK 212 SolarStation** is your compact, dual-pipe solar pump unit, available with or without a controller. It's the complete package, equipped with all the essential components for ensuring the safe and efficient operation of your solar heating system.

# Solar Pump Unit

## LK 212 SolarStation

- Reduced energy costs by using solar power
- Adapted for 180 mm circulation pump.
- Connections with 3/4" female thread and 1" male thread



### TECHNICAL DATA

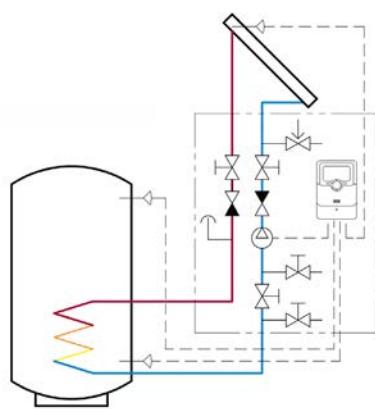
Voltage	230 VAC $\pm$ 10%, 50 Hz
Max. working pressure	1,0 MPa (10 bar)
Operating pressure	0,6 MPa (6 bar)
Working temperature	Supply: Max. 140 °C Return: Max. 110 °C
Thread standard	G - male thread, G - female thread
Protection type	IP 20
Media	Water - Glycol mixture max. 50%
Sensors	PT 1000
Circulating pump	Grundfos UPM3 Solar 25-75 180, Wilo Para ST 25-180/8 IPWM2 EEI < 0.23 (see pump datasheet/label for exact value)

LK 212 SolarStation is a compact dual-pipe solar pump unit. It contains all the necessary components for a safe operation and control of the solar heating system such as safety group, 180 mm circulating pump, ball valve with integrated check valve and thermometer, air separator with manual air vent connection, flow meter with shut-off, filling and drainage valves.

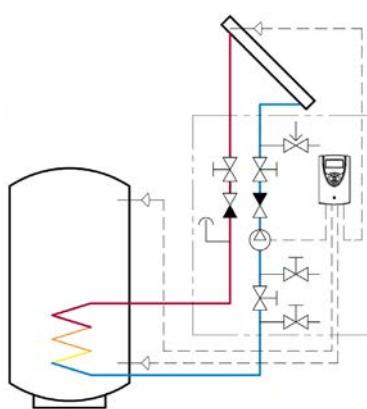
Option of selecting between two different controllers, LK 152 SmartSolar SLL or LK 152 SmartSolar CS Plus. A variant without a controller and/or circulation pump is also optional if you wish to supply it yourself.

LK 152 SmartSolar SLL and SC Plus has both 10 preset hydraulic schedules. The chosen hydraulic schedule and operating status is shown on the display.

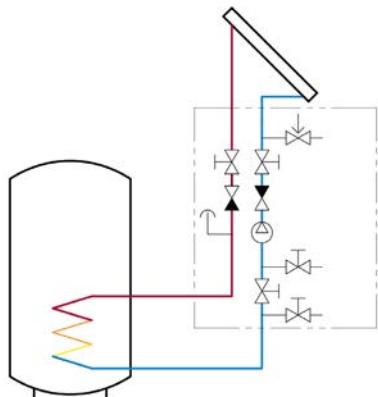
### LK 212 SOLARSTATION WITH LK 152 SMARTSOLAR SLL



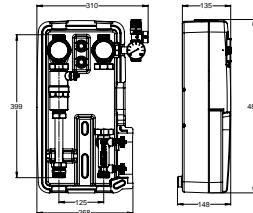
### LK 212 SOLARSTATION WITH LK 152 SMARTSOLAR CS PLUS



### LK 212 SOLARSTATION WITHOUT CONTROLLER

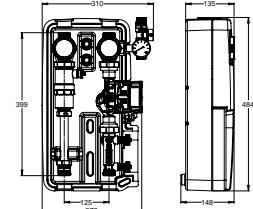


## LK 212 - Female / male thread - without pump and controller



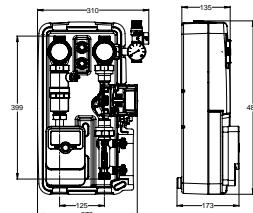
Article no.	Dim.	Flow range	Note	Weight kg
299999	F 3/4" / M 1"	2-12 l/min.	Without pump and controller	3.6

## LK 212 - Female / male thread - without controller



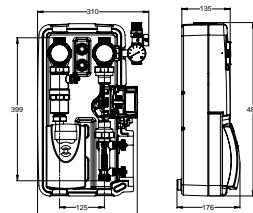
Article no.	Dim.	Flow range	Note	Weight kg
299998	F 3/4" / M 1"	2-12 l/min.	With Grundfos pump, without controller	5.6
396039	F 3/4" / M 1"	2-12 l/min.	With Wilo pump, without controller	5.6

## LK 212 - Female / male thread - with LK 152 SmartSolar SLL



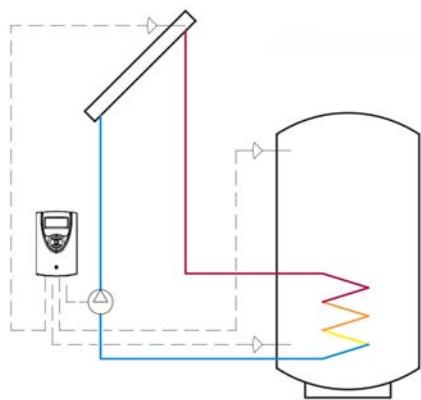
Article no.	Dim.	Flow range	Note	Weight kg
396000	F 3/4" / M 1"	2-12 l/min.	With LK 152 SmartSolar SLL, Grundfos pump	6.0
396040	F 3/4" / M 1"	2-12 l/min.	With LK 152 SmartSolar SLL, Wilo pump	6.0

## LK 212 - Female / male thread - with LK 152 SmartSolar CS Plus

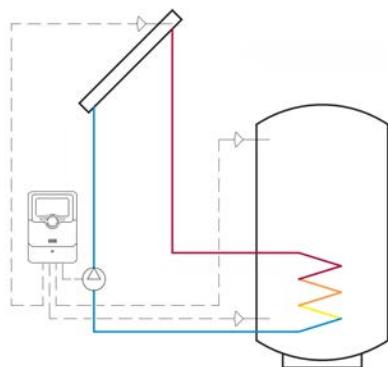


Article no.	Dim.	Flow range	Note	Weight kg
396050	F 3/4" x M 1"	2-12 l/min.	With LK 152 SmartSolar CS Plus, Wilo pump	6.0
396051	F 3/4" / M 1"	2-12 l/min.	With LK 152 SmartSolar CS Plus, Grundfos pump	6.0

## LK 152 SMARTSOLAR CS PLUS



## LK 152 SMARTSOLAR SLL



## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
182675	LK 152 SmartSolar SLL	1
182735	LK 152 SmartSolar CS Plus	2
187325	Bracket	3
095470	Grundfos UPM3 Solar 25-75 180	4
095471	Wilo Para ST 25-180/8 IPWM2	5
095473	Ballvalve, red	6
095474	Ballvalve, blue	7
095475	EPP Insulation	8
095477	Air vent	9
095478	Safety group	10
095479	Filling valve	11
095530	Pipe LK 212	12

# Solar Pump Unit

## LK 212 SolarStation S

- Reduced energy costs by using solar power
- Adapted for 130 mm circulation pump.
- Connections with 3/4" female thread and 1" male thread

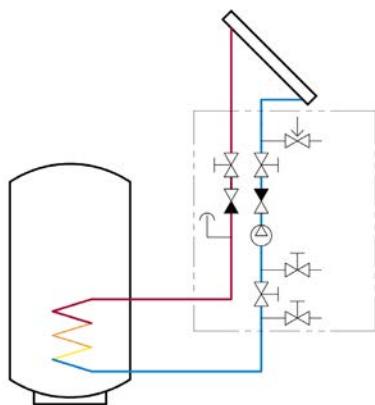


### TECHNICAL DATA

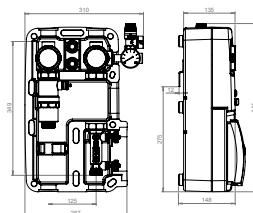
Voltage	230 VAC ± 10%, 50 Hz
Max. working pressure	1,0 MPa (10 bar)
Operating pressure	0,6 MPa (6 bar)
Working temperature	Supply: Max. 140 °C Return: Max. 110 °C
Thread standard	G - male thread, G - female thread
Protection type	IP 20
Media	Water - Glycol mixture max. 50%
Circulating pump	Wilo Para ST 25-130/8 IPWM2 EEI < 0.23 (see pump datasheet/label for exact value)

LK 212 SolarStation S is a compact dual-pipe solar pump unit. It contains all the necessary components for a safe operation and control of the solar heating system such as safety group, 130 mm circulating pump, ball valve with integrated check valve and thermometer, air separator with manual air vent connection, flow meter with shut-off, filling and drainage valves.

### LK 212 SOLARSTATION WITHOUT CONTROLLER

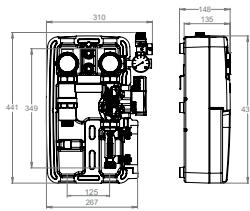


### LK 212 S - Female / male thread - without pump and controller



Article no.	Dim.	Flow range	Note	Weight kg
396389	F 3/4" / M 1"	2-12 l/min.	Without pump and controller	3.5

## LK 212 S - Female / male thread - without controller



Article no.	Dim.	Flow range	Note	Weight kg
396391	F 3/4" / M 1"	2-12 l/min.	With Wilo pump, without controller	5.2

### SPARE PARTS AND ACCESSORIES



Position	Article	Article no.
1	Bracket	187325
2	Wilo Para ST 25-130/8 IPWM2	095495
3	Ballvalve, red	095473
4	Ballvalve, blue	095474
5	EPP Insulation	095514
6	Air vent	095477
7	Safety group	095478
8	Filling valve	095479
9	Pipe LK 212 S	095531

# Solar Pump Unit

## LK 211 SolarStation S

- Reduced energy costs by using solar power
- Adapted for 130 mm circulation pump.
- Connections with 3/4" female thread and 1" male thread



### TECHNICAL DATA

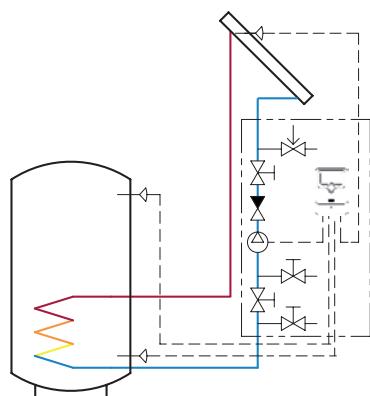
Voltage	230 VAC ± 10%, 50 Hz
Max. working pressure	1,0 MPa (10 bar)
Operating pressure	0,6 MPa (6 bar)
Working temperature	Max. 110 °C
Thread standard	G - male thread, G - female thread
Protection type	IP 20
Media	Water - Glycol mixture max. 50%
Sensors	PT 1000
Circulating pump	Grundfos UPM3 Solar 25-75 130, Wilo Para ST 25-130/8 IPWM2 EEI < 0.23 (see pump datasheet/label for exact value)

LK 211 SolarStation S is a compact single-pipe solar pump unit. It contains all the necessary components for a safe operation and control of the solar heating system such as safety group, 130 mm circulating pump, ball valve with integrated check valve and thermometer, flow meter with shut-off, filling and drainage valves.

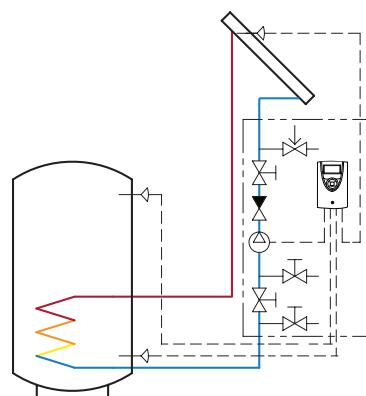
Option of selecting between two different controllers, LK 152 SmartSolar SLL or LK 152 SmartSolar CS Plus. A variant without a controller and/or circulation pump is also optional if you wish to supply it yourself.

LK 152 SmartSolar SLL and SC Plus has both 10 preset hydraulic schedules. The chosen hydraulic schedule and operating status is shown on the display.

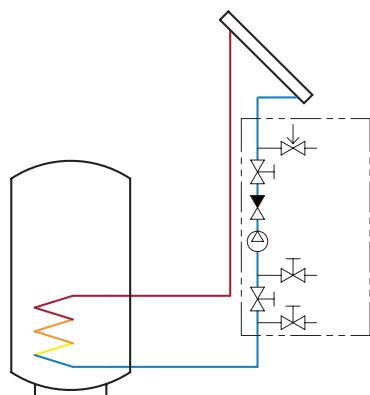
### LK 211 SOLARSTATION S WITH LK 152 SMARTSOLAR SLL



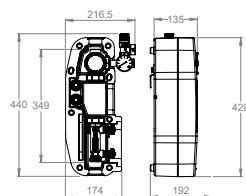
### LK 211 SOLARSTATION S WITH LK 152 SMARTSOLAR CS PLUS



### LK 211 SOLARSTATION S WITHOUT CONTROLLER

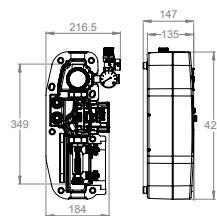


## LK 211 S - Female / male thread - without pump and controller



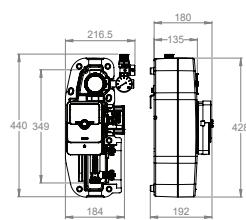
Article no.	Dim.	Flow range	Note	Weight kg
396198	F 3/4" / M 1"	2-12 l/min.	Without pump and controller	1.8

## LK 211 S - Female / male thread - without controller



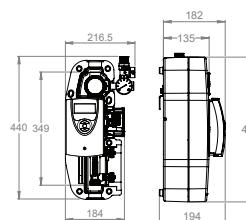
Article no.	Dim.	Flow range	Note	Weight kg
396192	F 3/4" / M 1"	2-12 l/min.	With Wilo pump, without controller	3.6
396195	F 3/4" / M 1"	2-12 l/min.	With Grundfos pump, without controller	3.6

## LK 211 S - Female / male thread - with LK 152 SmartSolar SLL



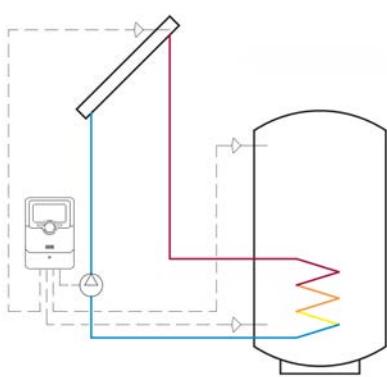
Article no.	Dim.	Flow range	Note	Weight kg
396193	F 3/4" / M 1"	2-12 l/min.	With LK 152 SmartSolar SLL, Wilo pump	4.0
396196	F 3/4" / M 1"	2-12 l/min.	With LK 152 SmartSolar SLL, Grundfos pump	4.0

## LK 211 S - Female / male thread - with LK 152 SmartSolar CS Plus

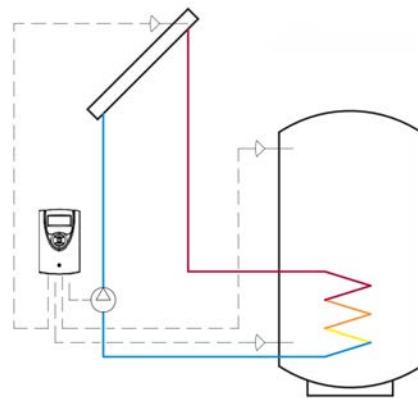


Article no.	Dim.	Flow range	Note	Weight kg
396194	F 3/4" x M 1"	2-12 l/min.	With LK 152 SmartSolar CS Plus, Wilo pump	4.0
396197	F 3/4" x M 1"	2-12 l/min.	With LK 152 SmartSolar CS Plus, Grundfos pump	4.0

**LK 152 SMARTSOLAR SLL**



**LK 152 SMARTSOLAR CS PLUS**



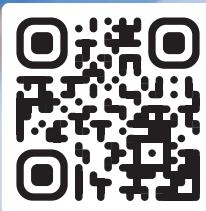
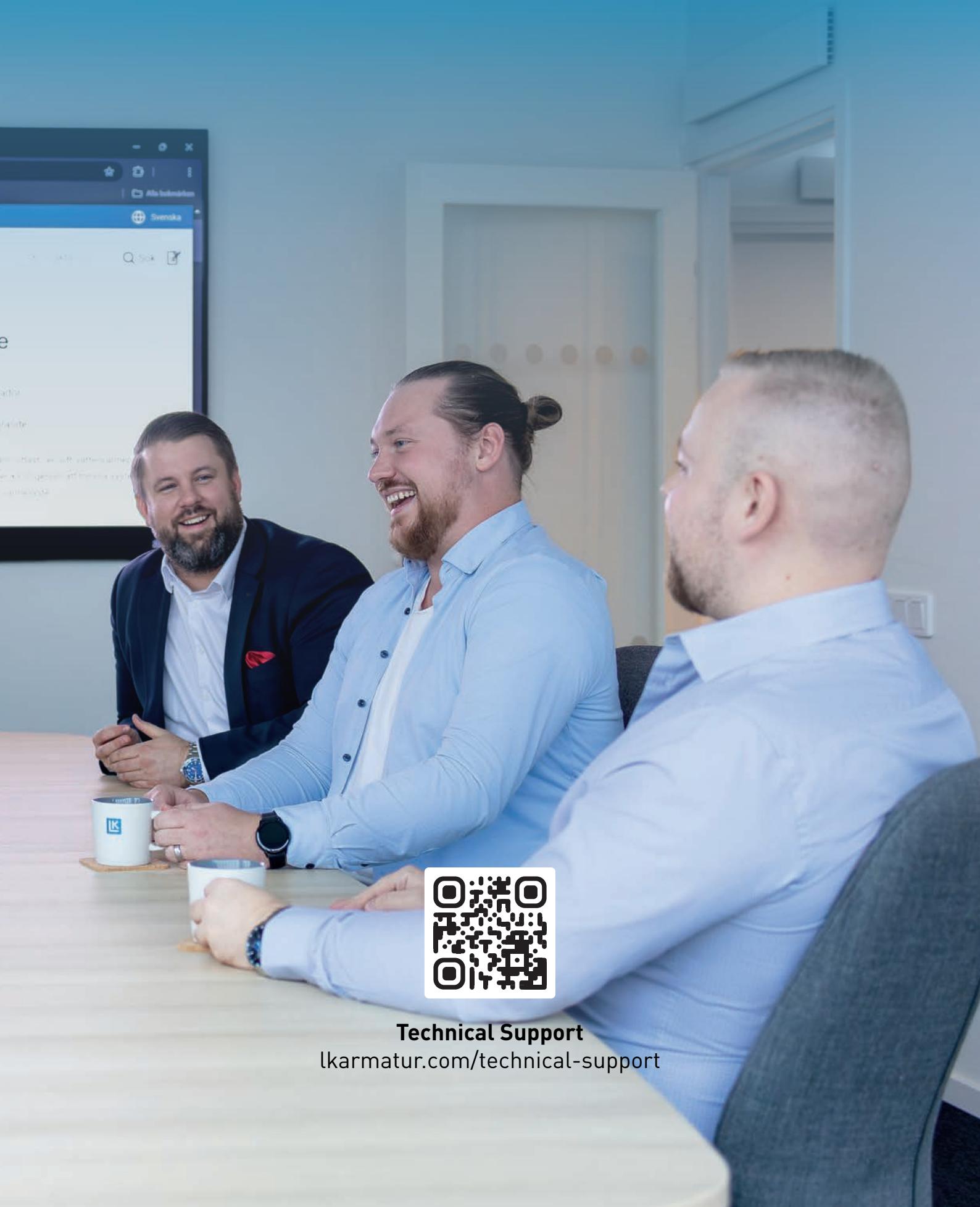
#### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
182675	LK 152 SmartSolar SLL	1
182735	LK 152 SmartSolar CS Plus	2
187961	Bracket	3
095494	Grundfos UPM3 Solar 25-75 130	4
095495	Wilo Para ST 25-130/8 IPWM2	5
095474	Ballvalve, blue	6
095496	EPP Insulation	7
095478	Safety group	8
095479	Filling valve	9

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**Technical Support**  
[lkarmatur.com/technical-support](http://lkarmatur.com/technical-support)

# Thermic Loading Valve

## LK 820 ThermoVar®



- Position-independent



### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	50 kPa (0,5 bar)
Working temperature	(45 - 55 °C) Min. 5 °C/Max. 95 °C (61 - 80 °C) Min. 5 °C/Max. 110 °C
Opening temperature	45 °C, 55 °C, 61 °C, 66 °C, 72 °C or 80 °C
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50%
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12165 CW617N, M 2" - Coated Aluminium
Material sealing	EPDM

LK 820 ThermoVar® is a 3-way thermic loading valve for solid fuel/storage tank installations. The valve is intended to ensure both an optimal temperature stratification in the storage tank and a high return temperature to the boiler, thus increasing the efficiency of the system. Tarring and condensation are prevented which prolongs boiler life.

LK 820 can be equipped with an insulation - see under Accessories. For more information, please see the product sheet for insulations.

The valve can be mounted at any angle. LK 820 ThermoVar® can easily be adapted for right- or left-hand mounting. The valve can be installed in three different positions. In the standard version the valve is intended for installation in position II. It can easily be adapted for installation in position I.

### POSITION I

As soon as the boiler temperature has reached the selected opening temperature, the thermic valve allows hot water to load to the storage tank. Return water from the storage tank is mixed with supply water before it circulates back into the boiler. The loading temperature is at least the selected opening temperature.

A balancing valve should be installed in the circuit between boiler and loading valve.

The installation should be equipped with an LK 822 ThermoBac check valve to prevent self-circulation from storage tank to boiler after the fire has gone out. In case of power failure or pump breakdown the check valve automatically opens for self-circulation.

The circulating pump should be controlled by a thermostat that measures the boiler's water or flue gas temperature.

### POSITION II

As soon as the boiler temperature has reached the selected opening temperature, the thermic valve allows return water from the storage tank to mix with supply water before it circulates back into the boiler. The return temperature is at least the selected opening temperature.

A balancing valve should be installed in the circuit between boiler and loading valve.

The circulating pump should be controlled by a thermostat that measures the boiler's water or flue gas temperature.

### POSITION III

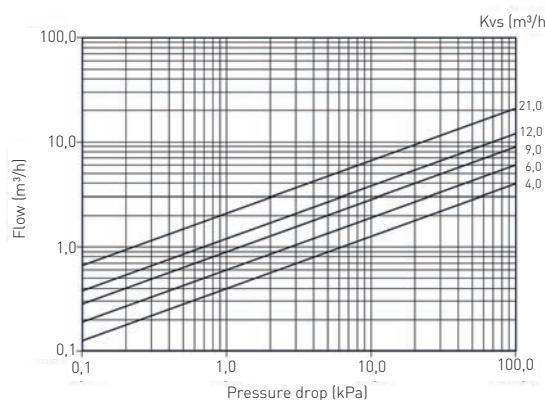
As soon as the boiler temperature has reached the selected opening temperature, the thermic valve allows return water from the storage tank to mix with supply water before it circulates back into the boiler. The return temperature is at least the selected opening temperature.

A balancing valve should be installed in the circuit between boiler and loading valve.

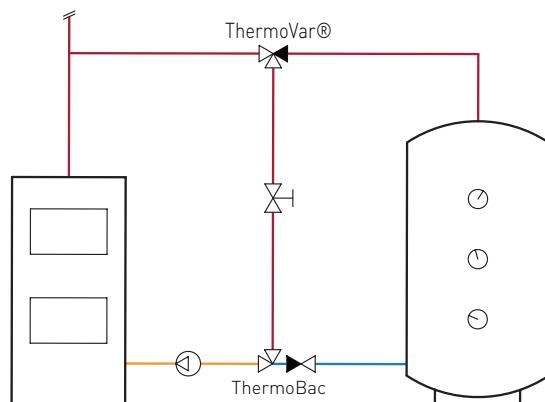
The installation should be equipped with an LK 822 ThermoBac check valve to prevent self-circulation from storage tank to boiler after the fire has gone out. In case of power failure or pump breakdown the check valve opens automatically for self-circulation.

The circulating pump should be controlled by a thermostat that measures the boiler's water or flue gas temperature.

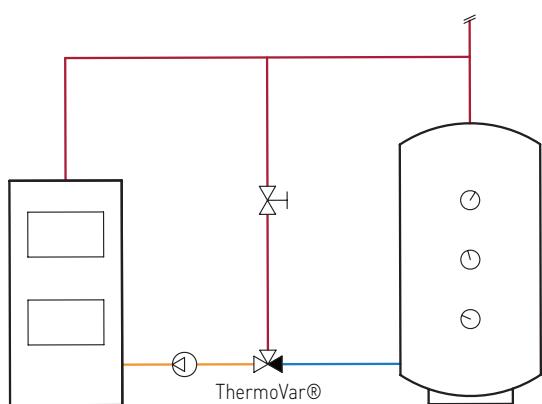
### CAPACITY DIAGRAM



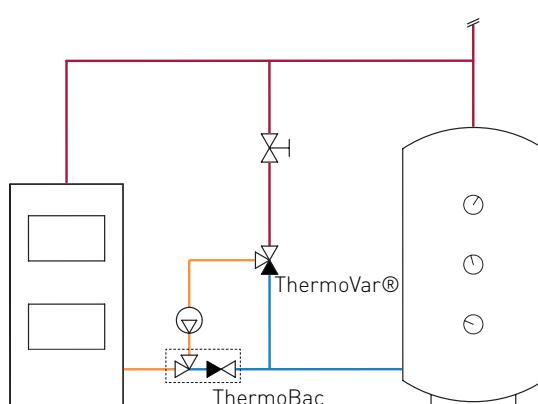
### POSITION I



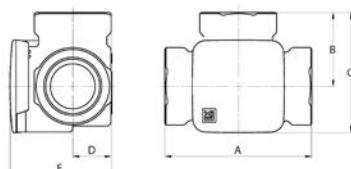
### POSITION II



### POSITION III



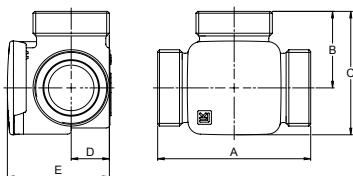
### LK 820 - Female thread



Article no.	Opening temp.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Weight kg
180493	45 °C	F 1"	9.0	82	41	67	21	35	0.7
180500	55 °C	F ¾"	6.0	80	40	66	21	35	0.7
180501	55 °C	F 1"	9.0	82	41	67	21	35	0.7
180502	55 °C	F 1¼"	12.0	84	42	68	24	39	0.8
180508	61 °C	F ¾"	6.0	80	40	66	21	35	0.7
180509	61 °C	F 1"	9.0	82	41	67	21	35	0.7
180510	61 °C	F 1¼"	12.0	84	42	68	24	39	0.8
180517	66 °C	F 1"	9.0	82	41	67	21	35	0.7
180525	72 °C	F 1"	9.0	82	41	67	21	35	0.7
180526	72 °C	F 1¼"	12.0	84	42	68	24	39	0.8
180534	80 °C	F 1¼"	12.0	84	42	68	24	39	0.8

Other temperatures and dimensions on request.

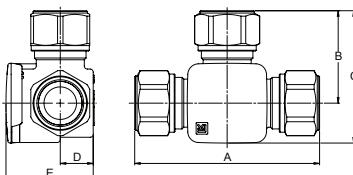
## LK 820 - Male thread



Article no.	Opening temp.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Weight kg
180503	55 °C	M 3/4"	4.0	80	40	66	21	35	0.7
180504	55 °C	M 1"	6.0	80	40	66	21	35	0.7
180505	55 °C	M 1 1/4"	9.0	84	42	68	21	35	0.7
180506	55 °C	M 1 1/2"	12.0	84	42	68	24	39	0.8
180512	61 °C	M 1"	6.0	80	40	66	21	35	0.7
180513	61 °C	M 1 1/4"	9.0	84	42	68	21	35	0.7
180514	61 °C	M 1 1/2"	12.0	84	42	68	24	39	0.8
180520	66 °C	M 1"	6.0	80	40	66	21	35	0.7
180528	72 °C	M 1"	6.0	80	40	66	21	35	0.7
180530	72 °C	M 1 1/2"	12.0	84	42	68	24	39	0.8

Other temperatures and dimensions on request.

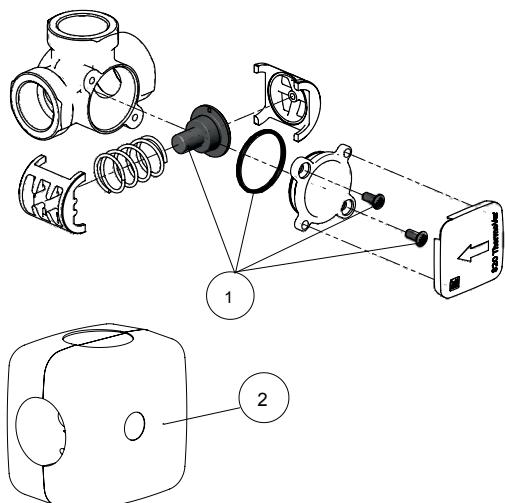
## LK 820 - Compression fitting



Article no.	Opening temp.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Weight kg
181125	61 °C	22 mm	6.0	114	57	83	21	35	0.8

Other temperatures and dimensions on request.

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187025	Thermostatic element 820, 45 °C	1
187026	Thermostatic element 820, 55 °C	1
187027	Thermostatic element 820, 61 °C	1
187028	Thermostatic element 820, 66 °C	1
187029	Thermostatic element 820, 72 °C	1
187030	Thermostatic element 820, 80 °C	1
187107	Insulation, DN 15-20	2
187108	Insulation, DN 25-32	2

# Thermic Zone Valve

## LK 821 ThermoVar®



- Position-independent



### TECHNICAL DATA

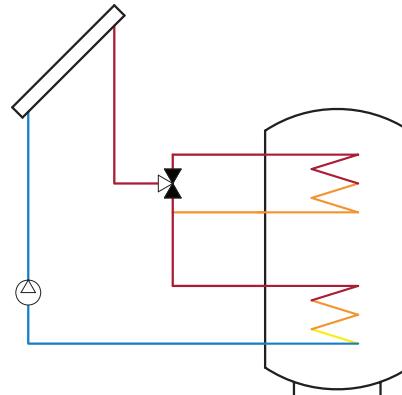
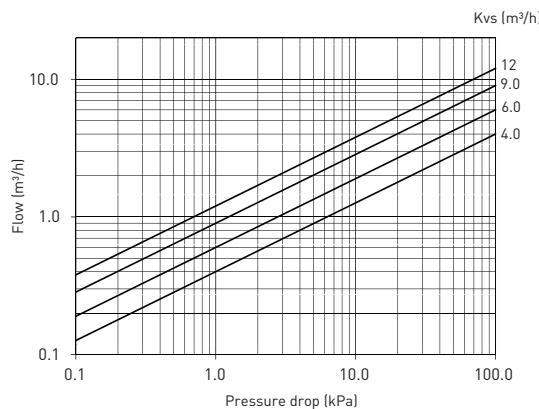
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	50 kPa (0.5 bar)
Working temperature	[45 - 55 °C] Min. 5 °C/Max. 95 °C [61 - 80 °C] Min. 5 °C/Max. 110 °C
Opening temperature	45 °C, 55 °C, 61 °C, 66 °C, 72 °C or 80 °C
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50%
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12165 CW617N
Material sealing	EPDM

LK 821 ThermoVar® 3-way thermic zone valve is designed to change the direction of flow of the media in heating systems. The valve is controlled by the temperature of the media. With an LK 821 ThermoVar® installed in, for example, a solar heating system an optimal stratification in the storage tank is obtained.

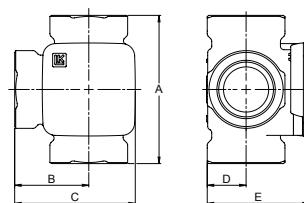
LK 821 can be equipped with an insulation - see under Accessories. For more information, please see the product sheet for insulations.

The valve can be mounted at any angle. LK 821 ThermoVar® can easily be adapted for right- or left-hand mounting.

### CAPACITY DIAGRAM



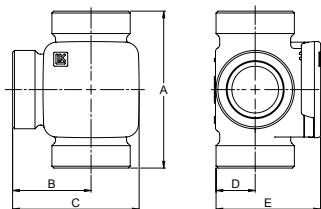
### LK 821 - Female thread



Article no.	Opening temp.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Weight kg
180540	45 °C	F ¾"	6.0	80	40	66	21	35	0.8
180541	45 °C	F 1"	9.0	82	41	67	21	35	0.9
180549	55 °C	F 1"	9.0	82	41	67	21	35	0.9
180573	72 °C	F 1"	9.0	82	41	67	21	35	0.9

Other temperatures and dimensions on request.

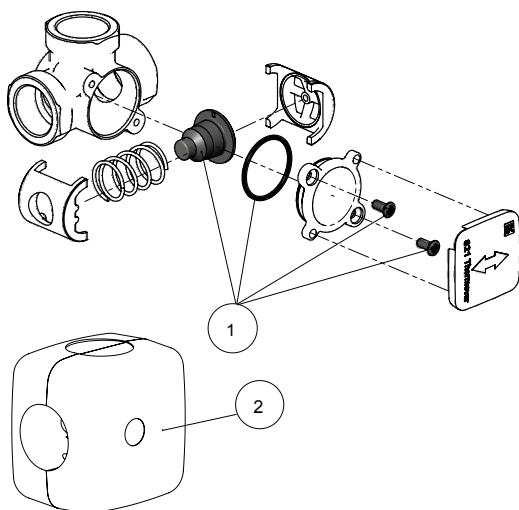
## LK 821 - Male thread



Article no.	Opening temp.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Weight kg
180544	45 °C	M 1"	6.0	80	40	66	21	35	0.8
180578	72 °C	M 1½"	12.0	84	42	68	24	39	1.0

Other temperatures and dimensions on request.

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187031	Thermostatic element 821, 45 °C	1
187032	Thermostatic element 821, 55 °C	1
187033	Thermostatic element 821, 61 °C	1
187034	Thermostatic element 821, 66 °C	1
187035	Thermostatic element 821, 72 °C	1
187036	Thermostatic element 821, 80 °C	1
187107	Insulation, DN 15-20	2
187108	Insulation, DN 25-32	2

# Thermic Loading Valve

## LK 823 ThermoVar®

- Increases the efficiency of the system
- Prevents condensation and taring
- Ensures an optimal temperature stratification in the storage tank



### TECHNICAL DATA

Leakage	< 0.5% of Kvs at 100 kPa
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Working temperature	[45 - 55 °C] Min. 5 °C/Max. 95 °C [60 - 70 °C] Min. 5 °C/Max. 110 °C
Opening temperature	45 °C, 50 °C, 55 °C, 60 °C, 65 °C or 70 °C
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50%
Material valve body	Brass EN 1982 CB753S
Material internal cover	Brass EN 12165 CW617N
Material sealing	EPDM

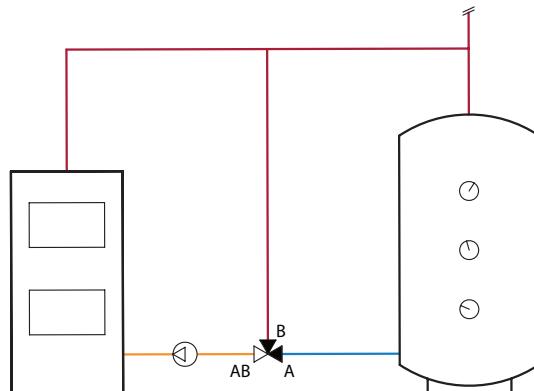
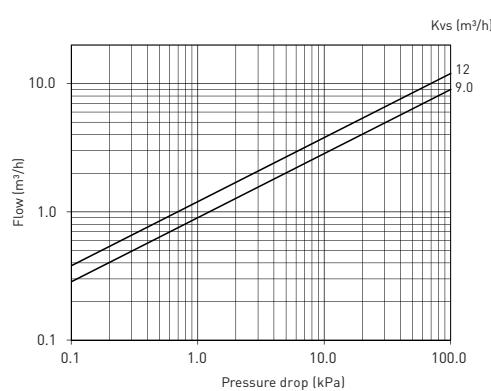
LK 823 ThermoVar® is a 3-way thermic loading valve for solid fuel/storage tank installations. The valve is intended to ensure both an optimal temperature stratification in the storage tank and a high return temperature to the boiler, thus increasing the efficiency of the system. Tarring and condensation are prevented which prolongs boiler life.

The valve regulates on two ports, which means that there is no need for a balancing valve in the circuit between boiler and loading valve. The thermostatic element starts to open port A when the outgoing mixed water temperature in port AB reaches the opening temperature. Port B is closed when the temperature in port A exceeds the nominal opening temperature by 10 °C.

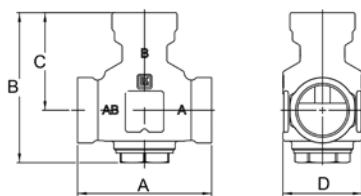
LK 823 can be equipped with an insulation - see under Accessories. For more information, please see the product sheet for insulations.

The valve can be mounted at any angle. LK 823 ThermoVar® is for right- or left-hand mounting.

### CAPACITY DIAGRAM



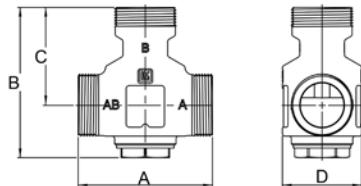
## LK 823 - Female thread



Article no.	Opening temp.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Weight kg
181284	45 °C	F 1"	9.0	92	114	72.5	Ø 55	1.0
181288	45 °C	F 1¼"	12.0	105	117	76	Ø 62	1.2
181285	50 °C	F 1"	9.0	92	114	72.5	Ø 55	1.0
181286	55 °C	F 1"	9.0	92	114	72.5	Ø 55	1.0
181290	55 °C	F 1¼"	12.0	105	117	76	Ø 62	1.2
181287	60 °C	F 1"	9.0	92	114	72.5	Ø 55	1.0
181291	60 °C	F 1¼"	12.0	105	117	76	Ø 62	1.2

Other temperatures and dimensions on request.

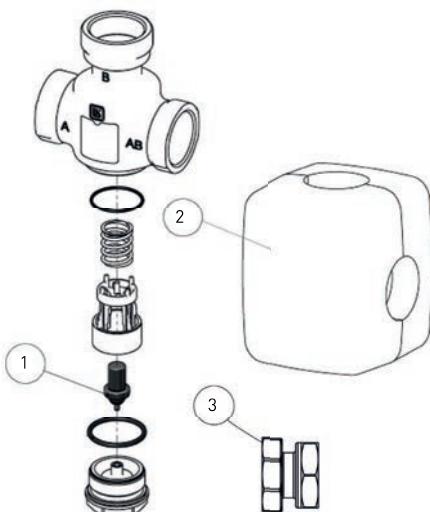
## LK 823 - Male thread



Article no.	Opening temp.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Weight kg
182163	45 °C	M 1"	9.0	84	103.5	62	Ø 55	1.0
181300	45 °C	M 1½"	12.0	105	117	76	Ø 62	1.2
182130	45 °C	M 1¼"	9.0	92	110.5	69	Ø 62	1.2
182164	50 °C	M 1"	9.0	84	103.5	62	Ø 55	1.0
182131	50 °C	M 1¼"	9.0	92	110.5	69	Ø 62	1.2
181302	55 °C	M 1½"	12.0	105	117	76	Ø 62	1.2
182132	55 °C	M 1¼"	9.0	92	110.5	69	Ø 62	1.2
181303	60 °C	M 1½"	12.0	105	117	76	Ø 62	1.2
181538	65 °C	M 1½"	12.0	105	117	76	Ø 62	1.2

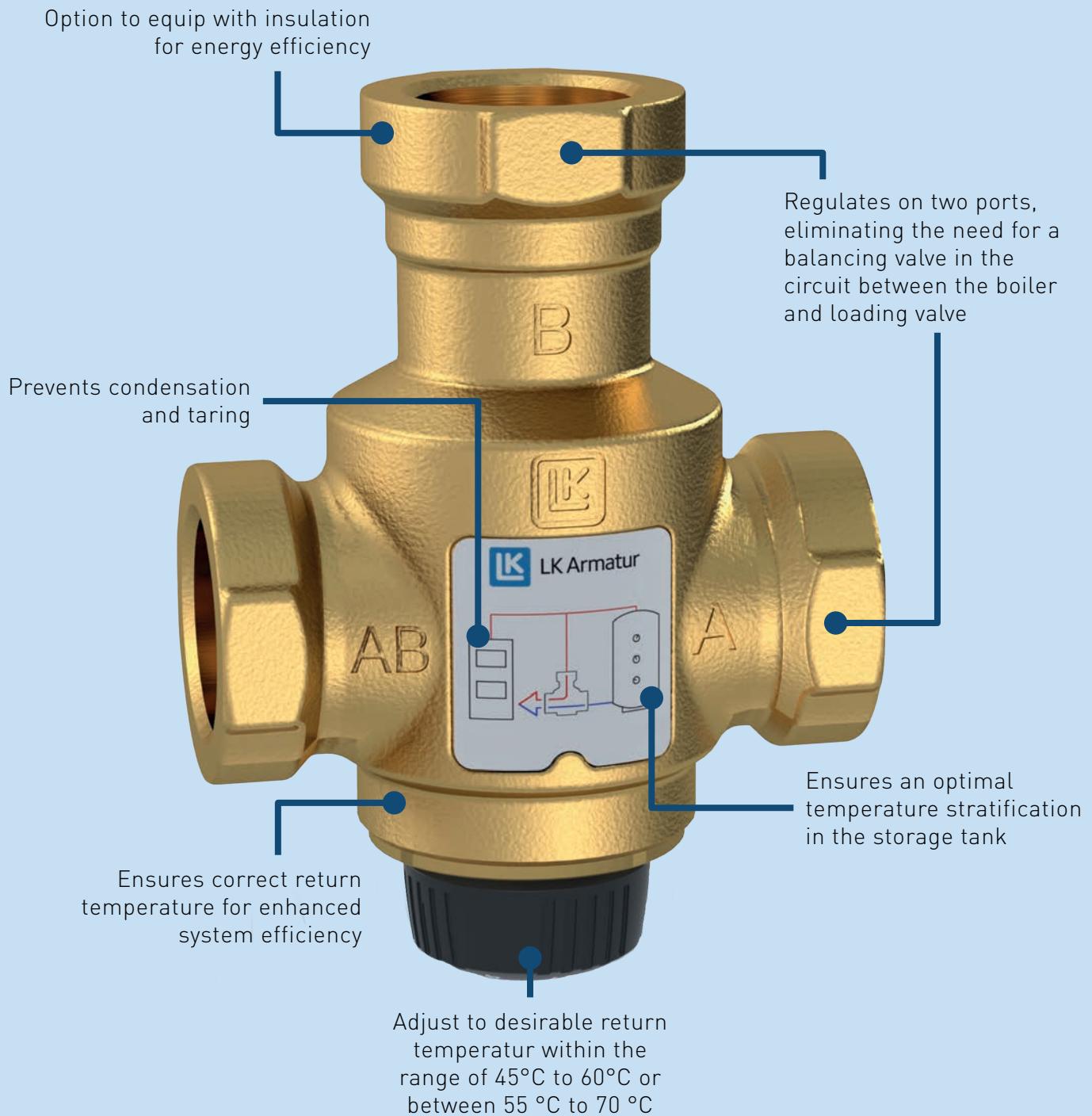
Other temperatures and dimensions on request.

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187102	Thermostatic element 823, 45 °C	1
187103	Thermostatic element 823, 50 °C	1
187104	Thermostatic element 823, 55 °C	1
187105	Thermostatic element 823, 60 °C	1
187138	Thermostatic element 823, 65 °C	1
187139	Thermostatic element 823, 70 °C	1
187109	Insulation, DN 25-32	2
095351	LK 823 Pump connection 1¼"	3
095352	LK 823 Pump connection 1"	3

# LK 823 ThermoVar® R



Improve your heating system with **LK 823 ThermoVar® R**, a 3-way thermic loading valve. It ensures optimal temperature distribution in your storage tank, enhances boiler efficiency, and prevents tarring and condensation. With the possibility to adjust the return temperature within the range of 45 °C to 60 °C or between 55 °C to 70 °C, it's the perfect valve for your system.

# Thermic Loading Valve

## LK 823 ThermoVar® R

- Increases system efficiency
- Prevents condensation and tarring
- Adjustable temperature



### TECHNICAL DATA

Leakage	< 0.5% of Kvs at 100 kPa
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Working temperature	Min 5 °C/Max 95 °C
Opening temperature	55-70 °C / 45-60 °C
Ambient temperature	Min 5 °C/Max 60 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50%
Material valve body	Brass EN 1982 CB753S
Material external cover	Brass EN 12165 CW617N
Material sealing	EPDM

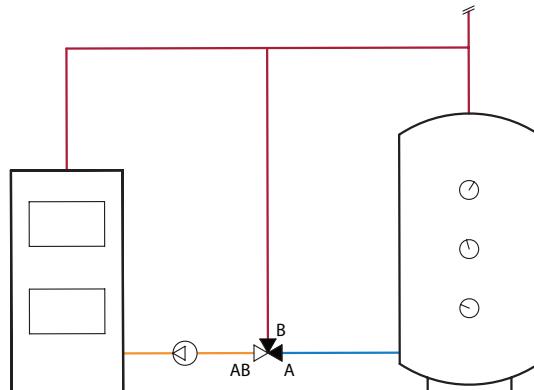
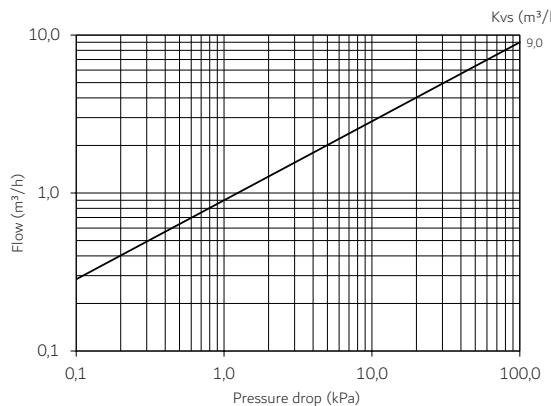
LK 823 ThermoVar® R is a 3-way thermic loading valve for solid fuel/storage tank installations. The valve is intended to ensure both an optimal temperature stratification in the storage tank and a high return temperature to the boiler, thus increasing the efficiency of the system. Tarring and condensation are prevented which prolongs boiler life.

The valve regulates on two ports, which means that there is no need for a balancing valve in the circuit between boiler and loading valve. The thermostatic element starts to open port A when the outgoing mixed water temperature in port AB reaches the opening temperature. Port B is closed when the temperature in port A exceeds the nominal opening temperature by 10 °C. The valve is adjustable within the range of 45 °C to 60 °C or 55 °C to 70 °C.

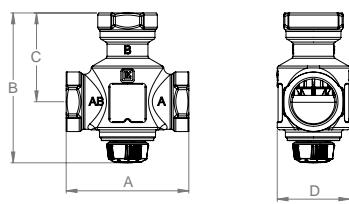
LK 823 R can be equipped with an insulation - see under Accessories. For more information, please see the product sheet for insulations.

The valve can be mounted at any angle. LK 823 ThermoVar® R is for right- or left-hand mounting.

### CAPACITY DIAGRAM

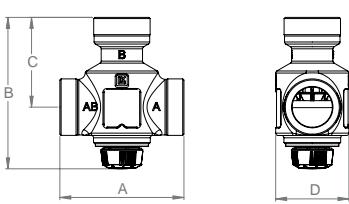


## LK 823 R - Female thread



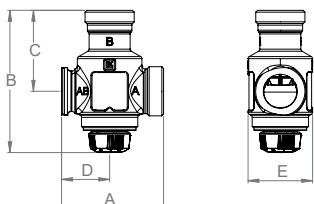
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182386	F 1 1/4"	9.0	105	128	76	Ø 62	55 - 70 °C	1.2
182445	F 1 1/4"	9.0	105	128	76	Ø 62	45 - 60 °C	1.2

## LK 823 R - Male thread



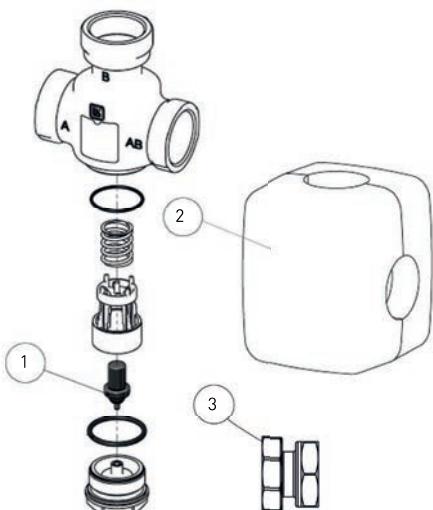
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182388	M 1 1/2"	9.0	105	128	76	Ø 62	55 - 70 °C	1.2
182446	M 1 1/2"	9.0	105	128	76	Ø 62	45 - 60 °C	1.2

## LK 823 R - Rotating nut



Article no.	Dim.	Dim. 2	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Note	Weight kg
182389	M 1 1/4"	1 1/2" Rotating nut	9.0	87	121	69	41	55	55 - 70 °C	0.9
182447	M 1 1/4"	1 1/2" Rotating nut	9.0	87	121	69	41	55	45 - 60 °C	0.9

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187330	Repair Kit 823R	1
187310	LK Insulation, 551 (Kvs 3.2-4.2) / 552	2
095351	LK 823 Pump connection 1 1/4"	3
095352	LK 823 Pump connection 1"	3

# Mixing / Diverting Valve

## LK 525 MultiZone 3R

- Low internal leakage
- The slide is designed to provide accurate regulation at low flows
- Click system for actuator



### TECHNICAL DATA

Voltage	230 VAC, 50 Hz
Power consumption	5 VA
Angle of rotation	90°
Torque	5 Nm
Leakage	< 0.1% of Kvs at 100 kPa
Operation time	110 s
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Working temperature	Min. 5 °C/Max. 80 °C (90 °C briefly)
Ambient temperature	Min. 5 °C/Max. 55 °C
Manual override	Yes
Thread standard	G - male thread, ISO 228/1
Protection type	IP 44
Protection class	II
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Electrical connection	Fixed wire
Signal connector	3 point SPDT
Cable specification	3 x 0.75 mm <sup>2</sup>
Wire colours	Blue, brown, black
External insulation	PVC
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12164 CW614N
Material slide/spindle	PPS Composite
Type approval certificate	CE (Actuator only)

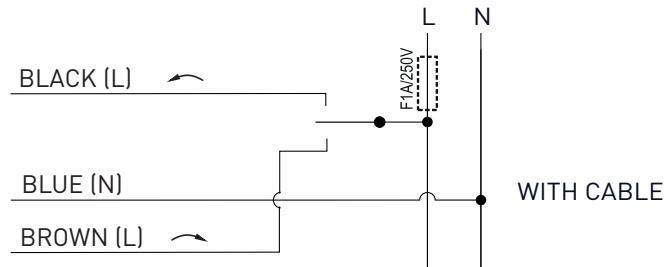
LK 525 MultiZone 3R is a 3-way valve that can be used as a mixing valve or as a diverting valve in heating systems.

The valve is constructed so that the leakage is less than 0.1% of Kvs at 100 kPa. It also has a split linear characteristic which means that the regulation is good even at low flows and capacities.

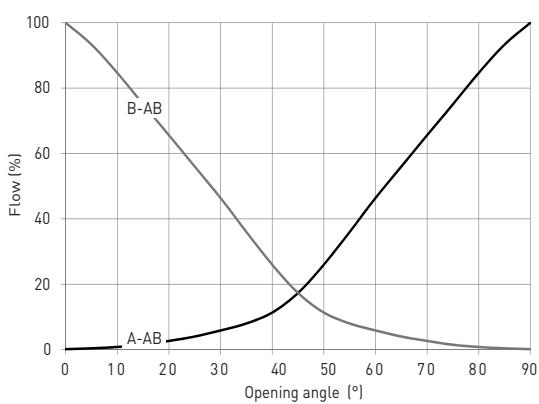
The valve must not be installed with the motor underneath the valve unit. Please note that the motor can be installed in only one position.

The motor operates anti clockwise when the black conductor is powered and clockwise when the brown conductor is powered.

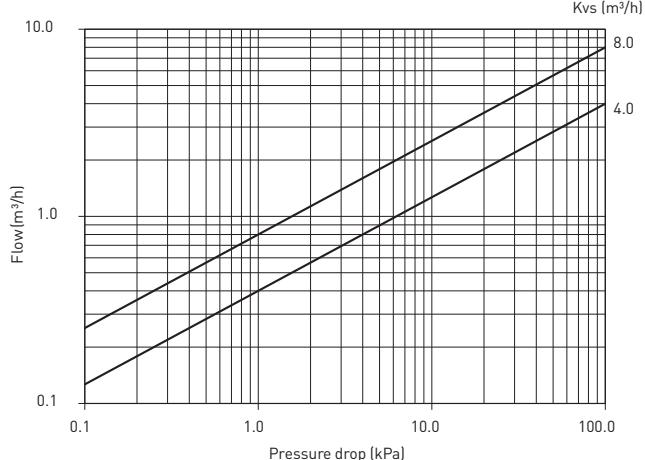
### WIRING DIAGRAM

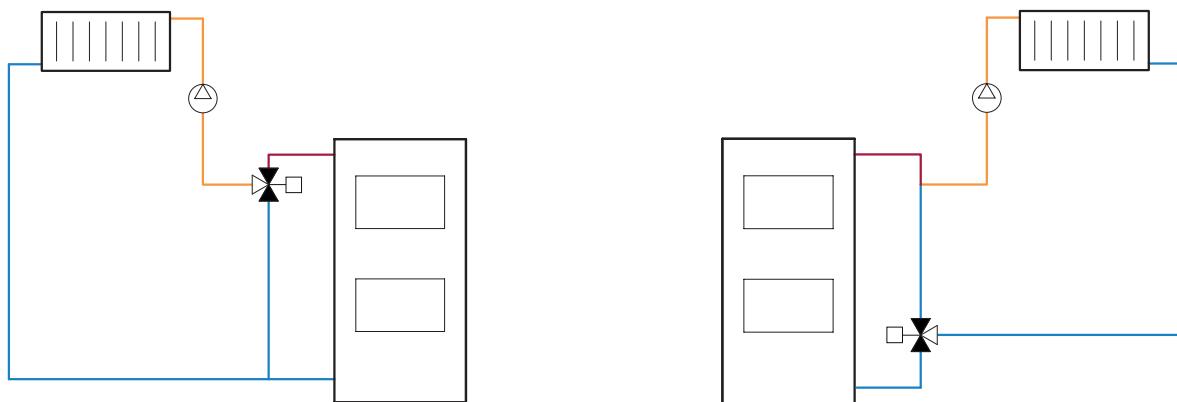


### VALVE CHARACTERISTICS

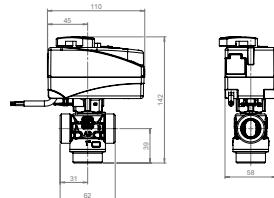


### CAPACITY DIAGRAM





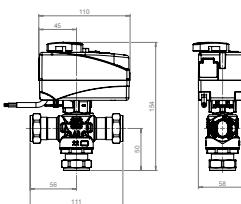
LK 525 3R - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066077	M 1"	8.0	62	31	39	132	46	109	58	0.3

Other dimensions and Kvs on request.

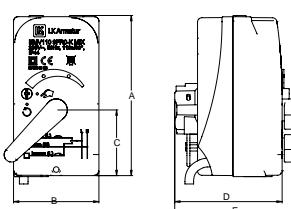
LK 525 3R - Compression fitting



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066079	22 mm	8.0	110	55	50	143	46	109	58	0.4
066080	28 mm	8.0	110	55	54	147	46	109	58	0.6

Other dimensions and Kvs on request.

LK 940 C



Article no.	Connection	Voltage	Torque	Operation time	A mm	B mm	C mm	D mm	E mm	Weight kg
066127	1 m cable	230 V	5 Nm	110 s*	109	58	45	73	85	0.4
066128	1 m cable 0-10 VDC	24 VAC	5 Nm	110 s*	109	58	45	73	85	0.4

\*Other operation times on request.

#### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187202	Insulation	1

# Bivalent Mixing Valve

## LK 830 ThermoMix® B

- Low internal leakage
- Easy to adapt for right- or left-hand mounting
- Suitable for motorization



### TECHNICAL DATA

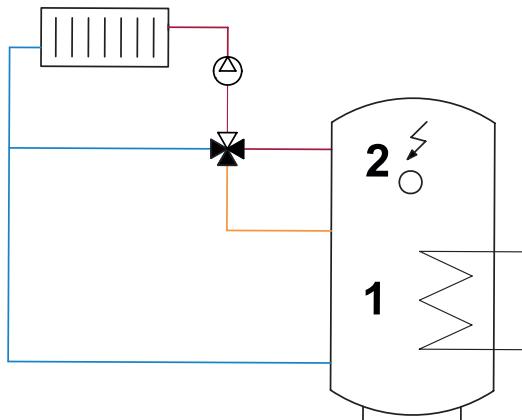
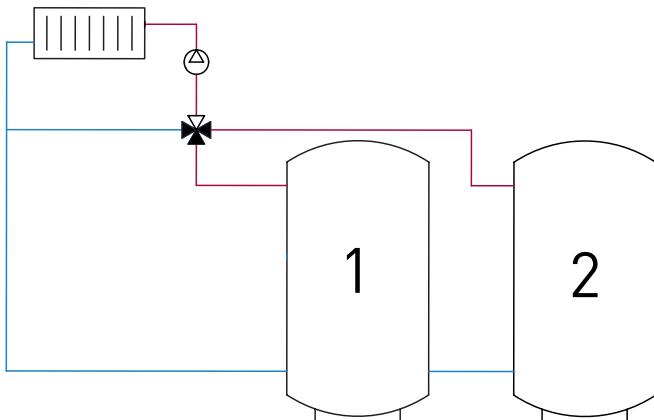
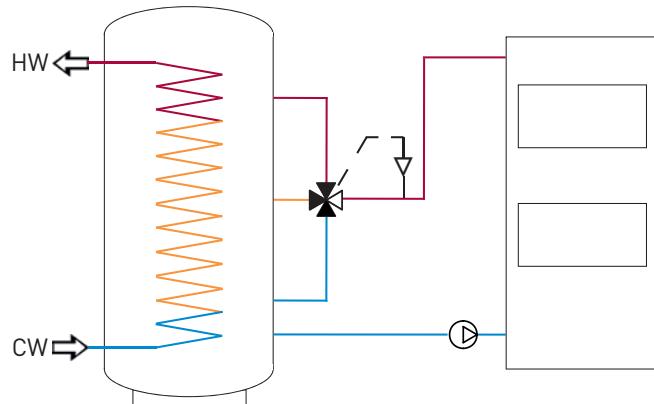
Angle of rotation	90°
Torque	< 1 Nm
Leakage	< 0.5% of Kvs at 50 kPa
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	50 kPa (0.5 bar)
Working temperature	Min. 5 °C/Max. 110 °C (120 °C briefly)
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12165 CW617N
Material slide/spindle	Brass EN 12164 CW614N
Material sealing	EPDM
Spindle sealing	Two O-rings

LK 830 ThermoMix® B 4-way bivalent mixing valves are designed for heating systems, where energy is taken from two heating units connected in series or Parallel or for storage tank systems where energy is extracted from two levels.

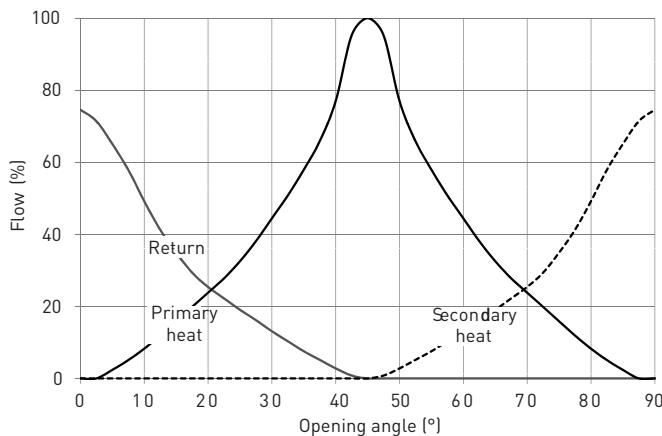
LK 830 ThermoMix® B should be equipped with an automatic control unit to ensure that the most favourable heat source is prioritised at all times.

LK 830 ThermoMix® B can be adapted for right- or left-hand installation.

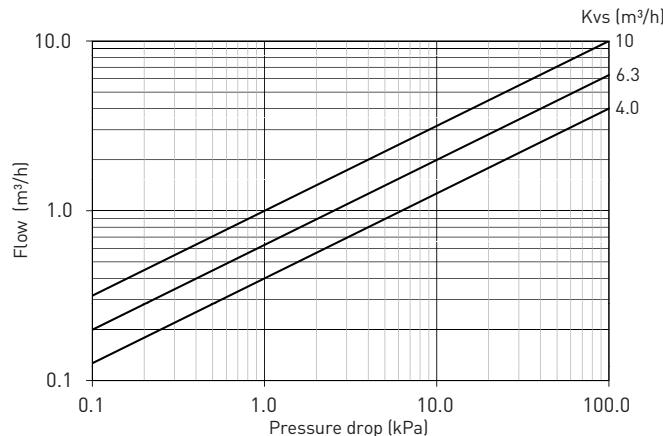
### LK 830 B AS DIVERTING VALVE WITH LK 100 SMARTCOM-FORT CT TO OPTIMIZE THE STRATIFICATION IN THE TANK.



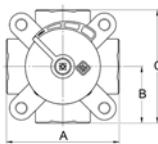
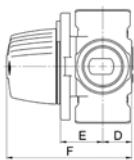
## VALVE CHARACTERISTICS



## CAPACITY DIAGRAM



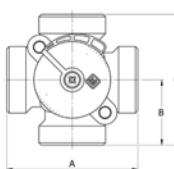
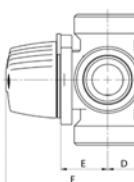
### LK 830 - Female thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
180587	F 3/4"	6.3	72	36	72	19	27	80	0.7

Other dimensions on request.

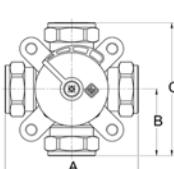
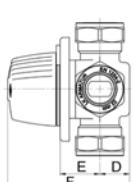
### LK 830 - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
180004	M 3/4"	6.3	72	36	72	20	26	80	0.6
180588	M 1"	6.3	80	40	80	18	29	81	0.7

Other dimensions on request.

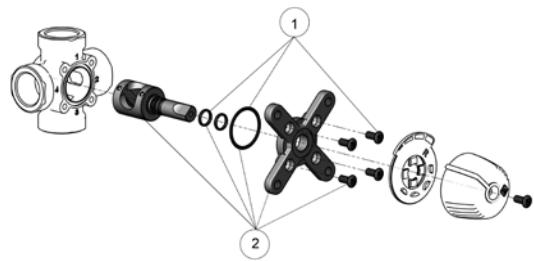
### LK 830 - Compression fitting



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
180001	22 mm	4.0	87	43.5	87	20	26	80	0.7
180003	22 mm	6.3	87	43.5	87	20	26	80	0.7
180595	28 mm	6.3	112	56	112	19	27	80	1.1

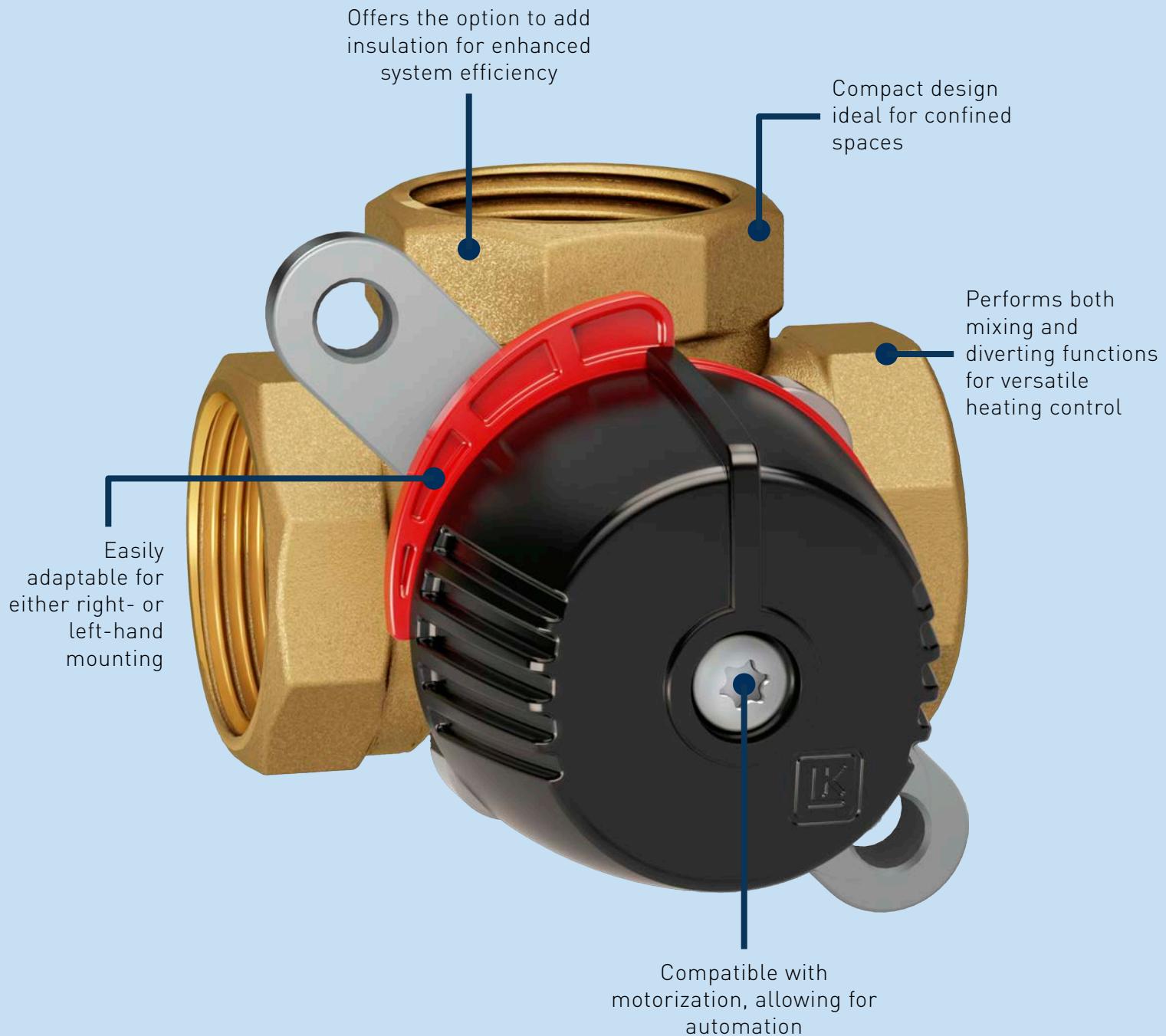
Other dimensions on request.

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187059	Sealing kit 830/831, DN 15-20	1
187060	Sealing kit 830, DN 25	1
187187	Sealing kit LK 840/841 DN 15-20	1
187061	Repair kit 830, DN 15-20, Kvs 4.0	2
187062	Repair kit 830, DN 15-20, Kvs 6.3	2
187064	Repair kit 830, DN 25, Kvs 10.0	2
187958	830 Repair kit 830 DN 20, Kvs 6,3	2

# LK 840 ThermoMix® 2.0



The **LK 840 ThermoMix® 2.0** is a versatile 3-way mixing valve for heating systems. It can serve as a mixing or diverting valve, is compatible with motorization, and can be insulated. With its adaptable and compact design, it can be installed in any position and is easily mounted in tight spaces.

# Mixing Valve

## LK 840 ThermoMix® 2.0

- Low internal leakage
- Suitable for motorization
- Broad product range



### TECHNICAL DATA

Angle of rotation	90°/360°
Torque	< 1 Nm (DN15-32)* < 2,1-2,3 Nm (DN40-50)*
Leakage	< 0,2% of Kvs at 100 kPa
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Working temperature	Min. 5 °C/Max. 110 °C (120 °C briefly)
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Material internal cover	PPS Composite
Material external cover	DN 15-32 Aluminium, DN 40-50 Composite
Material slide/spindle	Brass EN 12165 CW617N
Material sealing	EPDM
Spindle sealing	Two O-rings

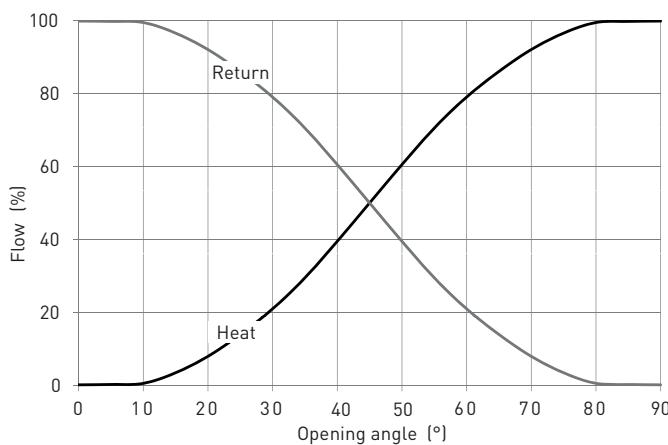
\* Double torque if the valve is used diverting

LK 840 ThermoMix® 2.0 is a 3-way mixing valve which can be used as a mixing or diverting valve in heating systems.

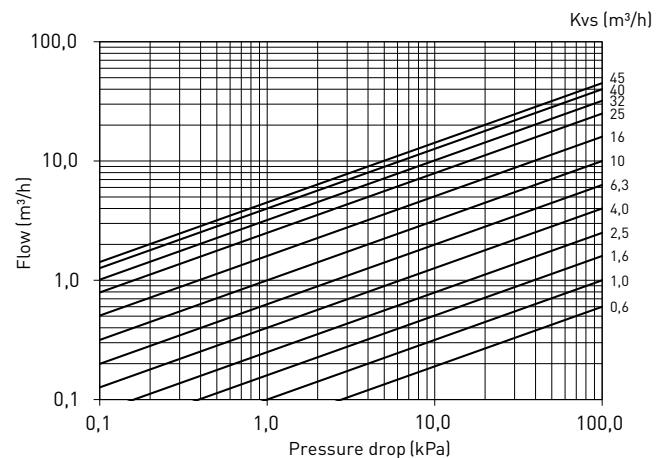
The valve is suitable for motorization and can be fitted with insulation. For more information, see the insulation data sheet.

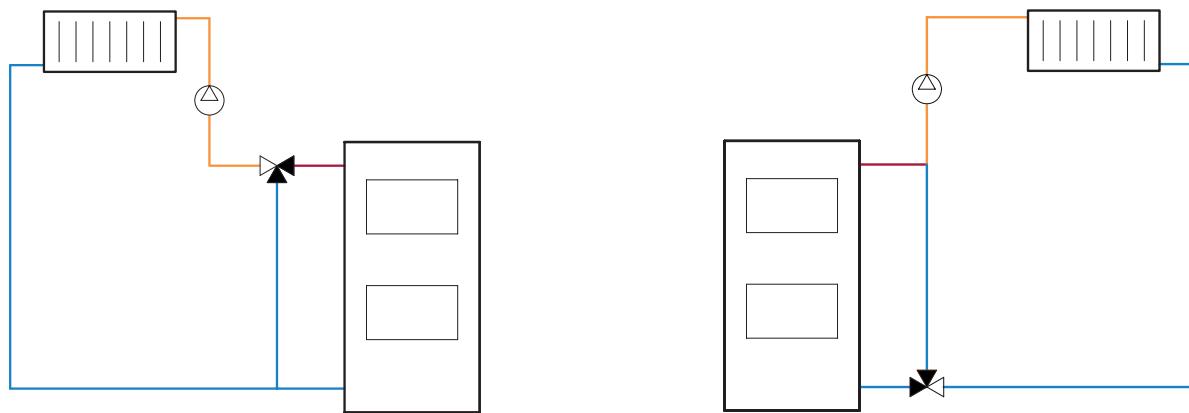
A compact design and a octagonal key grip gives an easier access and installation in tight spaces. The valve can be installed in any position and LK 840 ThermoMix® 2.0 can easily be adapted for right- or left-hand mounting.

### VALVE CHARACTERISTICS

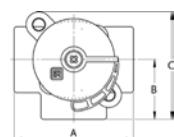
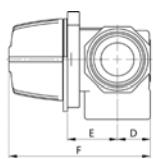


### CAPACITY DIAGRAM



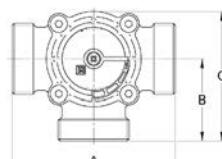
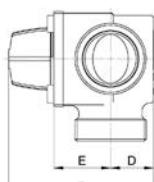


LK 840 2.0 - Female thread



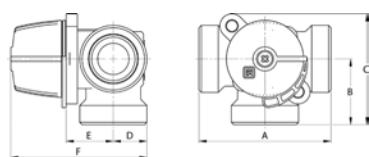
Article no.	Dim.	Kvs m <sup>3</sup> /h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181908	F 1/2"	0.6	70	35	69	18	29	81	0.5
181909	F 1/2"	1.0	70	35	69	18	29	81	0.5
181910	F 1/2"	1.6	70	35	69	18	29	81	0.5
181911	F 1/2"	2.5	70	35	69	18	29	81	0.5
181912	F 3/4"	4.0	70	35	69	18	29	81	0.5
181913	F 3/4"	6.3	70	35	69	18	29	81	0.5
181914	F 1"	6.3	70	35	69	20	29	83	0.5
181915	F 1"	10.0	70	35	69	20	29	83	0.5
181916	F 1 1/4"	16.0	84	42	77	24	32	90	0.8

LK 840 2.0 - Female thread



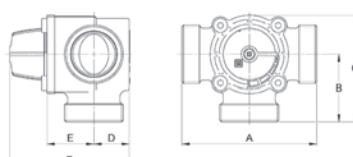
Article no.	Dim.	Kvs m <sup>3</sup> /h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181917	F 1 1/2"	25.0	106	53	88	33	43	110	1.4
181918	F 2"	40.0	106	53	88	33	43	110	1.6

## LK 840 2.0 - Male thread



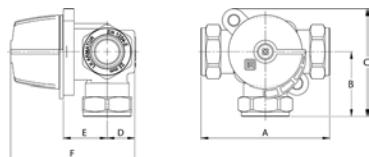
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181919	M 3/4"	2.5	80	40	74	18	29	81	0.6
181920	M 1"	4.0	80	40	74	18	29	81	0.6
181921	M 1"	6.3	80	40	74	18	29	81	0.6
181922	M 1 1/4"	10.0	82	41	75	20	29	83	0.6
181923	M 1 1/2"	16.0	84	42	77	24	32	90	0.8

## LK 840 2.0 - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181924	M 2"	25.0	124	62	97	33	43	110	1.4
181925	M 2"	32.0	124	62	97	33	43	110	1.4
181926	M 2"	45.0	124	62	97	33	43	110	1.4

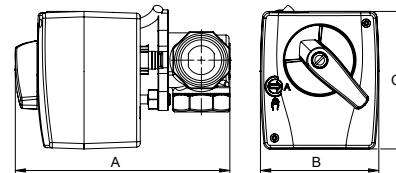
## LK 840 2.0 - Compression Fitting



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181932	28 mm	6.3	120	60	94	18	29	81	0.7

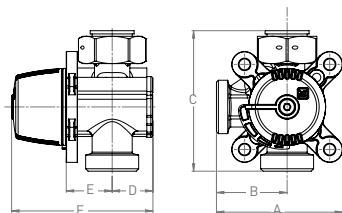
Other dimensions on request.

## LK 840 Set - Female thread - LK 950 / LK 100 SmartComfort CT



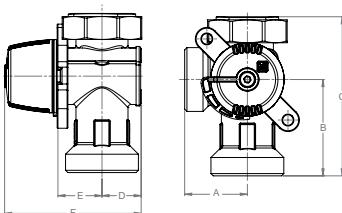
Article no.	Type	Dim.	Kvs m³/h	A mm	B mm	C mm	Weight kg
182759	LK 950 (180759)	F 3/4"	6.3	143	80	93	1.0
182760	LK 950 (180759)	F 1"	6.3	145	80	93	1.0
182761	LK 950 (180759)	F 1"	10.0	145	80	93	1.0
182762	LK 100 (181242)	F 3/4"	6.3	149	84	97	1.0
182763	LK 100 (181242)	F 1"	10.0	151	84	97	1.0

## LK 850 HG - Male thread / Rotating nut



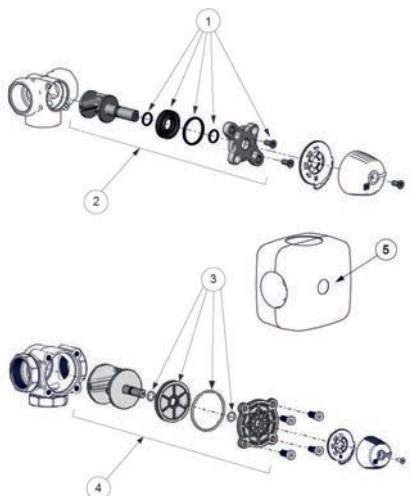
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
182765	M 1" x M 1" x F 1" Rotating nut	6.3/10.0	78.5	44	88	25.4	28.6	88.1	0.65

## LK 840 HG - Male thread / Rotating nut



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
182766	M 1½" x M 1¼" x F 1½" Rotating nut	6.3	41	63	104	25.6	28.8	89	0.7
182767	M 1½" x M 1¼" x F 1½" Rotating nut	10.0	41	63	104	25.6	28.8	89	0.7

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187187	Sealing kit LK 840/841 DN 15-20	1
187188	Sealing kit LK 840/841 DN 25	1
187197	Sealing kit 840/841 2.0, DN 32	1
187190	Repair kit LK 840 DN 15-20	2
187191	Repair kit 840 DN 25	2
187192	Repair kit LK 840 DN 32	2
187189	Sealing kit 840/841 2.0, DN 40-50	3
187193	Repair kit LK 840 DN 40-50	4
187107	Insulation, DN 15-20	5
187108	Insulation, DN 25-32	5

# Mixing Valve

## LK 841 ThermoMix® 2.0

- Octagonal key grip
- Compact design
- Low internal leakage

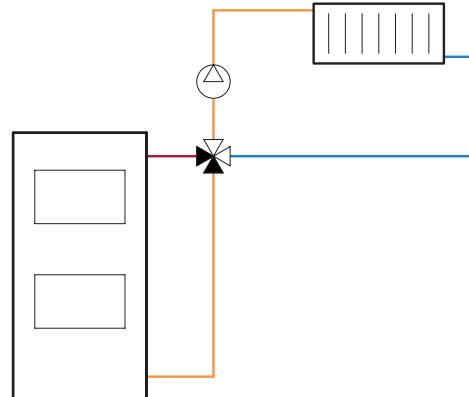


### TECHNICAL DATA

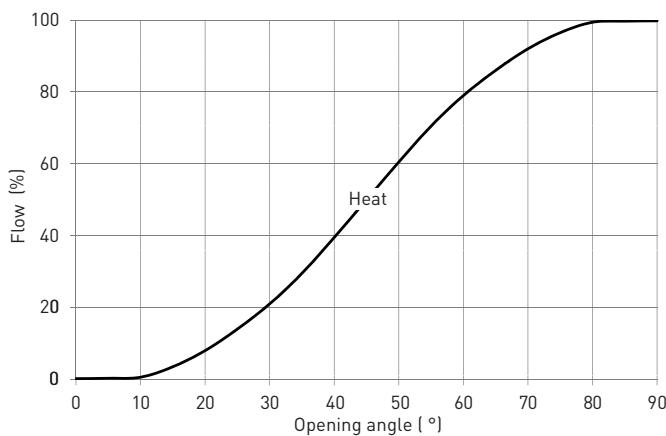
Angle of rotation	90°/360°
Torque	< 1 Nm
Leakage	< 1.5% of Kvs at 50 kPa
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Working temperature	Min. 5 °C/Max. 110 °C (120 °C briefly)
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Material internal cover	PPS Composite
Material external cover	DN 15-32 Aluminium, DN 40-50 Composite
Material slide/spindle	Brass EN 12165 CW617N
Material sealing	EPDM
Spindle sealing	Two O-rings

LK 841 ThermoMix® 2.0 is designed for heating systems where a high return temperature is required to prevent corrosion and thus extend the life length of the heat source.

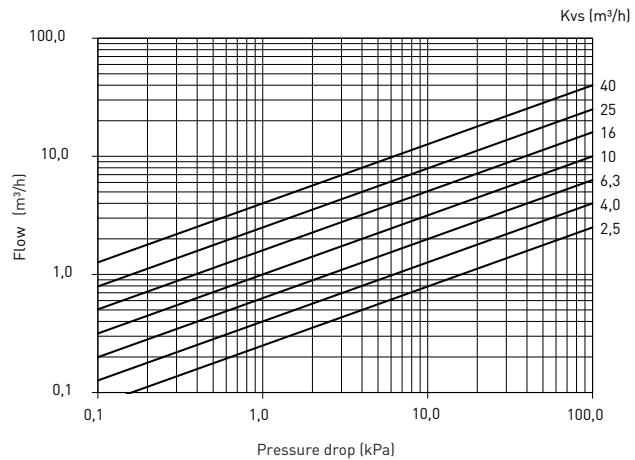
The valve is suitable for motorization and can be fitted with insulation. For more information, see the insulation data sheet. A compact design and a octagonal key grip gives an easier access and installation in tight spaces. The valve can be installed in any position and LK 841 ThermoMix® 2.0 can easily be adapted for right- or left-hand mounting.



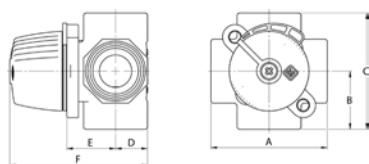
### VALVE CHARACTERISTICS



### CAPACITY DIAGRAM



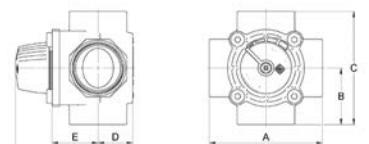
## LK 841 2.0 - Female thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181940	F 1/2"	2.5	70	35	70	18	29	81	0.7
181941	F 3/4"	4.0	70	35	70	18	29	81	0.5
181942	F 3/4"	6.3	70	35	70	18	29	81	0.5
181943	F 1"	10.0	70	35	70	20	29	83	0.5
181944	F 1 1/4"	16.0	84	42	84	24	32	90	0.8

Other dimensions on request.

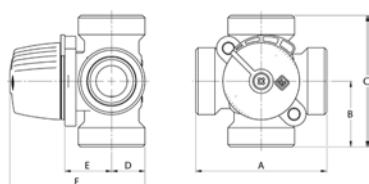
## LK 841 2.0 - Female thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181945	F 1 1/2"	25.0	106	53	106	33	43	110	1.6
181946	F 2"	40.0	106	53	106	33	43	110	1.7

Other dimensions on request.

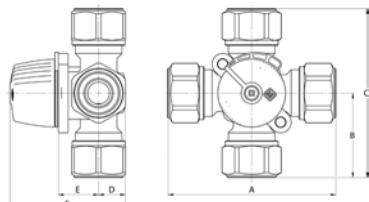
## LK 841 2.0 - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181949	M 1"	6.3	80	40	80	18	29	81	0.5

Other dimensions on request.

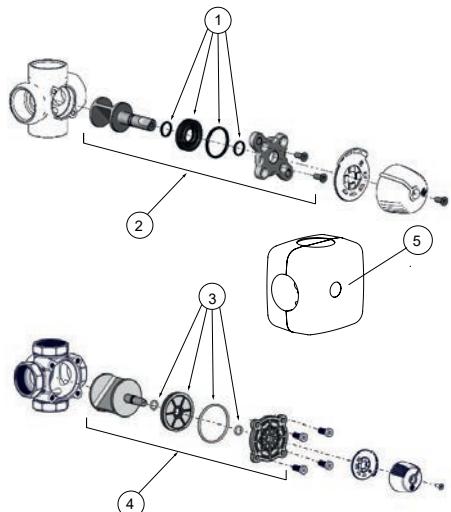
## LK 841 2.0 - Compression Fitting



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
181986	22 mm	2.5	114	57	114	18	29	81	0.9

Other dimensions on request.

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187187	Sealing kit LK 840/841 DN 15-20	1
187188	Sealing kit LK 840/841 DN 25	1
187197	Sealing kit 840/841 2.0, DN 32	1
187194	Repair kit 841 2.0, DN 15-20	2
187195	Repair kit 841 2.0, DN 25	2
187198	Repair kit 841 2.0, DN 32	2
187189	Sealing kit 840/841 2.0, DN 40-50	3
187196	Repair kit 841 2.0, DN 40-50	4
187107	Insulation, DN 15-20	5
187108	Insulation, DN 25-32	5

# Mixing Valve

## LK 842 ThermoMix® P

- Flange connection
- Simple motorisation



### TECHNICAL DATA

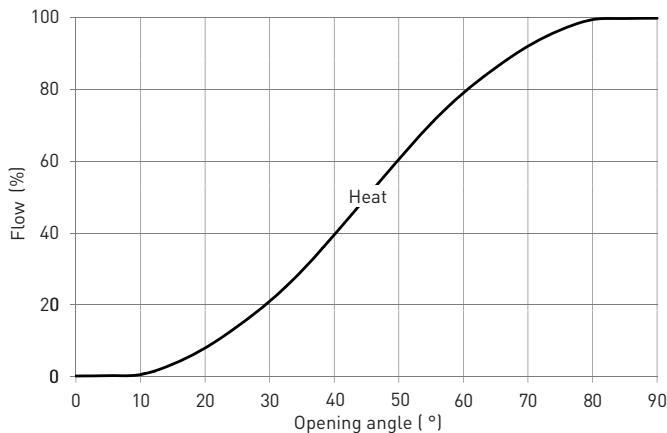
Angle of rotation	90°
Torque	< 1 Nm
Leakage	< 1.5% of Kvs at 50 kPa
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	50 kPa (0,5 bar)
Working temperature	Min. 5 °C/Max. 110 °C (120 °C briefly)
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 1982 CB753S
Material internal cover	PPS Composite
Material external cover	Aluminium
Material slide/spindle	Brass EN 12165 CW617N
Material sealing	EPDM
Spindle sealing	Two O-rings

LK 842 ThermoMix® P is a 4-way mixing valve for mounting on heating boilers.

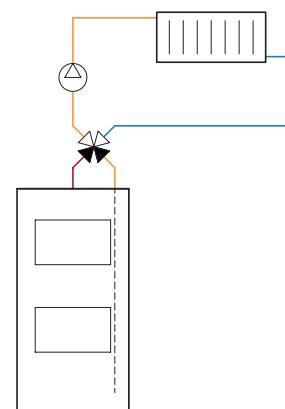
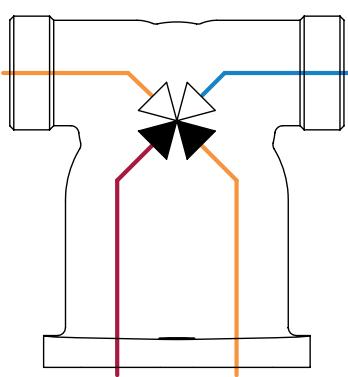
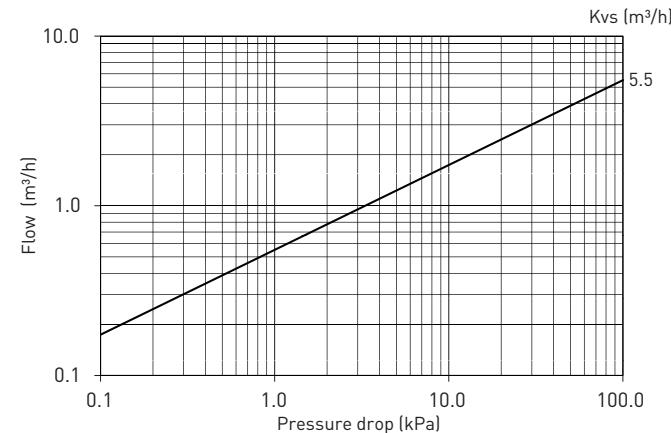
LK 842 ThermoMix® P is suitable for motorization.

The valve can be mounted at any angle. LK 842 ThermoMix® P can easily be adapted for right- or left-hand mounting.

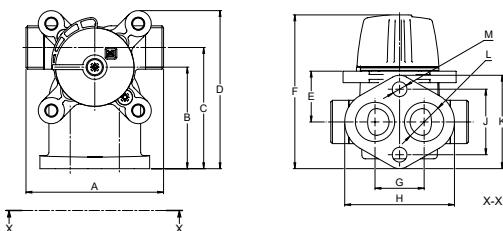
### VALVE CHARACTERISTICS



### CAPACITY DIAGRAM

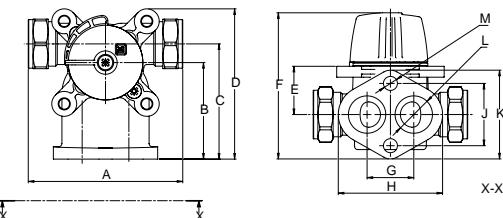


## LK 842 - Male thread



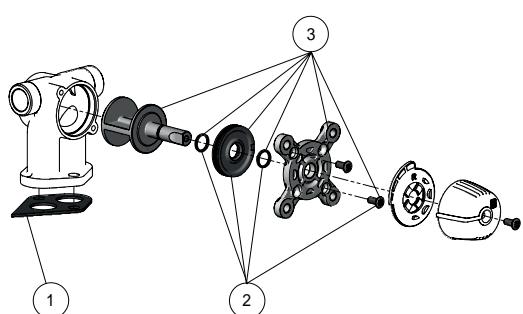
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	Weight (kg)
180879	M 3/4"	5.5	84	62	74	97	31	94	30	67	40	57	24	9	0.8

## LK 842 - Compression fitting



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	Weight (kg)
180880	15 mm	5.5	99	62	74	97	31	94	30	67	40	57	24	9	0.8
180881	22 mm	5.5	99	62	74	97	31	94	30	67	40	57	24	9	0.8

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
013083	Gasket 842	1
187067	Sealing kit 840/841/842, DN 25-32	2
187071	Repair kit 841/842, DN 25-32	3

# Mixing Valve

## LK 850 ThermoMix® H

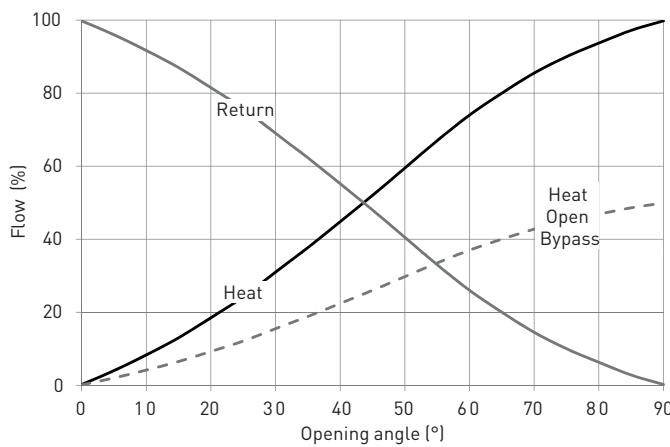
- Simple motorisation
- CC 125 mm
- Bypass



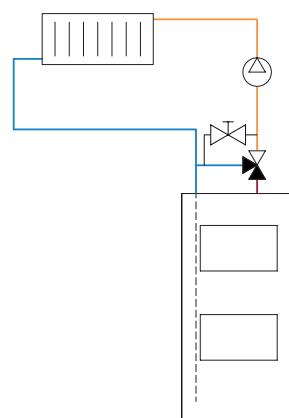
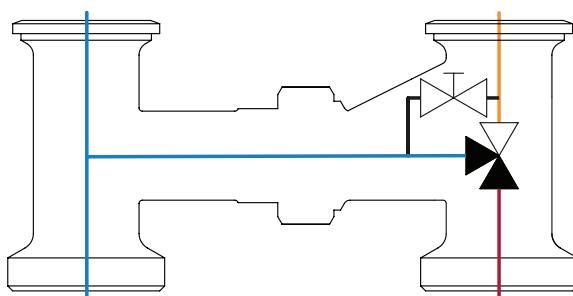
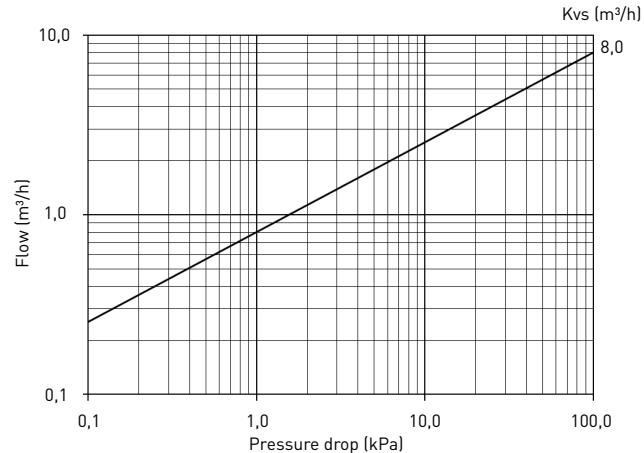
### TECHNICAL DATA

Angle of rotation	90°
Torque	< 3 Nm
Leakage	< 1% of Kvs at 50 kPa
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	50 kPa (0.5 bar)
Working temperature	Min. 5 °C/Max. 110 °C (120 °C briefly)
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12165 CW617N
Material slide/spindle	Brass EN 12165 CW617N
Material sealing	EPDM
Spindle sealing	Two O-rings

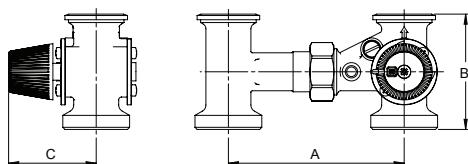
### VALVE CHARACTERISTICS



### CAPACITY DIAGRAM



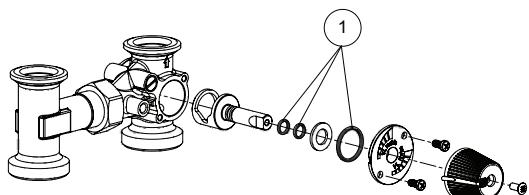
## LK 850 - Male thread / Rotating nut



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	Weight kg
181144	M 1½"	8.0	125	82	62	1.5

Two 1½" rotating nuts and two gaskets of EPDM are included in the delivery.

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187082	Sealing kit LK 850	1

# Mixing Valve

## LK 851 ThermoMix® H

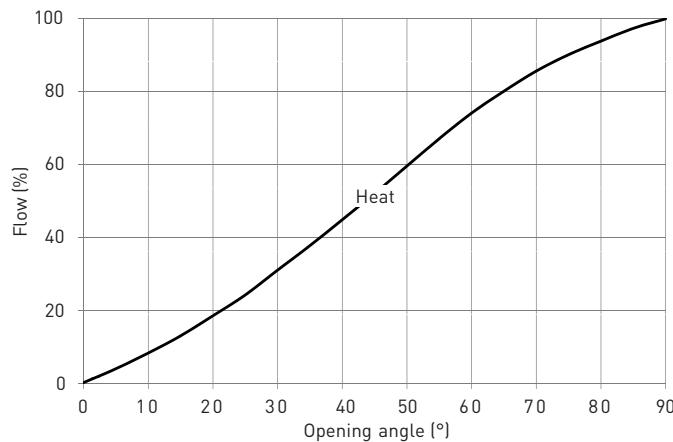
- Simple motorisation
- CC 125 mm



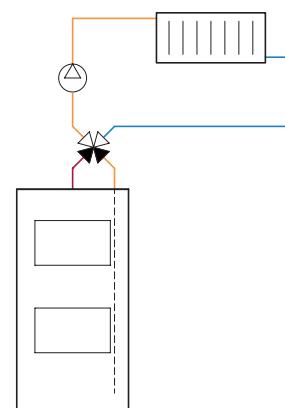
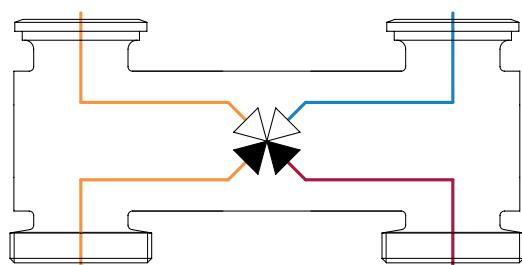
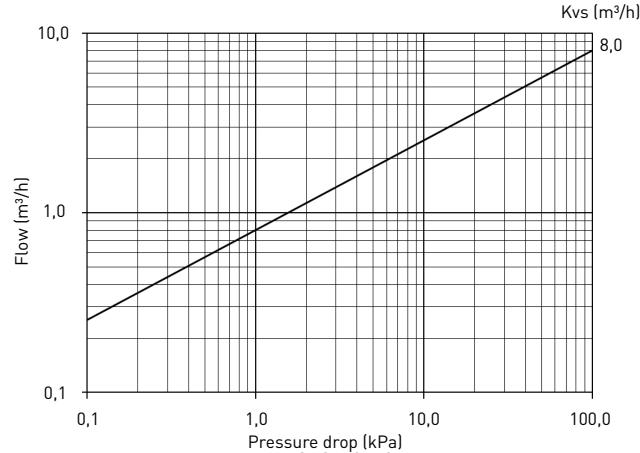
### TECHNICAL DATA

Angle of rotation	90°
Torque	< 3 Nm
Leakage	< 1% of Kvs at 50 kPa
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	50 kPa (0.5 bar)
Working temperature	Min. 5 °C/Max. 110 °C (120 °C briefly)
Ambient temperature	Min. 5 °C/Max. 60 °C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12165 CW617N
Material slide/spindle	Brass EN 12165 CW617N
Material sealing	EPDM
Spindle sealing	Two O-rings

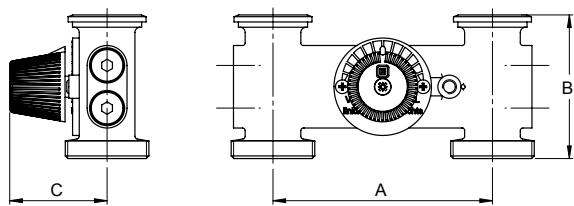
### VALVE CHARACTERISTICS



### CAPACITY DIAGRAM



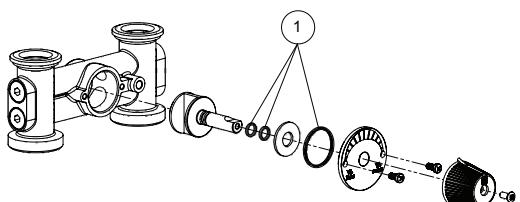
## LK 851 - Male thread / Rotating nut



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	Weight kg
181145	M 1½"	8.0	125	82	55	1.6

Two 1½" rotating nuts and two gaskets of EPDM are included in the delivery.

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187083	Sealing kit LK 851	1

# LK 130 SmartComfort



Elevate your indoor comfort with **LK 130 SmartComfort**. This intelligent controller offers precise temperature adjustments and integrates easily with existing systems. The included room temperature unit enhances control with preset programs and outdoor temperature monitoring. For top efficiency, connect SmartComfort PC to manage the circulating pump and prevent stalling.

# Temperature Controller

## LK SmartComfort



- Adjustments are easily made with push buttons
- Wired or wireless room controllers available
- The same actuator for LK SmartComfort 110, 120 and 130 enabling easy upgrading



### TECHNICAL DATA

Power consumption	< 3 VA
Primary voltage adapter	100-240 VAC, 50/60 Hz
Secondary voltage adapter	24 VDC
Angle of rotation	90°
Torque	5 Nm
Ambient temperature	Actuator: Min. 0 °C/Max. 50 °C (in operation) Room Temperature Unit: Min. 0 °C/Max. 40 °C
Min. supply temperature	LK 110/120/130: 5 - 40 °C
Max. supply temperature	LK 110/120/130: 20 - 99 °C
Control range	LK 100 CT: 5 - 99 °C, LK 110, 120, 130: Min. 5 °C/Max. 35 °C
Curve slope	LK 110/130: 1.0 - 9.9
Parallel displacement	LK 110/130: ± 10 °C
Protection class	Actuator: IP 40 Room Temperature Unit: IP 20
Type approval certificate	CE

LK SmartComfort is an electronic controller that has an automatic choice of direction to adapt to the direction of the mixing valve. LED-indicators show if the controller is opening or closing the valve. The supply temperature can be limited with a minimum and a maximum value. LED-indicators show if the controller is opening or closing the valve. Adjustments are easily made with the push buttons marked "+" and "-". The selected value will be shown on the LED-display.

LK SmartComfort is easy to install onto new as well as existing mixing valves. Mounting kits for installation onto mixing valves of other brands are available - see separate page.

The plug-in adapter provides quick and easy do-it-yourself installation. In case of a power outage the controller will keep its settings and the actuator will stop in its current position. By disengaging the controller, the mixing valve can be manually operated.

### LK 100 CT - CONSTANT TEMPERATURE CONTROLLER

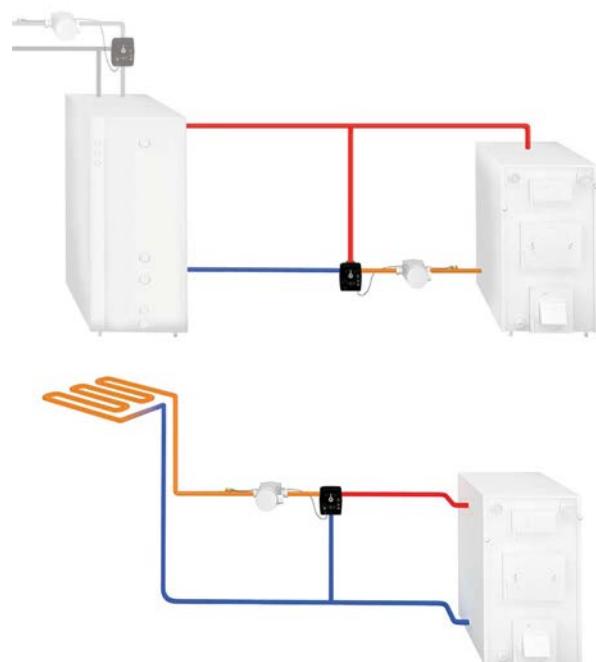
LK 100 SmartComfort CT is an electronic temperature controller designed to keep the supply temperature in underfloor heating systems or the return temperature to solid fuel boilers at a constant level. The flow temperature is adjustable between 5 - 99 °C.

### LK 100 CT - ITEMS INCLUDED

- Temperature controller
- Adapter 24 VDC
- Mounting kit for mixing valve
- Supply temperature sensor with 1 m cable



### LK 100 SMARTCOMFORT CT



## LK 110 - WEATHER COMPENSATED TEMPERATURE CONTROLLER

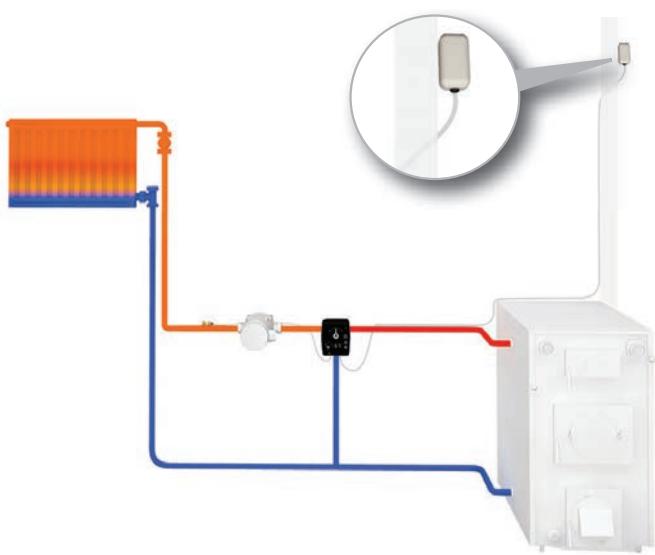
LK 110 SmartComfort is an electronic weather compensated temperature controller for hydronic radiator and underfloor heating systems. By measuring the supply and outdoor temperatures LK 110 SmartComfort regulates the mixing valve to provide the system with the exact amount of heat required in the building at any given time. The supply temperature can be limited with a minimum and a maximum value. The current supply and outdoor temperatures can be read on the controller display.

### LK 110 - ITEMS INCLUDED

- Temperature controller
- Adapter 24 VDC
- Mounting kit for mixing valve
- Supply temperature sensor with 1 m cable
- Outdoor temperature sensor with 15 m cable and protective casing



## LK 110 SMARTCOMFORT



## LK 120 - INDOOR TEMPERATURE CONTROLLER

LK 120 SmartComfort is an electronic indoor temperature controller for hydronic radiator and underfloor heating systems. By measuring the supply and indoor temperatures LK 120 SmartComfort regulates the mixing valve to provide the system with the exact amount of heat required in the building at any given time. The supply temperature can be limited with a minimum and a maximum value.

LK 120 SmartComfort is delivered with a room temperature unit allowing easy setting of the desired indoor temperature.

### LK 120 - ITEMS INCLUDED

- Temperature controller
- Adapter 24 VDC
- Mounting kit for mixing valve
- Supply temperature sensor with 1 m cable
- Room temperature unit SmartComfort RT with 15 m cable or Room temperature unit SmartComfort RTW with wireless receiver



## LK 120 SMARTCOMFORT



## LK 130 - WEATHER COMPENSATED INDOOR TEMPERATURE CONTROLLER

LK 130 SmartComfort is an electronic, weather compensated, indoor temperature controller for hydronic radiator and underfloor heating systems. By measuring the supply, outdoor and indoor temperatures LK 130 SmartComfort regulates the mixing valve to provide the system with the exact amount of heat required in the building at any given time. The supply temperature can be limited with a minimum and a maximum value.

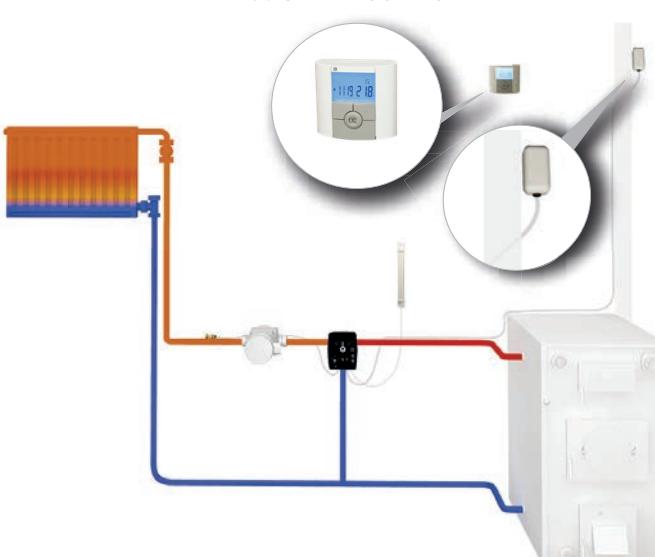
LK 130 SmartComfort is delivered with a room temperature unit allowing easy setting of the desired indoor temperature.

### LK 130 - ITEMS INCLUDED

- Temperature controller
- Adapter 24 VDC
- Mounting kit for mixing valve
- Supply temperature sensor with 1 m cable
- Outdoor temperature sensor with 15 m cable and protective casing
- Room temperature unit SmartComfort RT with 15 m cable or Room temperature unit SmartComfort RTW with wireless receiver



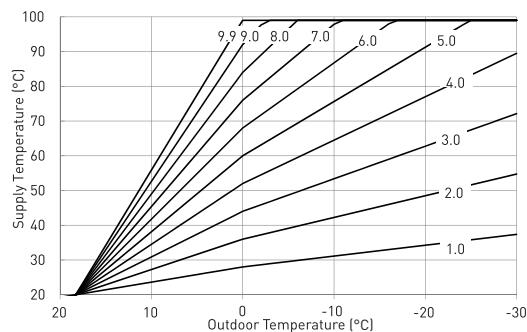
## LK 130 SMARTCOMFORT



## PUMP CONTROL - SMARTCOMFORT PC

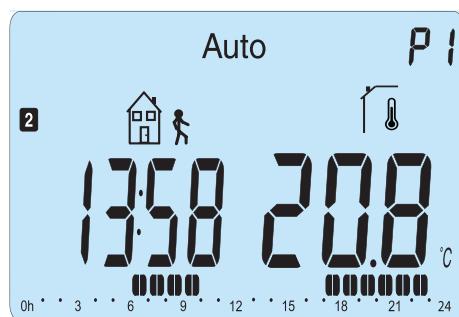
For further energy saving a pump control, SmartComfort PC, can easily be connected to the controller - see under Accessories. SmartComfort PC stops the circulating pump when no heat is required and exercises pump every two days, thus eliminating the risk of pump stalling after an intermission.

## LK 110 / 130 - CURVE SLOPE

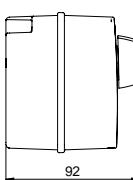
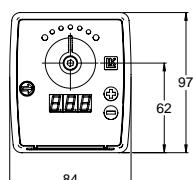


Dependent on the dimension of the heating system and the insulation of the building, the heating curve may need to be adjusted in order to achieve the desired room temperature. The curve slope and the Parallel displacement are easily adjusted with the push buttons.

## LK 120/130 DISPLAY - ROOM TEMPERATURE UNIT

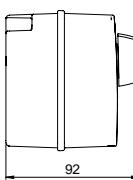
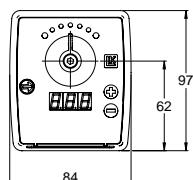


## LK 100 SmartComfort CT



Article no.	Type	Weight kg
181242	LK 100 SmartComfort CT - EU	0.5
181248	LK 100 SmartComfort CT - UK	0.5

## LK 110 SmartComfort



Article no.	Type	Weight kg
181243	LK 110 SmartComfort - EU	0.7
181250	LK 110 SmartComfort - UK	0.7

## LK ROOM TEMPERATURE UNIT

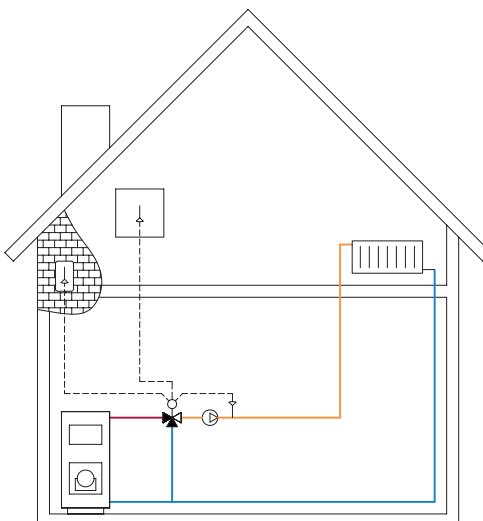
The room temperature unit is available in two versions; with fixed cable SmartComfort RT or wireless receiver SmartComfort RTW.

The room temperature unit is equipped with a connection port for external control, such as via a GSM modem, making it possible to activate a preset temperature change via mobile phone.

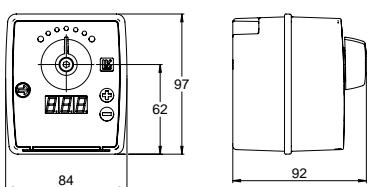
For further energy saving and increased comfort there are nine preset programs with scheduled temperature changes. You can also create your own programs. Additional functions such as holiday and timer settings are available. The current outdoor temperature can be read on the room temperature unit.

After a temperature setback the room temperature unit applies a booster function which briefly increases the supply temperature in order to quickly reach the desired room temperature. Should the room temperature unit sense a sudden change in temperature, such as when airing a room, the unit disregards this change for the following half hour.

## LK 130 SMARTCOMFORT

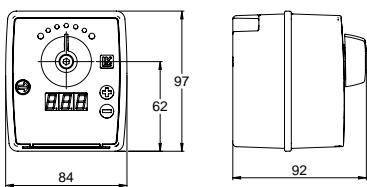


## LK 120 SmartComfort



Article no.	Type	Weight kg
181244	LK 120 SmartComfort - EU, with room temperature unit SmartComfort RT - 15 m cable	0.8
181245	LK 120 SmartComfort - EU, with room temperature unit SmartComfort RTW - wireless receiver	0.7
181252	LK 120 SmartComfort - UK, with room temperature unit SmartComfort RT - 15 m cable	0.8
181254	LK 120 SmartComfort - UK, with room temperature unit SmartComfort RTW - wireless receiver	0.7

## LK 130 SmartComfort



Article no.	Type	Weight kg
181246	LK 130 SmartComfort - EU, with room temperature unit SmartComfort RT - 15 m cable	1.0
181256	LK 130 SmartComfort - UK, with room temperature unit SmartComfort RT - 15 m cable	1.0
181247	LK 130 SmartComfort - EU, with room temperature unit SmartComfort RTW - wireless receiver	0.9
181258	LK 130 SmartComfort - UK, with room temperature unit SmartComfort RTW - wireless receiver	0.9

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187098	Temperature controller SmartComfort CT	1
187099	Temperature controller SmartComfort	1
025010	Adapter 24 VDC - EU	2
025011	Adapter 24 VDC - UK	2
181260	Mounting kit LK	3
025013	Supply temperature sensor, 1 m cable	4
025014	Outdoor temperature sensor, 15 m cable	5
025020	Protective casing for outdoor temperature sensor	6
187096	Room temperature unit SmartComfort RT	7
025025	Cable for SmartComfort RT, 15 m	8
025026	Extension cable for SmartComfort RT, 15 m	9
187113	Room temperature unit SmartComfort RTW with wireless receiver	10
187095	Pump control SmartComfort PC	11
025027	Extension cable for outdoor temperature sensor, 15 m	12
025008	Extension cable for adapter, 1 m	13

# Valve Actuator

## LK 941 EasyMix



### TECHNICAL DATA

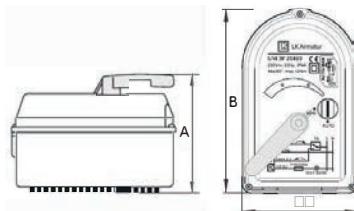
Voltage	230 VAC 50 Hz 24 VAC 50 Hz
Power consumption	6 VA
Angle of rotation	90° electrically limited
Torque	15 Nm
Operation time	73 s/147 s
Ambient temperature	Min. 0 °C/Max. 55 °C
Position indication	Reversible scale
Direction of operation	Selectable
Manual override	Disengagement of gears
Protection type	IP 44
Protection class	II
Electrical connection	Cable 1 m
Signal connector	3-point SPDT 0-10 VDC/4-20 mA
Type approval certificate	CE

LK 941 EasyMix is a series of valve actuators. Depending on model the actuator can be operated by a controller with a 3-point SPDT output or a proportional 0-10 V / 4-20 mA output. The angle of rotation is electrically limited to 90°.

The actuator can be mounted in any position except below the valve. The actuator is mounted directly onto the valve spindle with a screw. An anti-rotation bolt keeps the actuator in position. When needed, the actuator can be put into manual mode by pressing and turning the button on the housing cover 90° to disengage the gears. The actuator can now be put in any position by turning the handle on the front. The position is indicated on the reversible scale.

LK 941 EasyMix fits most mixing valves on the market.

### LK 941



Article no.	Connection	Voltage	Torque	Operation time	A mm	B mm	C mm	Weight kg
066129	1 m cable	230 VAC	15 Nm	73 s	92.5	125	78	0.6
066132	1 m cable	230 VAC	15 Nm	147 s	92.5	125	78	0.6
066133	1 m cable. 0 - 10 VDC	24 VDC/AC	15 Nm	73 s	92.5	125	78	0.6

# Valve Actuator

## LK 950 Valve Actuator

- Up to 10 Nm
- Wide range of products

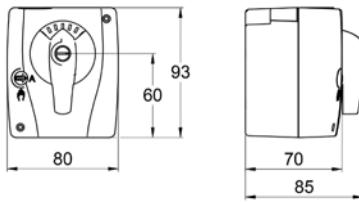


### TECHNICAL DATA

Voltage	230 VAC 50/60 Hz 24 VAC 50/60 Hz, 24 VDC/AC 50/60 Hz
Power consumption	1.5 - 3.5 W
Dimensioning	1,5 - 3,5 VA *
Angle of rotation	90°, electrically limited
Torque	5/10 Nm
Operation time	70/140/280 s
Ambient temperature	Min. 0 °C/Max. 50 °C
Position indication	Reversible scale
Direction of operation	Selectable
Manual override	Disengagement of gears
Protection type	IP 40
Protection class	II (Double Insulated) III (SELV)
Electrical connection	Cable 1.5 m, 3 x 0.75 mm <sup>2</sup>
Type approval certificate	CE

\* Depending on model

### LK 950



LK 950 is a series of valve actuators. Depending on model the actuator can be operated by a controller with a 3-point SPDT output or a proportional 2 (0) - 10 V output. The actuator is fitted with limit switches. The angle of rotation is electrically limited to 90°. An additional auxiliary adjustable switch can be ordered as an accessory.

The actuator can be mounted in any position except below the valve. The actuator is mounted directly onto the valve spindle with a screw. An anti-rotation bolt keeps the actuator in position. When needed, the actuator can be put into manual mode by turning the button on the housing cover 90° clockwise to disengage the gears. The actuator can now be put in any position by turning the handle on the front. The position is indicated on the reversible scale.

LK 950 fits most mixing valves. Mounting kits for mixing valves of other brands are available - please see the product sheet for Mounting Kits.

Article no.	Voltage	Torque	Operation time	Note	Weight kg
180742	24 VAC	5 Nm	70 s	Mounting kit is not included	0.5
180744	24 VAC	5 Nm	140 s	Mounting kit is not included	0.5
50801007	230 VAC	5 Nm	35 s	1.5 m cable	0.5
180756	230 VAC	5 Nm	70 s	1.5 m cable	0.5
180759	230 VAC	5 Nm	140 s	1.5 m cable	0.5
180760	230 VAC	5 Nm	140 s	3 m cable	0.5
180762	230 VAC	10 Nm	280 s	1.5 m cable	0.5
180764	230 VAC	10 Nm	140 s	1.5 m cable	0.5
181208	230 VAC	5 Nm	280 s	incl. auxiliary switch	0.5
180978	230 VAC	5 Nm	280 s	1.5 m cable	0.5
180765	24 VDC/AC	5 Nm	70 s	2 (0) - 10 V, without cable	0.5
182323	24 VDC/AC	5 Nm	70 s	2 (0) - 10 V, 3 m cable	0.5

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
180739	Mounting kit 950	1
180741	Auxiliary switch 950	2
026223	Cable for auxiliary switch, 1.5 m	3

# Mounting Kits

## Mounting Kits



Mounting kits for mixing valves of other brands



Article no.	Type	Valve brand
187086	440, 450, 451, 460, 475, 476, W28	Barberi
187084	DR-GMLA, DR-GFLA (DN 15-35)	Centra
187087	DR-MA (DN 15-50)	Centra
180746		Danfoss
180403	VRG, VRB (DN 15-50)	ESBE
187088	BR80 SMD/SMV	Holter
187094	SERIES 2, VCI 31 (DN 20-40)	Landis & Staefa
187089	SERIES 1, B3F (DN 20-40)	Landis & Staefa
187090		Lazzari
187091	3W, 4W	Lovato
187092	MB	Satchwell
187093	MBF	Satchwell
180747		Siemens
180740	3W, 4W, H	Wita / Oventrop / Meibes

# Differential Temperature Controller

## LK 150 SmartSol

- Colour display
- Frost protection



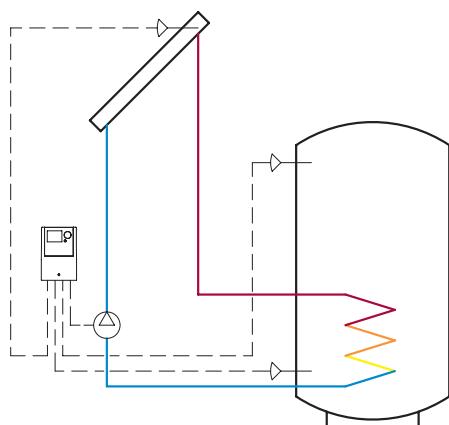
### TECHNICAL DATA

Voltage	230 VAC, 50 Hz
Power consumption	3.5 VA
Protection type	IP 20
Protection class	II
Display	TFT backlit colour display 47 x 35 mm
Triac outputs	230 VAC $\pm$ 10%, 1 A, 200 VA
Relay output	Max. 240 VAC, 4 A
Sensors	PT 1000
High-efficiency pump	Analog output 0 -10 V, max. 10 mA PWM output 100 Hz - 2 kHz
Type approval certificate	CE

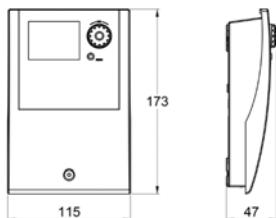
LK 150 SmartSol is an electronic differential temperature controller for solar heating systems. The controller has, depending on model, 20 or 24 preset hydraulic systems for different solar heating systems. The chosen hydraulic system and operating status is shown on the backlit colour display. Controls and settings are easily carried out using the rotating knob and the esc-button. LK 150 SmartSol can handle high efficiency pumps.

### FEATURES, MODEL "TOP"

- Two speed controlled outputs for circulating pumps or valves
- Output for high efficiency pump
- Floating relay output
- Operation time counter for relay outputs
- Pump exercise
- Balancing of sensors
- Overheating protection for collectors and tanks
- Collector and tank cooling
- Anti-freeze
- Collector defrosting
- Tube collector function
- Additional heat
- Quick-charging
- Holiday function
- Integrated energy measuring
- Integrated clock with date
- Automatic summer/winter time
- Graphic, multilingual colour display
- Self-explanatory menu and user guide
- SD card slot for data logging (micro SD)
- One input for analog vortex flow sensor
- 24 hydraulic systems
- Terminal block for six PT 1000 sensors



## LK 150 SmartSol



Article no.	Type	Weight kg
181796	150 SmartSol Top	0.7

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
025042	Differential temperature controller SmartSol Top	1
181187	Collector sensor PT 1000 Ø 5 mm - 3 m cable	2
181186	Tank sensor PT 1000 Ø 6 mm - 4 m cable	3
180812	Sensor pocket 150 mm	4

# LK 160 SmartBio®



**LK 160 SmartBio®** is an electronic differential temperature controller that offers preset hydraulic systems for optimal heating in systems with storage tanks. The backlit color display provides clear insight into your system's operation, while user-friendly controls simplify adjustments. It can manage pumps and also trigger an immersion heater or burner when needed, ensuring consistent comfort.

# Differential Temperature Controller

## LK 160 SmartBio®

- With SmartBio you can optimize the energy efficiency, and have more environmentally friendly biomass fuel solution



### TECHNICAL DATA

Voltage	230 VAC, 50 Hz
Power consumption	3.5 VA
Protection type	IP 20
Protection class	II
Display	TFT backlit colour display 47 x 35 mm
Triac outputs	230 VAC $\pm$ 10%, 1 A, 200 VA
Relay output	Max. 240 VAC, 4 A
Sensors	PT 1000
High-efficiency pump	Analog output 0 -10 V, max. 10 mA PWM output 100 Hz - 2 kHz
Type approval certificate	CE

LK 160 SmartBio® is an electronic differential temperature controller with several preset hydraulic systems for energy efficiency in heating systems with storage tanks. The chosen hydraulic system and operation status is shown on the backlit colour display. Controls and settings are easily carried out using the rotating knob and the esc-button. LK 160 SmartBio® can handle high efficiency pumps.

LK 160 SmartBio® can also activate an immersion heater or burner if the temperature in the primary tank falls below the selected value. The additional heat has a sophisticated delay function that further adds to the efficiency of the system.

### FEATURES

- Several hydraulic systems
- Two outputs for circulating pumps
- Pump exercise
- Floating relay output
- Sensor balancing
- Adjustable delay function for additional heat
- Graphic, multilingual colour display with time and date
- User-friendly menu system
- SD card slot for data logging (micro SD)
- Speed control possible for two circulation pumps via PWM signal

### HYDRAULIC SYSTEM 1

Hydraulic system 1 is intended for storage tank systems with a primary and secondary tank. LK 160 SmartBio® controls the two circulating pumps between the tanks. When the primary tank is fully charged the charge pump starts at the chosen temperature to fill the secondary tank. When the temperature in the primary tank falls, the recharging pump starts and transfers energy back to the primary tank.

### HYDRAULIC SYSTEM 1.1

In order to prevent self-circulation in both directions LK 970 ThermoBac DB double acting check valve should be mounted between the circulating pumps - see under spare parts and accessories.

### HYDRAULIC SYSTEM 1.2

The LK 824 ThermoVar® is a thermic valve with double acting check valve function which ensures a high return temperature to the solid fuel boiler, thus increasing the efficiency of the system - see spare parts and accessories.

### HYDRAULIC SYSTEM 2

Hydraulic system 2 is intended for storage tank systems in which heating water and domestic hot water are taken from a secondary tank. Heat is to be transferred from the main tank to the secondary tank. By measuring the temperature difference between the tanks LK 160 SmartBio® controls the charge pump.

### HYDRAULIC SYSTEM 3

Hydraulic system 3 is intended for the charging of a storage tank with a pellet, oil or gas fired burner. By measuring the temperatures in the tank and boiler LK 160 SmartBio® controls the burner and charge pump.

### HYDRAULIC SYSTEM 4

Hydraulic system 4 is intended for storage tank systems with domestic hot water tanks. This system gives priority to the heat in the upper part of the main tank. This enables a fast transfer of heat to the domestic hot water tank. LK 160 SmartBio® controls the charge pump to the domestic hot water tank, the zone valve of the main tank and the circulator in the heating loop.

## STANDARD KIT

- Differential temperature controller LK 160 SmartBio®
- Three sensors PT 1000 - 4 m cable

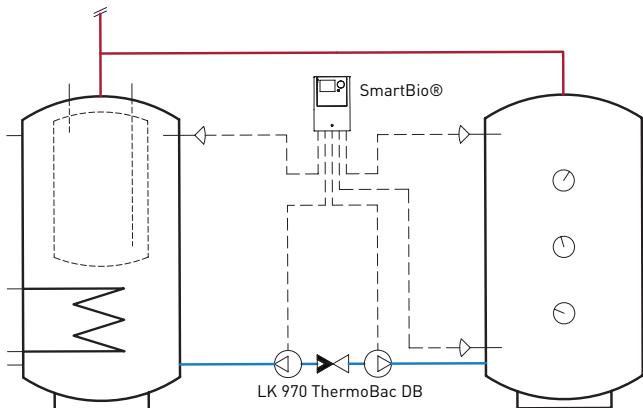


## KIT FOR HYDRAULIC SYSTEM 1.1

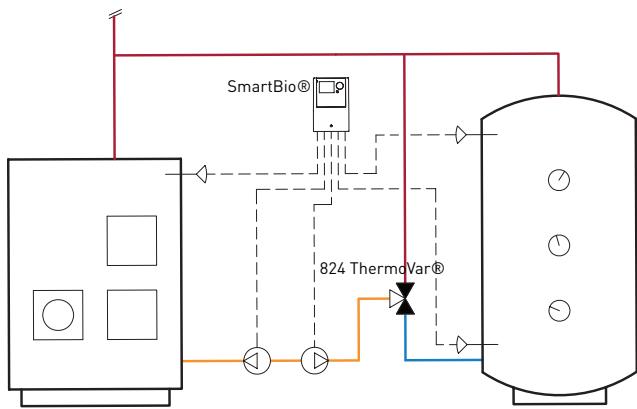
- Differential temperature controller LK 160 SmartBio®
- Three sensors PT 1000 - 4 m cable
- Two circulating pumps Grundfos Alpha1 25-60/130
- Two ball valves 1"
- Check valve with double acting flow LK 970 ThermoBac DB
- Four gaskets EPDM



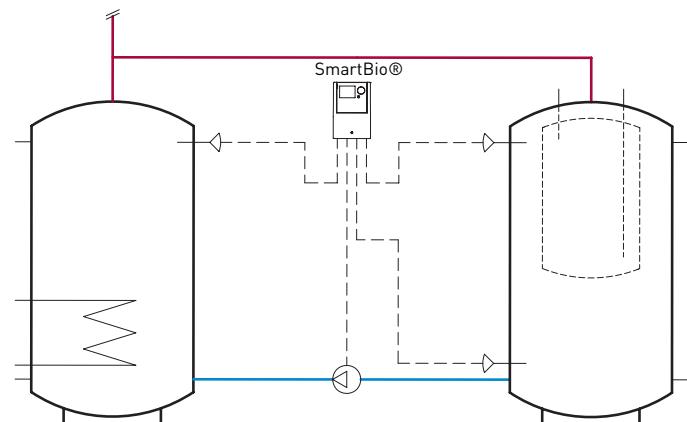
## HYDRAULIC SYSTEM 1.1



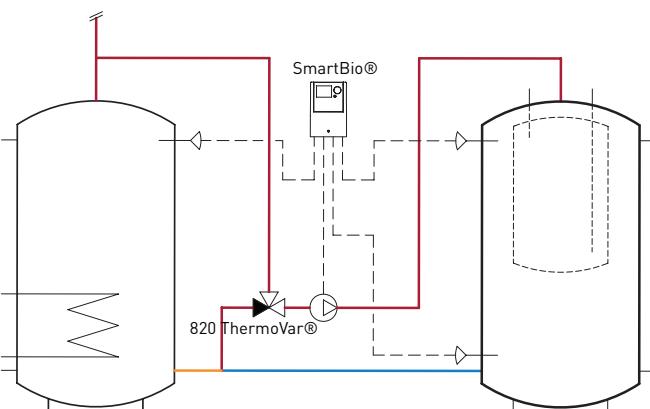
## HYDRAULIC SYSTEM 1.2



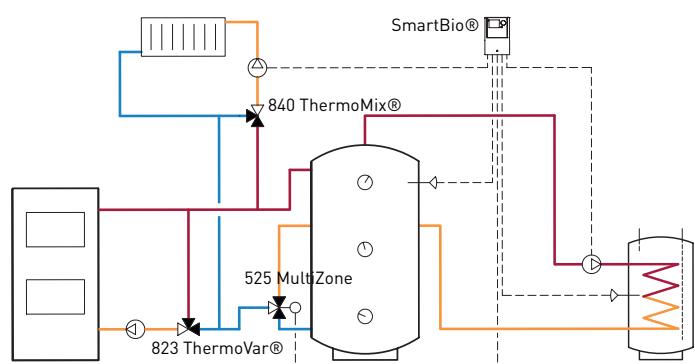
## HYDRAULIC SYSTEM 3



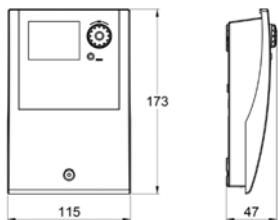
## HYDRAULIC SYSTEM 2



## HYDRAULIC SYSTEM 4



## LK 160 SmartBio®



Article no.	Type	Weight kg
181234	LK 160 SmartBio standard kit	0.7
181233	LK 160 SmartBio® kit for hydraulic system 1	6.2

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
025017	Differential temperature controller SmartBio®	1
181186	Tank sensor PT 1000 Ø 6 mm - 4 m cable	2
187129	Circulating pump Grundfos Alpha1 25-60/130	3
187017	Ball valve F 1"	4
187018	Ball valve F 1 1/4"	5
187019	Ball valve 28 mm	6
180487	Check valve with double acting flow LK 970 ThermoBac DB	7
180812	Sensor pocket 150 mm	8
013025	Gasket EPDM 1 1/2" - Ø44 x Ø27 x 2 mm	9
181553	LK 824 ThermoVar® M 1 1/2", 45 °C	10
181554	LK 824 ThermoVar® M 1 1/2", 55 °C	10
181555	LK 824 ThermoVar® M 1 1/2", 61 °C	10
181556	LK 824 ThermoVar® M 1 1/2", 66 °C	10
181557	LK 824 ThermoVar® M 1 1/2", 72 °C	10
180810	Connection M 1 1/2" x M 1 1/2", L30 mm	11

# Differential Temperature Controller

## LK 162 SmartStove®

- With the alarm function in case of over temperature, you can enjoy the warmth without worrying



### TECHNICAL DATA

Voltage	230 VAC, 50 Hz
Power consumption	3,5 VA
Protection type	IP 20
Protection class	II
Display	TFT backlit colour display, 47 x 35 mm
Triac outputs	230 VAC $\pm$ 10%, 1 A, 200 VA
Relay output	Max. 240 VAC, 4 A
Sensors	PT 1000
High-efficiency pump	Analog output 0 -10 V, max. 10 mA PWM output 100 Hz - 2 kHz
Type approval certificate	CE

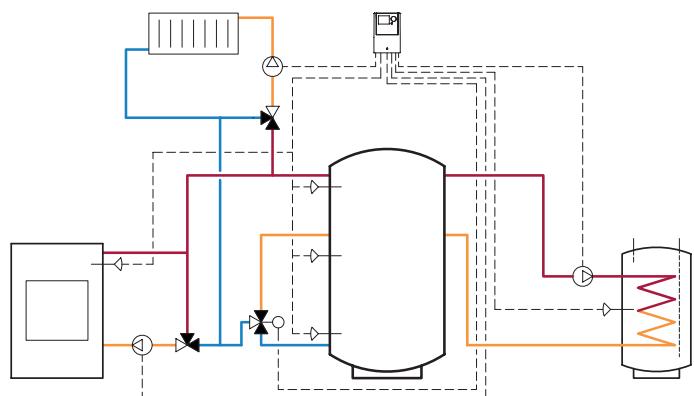
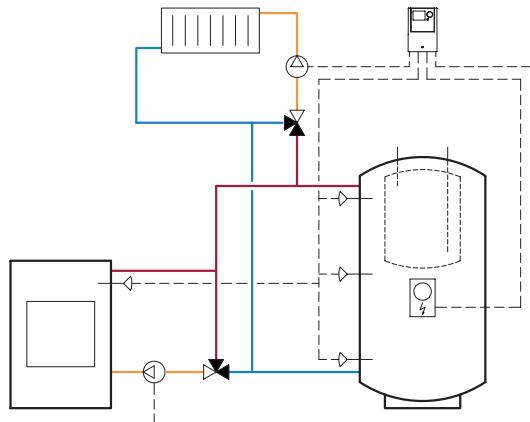
LK 162 SmartStove® is a biomass controller for multi-fuel water containing stoves with buffer tanks. The controller has a number of preset hydraulic systems for different installations.

For indication of the active hydraulic system and the current temperatures in stove and buffer tank the controller is equipped with a coloured full graphics display which is permanently backlit.

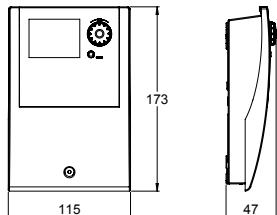
LK 162 SmartStove® can control the charge pump of a loading unit, the circulator in a heating loop, high-efficiency pumps and an additional heat source.

### FEATURES

- Acoustic alarm and indication in the display if over temperature should occur in stove or buffer tank
- A temperature sensor in the stove controls the charge pump of the loading unit which means that no fluegas thermostat is needed
- Pump delay function. The charge pump in the loading unit does not start until the stove has reached a certain temperature. This saves energy, prevents tarring and considerably prolongs the life-time of the stove
- Dynamic pump control can be activated when the loading unit is equipped with a speed-controlled pump. The pumpcontrol keeps the flow at a constant temperature
- Economy or comfort mode can be selected to optimize energy efficiency in the potable hot water boiler and/or in the heating system
- Controls an additional heat source
- Delay function for the additional heat source
- 7 hydraulic systems which can be mirrored
- 2 outputs for speed-controlled pumps with PWM and/ or analogue signal
- 6 terminals for temperature sensors
- 1 floating change-over contact
- SD card slot for data logging and software update
- Legionella prevention
- Pump exercise
- Freeze protection



## LK 162 SmartStove®



Article no.	Type	Weight kg
181708	LK 162 SmartStove®	0.7

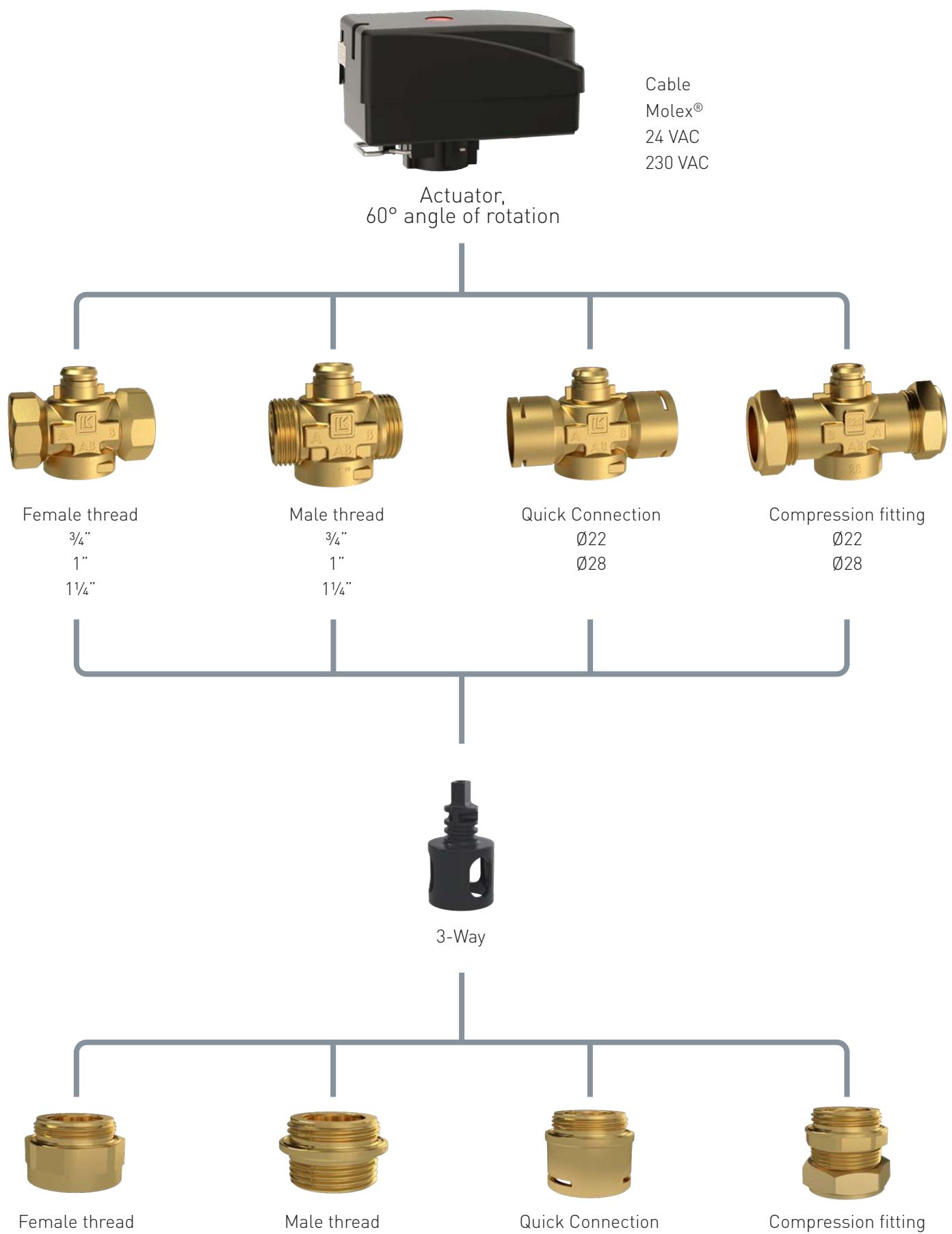
Four sensors included (PT 1000 - 4 m cable).

## SPARE PARTS AND ACCESSORIES



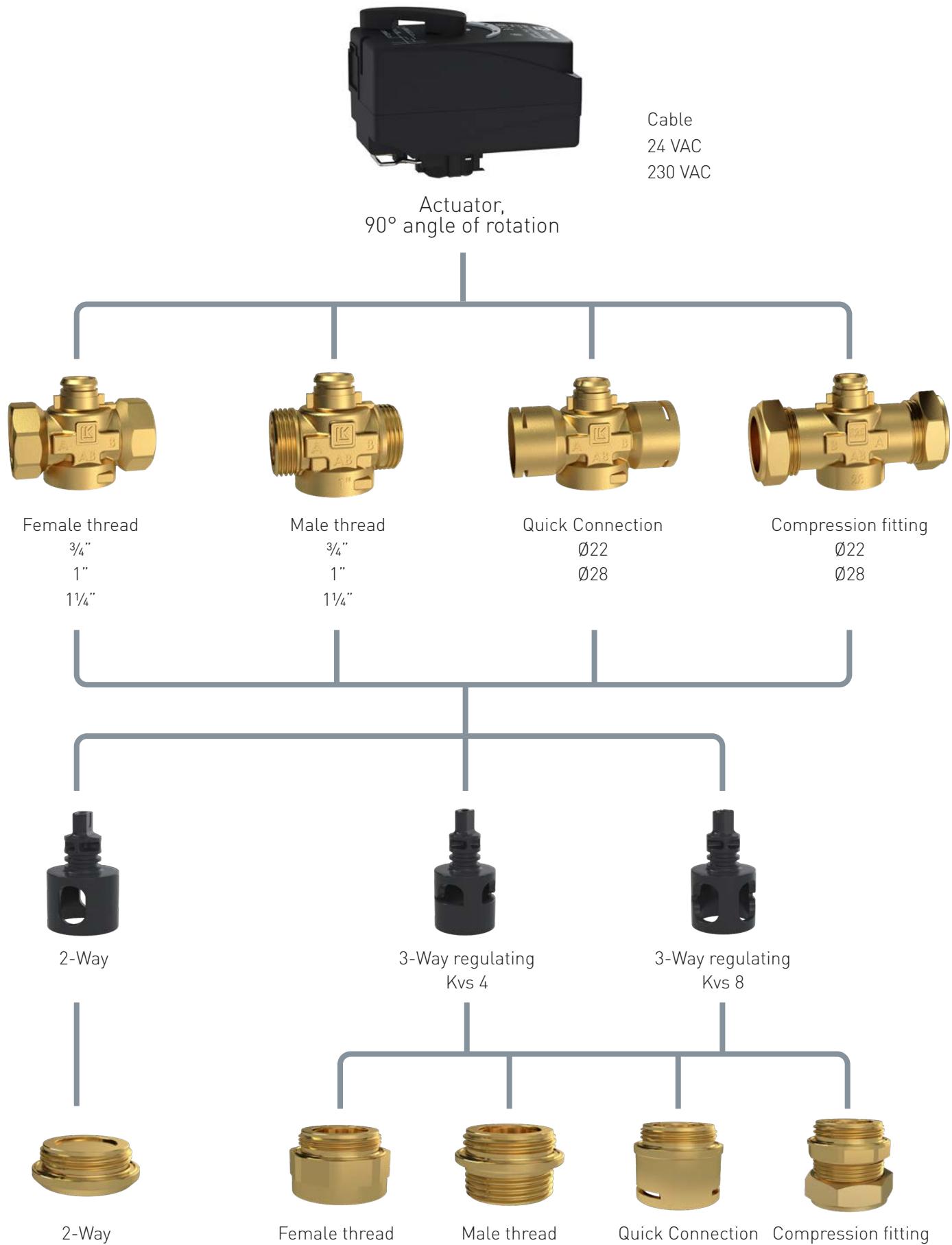
Article no.	Article	Position
181186	Tank sensor PT 1000 Ø 6 mm - 4 m cable	1
180812	Sensor pocket 150 mm	2

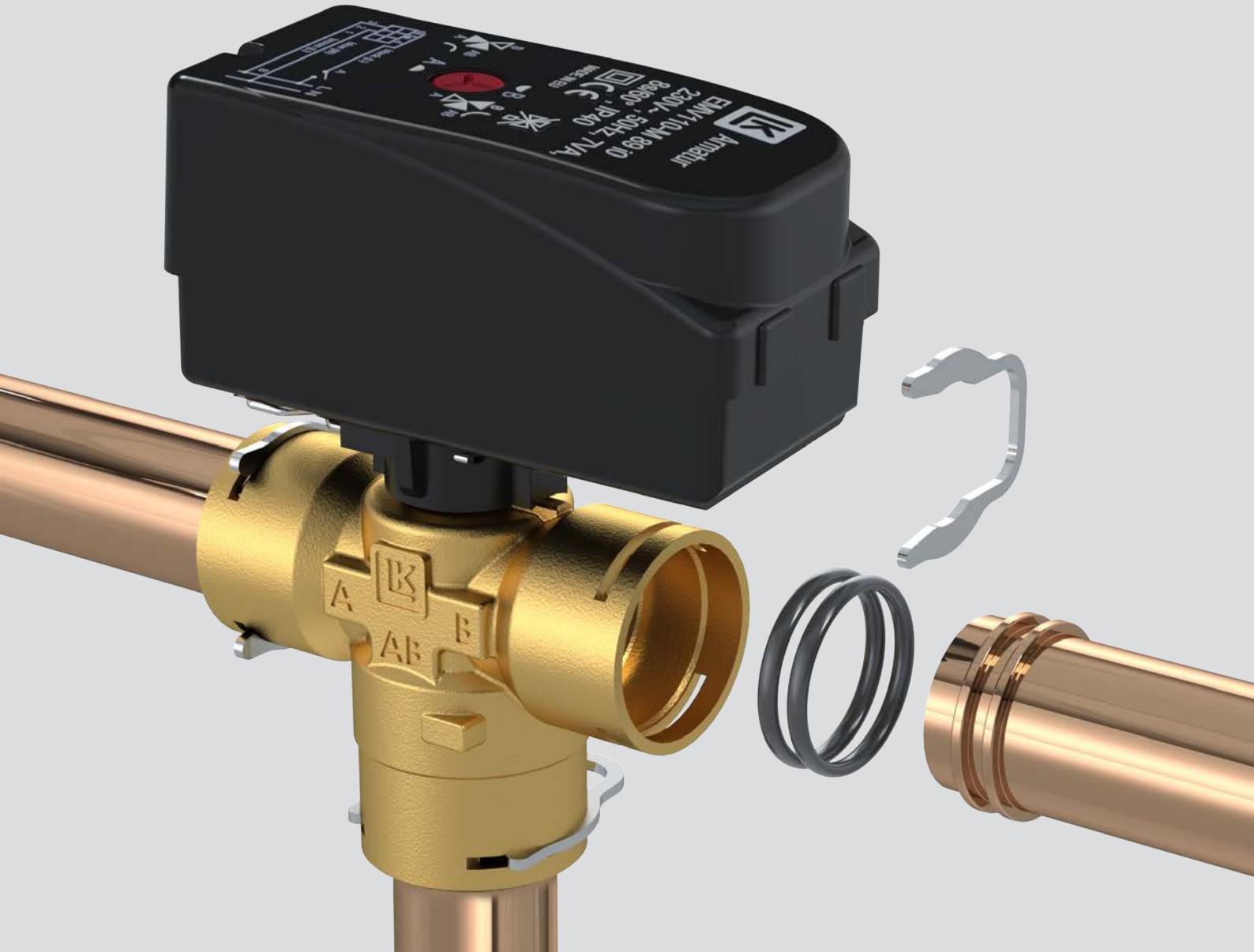
# Design your own zone valve



For more information please contact our Sales Department.

# Design your own valve





## Connect quickly and securely

Quick connection solutions save assembly time and ensure correct installation – every time.

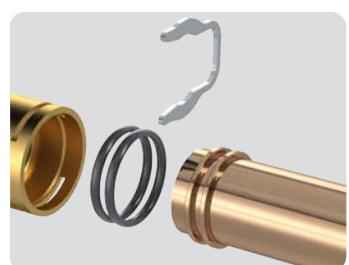
To meet a growing trend for products that can be installed quickly and easily, we have developed a quick-connection solution for the OEM industry.

A specially designed end form with two O-rings to seal the joint between the two elements. By using double O-rings, we create a more secure, guaranteed sealed connection. The pipe is held in place in the valve by a locking pin.

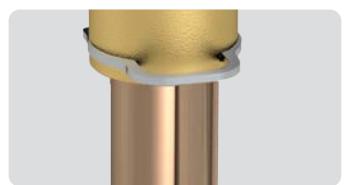
End forming can be performed on copper or stainless steel pipes with dimensions Ø 22 mm and Ø 28 mm

### END FORMING FOR DOUBLE O-RINGS TAKES INSTALLATION TO A NEW LEVEL

- Quick installation
- Exactly the same assembly procedure every time
- Allows for any tolerances
- Double O-rings for a guaranteed sealed connection



Double O-rings for guaranteed sealed connections that allow for tolerances.



Quick and secure fastening with locking pin

# Zone Valve

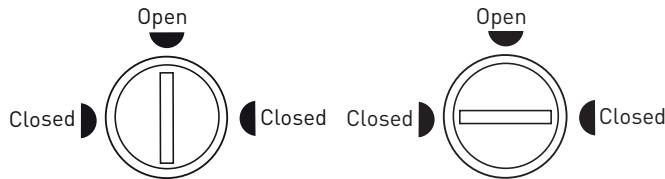
## LK 525 MultiZone 2W

- Simple and flexible assembly with clip system
- Actuators are available as normally closed (NC) or normally open (NO). Direction is displayed on the actuator



### TECHNICAL DATA

Angle of rotation	90°/360°
Leakage	< 0.1% of Kvs at 100 kPa
Operation time	12 seconds (90°)
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Working temperature	Min. 5 °C/Max. 80 °C (90 °C briefly)
Ambient temperature	Min. 1 °C/Max. 60 °C
Thread standard	Rp - female thread, G - male thread, ISO 228/1
Protection type	IP 44
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Electrical connection	Fixed wire
Signal connector	Single pole SPST
Cable specification	Dimension 3 x 0,75 mm <sup>2</sup>
Wire colours	Blue, brown, black
External insulation	PVC
Actuator	7 VA, 230 VAC, 50 Hz
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12164 CW614N
Material slide/spindle	PPS Composite
Type approval certificate	CE (Actuator only)



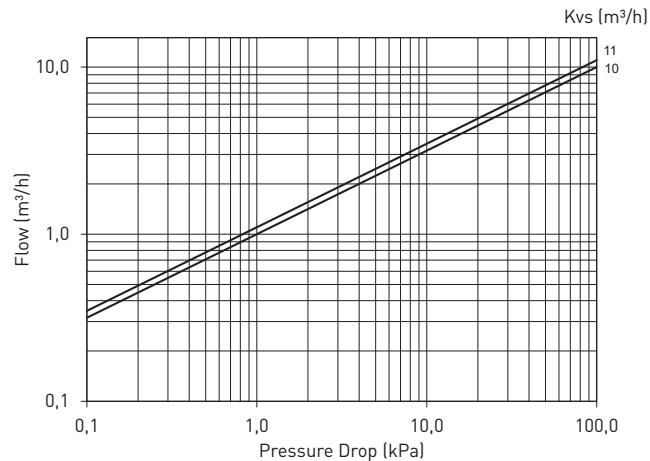
LK 525 MultiZone is a motorized 2-way zone valve for application in heating systems in which the flow through one or more zones is to be controlled. The zone valve has On/Off control and is designed with a turning slide which allows it to withstand a larger pressure difference and reduces the risk of it stalling after a long intermission. On the upper surface of the actuator is an indicator that shows which port is open or closed.

The zone valve must not be installed with the motor underneath the valve unit.

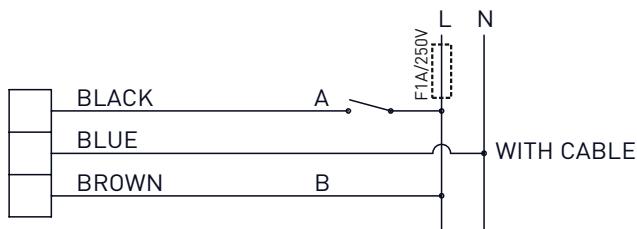
In case of a power failure, the valve cone stays in its current position. When the power is switched off, the valve can be manually set. Remove the motor and turn the spindle to your selected position. When the power is restored, turn the valve back to its original position and reinstall the motor.

Please note that the motor can be installed in only one position.

### CAPACITY DIAGRAM

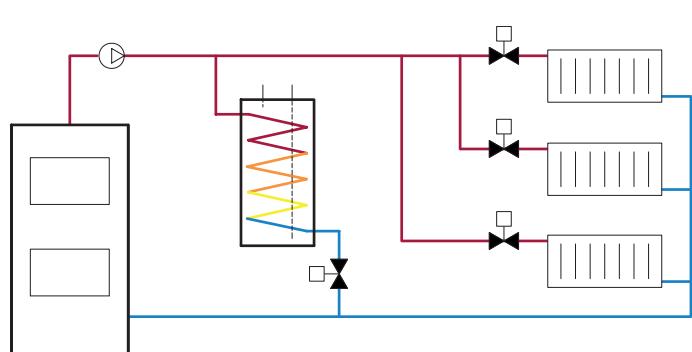


### WIRING DIAGRAM

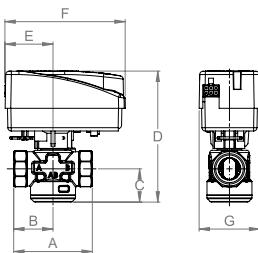


Valve and motor are available in closed or open position. (NC; Normally Closed or NO; Normally Open)

### WIRING DIAGRAM

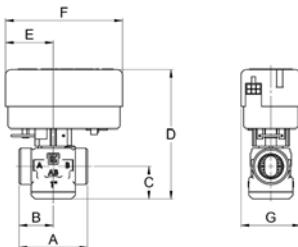


## LK 525 2W - Female thread



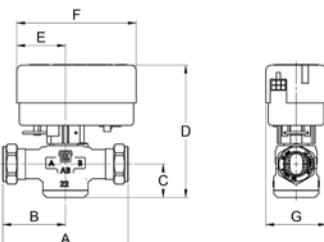
Article no.	Type	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066246	NO	F 3/4"	10.0	70	35	30	118	43	107	54	0.2
066247	NO	F 1"	11.0	74	37	30	118	43	107	54	0.3
066248	NO	F 1 1/4"	11.0	84	42	30	118	43	107	54	0.6
066423	NC	F 3/4"	10.0	70	35	30	118	43	107	54	0.2
066424	NC	F 1"	11.0	74	37	30	118	43	107	54	0.3
066425	NC	F 1 1/4"	11.0	84	42	30	118	43	107	54	0.6

## LK 525 2W - Male thread



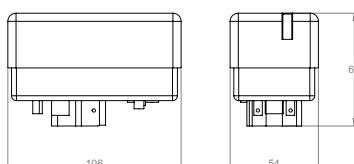
Article no.	Type	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066112	NC	M 3/4"	10.0	70	35	30	118	43	107	54	0.2
066102	NC	M 1"	11.0	62	31	30	118	43	107	54	0.3
066103	NC	M 1 1/4"	11.0	74	37	30	118	43	107	54	0.6
066115	NO	M 3/4"	10.0	70	35	30	118	43	107	54	0.2
066113	NO	M 1"	11.0	62	31	30	118	43	107	54	0.3
066114	NO	M 1 1/4"	11.0	74	37	30	118	43	107	54	0.6

## LK 525 2W - Compression fitting



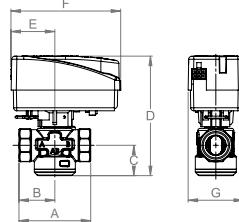
Article no.	Type	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066104	NC	22 mm	11.0	110	55	30	118	43	107	54	0.4
066105	NC	28 mm	11.0	110	55	30	118	43	107	54	0.6
066116	NO	22 mm	11.0	110	55	30	118	43	107	54	0.4
066119	NO	28 mm	11.0	110	55	30	118	43	107	54	0.6

## LK 525 - Actuator



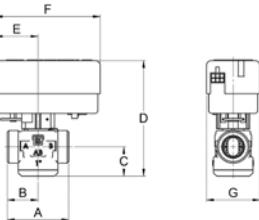
Article no.	Type	Connection	Torque	Weight kg
066111	NC	EMV 110-K SPST Actuator 230 VAC, Cable 1 m	5 Nm	0.3
066199	NO	EMV 110-K SPST Actuator 230 VAC, Cable 1 m	5 Nm	0.3

## LK 525 2W SET – incl. Actuator 230VAC 1m Cable - Female thread



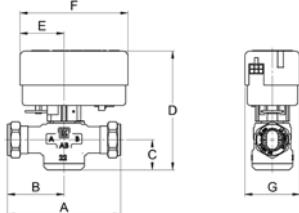
Article no.	Type	Dim.	Kvs m³/h	Torque	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066442	NC	F 3/4"	10.0	5 Nm	70	35	30	118	43	107	54	0.5
066443	NC	F 1"	11.0	5 Nm	62	31	30	118	43	107	54	0.6

## LK 525 2W SET – incl. Actuator 230VAC 1m Cable - Male thread



Article no.	Type	Dim.	Kvs m³/h	Torque	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066437	NC	M 3/4"	10.0	5 Nm	70	35	30	118	43	107	54	0.5
066438	NC	M 1"	11.0	5 Nm	62	31	30	118	43	107	54	0.6
066439	NC	M 1 1/4"	11.0	5 Nm	70	35	30	118	43	107	54	0.9

## LK 525 2W SET – incl. Motor 230VAC 1m Cable - Compression fitting



Article no.	Type	Dim.	Kvs m³/h	Torque	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066440	NC	22 mm	11.0	5 Nm	110	55	30	118	43	107	54	0.7
066441	NC	28 mm	11.0	5 Nm	110	55	30	118	43	107	54	0.9

# Mixing / Diverting Valve

## LK 525 MultiZone 3R

- Low internal leakage
- The slide is designed to provide accurate regulation at low flows
- Click system for actuator



### TECHNICAL DATA

Voltage	230 VAC, 50 Hz
Power consumption	5 VA
Angle of rotation	90°
Torque	5 Nm
Leakage	< 0.1% of Kvs at 100 kPa
Operation time	110 s
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Working temperature	Min. 5 °C/Max. 80 °C (90 °C briefly)
Ambient temperature	Min. 5 °C/Max. 55 °C
Manual override	Yes
Thread standard	G - male thread, ISO 228/1
Protection type	IP 44
Protection class	II
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Electrical connection	Fixed wire
Signal connector	3 point SPDT
Cable specification	3 x 0.75 mm <sup>2</sup>
Wire colours	Blue, brown, black
External insulation	PVC
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12164 CW614N
Material slide/spindle	PPS Composite
Type approval certificate	CE (Actuator only)

LK 525 MultiZone 3R is a 3-way valve that can be used as a mixing valve or as a diverting valve in heating systems.

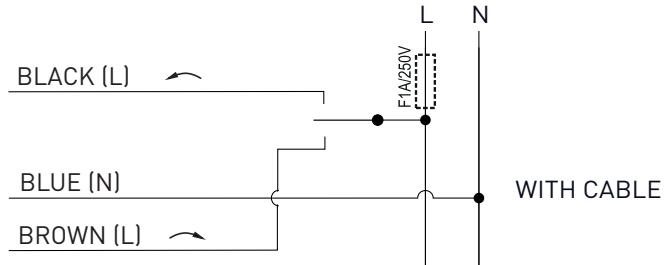
The valve is constructed so that the leakage is less than 0.1% of Kvs at 100 kPa. It also has a split linear characteristic which means that the regulation is good even at low flows and capacities.

The valve must not be installed with the motor underneath the valve unit. Please note that the motor can be installed in only one position.

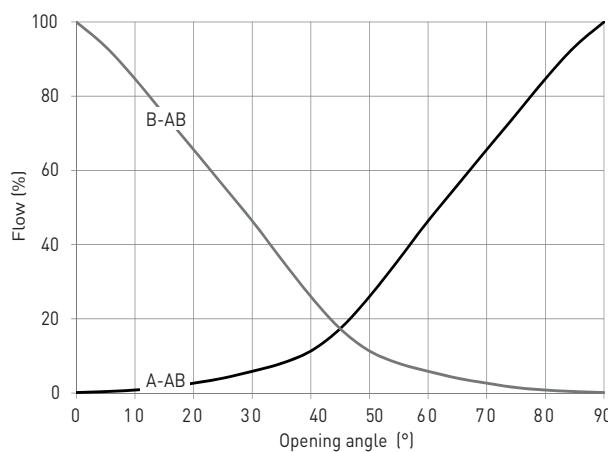
The motor operates anti clockwise when the black conductor is powered and clockwise when the brown conductor is powered.

The valve requires no maintenance but the installation should be checked regularly.

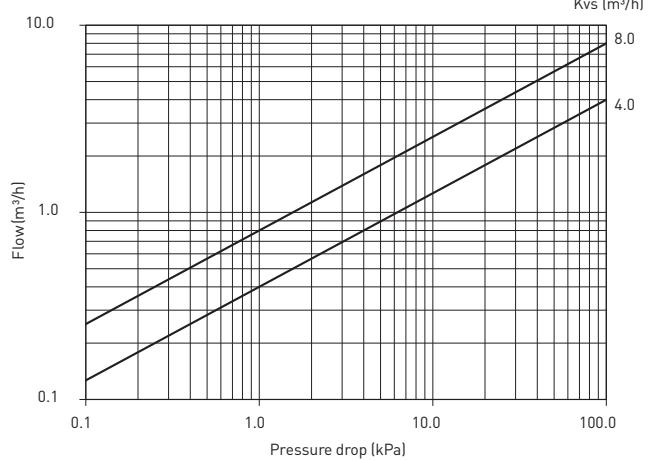
### WIRING DIAGRAM

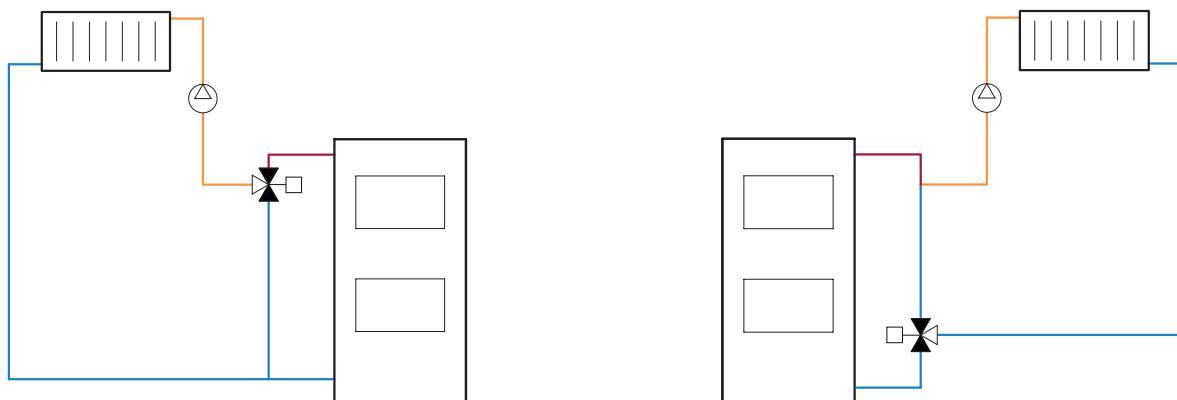


### VALVE CHARACTERISTICS

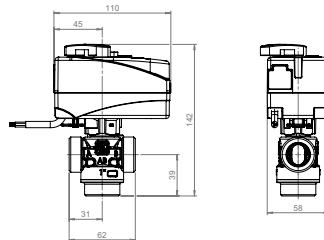


### CAPACITY DIAGRAM





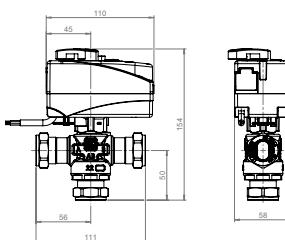
LK 525 3R - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066077	M 1"	8.0	62	31	39	132	46	109	58	0.3

Other dimensions and Kvs on request.

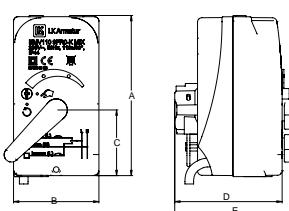
LK 525 3R - Compression fitting



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066079	22 mm	8.0	110	55	50	143	46	109	58	0.4
066080	28 mm	8.0	110	55	54	147	46	109	58	0.6

Other dimensions and Kvs on request.

LK 940 C



Article no.	Connection	Voltage	Torque	Operation time	A mm	B mm	C mm	D mm	E mm	Weight kg
066127	1 m cable	230 V	5 Nm	110 s*	109	58	45	73	85	0.4
066128	1 m cable 0-10 VDC	24 VAC	5 Nm	110 s*	109	58	45	73	85	0.4

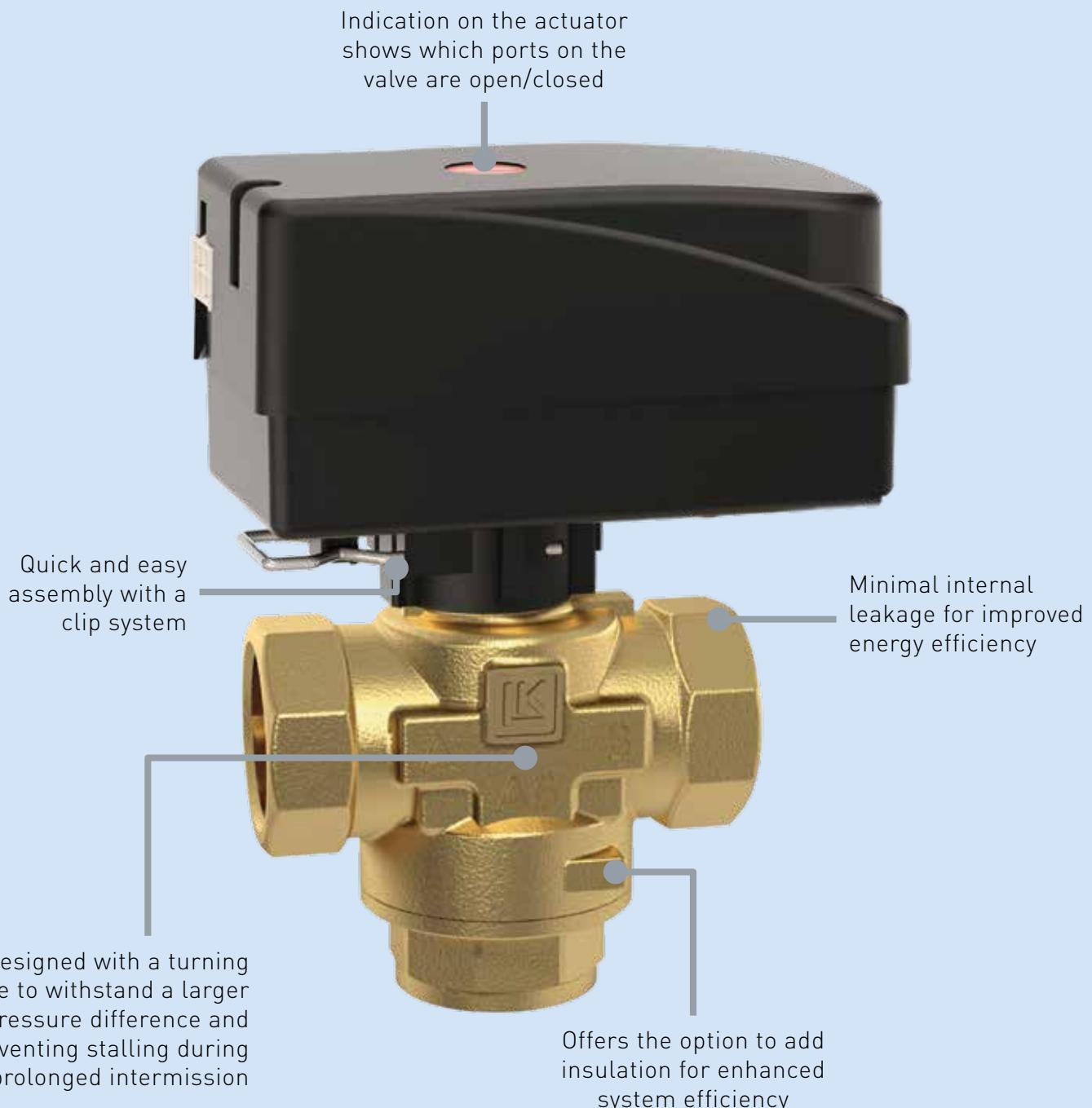
\*Other operation times on request.

#### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187202	Insulation	1

# LK 525 MultiZone 3W



**LK 525 MultiZone 3W** is a motorized 3-way zone valve with a unique turning slide which allows it to withstand a larger pressure difference and reduces the risk of it stalling after a long intermission. This makes it especially suited for heat pump applications where there can be long intermissions between the changes to the direction of the flow during the warm season. Plus, its minimal internal leakage and quick clip system assembly make it a reliable choice for precise On/Off control.

# Zone Valve

## LK 525 MultiZone 3W

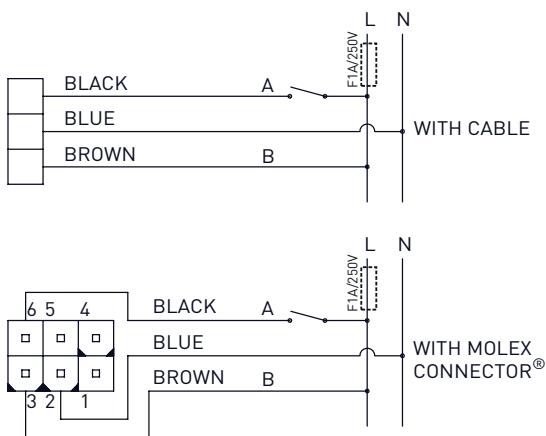
- Turning slide to reduce risk of stalling
- Minimal internal leakage
- Quick and easy assembly with clip system



### TECHNICAL DATA

Angle of rotation	60°/360°
Leakage	< 0.1% of Kvs at 100 kPa
Leakage Solar	< 0.5% of Kvs at 100 kPa
Operation time	8 seconds (60°)
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Working temperature Kvs 13:	Min. 5 °C/Max. 80 °C (90 °C briefly)
Cooling/Heating (inkl. adapter):	Min. 5 °C/Max. 70 °C (80 °C briefly)
Ambient temperature	Min. 1 °C/Max. 60 °C
Thread standard	Rp - female thread, G - male thread, ISO 228/1
Protection type	IP 40 (Molex®) / IP 44 (Cable)
Media 1	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Media 2	Kvs 13 - Water
Electrical connection	Fixed wire alternatively Molex® or Molex®-compatible connector, 6-circuit
Signal connector	Single pole SPST
Cable specification	Dimension 3 x 0.75 mm²
Wire colours	Blue, brown, black
External insulation	PVC
Actuator	7 VA, 230 VAC, 50 Hz 7 VA, 24 VAC, 50 Hz 9 VA, 230 VAC, 50 Hz (50802229)
Material valve body	Brass EN 12165 CW617N
Material external cover	Brass EN 12164 CW614N
Material slide/spindle	PPS Composite
Type approval certificate	CE (Actuator only)

### WIRING DIAGRAM



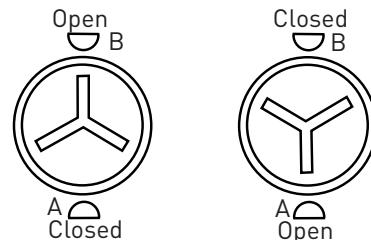
LK 525 MultiZone 3W is a motorized 3-way valve for On/Off control. The zone valve is designed with a turning slide which allows it to withstand a larger pressure difference and reduces the risk of it stalling after a long intermission. This makes it especially suited for heat pump applications where there can be long intermissions between the changes to the direction of the flow during the warm season. On the upper surface of the actuator is an indicator that shows which port is open.

Installing the 066177 plastic adapter between the valve unit and the motor protects the motor against condensation, icing and high temperatures.

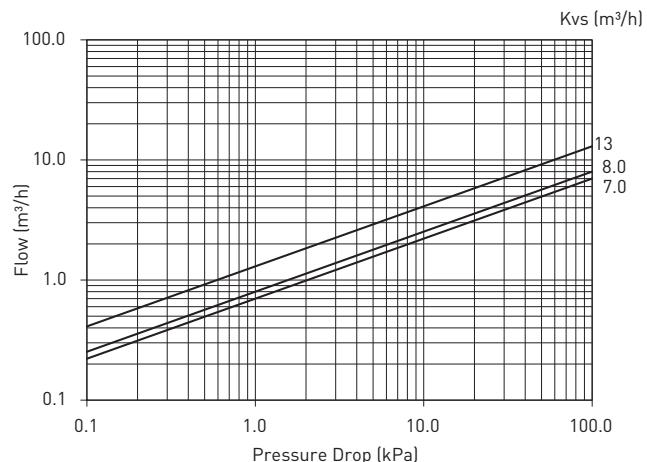
The zone valve must not be installed with the motor underneath the valve unit.

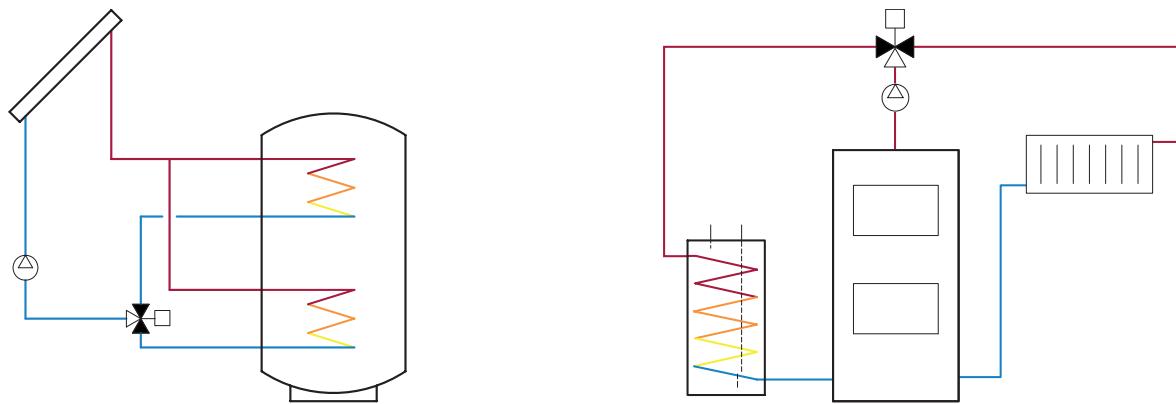
In case of a power failure, the valve cone stays in its current position. When the power is switched off, the valve can be manually set to the centre position, which distributes the flow between the heating and tap water circuits. Remove the motor and turn the spindle about 30° or turn until hot water flows through both valve ports. When the power is restored, turn the valve back to its original position and reinstall the motor.

Please note that the motor can be installed in only one position.

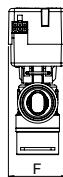
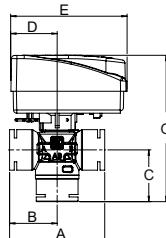


### CAPACITY DIAGRAM



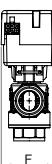
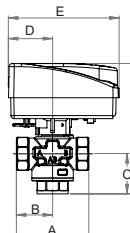


LK 525 3W - Quick Connection



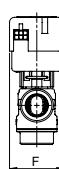
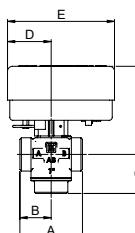
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
182306	Ø 22	8.0	84	42	46	43	107	54	135	0.3
182307	Ø 28	8.0	88	44	48	43	107	54	135	0.5

LK 525 3W - Female thread



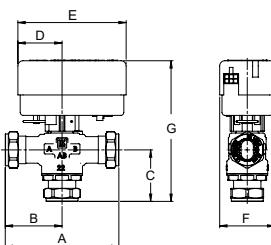
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066420	F 3/4"	7.0	70	35	39	43	107	54	126	0.3
066421	F 1"	8.0	74	37	40	43	107	54	127	0.3
066422	F 1 1/4"	8.0	74	42	45	43	107	54	132	0.6

LK 525 3W - Male thread



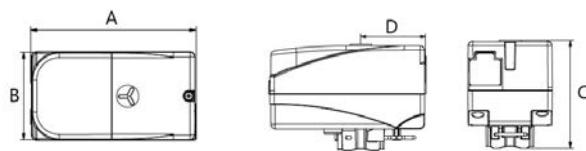
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066000	M 3/4"	7.0	70	35	39	43	107	54	127	0.3
066106	M 1"	8.0	62	31	39	43	107	54	127	0.3
066107	M 1 1/4"	8.0	74	37	40	43	107	54	128	0.6
066418	M 1 1/4"	13.0	80	40	40	43	107	54	120	0.7

## LK 525 3W - Compression fitting



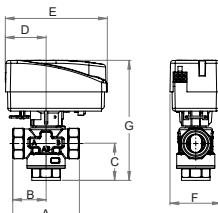
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066108	22 mm	8.0	110	55	50	43	107	54	138	0.4
066109	28 mm	8.0	110	55	54	43	107	54	142	0.6
066399	28 mm	13.0	100	50	52	43	107	54	140	0.7

## LK 525 3W - Actuator and Adaptor



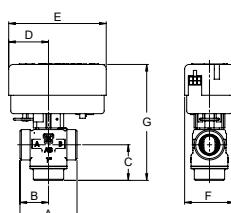
Article no.	Torque	Note	A mm	B mm	C mm	D mm	Weight kg
066177		LK 525 3W Adapter Polar / Solar					0.03
066060	5 Nm	EMV 110-M SPST Actuator 230 VAC with Molex®	107	54	69	43	0.3
066061	5 Nm	EMV 110-K SPST Actuator 230 VAC with cable 1 m	107	54	69	43	0.3
066062	5 Nm	EMV 110-K SPST Actuator 230 VAC with cable 3 m	107	54	69	43	0.4
066063	5 Nm	EMV 110-M SPST Actuator 24 VAC with Molex®	107	54	69	43	0.3
50802229	5 Nm	EMV 110-M EX SPST Actuator 230 VAC with Molex®	109	58	74	45	0.3
066083		Cable-M 3x0.75 L=1 m with Molex®					0.1
066086		Cable-M 3x0.75 L=1.7 m with Molex®					0.1

## LK 525 3W SET - incl. Motor 230VAC 1m Cable - Internal thread



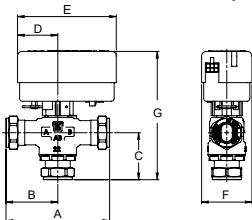
Article no.	Dim.	Kvs m³/h	Torque	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066433	F 3/4"	7.0	5 Nm	70	35	39	43	107	54	126	0.6
066434	F 1"	8.0	5 Nm	74	37	40	43	107	54	127	0.6
066435	F 1 1/4"	8.0	5 Nm	84	42	45	43	107	54	132	0.9

## LK 525 3W SET - incl. Motor 230VAC 1m Cable - Male thread



Article no.	Dim.	Kvs m³/h	Torque	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066426	M 3/4"	7.0	5 Nm	70	35	39	43	107	54	127	0.6
066427	M 1"	8.0	5 Nm	62	31	39	43	107	54	127	0.6
066428	M 1 1/4"	8.0	5 Nm	74	37	40	43	107	54	128	0.9
066429	M 1 1/4"	13.0	5 Nm	88	44	48	43	107	54	120	1.1

## LK 525 3W SET - incl. Motor 230VAC 1m Cable - Compression fitting



Article no.	Dim.	Kvs m³/h	Torque	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg
066430	22 mm	8.0	5 Nm	110	55	50	43	107	54	138	0.7
066431	28 mm	8.0	5 Nm	110	55	54	43	107	54	142	0.9
066432	28 mm	13.0	5 Nm	100	57	59	43	107	54	140	1.1

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187202	Insulation	1

# Zone Valve

## LK 527 MultiZone 2W

- Click system for actuator



### TECHNICAL DATA

Max. working pressure	3.2 MPa (32 bar)
Max. differential pressure	600 kPa (6 bar)
Working temperature	Min. 2 °C/Max. 110 °C
Ambient temperature	Min. 1 °C/Max. 55 °C
Thread standard	R - male thread, Rp - female thread, G - male thread
Protection type	IP 44
Media	Water - Glycol mixture max. 50%
Electrical connection	Fixed wire
Signal connector	2-Point SPST
Cable specification	Dimension 3 x 0,75 mm <sup>2</sup>
Wire colours	Blue, brown, black
External insulation	PVC
Actuator	230 VAC, 50 Hz
Material valve body	Brass EN 12165 CW617N
Material Ball	Brass CW617N
Type approval certificate	Actuator: CE Valve: DIN-DVGW*, WRAS*, ACS

\* Applies for LK 527 MultiZone 2W female thread

LK 527 MultiZone is a motorized 2-way ball valve with high flow capacity for applications in, for example heating, cooling and domestic water systems.

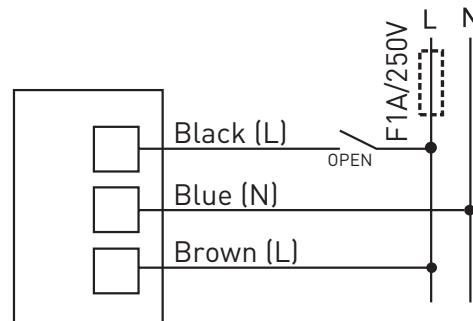
The zone valve has On/Off control and is controlled by 2-point signal.

Assembly/disassembly of actuator on the ball valve is simple and secure, using the clip-system. The zone valve must not be installed with the actuator underneath the valve unit.

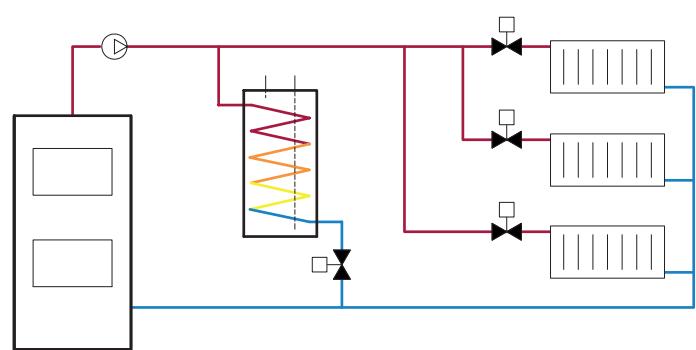
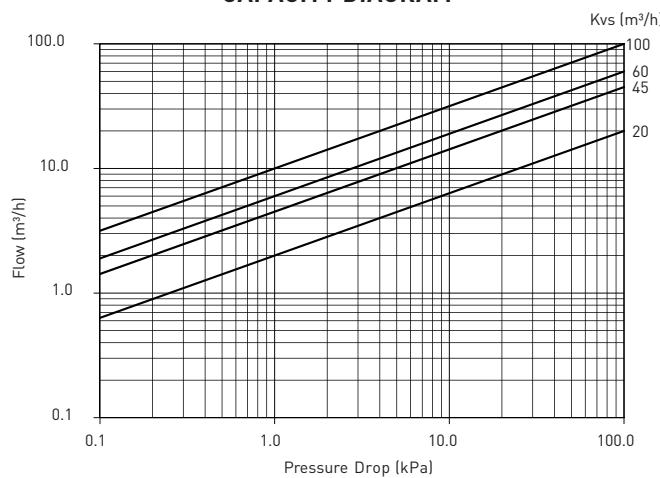
In case of a power failure, the valve stays in its current position. When the power is switched off, the valve can be manually set by the handle on the actuator.

Please note that the actuator can be installed in only one position.

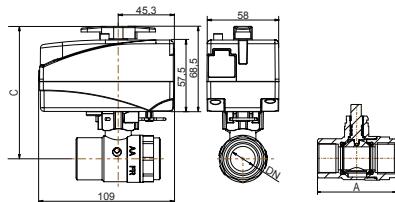
### WIRING DIAGRAM



### CAPACITY DIAGRAM



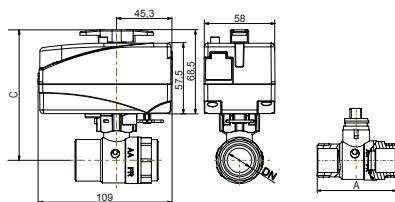
## LK 527 2W - Female Thread



Article no.	Dim.	Kvs m³/h	A mm	C mm	Weight kg
066263	F 1/2"	20.0	62	104	0.6
066264	F 3/4"	45.0	68	107	0.7
066265	F 1"	60.0	81	112	0.9
066266	F 1 1/4"	100.0	86	117	1.1

Other dimensions on request.

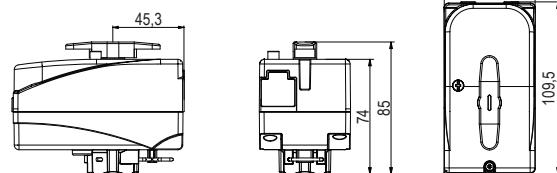
## LK 527 2W - Male thread



Article no.	Dim.	Kvs m³/h	A mm	C mm	Weight kg
066279	M 1"	45.0	74	107	0.8
066280	M 1 1/4"	60.0	82	112	1.0

Other dimensions on request.

## LK 527 - Actuator



Article no.	Connection	Voltage	Torque	Operation time	Weight kg
066282	2-point SPST output, with cable 1 m	230 V	5 Nm	12s / 90°	0.4
066283	2-point SPST output, with cable 1 m	230 V	5 Nm	30s / 90°	0.4

# Zone Valve

## LK 527 MultiZone 3W

- Click system for actuator



### TECHNICAL DATA

Max. working pressure	3.2 MPa (32 bar)
Max. differential pressure	600 kPa (6 bar)
Working temperature	Min. 2 °C/Max. 110 °C
Ambient temperature	Min. 1 °C/Max. 55 °C
Thread standard	R - male thread, Rp - female thread, G - male thread
Protection type	IP 44
Media	Water - Glycol mixture max. 50%
Electrical connection	Fixed wire
Signal connector	3-Point SPDT
Cable specification	Dimension 3 x 0.75 mm <sup>2</sup>
Wire colours	Blue, brown, black
External insulation	PVC
Actuator	230 VAC, 50 Hz
Material valve body	Brass EN 12165 CW617N
Material ball	Brass CW617N
Type approval certificate	Actuator: CE Valve: ACS

LK 527 MultiZone is a motorized 3-way ball valve for applications in, for example heating, cooling and domestic water systems.

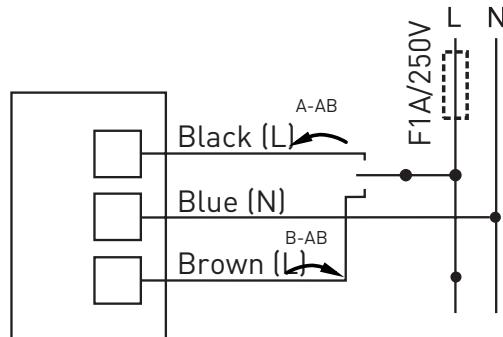
The zone valve is controlled by 3-point signal.

Assembly/disassembly of actuator on the ball valve is simple and secure, using the clip-system. The zone valve must not be installed with the actuator underneath the valve unit.

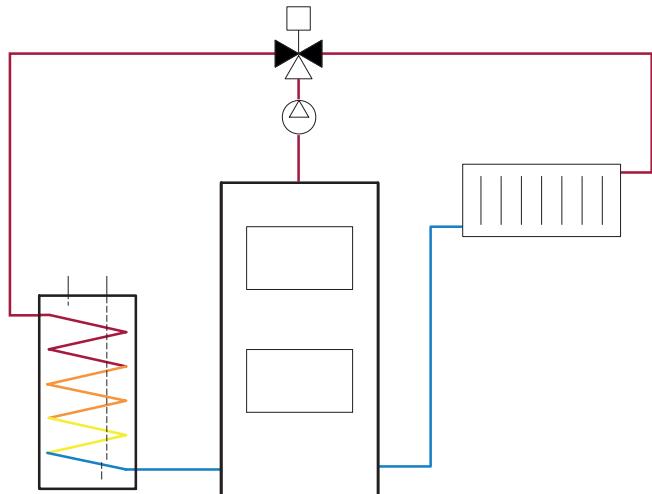
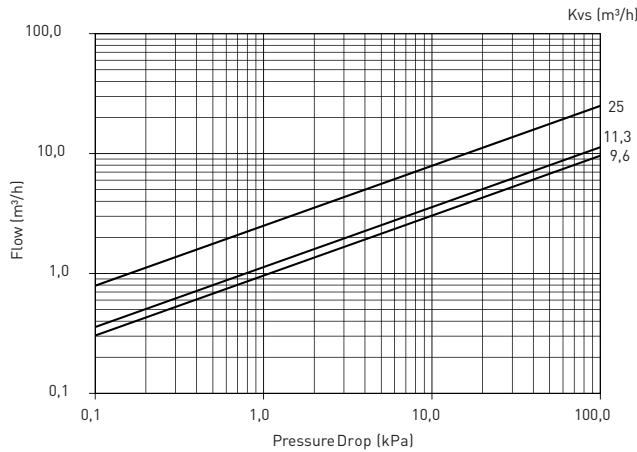
In case of a power failure, the valve stays in its current position. When the power is switched off, the valve can be manually set by the handle on the actuator.

Please note that the actuator can be installed in only one position.

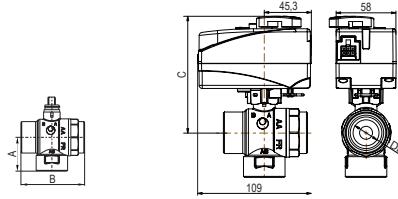
### WIRING DIAGRAM



### CAPACITY DIAGRAM

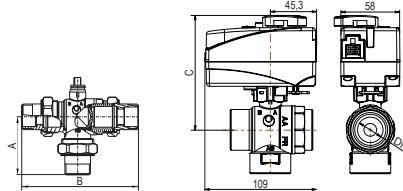


## LK 527 3W - Female Thread



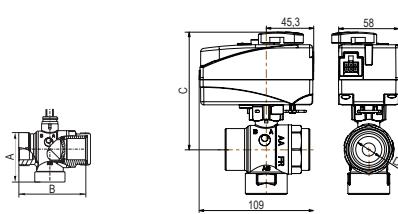
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	Weight kg
066252	F 3/4"	9.6	40	68	104	0.8
066253	F 1"	11.3	43	81	107	1.0

## LK 527 3W - Male Thread



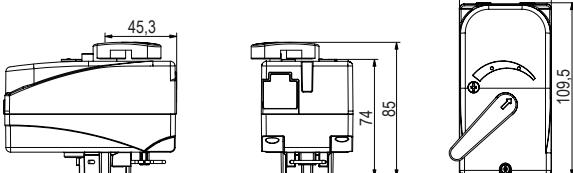
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	Weight kg
066257	M 1 1/2" with transition fitting M 1 1/4"	25.0	89	165	134	2.1

## LK 527 3W - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	Weight kg
066259	M 1 1/4"	11.3	43	85	107	1.0
066260	M 1 1/2"	25.0	52	90	134	1.3

## LK 527 - Actuator



Article no.	Connection	Voltage	Torque	Operation time	Weight kg
066284	3-point SPDT output, with cable 1 m	230 V	5 Nm	20s / 90°	0.4
066287	3-point SPDT output, with cable 1 m	230 V	5 Nm	110s / 90°	0.4

# Filling Valve

## LK 321 MultiFill® Solar



- Compact design
- Easy to install



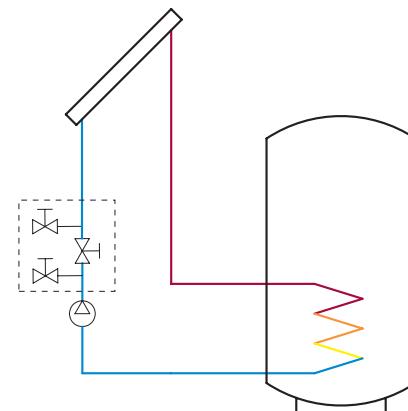
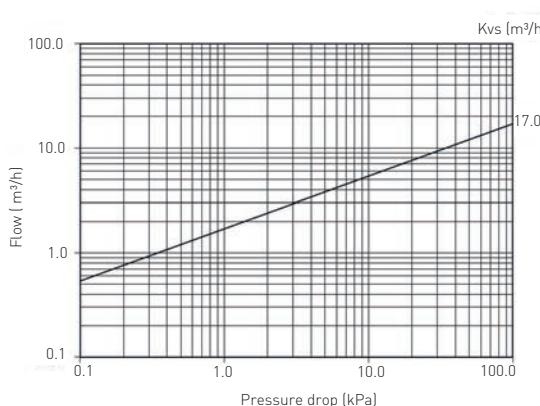
### TECHNICAL DATA

Max. working pressure	1,0 MPa (10 bar)
Working temperature	Min. -20 °C/Max. 120 °C (160 °C briefly)
Thread standard	G - male thread, ISO 228/1
Media	Water - Glycol mixture max. 50%
Material valve body	Brass EN 12165 CW617N
Material sealing	PTFE

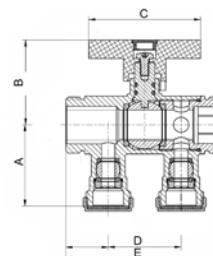
LK 321 MultiFill® Solar is a compact combination valve for easy filling of solar systems. The valve's compact design makes it easy to install even in tight spaces.

Two M 1" connections with surface for connection with flange, eg. 299189 see accessories. Two filling valves M 3/4".

### CAPACITY DIAGRAM



### LK 321 - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Weight kg
092320	M 1" x M 3/4"	17.0	48	50	66	43	93	0.65

### SPARE PARTS AND ACCESSORIES



#### Article no. Article Position

299189 Flanged pipe - 22 mm, F 1", L=120 mm 1



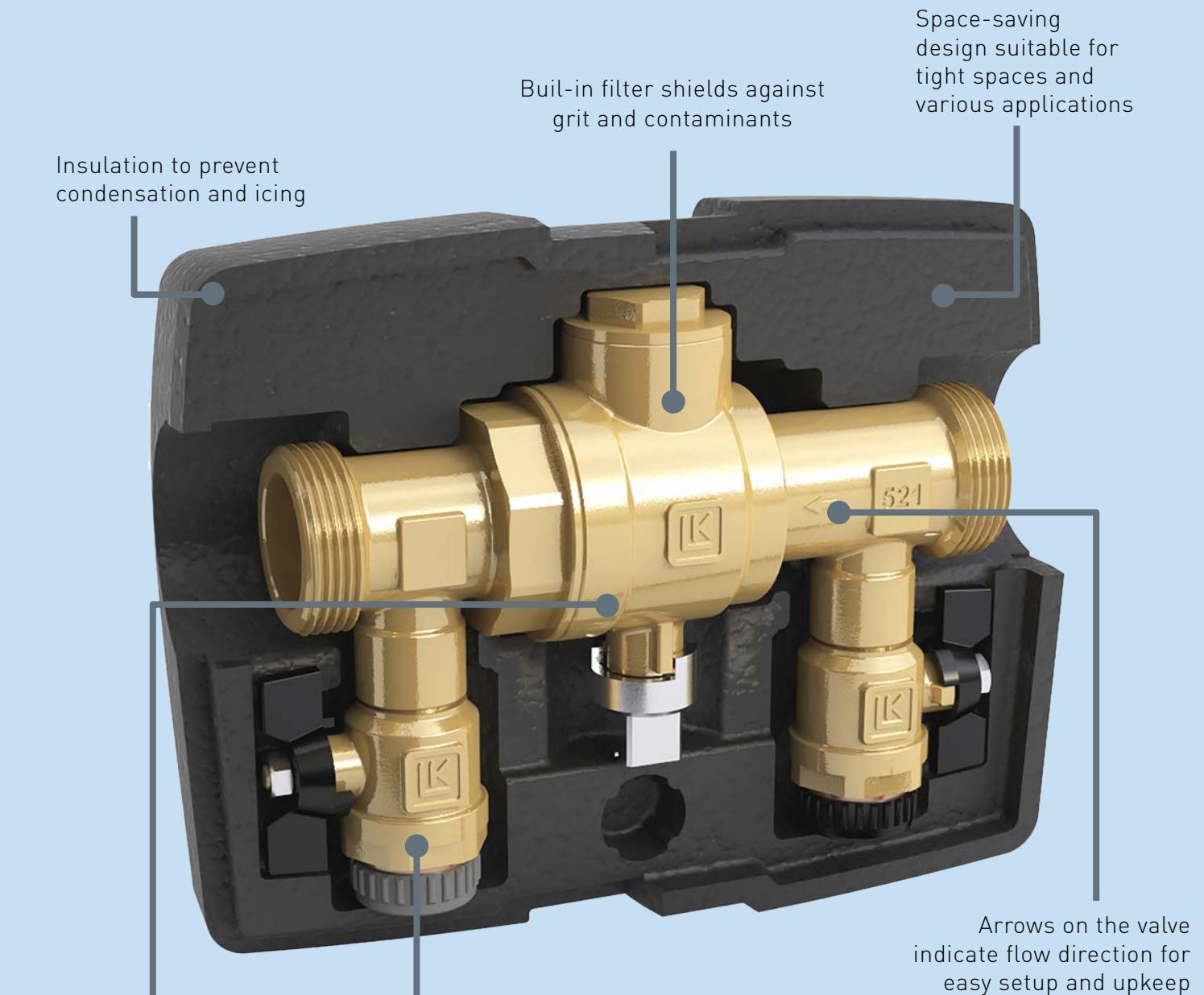
013035 Gasket C4400 1" 2



095410 Compression fitting 22 mm x M 25 3

095411 Compression fitting 18 mm x M 25 3

# LK 521 MultiFill®



Minimal pressure drop due to the placement of the filter in the ball, which saves energy

Integrated filter to prevent particles during filling

Arrows on the valve indicate flow direction for easy setup and upkeep

**LK 521 MultiFill®** simplifies refrigerant fluid filling for geothermal heat pump systems. Its built-in filter safeguards the evaporator against potential contaminants, while the compact design allows easy installation in tight spaces. Insulation protects against condensation and icing. This versatile valve can be used in various applications requiring filling and filtration.

# Filling Valve

## LK 521 MultiFill®



- Compact design
- Insulation protects against condensation and icing
- Minimal pressure drop due to the placement of the filter in the ball



### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. -20 °C/Max. 80 °C
Mesh opening filter	Main valve DN25, DN32: 0,6 mm <sup>2</sup> Main valve DN50: 1,0 mm <sup>2</sup> Fillingvalve DN25, DN32: 0,7 mm <sup>2</sup> Fillingvalve DN50: 0,7 mm <sup>2</sup>
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50%
Media 2	Water - Glycol mixture max. 30%
Media 3	Water - Ethanol mixture max. 30% Ethanol mixture - Working temperature: Max. 60 °C
Material valve body	Brass EN 12165 CW617N
Material insulation	Expanded Polystyrene EPS
Material filter element	Main valve: Plastic, Stainless steel Filling valve: Stainless steel
Material sealing	EPDM

LK 521 MultiFill® is a combination valve for easy filling of refrigerant fluid into ground source heat systems. The valve has a filter to protect the evaporator against possible grit. Its compact construction allows it to be installed in tight spaces. The valve comes with an insulation to protect against condensation and possible icing. LK 521 MultiFill® can also be used in other applications where filling and filtration are required.

Arrows on the valve body indicate the direction of the flow. The enclosed insulation should be used. Apart from cleaning the filter no maintenance is required.

### LK 521 MultiFill® 25

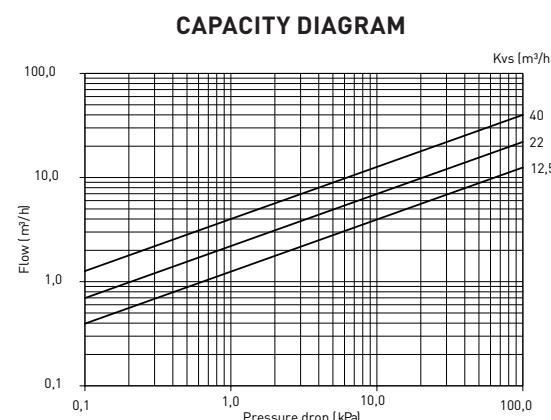
for heat pumps, max. 12 kW

### LK 521 MultiFill® 32

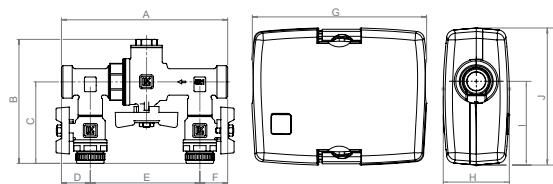
for heat pumps, max. 30 kW

### LK 521 MultiFill® 50

for heat pumps, max. 50 kW



## LK 521 - Male thread



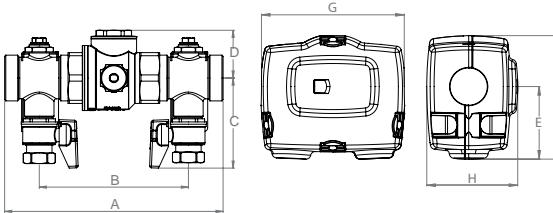
Article no.	Dim.	Dim. 2	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Weight (kg)
091480	M 1"	M 3/4"	12.5	170	127	83	29	108	29	218	83	105	171	1.3
091481	M 1 1/4"	M 3/4"	22.0	173	136	87	29	115	29	218	83	105	171	1.7

Dimension 1 - Pipe connection to collector hose

Dimension 2 - Connection for filling of fluid

Dimensions according to dimensional drawings are guidance and not part of the specification

## LK 521 - Male thread



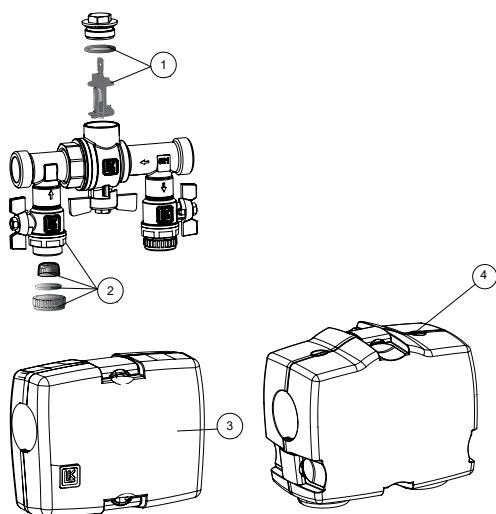
Article no.	Dim.	Dim. 2	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Weight (kg)
091483	M 2"	M 1"	40.0	284	178	118	49	156	265	308	195	4.6

Dimension 1 - Pipe connection to collector hose

Dimension 2 - Connection for filling of fluid

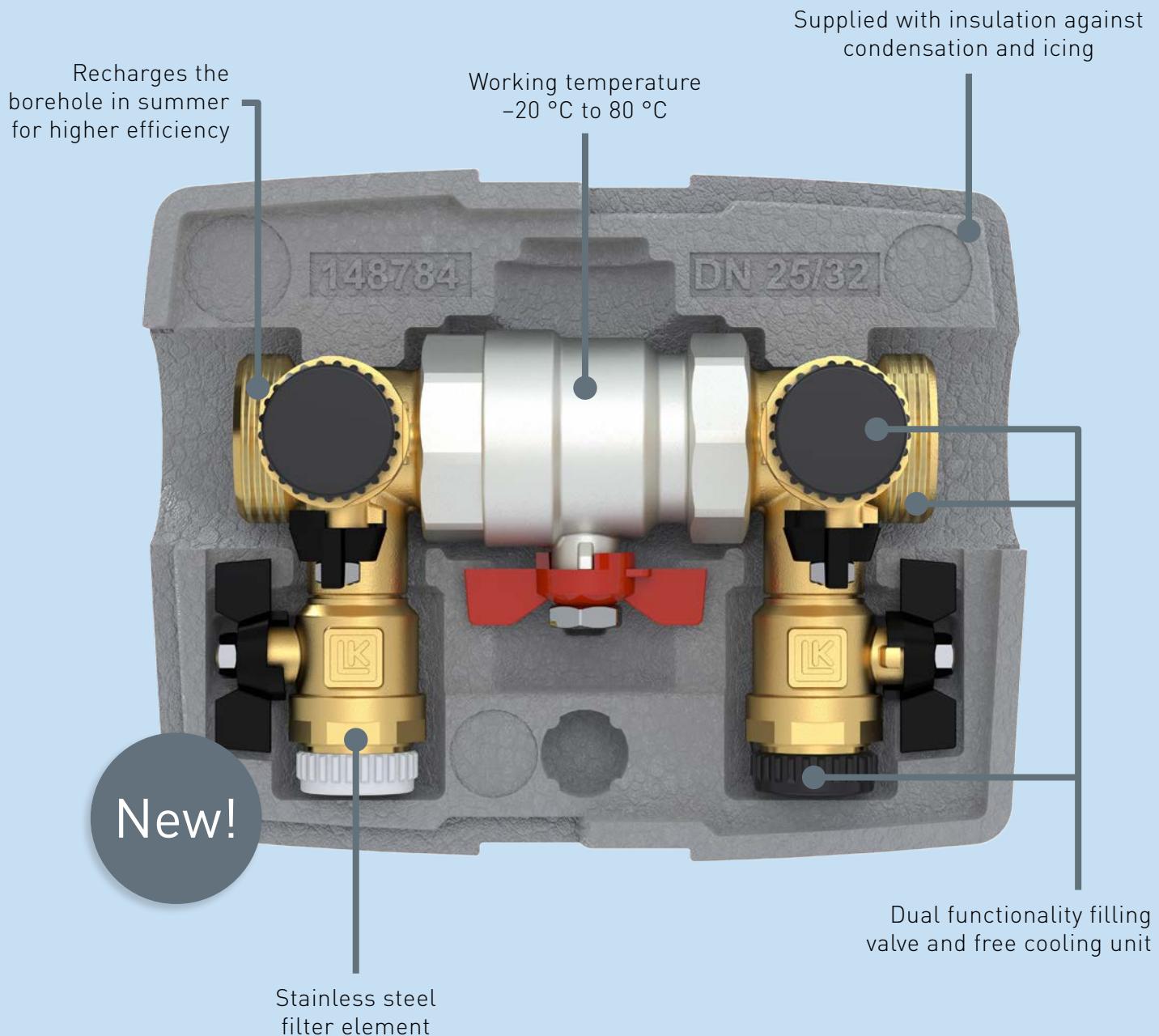
Dimensions according to dimensional drawings are guidance and not part of the specification

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095070	Filter and sealing DN 25	1
095071	Filter and sealing DN 32	1
095073	Ball valve incl. filter	2
095072	LK Insulation, 521 DN 25-32	3
187309	LK Insulation, 521 DN 50	4

# LK 524 MultiFill® Plus



**LK 524 MultiFill® Plus** combines a refrigerant filling valve and a free cooling unit in one compact body. Fill the collector loop and route brine to a fan coil for natural ground cooling, recharging the borehole in summer to boost heat pump performance. Supplied with insulation to prevent condensation and icing, and sized for quick installation in tight spaces.

# Filling Valve

## LK 524 MultiFill® Plus



- Recharges the borehole in summer
- Dual functionality
- Compact and easy to install even in tight spaces



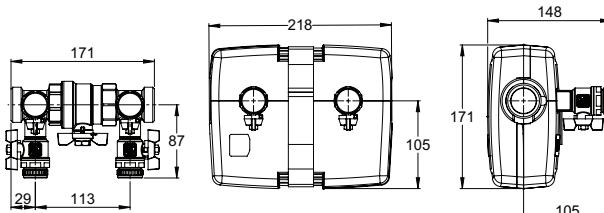
### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. -20 °C/Max. 80 °C
Mesh opening filter	0.7 mm <sup>2</sup>
Thread standard	G - male thread
Media 1	Water - Glycol mixture max. 50%
Media 2	Water - Ethanol mixture max. 30% Working temperature: Max. 60 °C
Material valve body	Brass EN 12165 CW617N
Material insulation	Expanded Polystyrene EPS
Material filter element	Stainless Steel
Material sealing	EPDM
Material ball valve	Stainless steel

LK 524 MultiFill®Plus is a compact combination valve with 2 connections for easy filling of the brine in the collector hose for geothermal heat pumps and 2 connections to lead the brine in the collector hose to a fan coil unit so that you can cool your home with the cold that is naturally found in the ground. In addition, the borehole is recharged during the summer, which increases the performance of the heat pump.

LK 524 is supplied with insulation to protect against condensation and possible icing. The valve's compact design makes it easy to install even in tight spaces.

### LK 524 Plus - Male thread



Article no.	Dim.	Dim. 2	Kvs m <sup>3</sup> /h	Weight kg
092398	M 1 1/4"	M 3/4"	22	2.3

Dimension 1 - Pipe connection to collector hose

Dimension 2 - Connections for filling of fluid to heat pump and to a fan coil unit

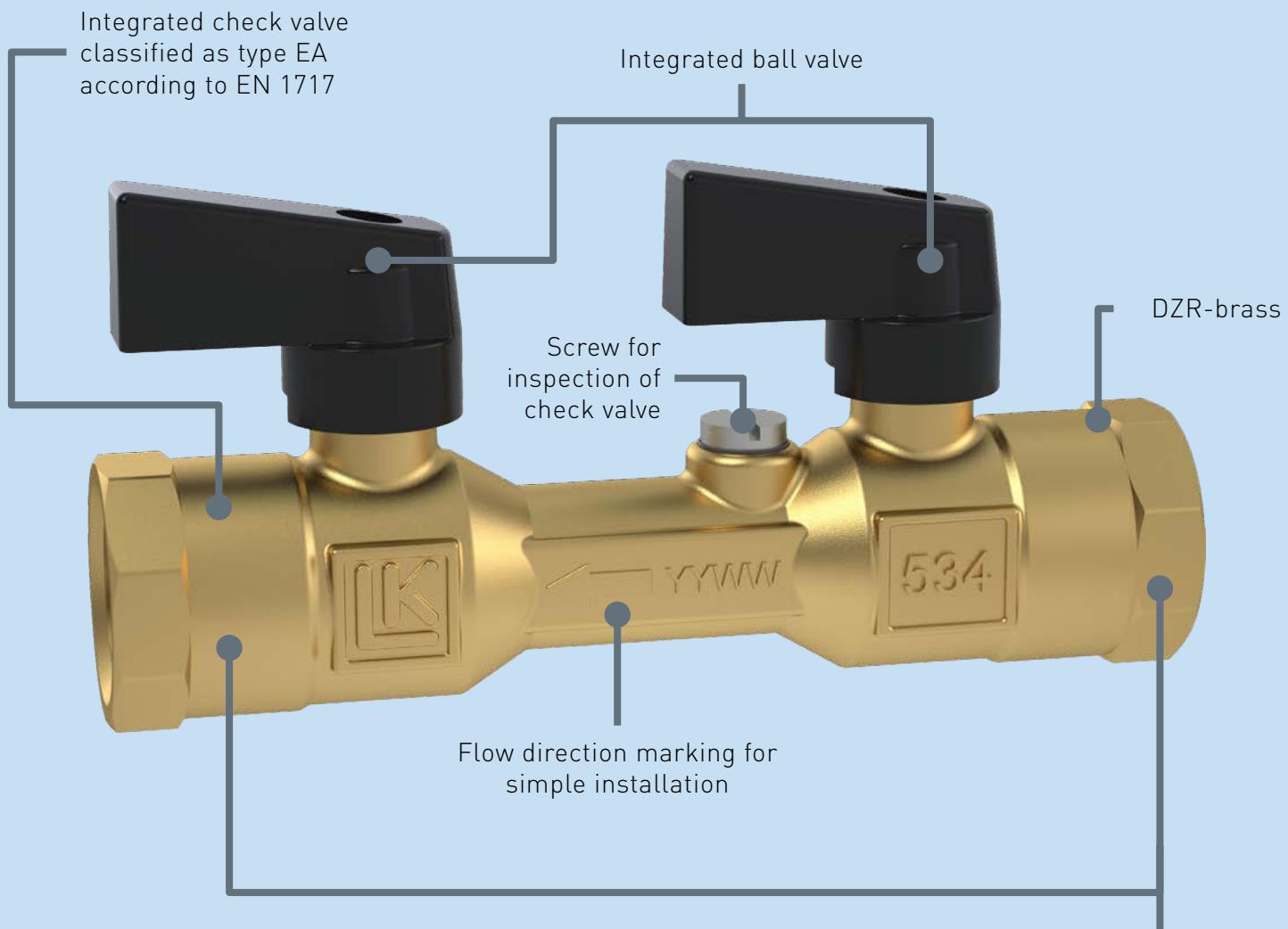
Dimensions according to dimensional drawings are guidance and not part of the specification

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095073	Ball valve incl. filter	1
187984	LK Insulation, 524 Plus	2

# LK 534 ThermoFill EA®



Available with 1/2" internal thread  
or 15 mm compression fittings

Streamline your heating system setup with the **LK 534 ThermoFill® EA**. This filling valve features an integrated shut-off and inspectable check valve for seamless operation, even at low pressure. Certified for backflow prevention (Type EA, fluid category 1-2), it ensures system safety and compliance. Designed for easy maintenance and precise installation, it's the reliable choice for secure and efficient system filling.

# Filling Valve

## LK 534 ThermoFill® EA

- Integrated ball valve and non-return valve
- Classified as type EA according to EN 1717



### TECHNICAL DATA

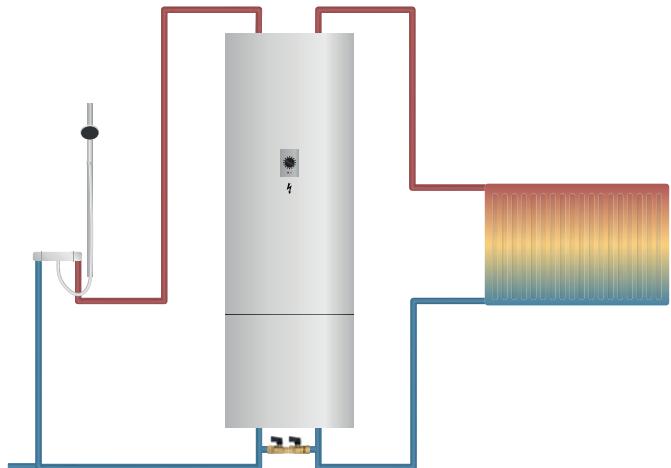
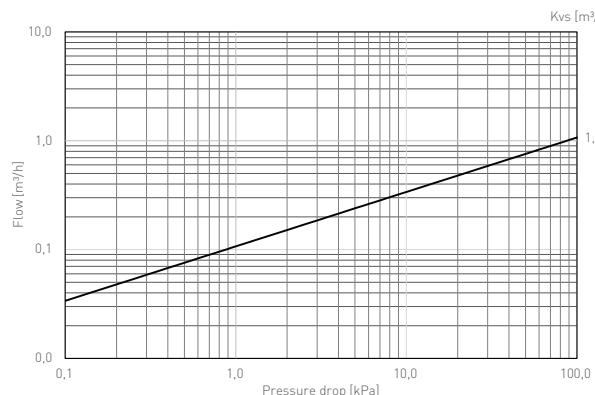
Max. working pressure	1.0 MPa (10 bar)
Opening pressure check valve	1 kPa (0,01 bar)
Working temperature	Min. 5 °C/Max. 90 °C
Thread standard	G - female thread, ISO 228/1
Material valve body	DZR Brass EN 12165 CW625N
Material sealing	EPDM
Material check valve	POM
Standard	Check valve: Type EA according to EN 1717

LK 534 ThermoFill® EA is a filling valve for heating systems. The valve has an integrated shut-off/check valve which ensures opening even at low pressure differences. The check valve is inspectionable and classified as a back flow preventer Type EA, fluid category 1-2, according to EN 1717.

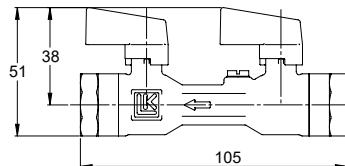
By closing the first valve towards the tap water system and loosening the screw, the function of the check valve can be checked.

The arrow on the valve body indicates the direction of the flow.

### CAPACITY DIAGRAM

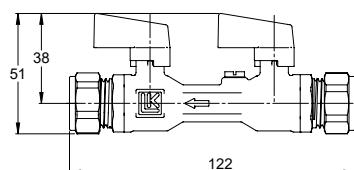


### LK 534 - Female thread



Article no.	Dim.	Kvs m³/h	Weight kg
182786	F 1/2"	1.1	0.3

### LK 534 - Compression fitting



Article no.	Dim.	Kvs m³/h	Weight kg
182787	15 mm	1.1	0.3

# Filling Valve

## LK 538 ThermoFill® EA

- Integrated ball valve and non-return valve
- Classified as type EA according to EN 1717



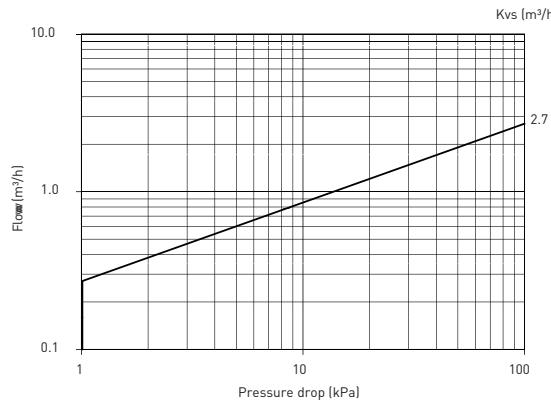
### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Opening pressure check valve	1 kPa (0,01 bar)
Working temperature	Min. 5 °C/Max. 90 °C
Thread standard	G - male thread
Material valve body	DZR Brass EN 12165 CW625N
Material sealing	EPDM
Material check valve	POM
Standard	Check valve: Type EA according to EN 1717

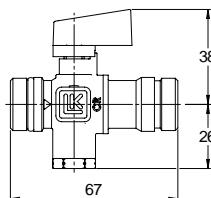
LK 538 ThermoFill® EA is a filling valve for heating systems. The valve has an integrated shut-off/check valve which ensures opening even at low pressure differences. The check valve is inspectionable and classified as a back flow preventer Type EA, fluid category 1-2, according to EN 1717.

The arrow on the valve body indicates the direction of the flow.

### CAPACITY DIAGRAM

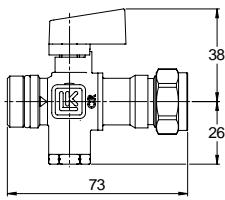


### LK 538 - Male thread



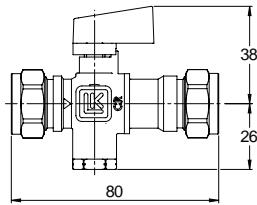
Article no.	Dim.	Kvs m³/h	Weight kg
090268	M 1/2"	2.7	0.1

## LK 538 - Male thread / Compression fitting



Article no.	Dim.	Kvs m³/h	Weight kg
090269	M 1½" / 15 mm	2.7	0.2

## LK 538 - Compression fitting



Article no.	Dim.	Kvs m³/h	Weight kg
090271	15 mm	2.7	0.2

# Filling Valve

## LK 539 ThermoFill® EA

- Integrated ball valve and non-return valve
- Classified as type EA according to EN 1717



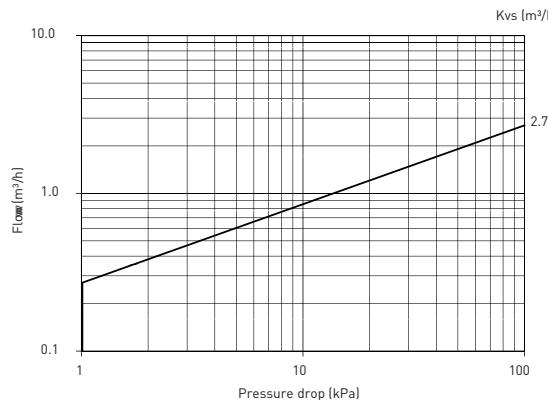
### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Opening pressure check valve	1 kPa (0,01 bar)
Working temperature	Min. 5 °C/Max. 90 °C
Thread standard	G - male thread
Material valve body	DZR Brass EN 12165 CW625N
Material sealing	EPDM
Material check valve	POM
Standard	Check valve: Type EA according to EN 1717

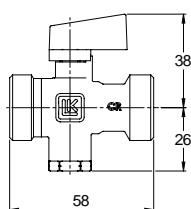
LK 539 ThermoFill® EA is a filling valve for heating systems. The valve has an integrated shut-off/check valve, which ensures opening even at low pressure differences. The check valve is inspectionable and classified as a back flow preventer Type EA, fluid category 1-2, according to EN 1717.

The arrow on the valve body indicates the direction of the flow.

### CAPACITY DIAGRAM



### LK 539 - Male thread



Article no.	Dim.	Kvs m³/h	Weight kg
068008	M 3/4"	2.7	0.2

# Safety Relief Valve

LK 510/511/512 MultiSafe

- From 1.5 to 10 bar
- Protect your boiler against overpressure

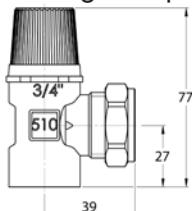


## TECHNICAL DATA

Working temperature	Min. -10 °C/Max. 110 °C
Thread standard	G - male thread, G - female thread
Material valve body	DZR Brass EN 12165 CW625N
Material sealing	EPDM
Type approval certificate	CE - LK 511 and LK 512 are fitted with a CE-marked LK 510 valve with installed nipple.

LK 510/511/512 MultiSafe is a safety relief valve for tap water installations, as well as heating systems with closed boiler system with a power of max.50 kW. The valve must not be used for steam. The outlet is fitted with compression fitting for simple installation of a discharge pipe.

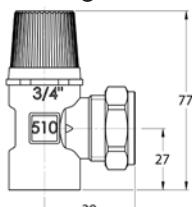
LK 510 - Female thread / Compression fitting - Tap water



Article no.	Dim.	Opening pressure	Discharge capacity	Weight kg
090033	F 3/4" x 22 mm	0.9 MPa	6741 l/h	0.2
090034	F 3/4" x 22 mm	1.0 MPa	7107 l/h	0.2

According to EN 1491

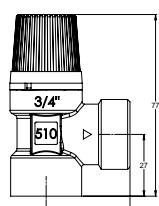
LK 510 - Female thread / Compression fitting - Heating



Article no.	Dim.	Opening pressure	Discharge capacity	Weight kg
090030	F 3/4" x 22 mm	0.15 MPa	2962 l/h	0.2
090035	F 3/4" x 22 mm	0.2 MPa	3298 l/h	0.2
090031	F 3/4" x 22 mm	0.25 MPa	3602 l/h	0.2
090036	F 3/4" x 22 mm	0.3 MPa	3883 l/h	0.2

According to EN 1491

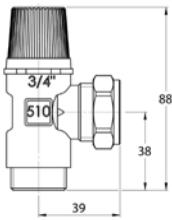
LK 510 - Female thread - Heating



Article no.	Dim.	Opening pressure	Discharge capacity	Weight kg
055505	F 3/4"	0.15 MPa	2962 l/h	0.2
055506	F 3/4"	0.25 MPa	3602 l/h	0.2

According to EN 1491

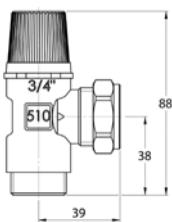
## LK 511 - Male thread / Compression fitting - Tap water



Article no.	Dim.	Opening pressure	Discharge capacity	Weight kg
090043	M 3/4" x 22 mm	0.9 MPa	6741 l/h	0.2
090044	M 3/4" x 22 mm	1.0 MPa	7107 l/h	0.2

According to EN 1491

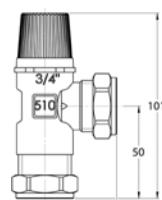
## LK 511 - Male thread / Compression fitting - Heating



Article no.	Dim.	Opening pressure	Discharge capacity	Weight kg
090040	M 3/4" x 22 mm	0.15 MPa	2962 l/h	0.2
090047	M 3/4" x 22 mm	0.2 MPa	3298 l/h	0.2
090041	M 3/4" x 22 mm	0.25 MPa	3602 l/h	0.2
090048	M 3/4" x 22 mm	0.3 MPa	3883 l/h	0.2

According to EN 1491

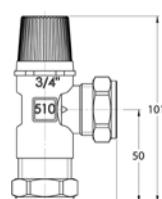
## LK 512 - Compression fitting - Tap water



Article no.	Dim.	Opening pressure	Discharge capacity	Weight kg
090053	22 mm	0.9 MPa	6741 l/h	0.3
090054	22 mm	1.0 MPa	7107 l/h	0.3

According to EN 1491

## LK 512 - Compression fitting - Heating



Article no.	Dim.	Opening pressure	Discharge capacity	Weight kg
090050	22 mm	0.15 MPa	2962 l/h	0.3
090051	22 mm	0.25 MPa	3602 l/h	0.3

According to EN 1491

# Safety Relief Valve

## LK 514 MultiSafe

- O-ring connection suitable for LK's range of valves
- From 1.5 to 10 bar
- Protect your boiler against overpressure



### TECHNICAL DATA

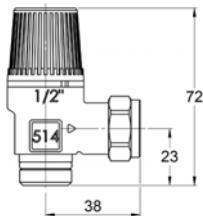
Working temperature	Min. -10 °C/Max. 110 °C
Thread standard	G - male thread
Material valve body	DZR Brass EN 12165 CW625N
Material sealing	EPDM
Type approval certificate	CE

LK 514 MultiSafe is a high lift, soft sealing safety relief valve for tap water installations as well as heating, recycling and cooling systems with thermal expansion only. The valve must not be used for steam. The outlet is fitted with compression fitting for simple installation of a discharge pipe.

Turn the knob counter-clockwise  $\frac{1}{4}$  turn until a faint "click" is heard. Let the water flush through briefly, then turn another  $\frac{1}{4}$  turn until a stronger "click" is heard and the valve closes.

This two-step opening function makes it possible to use the safety valve discharge pipe to drain e.g. a water heater.

### LK 514 Male thread / Compression fitting



Article no.	Dim.	Opening pressure	Discharge capacity	Weight kg
090109	M 1/2" x 15 mm	0.15 MPa	3420 l/h	0.1
090110	M 1/2" x 15 mm	0.25 MPa	4159 l/h	0.1
090111	M 1/2" x 15 mm	0.3 MPa	4484 l/h	0.1
090112	M 1/2" x 15 mm	0.4 MPa	5180 l/h	0.1
090113	M 1/2" x 15 mm	0.6 MPa	6350 l/h	0.1
090114	M 1/2" x 15 mm	0.7 MPa	6860 l/h	0.1
090115	M 1/2" x 15 mm	0.9 MPa	7782 l/h	0.1
090116	M 1/2" x 15 mm	1.0 MPa	8204 l/h	0.1

\*(According to EN 1491)

# Valve Combination

## LK 548 AquaKit

- O-ring connection suitable for LK's range of valves
- Complete valve combination



### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Opening pressure check valve	5 kPa (0,05 bar)
Working temperature	Min. 5 °C/Max. 90 °C
Operating temperature	Min. 38 °C/Max. 65 °C
Material valve body	DZR Brass EN 12165 CW625N
Material sealing	EPDM

LK 548 is AquaKit a valve combination for water heating consisting of a shut-off/check valve and a thermostatic mixing valve. The shut-off valve closes the cold water inlet and has an integrated check valve preventing recirculation of warm water into the incoming cold water pipe. The mixing valve regulates the supply of cold water in order to achieve the desired temperature. The shut-off/check valve has two connections with female thread M 1/2" for fitting of a safety relief valve, vacuum breaker or filling valve.

Arrows on the valve body indicate the direction of the flow.

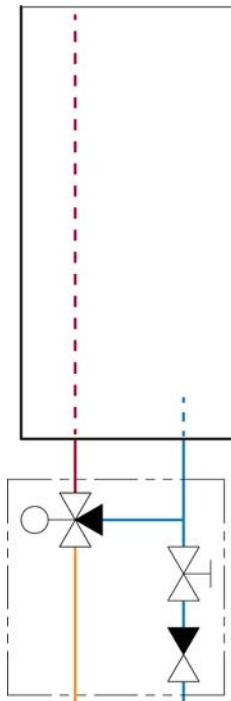
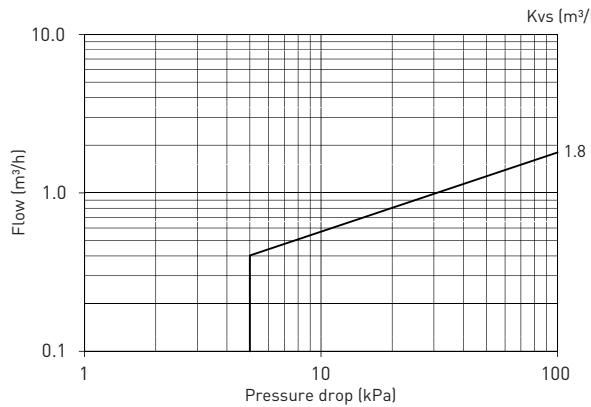
KV = incoming cold water

VV = incoming hot water

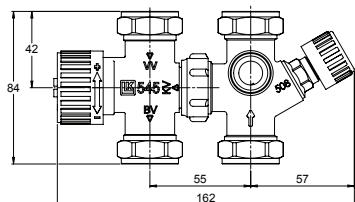
BV = outgoing warm water

Female thread connections are designed for the LK Armatur O-ring seal system. Other components are fitted in the usual way. When fitting to a male thread connection, adapter LK 373 is used - see under Accessories.

CAPACITY DIAGRAM

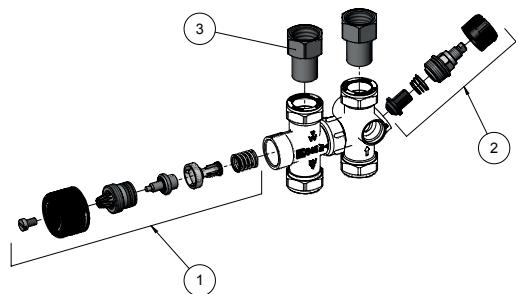


## LK 548 - Compression fitting



Article no.	Dim.	Kvs m³/h	Weight kg
090085	22 mm	1.8	0.7

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
4920723	LK 683 Repair kit, Mixing valve	1
4311733	LK 684 Repair kit, Shut-off/Check valve	2
1898055	Adapter LK 373 22 x M ¾"	3

# Thermic Mixing Valve

## LK 550 AquaMix

- Temperature control
- DZR Brass



### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 90 °C
Operating temperature	Min. 38 °C/Max. 65 °C
Thread standard	G - male thread
Material valve body	DZR Brass EN 12165 CW625N
Material sealing	EPDM

LK 550 AquaMix is a mixing valve for water heating with a thermostatic element that regulates the supply of cold water in order to achieve the desired temperature. Self-circulation is prevented with a check valve installed in the cold water supply - see under Accessories. Valves with male thread M 1/2" and 15 mm compression fitting have an airvent for simple draining of smaller water heaters.

Arrows on the valve body indicate the direction of the flow.

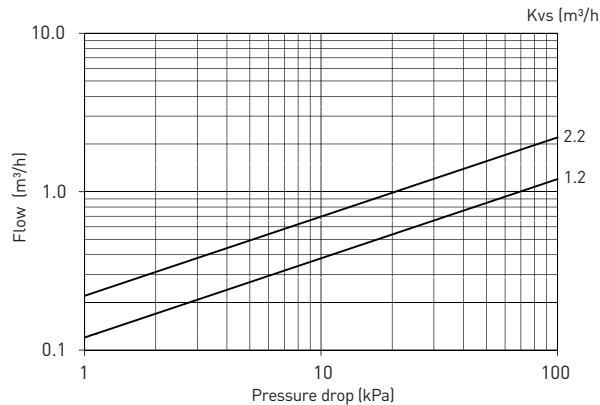
KV = incoming cold water

VV = incoming hot water

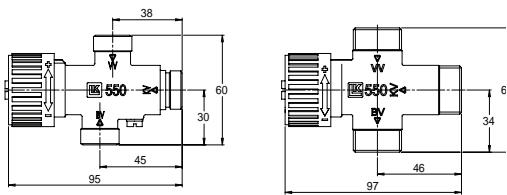
BV = outgoing warm water

When fitting to a male thread connection adapter LK 373 is used  
- see under Accessories.

CAPACITY DIAGRAM

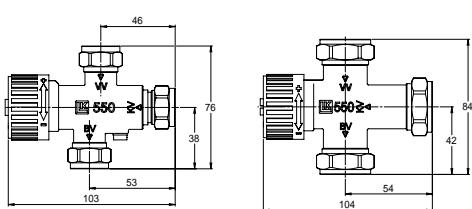


## LK 550 - Male thread



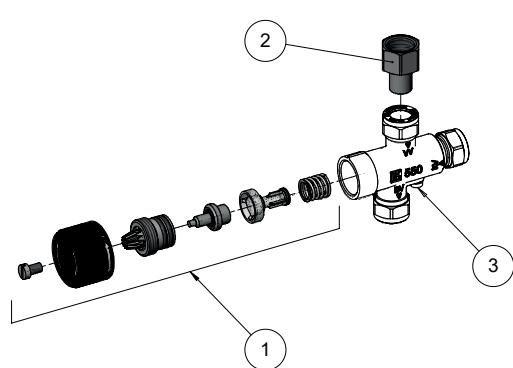
Article no.	Dim.	Kvs m³/h	Weight kg
090206	M 1/2"	1.2	0.3
090063	M 3/4"	2.2	0.4
090528	M 1"	2.2	0.5

## LK 550 - Compression fitting



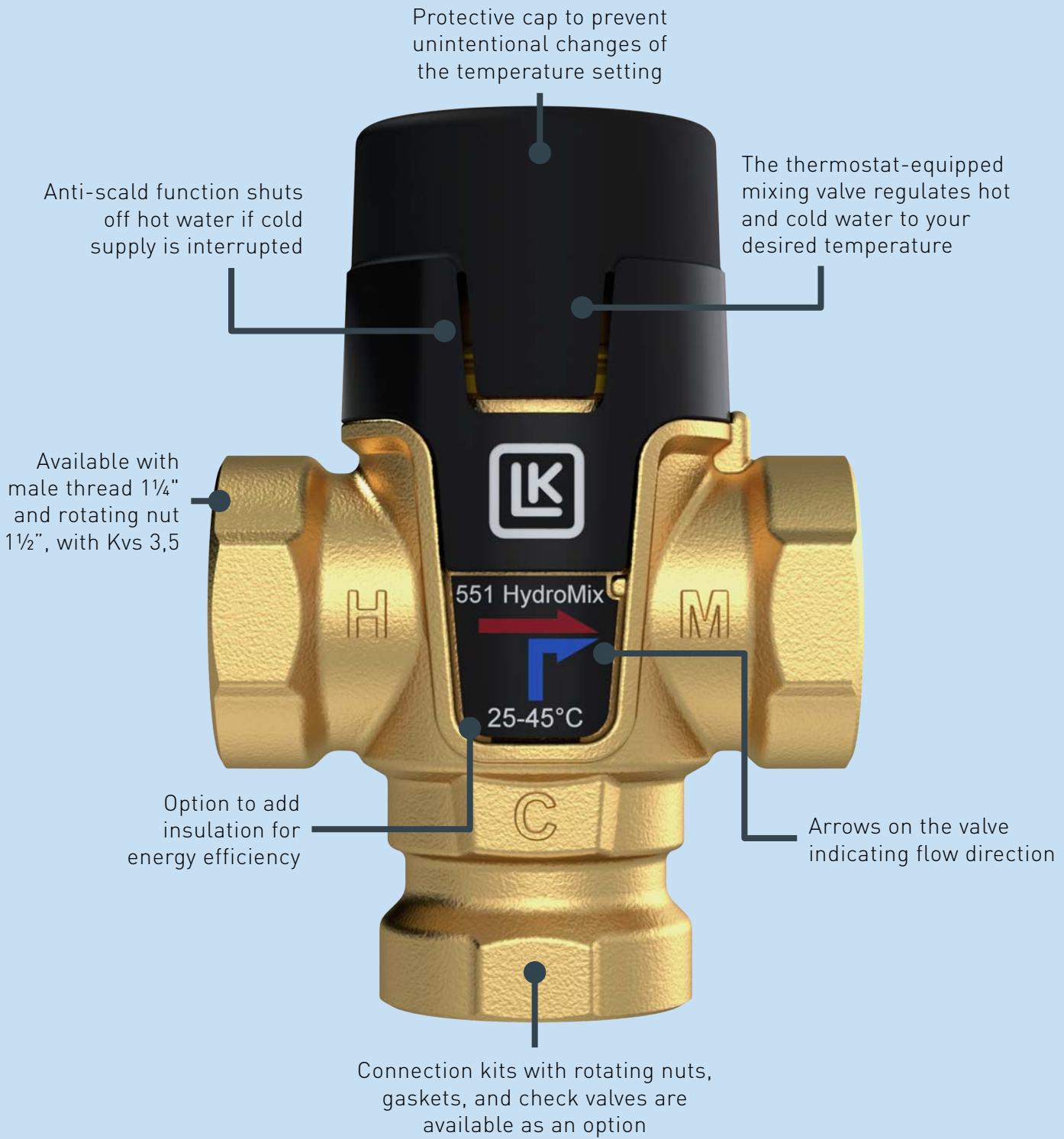
Article no.	Dim.	Kvs m³/h	Weight kg
090200	15 mm	1.2	0.3
090205	22 mm	2.2	0.4

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
055008	Check valve NN 1/2"	-
055009	Check valve NN 3/4"	-
092103	528 Cartridge Check valve 22 mm	-
092105	528 Cartridge Check valve 15 mm	-
4920723	LK 683 Repair kit, Mixing valve	1
052002	LK 373 Adapter 15 x M 1/2"	2
1898055	Adapter LK 373 22 x M 3/4"	2
187224	Airscrew	3

# LK 551 HydroMix



**LK 551 HydroMix** - an asymmetric mixing valve that ensures stable and safe hot water temperature in heating and tap water systems. Its thermostatic element adjusts the flow of hot and cold water, while the scald protection shuts off hot water if cold water supply drops. Easy installation with flow markings on the valve.

# Thermic Mixing Valve

## LK 551 HydroMix



WRAS  
APPROVED  
PRODUCT

- Anti-scald function
- Adjustable temperature



### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 65 °C Min. 5 °C/Max. 95 °C
Operating temperature	Min. 10 °C/Max. 30 °C (Max. 65 °C) Min. 25 °C/Max. 45 °C Min. 35 °C/Max. 55 °C Min. 35 °C/Max. 65 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Temperature stability	±3 °C

LK 551 HydroMix is an asymmetrical mixing valve for water heating and heating systems. The mixing valve has a thermostatic element that regulates the supply of cold as well as hot water in order to achieve the desired temperature. The valve has an anti-scald function that shuts off the incoming hot water flow in case of failure of cold water supply.

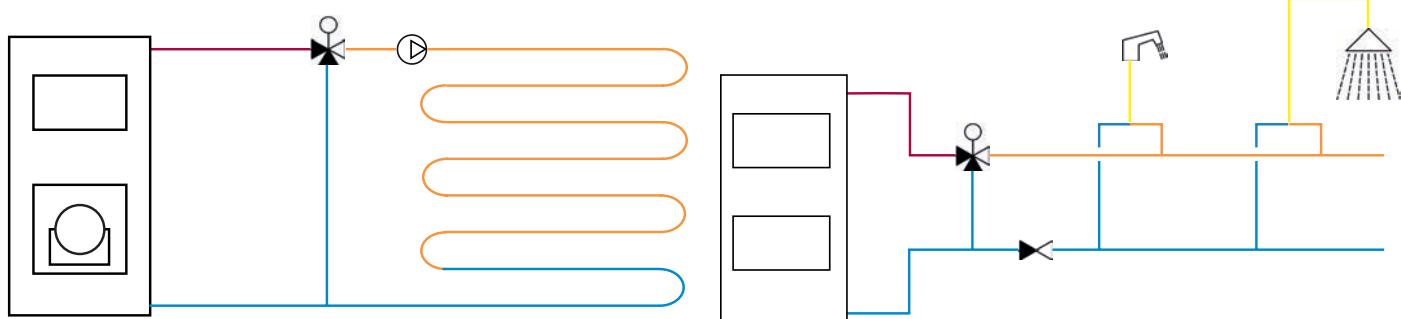
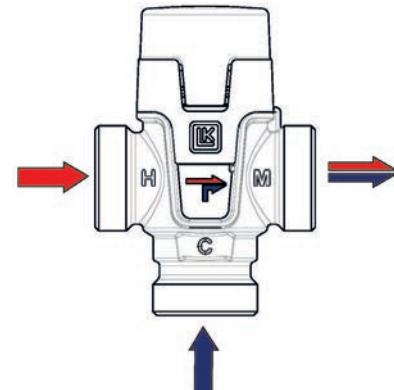
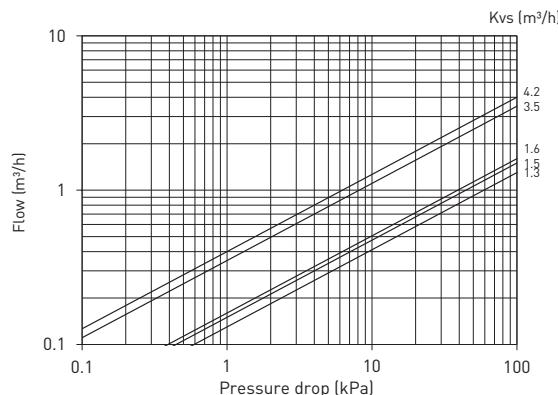
Arrows on the valve body indicate the direction of the flow.

C = incoming cold water

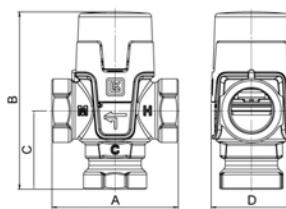
H = incoming hot water

M = outgoing mixed water

### CAPACITY DIAGRAM

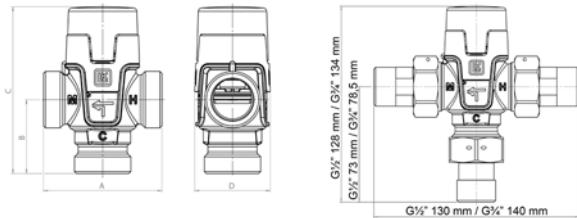


## LK 551 - Female thread



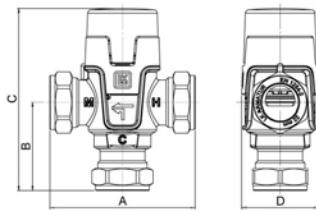
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
181616	F 1/2"	1.5	70	99	43.5	45	25 - 45 °C	0.5
181617	F 3/4"	1.6	70	99	43.5	45	25 - 45 °C	0.5
181455	F 1/2"	1.5	70	99	43.5	45	35 - 65 °C	0.5
181486	F 3/4"	1.6	70	99	43.5	45	35 - 65 °C	0.5
182203	F 1"	3.5	84	121	62	55	10 - 30 °C	0.9
182204	F 1"	4.2	84	121	62	55	25 - 45 °C	0.9
182205	F 1 "	3.5	84	121	62	55	35 - 65 °C	0.9

## LK 551 - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
181618	M 1/2"	1.3	70	42.5	99	45	25 - 45 °C	0.4
181619	M 3/4"	1.5	70	43.5	99	45	25 - 45 °C	0.5
181620	M 1"	1.6	70	43.5	99	45	25 - 45 °C	0.5
181452	M 1/2"	1.3	70	42.5	99	45	35 - 65 °C	0.4
181453	M 3/4"	1.5	70	43.5	99	45	35 - 65 °C	0.5
181454	M 1"	1.6	70	43.5	99	45	35 - 65 °C	0.5
182197	M 1"	3.5	84	62	121	55	10 - 30 °C	0.7
182198	M 1"	3.5	84	62	121	55	25 - 45 °C	0.7
182199	M 1"	3.5	84	62	121	55	35 - 65 °C	0.7
182200	M 1 1/4"	3.5	84	62	121	55	10 - 30 °C	0.8
182201	M 1 1/4"	4.2	84	62	121	55	25 - 45 °C	0.8
182202	M 1 1/4"	3.5	84	62	121	55	35 - 65 °C	0.8

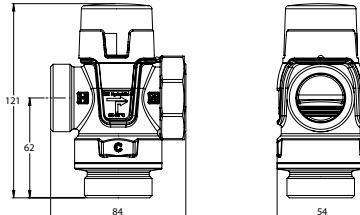
## LK 551 - Compression fitting



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
181621	15 mm	1.3	86.5	51	106	45	25 - 45 °C	0.4
181622	22 mm	1.6	85	52	106	45	25 - 45 °C	0.4
181523	15 mm	1.3	86.5	51	106	45	35 - 55 °C	0.5
181487	22 mm	1.6	85	52	106	45	35 - 55 °C	0.6
181456	15 mm	1.3	86.5	51	106	45	35 - 65 °C	0.5
181457	22 mm	1.6	85	52	106	45	35 - 65 °C	0.6
182206	28 mm	3.5	110	80	138	55	10 - 30 °C *	0.9
182207	28 mm	4.2	110	80	138	55	25 - 45 °C *	0.9
182208	28 mm	3.5	110	80	138	55	35 - 65 °C *	0.9

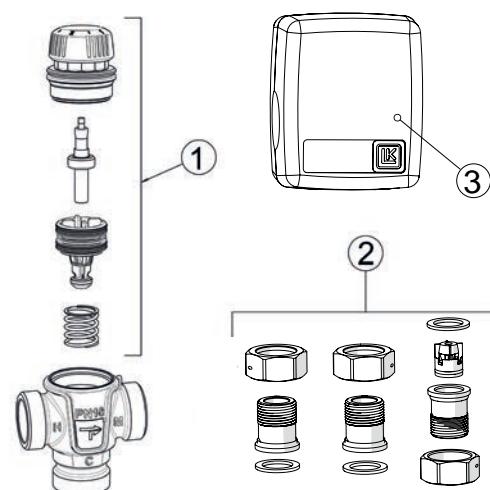
\* Material, valve body: EN 12165 CW625N

## LK 551 - Rotating nut



Article no.	Dim.	Dim. 2	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182431	M 1 1/4"	1 1/2" Rotating nut	3.5	84	62	121	55	25 - 45 °C	0.9
182820	M 1 1/4"	1 1/2" Rotating nut	3.5	84	62	121	55	50 - 70 °C	0.9

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095234	Repair kit 551, 35 - 65 °C (Kvs 1.6)	1
095235	Repair kit 551, 25 - 45 °C	1
095236	Repair kit 551, 35 - 55°C	1
095348	Repair kit 551, 10 - 30 °C, Kvs 3.2-4.2	1
095349	Repair kit 551, 25 - 45 °C, Kvs 3.2-4.2	1
095350	Repair kit 551, 35 - 65 °C, Kvs 3.2-4.2	1
092052	Connection kit M 3/4" x 1" with rotating nut, gaskets, 1 check valve	2
092053	Connection kit M 3/4" x 1" with rotating nut, gaskets, 2 check valves	2
092054	Connection kit M 1/2" x 3/4" with rotating nut, gaskets, 1 check valve	2
092055	Connection kit M 1/2" x 3/4" with rotating nut, gaskets, 2 check valves	2
092333	Connection kit M 1" x 1 1/4" with rotating nut, gaskets, 1 check valve	2
092334	Connection kit M 1" x 1 1/4" with rotating nut, gaskets, 2 check valves	2
187304	LK Insulation, 551 (Kvs 1.3-1.6)	3
187310	LK Insulation, 551 (Kvs 3.2-4.2) / 552	3

# Diverting Valve

## LK 551 HydroMix F



- Adjustable diverting temperature



### TECHNICAL DATA

Max. working pressure	1.0 MPa (10bar)
Working temperature	Min. 5 °C/Max. 95 °C
Diverting temperature	Min. 42 °C/Max. 52 °C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Temperature stability	±3 °C

The LK 551 HydroMix F is a 3-way diverting valve. Once the media reaches chosen temperature it will be redirected to port C. Below chosen temperature it will be redirected to port H.

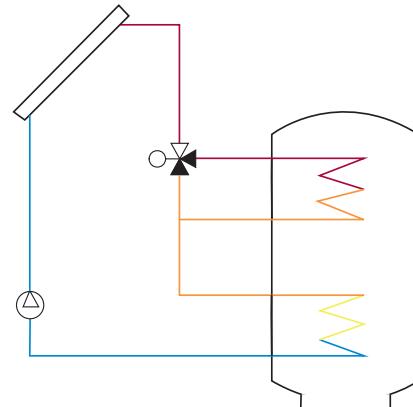
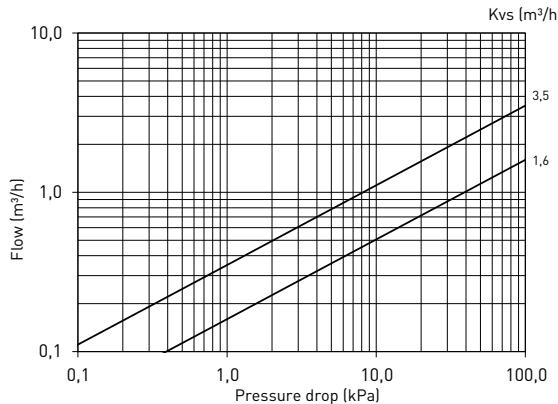
Arrows on the valve body indicate the direction of the flow.

M = incoming water

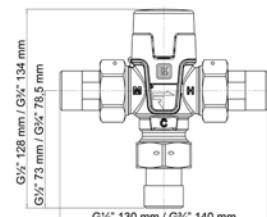
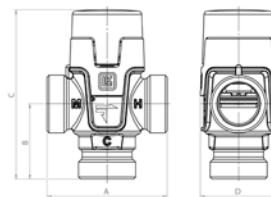
C = outgoing hot water

H = outgoing cold water

### CAPACITY DIAGRAM

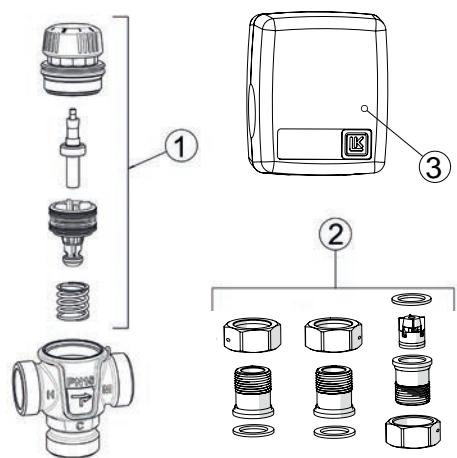


### LK 551 F - Male thread



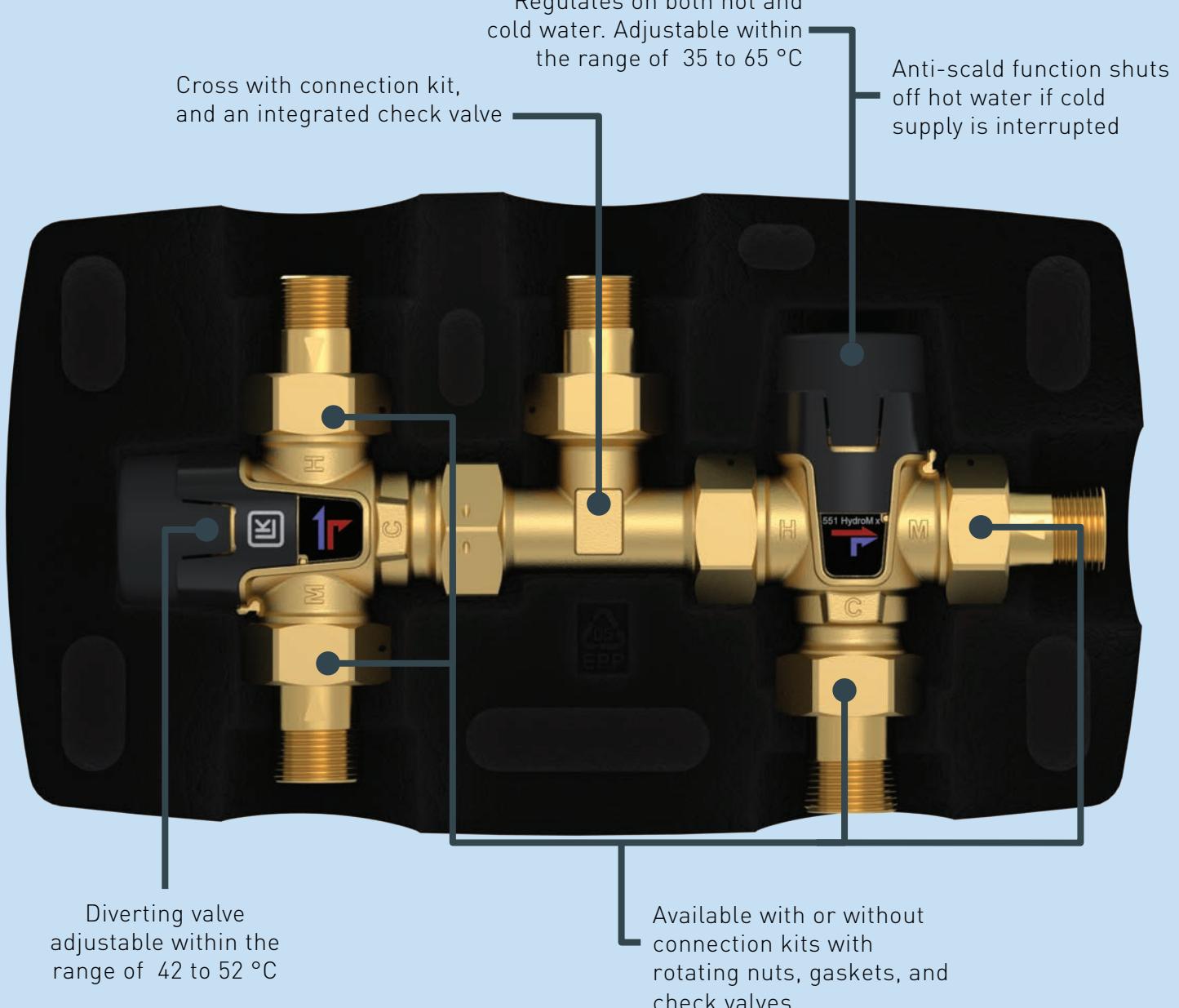
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182143	M 1"	1.6	70	43.5	99	45	42 - 52 °C	0.5
182428	M 1"	3.5	84	62	121	55	42 - 52 °C	0.7

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095075	Repair kit 551 F, 42 - 52 °C. Kvs 1.6	1
095444	Repair kit 551 F, 42 - 52 °C. Kvs 3,5	1
092052	Connection kit M 3/4" x 1" with rotating nut, gaskets, 1 check valve	2
092053	Connection kit M 3/4" x 1" with rotating nut, gaskets, 2 check valves	2
187304	LK Insulation, 551 (Kvs 1.3-1.6)	3
187310	LK Insulation, 551 (Kvs 3.2-4.2) / 552	3

# LK 551 HydroKit Solar



**LK 551 HydroKit Solar**, the ideal valve combination for optimising hot water production from two heat sources. It ensures a stable water temperature by either mixing and delivering hot water directly to the mixed water outlet or when needed, diverting it to an additional heat source. The built-in anti-scald protection ensures a safe and comfortable hot water supply.

# Valve Combination

## LK 551 HydroKit Solar

- Simple installation
- Plug and play
- Scald protection

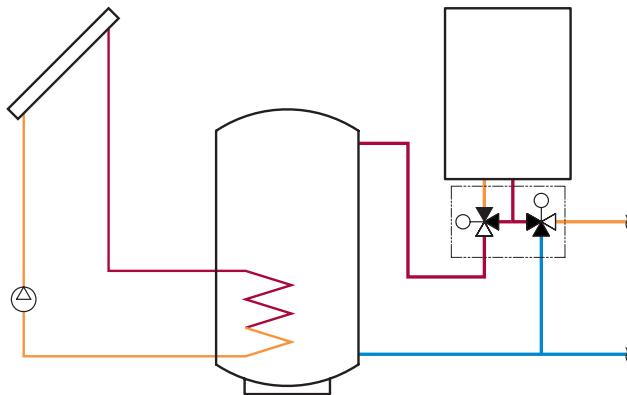


### TECHNICAL DATA

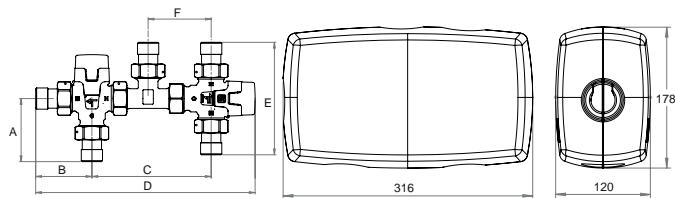
Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Diverting temperature	Min. 42 °C/Max. 52 °C
Operating temperature	Min. 35 °C/Max. 65 °C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Temperature stability	±3 °C

LK 551 HydroKit Solar is a valve combination, designed to energy optimize water heating from two different heat sources. In order to maintain the set water temperature, the warm water from one heat source is mixed and led directly to the mixed water outlet or if needed diverted to an other heat source for further heating.

LK 551 HydroKit Solar has two thermic valves; one diverting valve and one mixing valve with anti-scald function. The warm water temperature, for the mixing valve, is adjustable within the range of 35 °C to 65 °C and for the diverting valve the temperature is adjustable within the range of 42 °C to 52 °C.



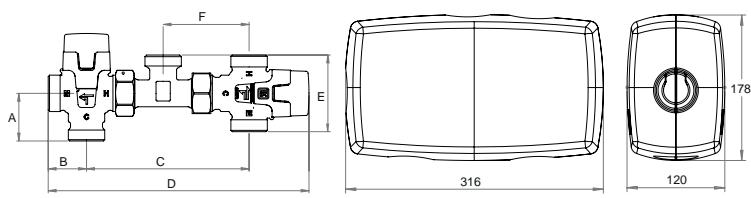
## LK 551 HydroKit Solar - with connection kit



Article no.	Dim.	Kvs m <sup>3</sup> /h	A mm	B mm	C mm	D mm	E mm	F mm	Note	Weight kg
181588	M 3/4"	1.6	79	70	149	273	140	79		1.6
182292	M 3/4"	1.6	79	70	149	55	140	79	Insulation included	1.7
182782	M 3/4"	2.5	97	77	149	280	140	79		1.7
182294	M 3/4"	2.5	97	77	149	280	140	79	Insulation included	1.7
182783	M 3/4"	3.5	97	77	175	310	154	100		2.5
182674	M 3/4"	3.5	97	77	175	310	154	100	Insulation included	2.5

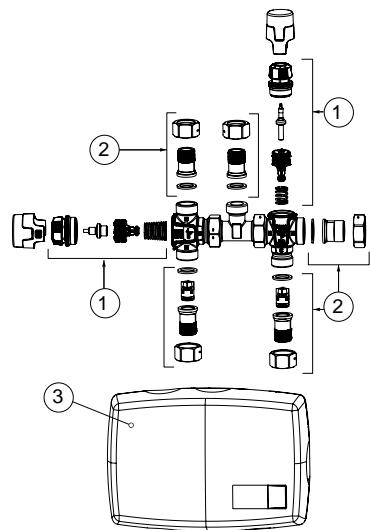
Connection kit included: contains nuts, gaskets, fittings (5 pcs of each) check valves (2 pcs).

## LK 551 HydroKit Solar - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	Note	Weight kg
181690	M 1"	1.6	44	35	149	238	70	79		1.6
182293	M 1"	1.6	44	35	149	238	70	79	Insulation included	1.7
182784	M 1"	2.5	62	42	149	245	70	79		1.7
182295	M 1"	2.5	62	42	149	245	70	79	Insulation included	1.7
182785	M 1"	3.5	62	42	174	269	84	97		1.9
182427	M 1"	3.5	62	42	174	269	84	97	Insulation included	1.9

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095234	Repair kit 551, 35 - 65 °C (Kvs 1.6)	1
095075	Repair kit 551 F, 42 - 52 °C. Kvs 1.6	1
095350	Repair kit 551, 35 - 65 °C, Kvs 3.2-4.2	1
095444	Repair kit 551 F, 42 - 52 °C. Kvs 3,5	1
095389	Connection kit M 3/4" x 1" with rotating nut, gaskets, 2 check valves	2
095390	LK Insulation (Kvs 1.6 - 2.5)	3
095459	LK Insulation (Kvs 3.5)	3

# LK 551 HydroKit HWC

Compact design for versatile and hassle-free installation

Anti-scald function shuts off hot water if cold supply is interrupted

The thermostat-equipped mixing valve regulates hot and cold water to your desired temperature

Stable, two-piece insulation

Ideal for buildings with long water pipes, ensuring hot water reaches all areas quickly

Includes a mixing valve, cross, connection kit, and three check valves to prevent self circulation

Experience instant hot water with **LK 551 HydroKit HWC**, even in buildings with lengthy water pipes. This compact unit includes a mixing valve, cross, connection kit, and three check valves for seamless hot water circulation. The thermostat-controlled mixing valve blends cold and hot water for an improved hot water experience, with added safety from the anti-scald feature.

# Hot Water Circulation Unit

## LK 551 HydroKit HWC

- Direct hot water
- Plug and play
- Scald protection



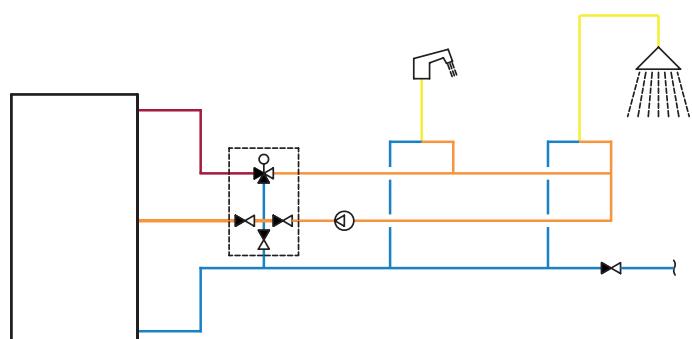
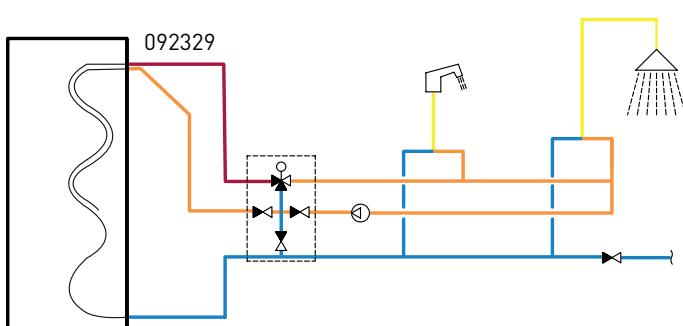
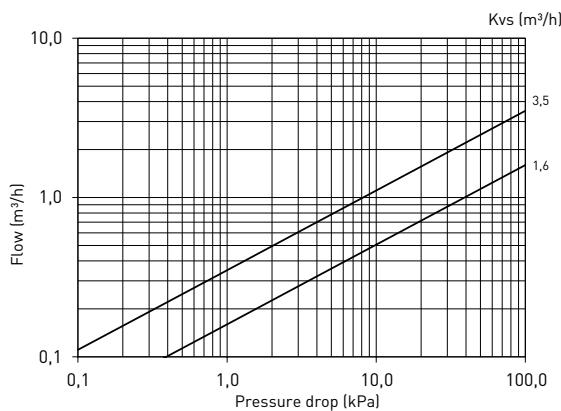
## TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Operating temperature	Min. 35 °C/Max. 65 °C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N, DZR Brass EN 12165 CW625N
Temperature stability	±3 °C

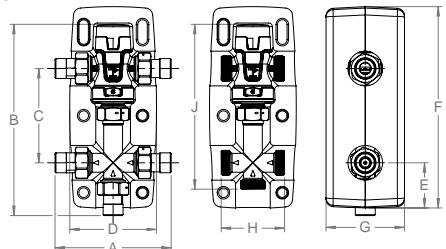
LK 551 HydroKit HWC is a compact unit for hot water circulation. Hot water circulation offers instantly available hot water at a tap, so you don't have to wait on hot water. Hot water circulation is especially useful in buildings with long water pipes.

LK 551 HydroKit HWC consists of a mixing valve, cross, connection kit and 3 check valves, to prevent self circulation. The mixing valve has a thermostat that regulates the supply of both cold and hot water to the desired temperature. The valve has an anti-scald function that closes for incoming hot water in case the cold water supply ends.

## CAPACITY DIAGRAM



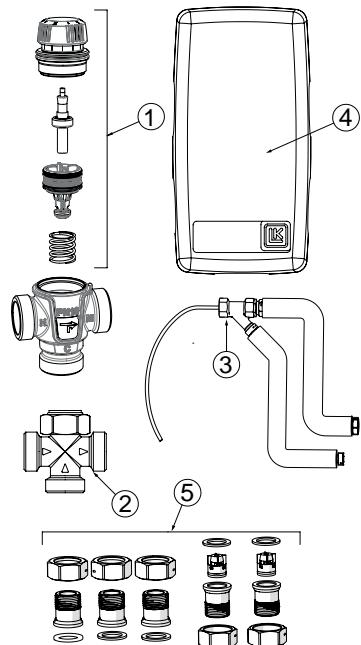
## LK 551 HydroKit HWC - with connection kit



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	Note	Weight (kg)
091782	M 3/4"	1.6	140	205	81	115	60	225	104	70	170	35 - 65 °C	1.4
182430	M 3/4"	3.5	154	250	125	120	70	270	110	84	217	35 - 65 °C	1.8

\* Material, valve body: EN 12165 CW617N

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095234	Repair kit 551, 35 - 65 °C (Kvs 1.6)	1
095350	Repair kit 551, 35 - 65 °C, Kvs 3.2-4.2	1
092325	Fitting	2
092329	LK CirculationKit HWC, Kvs 1.6	3
092357	LK CirculationKit HWC, Kvs 3,5	3
187305	LK Insulation HWC (Kvs 1.6)	4
095460	LK Insulation HWC (Kvs 3.5)	4
095388	Connection kit M 3/4" x 1" with rotating nut, gaskets, 2 check valves	5

# Circulation Kit

## LK 551 HWC CirculationKit



### TECHNICAL DATA

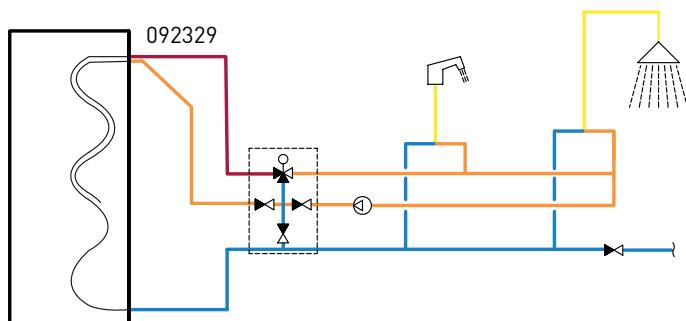
Max. working pressure	0.6 MPa (6 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Material	Pex PE-Xc - PE-HD without EVOH Barrier
Material, T-pipe	Cuphin
Material pipe	Stainless steel pipe EN 1008-3-14404 (AISI316L)

LK 551 HWC CirculationKit is an accessory for LK 551 HydroKit HWC. The accessory is installed when there is no connection for recirculated water in the tank.

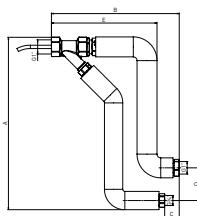
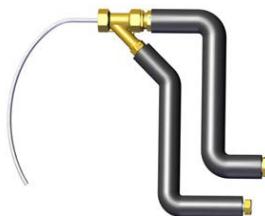
It is installed on the hot water connection.

Using a pipe-in-pipe solution with a 1.5-metre Pex pipe, the return of recirculated water can be adjusted to a correct level to prevent the stratification in the tank from being destroyed.

Supplied with 2x insulated stainless steel pipes, valve and Pex pipe 8x1 length 1.5m.

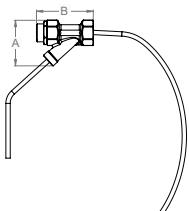


### LK 551 HWC CirculationKit - Female thread



Article no.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Weight kg
092329	1.6	415	308	35	79	254	2.1
092357	3.5	415	308	35	125	254	2.6

### LK 551 HWC CirculationKit - Female thread



Article no.	Dim.	A mm	B mm	C mm	Weight kg
095487	M 1" x F 1" x M 3/4"	85	106	41	0.6

# Mixing Valve

## LK 552 HydroMix

- Scald protection
- Symmetrical flow
- Adjustable temperature



### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 95 °C
Operating temperature	Min. 25 °C/Max. 45 °C Min. 35 °C/Max. 65 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Temperature stability	±3 °C

LK 552 HydroMix is a mixing valve for water heating and heating systems. The mixing valve has a thermostatic element that regulates the supply of cold as well as hot water in order to achieve the desired temperature. The valve has an anti-scald function that shuts off the incoming hot water flow in case of failure of cold water supply.

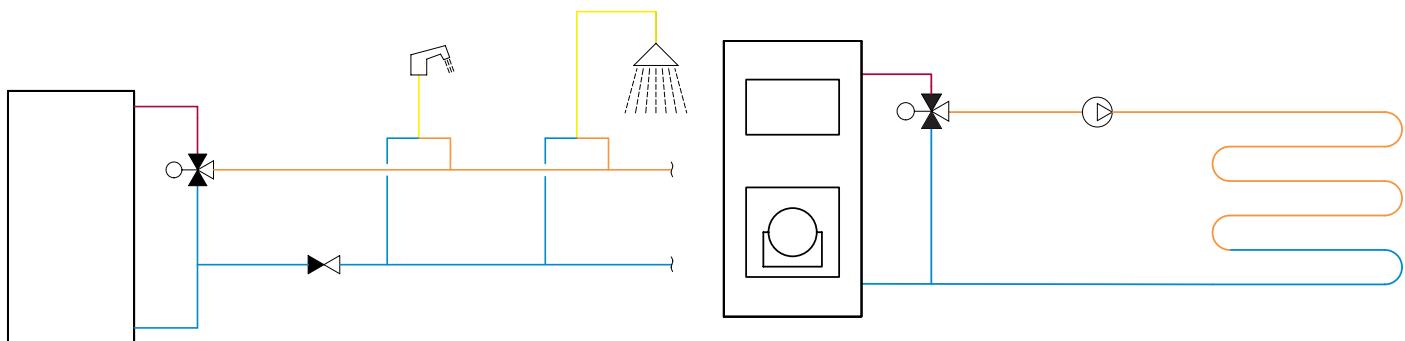
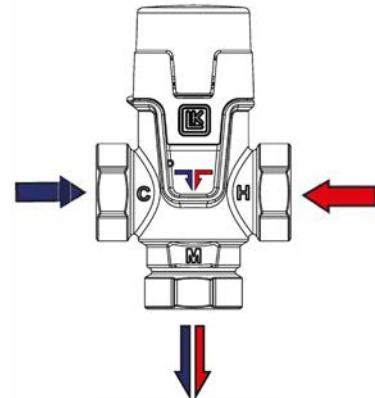
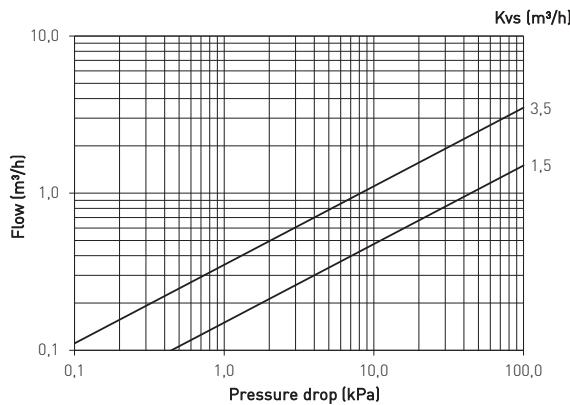
Arrows on the valve body indicate the direction of the flow.

C = incoming cold water

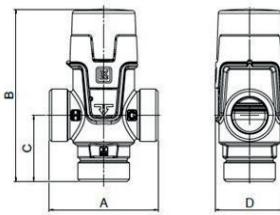
H = incoming hot water

M = outgoing mixed water

### CAPACITY DIAGRAM

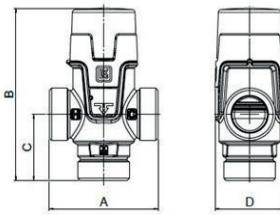


## LK 552 - Female thread



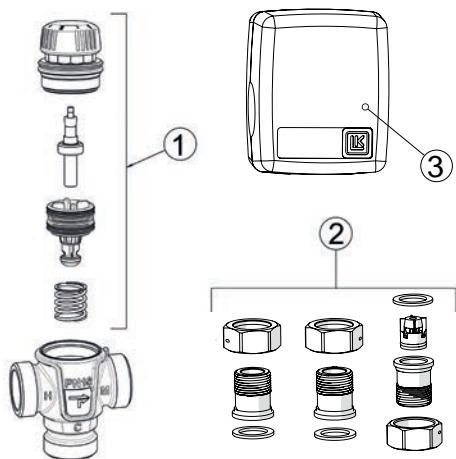
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182234	F 3/4"	1.5	70	110	42	45	35 - 65 °C	0.6
182237	F 3/4"	1.5	70	110	42	45	25 - 45 °C	0.6
182256	F 1"	3.5	84	122	50	52	35 - 65 °C	0.9
182260	F 1 "	3.5	84	122	50	52	25 - 45 °C	0.9

## LK 552 - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182235	M 3/4"	1.5	70	110	42	45	35 - 65 °C	0.5
182236	M 1"	1.5	70	110	42	45	35 - 65 °C	0.6
182238	M 3/4"	1.5	70	110	42	45	25 - 45 °C	0.5
182239	M 1"	1.5	70	110	42	45	25 - 45 °C	0.6
182257	M 1"	3.5	84	122	50	52	35 - 65 °C	0.7
182258	M 1 1/4"	3.5	84	122	50	52	35 - 65 °C	0.8
182261	M 1"	3.5	84	122	50	52	25 - 45 °C	0.7
182262	M 1 1/4"	3.5	84	122	50	52	25 - 45 °C	0.8

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095360	Repair kit 552, 25 - 45 °C	1
095361	Repair kit 552, 35 - 65 °C	1
095362	Repair kit 552, 25 - 45 °C (Kvs 3.5)	1
095363	Repair kit 552, 35 - 65 °C (Kvs 3.5)	1
092052	Connection kit M 3/4" x 1" with rotating nut, gaskets, 1 check valve	2
092053	Connection kit M 3/4" x 1" with rotating nut, gaskets, 2 check valves	2
092333	Connection kit M 1" x 1 1/4" with rotating nut, gaskets, 1 check valve	2
092334	Connection kit M 1" x 1 1/4" with rotating nut, gaskets, 2 check valves	2
187310	LK Insulation, 551 (Kvs 3.2-4.2) / 552	3

# Shunt Group

## LK 419 Manifold Shunt



- Suitable for underfloor heating areas up to 200 m<sup>2</sup>
- Thermostat setting of supply temperature
- Choose between right and left installation



### TECHNICAL DATA

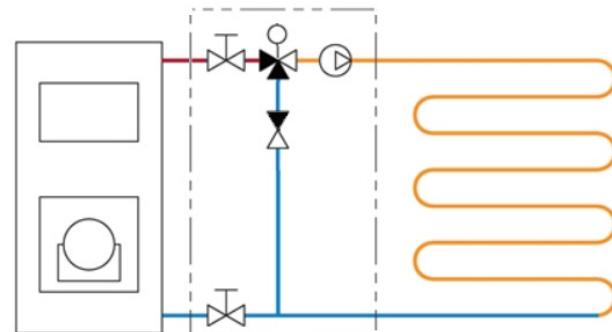
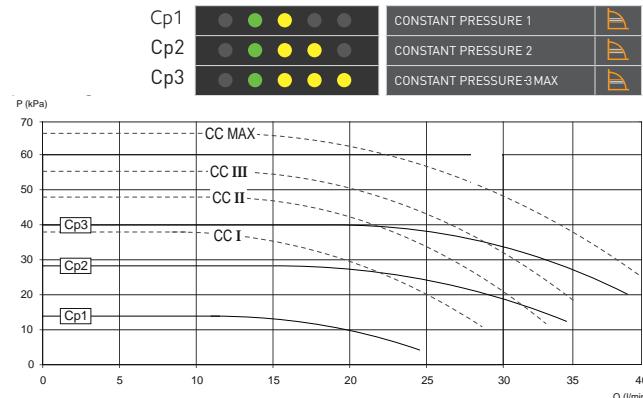
Voltage	230 VAC 50/60 Hz
Power consumption	10-75 W, depending on pump speed
Max. working pressure	1.0 MPa
Working temperature	Min. 5 °C /Max. 95 °C
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Circulating pump	Grundfos UPM3 AUTO 15-70 EEI < 0.23 (see pump datasheet/label for exact value)
Material valve body	Brass EN 12165 CW617N
Material, Supply pipe	Stainless steel EN 1.4404

LK 419 Manifold Shunt is a shunt group with a thermal mixing valve designed for systems equipped with a main pump.

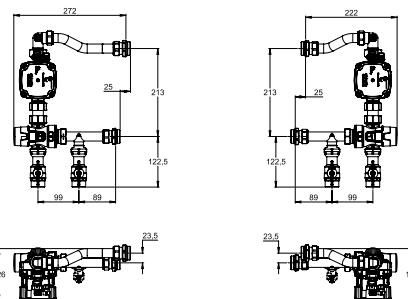
The shunt group is suitable for both left-hand and right-hand mounting directly to LK Heat Circuit Manifold.

LK 419 is equipped with an asymmetric mixing valve, LK 551 HydroMix, that has a thermal insert that controls the supply of incoming and return pipe, so that the desired set temperature is achieved.

### PUMP CHARACTERISTICS



### LK 419 - Male thread



Article no.	Dim.	Kvs m <sup>3</sup> /h	Note	Weight kg
299451	M 1"	3.5	25 - 45 °C	4.6
299792	M 1"	3.5	35 - 65 °C	4.6

# Shunt Group

## LK 420 MiniShunt 2.0

- Switchable between single and two-pipe radiator systems
- Suitable for both left-hand and right-hand mounting



### TECHNICAL DATA

Voltage	1 phase 230V+10%/-15%, 50/60 Hz, PE
Power consumption	Max 45 W
Max. working pressure	0.6 MPa (6 bar)
Max. differential pressure	0.1 MPa (1 bar)
Working temperature	Primary Max. 80 °C Secondary Min. 12 °C/Max. 55 °C
Ambient temperature	Max. 60 °C
Thread standard	Rp - female thread, G - male thread
Protection type	IP X4D
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Circulating pump	Wilo Yonos Para RSB 15/6-RKA EEI < 0.23 (see pump datasheet/ label for exact value)
Material valve body	Nickel-plated Brass EN 12165 CW617N
Max valve capacity	Kvs 1,05 Max. valve capacity with selfacting thermostat installed: At room temp. approx. 20 °C: Kv 0.9
Type approval certificate	Pump: CE, EC Low Voltage Directive (2006/95/EC) incl. additions

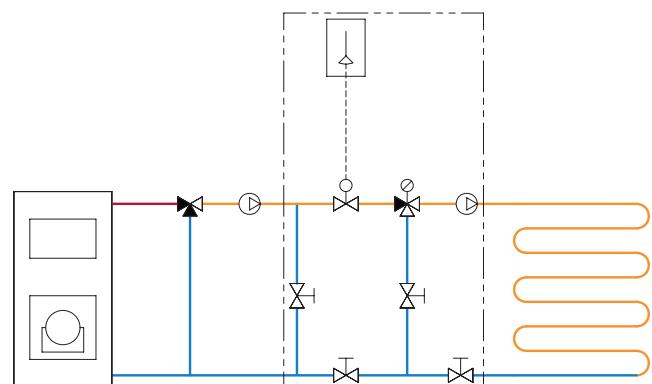
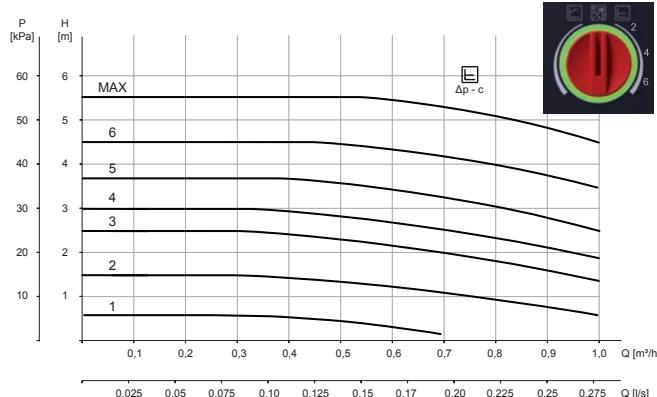
LK 420 MiniShunt 2.0 is a shunt group intended for use when smaller underfloor heating areas are to be connected to an existing heating system. LK MiniShunt adapts the heating system temperature to the lower temperature necessary for the underfloor heating system. Its capacity can normally be set at a heating need of 50 W/m<sup>2</sup> to a maximum 60 m<sup>2</sup> underfloor heating area. Capacity is however dependent on primary temperature, pressure, laying method etc.

- For underfloor heating areas up to 60 m<sup>2</sup>.
- Compact design.
- Energy efficient circulation pump.
- Thermostat-controlled maximum limit of supply temperature.
- Switchable between single or twin pipe systems.
- VF valve.
- Easy filling and air bleeding.
- Expandable to 2, 3 or 4 underfloor heating circuits.

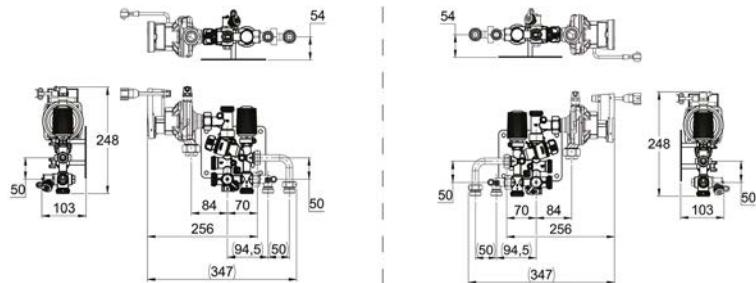
### ITEMS INCLUDED:

- Circulation pump Wilo Yonos Para RSB 15/6-RKA, with automatic speed control, 1 fas 230V AC, 50 Hz, max 45W, 0,44 A.
- Thermostat with capillary tube sensor, length 2 m.
- 1 thermometer to place in one of the shunt group's thermometer pockets.
- Hose 0.5 m for air bleeding.
- Primary connector G20 EK and 2 connectors for CU15.
- Bracket.

### PUMP CHARACTERISTICS



## LK 420 - Compression fitting alt. Male thread / Female thread



Article no.	Dim.	Kvs m³/h	Weight kg
299773	M 3/4" EuroCone / F 1/2"	1.05	4.0

Dimension = Prim. / Sec. connection

### SPARE PARTS AND ACCESSORIES



2



Article no.	Article	Position
095442	Circulating pump Wilo Para	1
095391	Thermostat with sensor	2

# Shunt Group

## LK 421 Manifold Shunt

- Suitable for left-hand and right-hand mounting



### TECHNICAL DATA

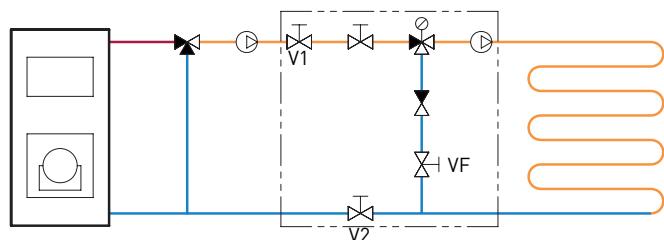
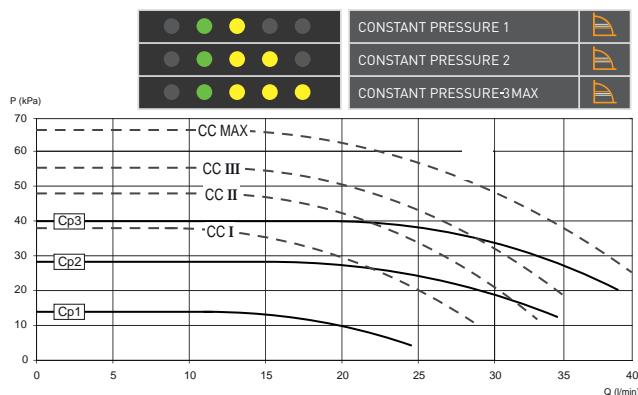
Voltage	1 phase 230V AC, -15 %/+10 %, 50 Hz , PE
Power consumption	Max. 52 W
Max. working pressure	0.6 MPa (6 bar)
Max. differential pressure	0.1 MPa (1 bar)
Working temperature	Primary: Min. 5 °C/Max. 90 °C Secondary: Min. 30 °C/Max. 65 °C
Ambient temperature	Max. 70 °C
Thread standard	Rp - female thread, G - male thread
Protection type	IP44
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Circulating pump	Grundfos UPM3 AUTO 15-70 EEI < 0.23 (see pump datasheet/ label for exact value)
Material valve body	Nickel-plated Brass EN 12165 CW617N
Max valve capacity	Control valve V1: With hand actuator fitted. Kv 2.2 With electric valve actuator: Kvs 3.6 Control valve V2: Kvs 4.1
Type approval certificate	Pump: CE, EC Low Voltage Directive (2006/95/EC) incl. additions

LK 421 is to be used in systems with main pump in the primary circuit. Its capacity can be set at a flat rate of heating requirements of 50W/m<sup>2</sup> to max 200 m<sup>2</sup> of floor heating surface. The capacity is dependent on the primary temperature, pressure, floor heating installing system, etc. The included supply pipe allows in both left- and righthand assembly to LK 430 Manifold RF. The shunt unit is a complete pre-manufactured unit.

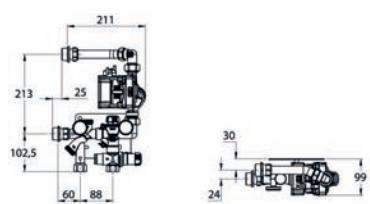
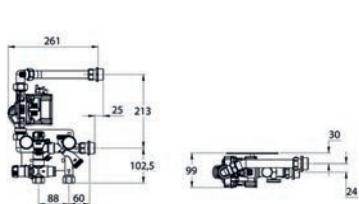
### ITEMS INCLUDED:

- Circulation pump Grundfos UPM3 Auto 15-70 130, with automatic speed control, 1 phase 230 V AC 50 Hz, max 45 W, 0.38 A
- Two way control valve Kvs value 2.5, equipped with hand actuator
- VF valve
- Temperature limiter of feed temperature
- Adjustment valve for the primary circuit
- Check valve
- 2 tube thermometers
- Isolation valves for primary circuit
- Fixing bracket

### PUMP CHARACTERISTICS



## LK 421 - Female thread / Male thread



Article no.	Dim.	Weight kg
298559	F 3/4" / M 1"	4.6

Dimension = Prim. / Sec. connection

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187172	Circulating pump Grundfos UPM3 Auto 15/70	1
095018	Thermometer T40, 0 - 80 °C	2
095221	Bracket	3

# Shunt Group

## LK 422 Manifold Shunt Tmax

- Suitable for left-hand and right-hand mounting



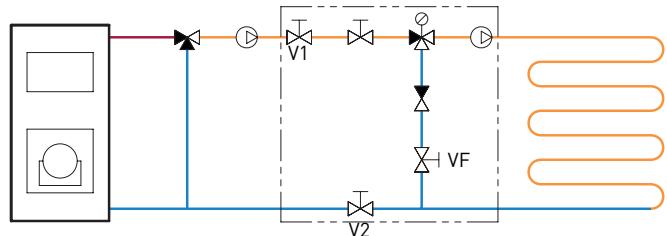
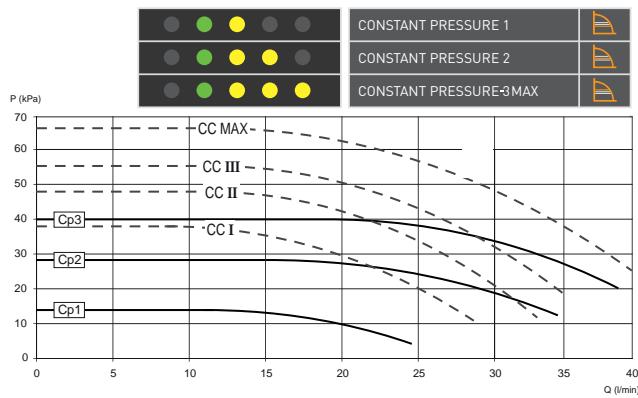
### TECHNICAL DATA

Voltage	1 phase 230V AC, -15 % / +10 %, 50 Hz, PE
Max. working pressure	0.6 MPa (6 bar)
Max. differential pressure	0.1 MPa (1 bar)
Working temperature	Primary: Min. 5 °C/Max. 90 °C Secondary: Min. 30 °C/Max. 65 °C
Ambient temperature	Max. 70 °C
Thread standard	G - male thread, G - female thread
Protection type	IP44
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Circulating pump	Grundfos UPM3 AUTO 15-70 EEI < 0.23 (see pump datasheet/ label for exact value)
Material valve body	Nickel-plated Brass EN 12165 CW617N
Material pipe	Supply pipe: Stainless steel EN 1.4404

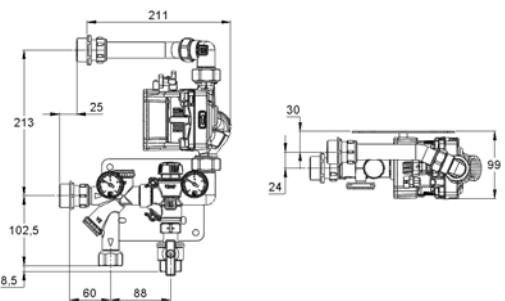
LK Manifold Shunt Tmax is used in systems with a main pump. The shunt unit can be mounted directly to LK Manifold RF from the left or right. The shunt unit is fitted as standard with a constant thermostat controlled feed temperature as well as an automatic speed controlled pump for reduced energy consumption and quieter operation. The guideline capacity of this shunt unit is a maximum of 130 m<sup>2</sup> floor heating surface. The capacity is dependent on heat requirement, laying procedure etc.

LK 422 can be mounted directly onto the manifold from the right or left. A manifold supply pipe for use when mounting to the left of the manifold is supplied. When fitting from the right, shorten the supply pipe by about 50 mm, reposition the thermometers and the pump through 180°.

### PUMP CHARACTERISTICS



## LK 422 - Female thread / Male thread

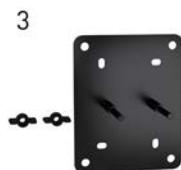


Article no.	Dim.	Kvs m <sup>3</sup> /h	Kvs2 m <sup>3</sup> /h	Weight kg
2419498	F 3/4" / M 1"	2.7	5.0	5.3

### SPARE PARTS AND ACCESSORIES

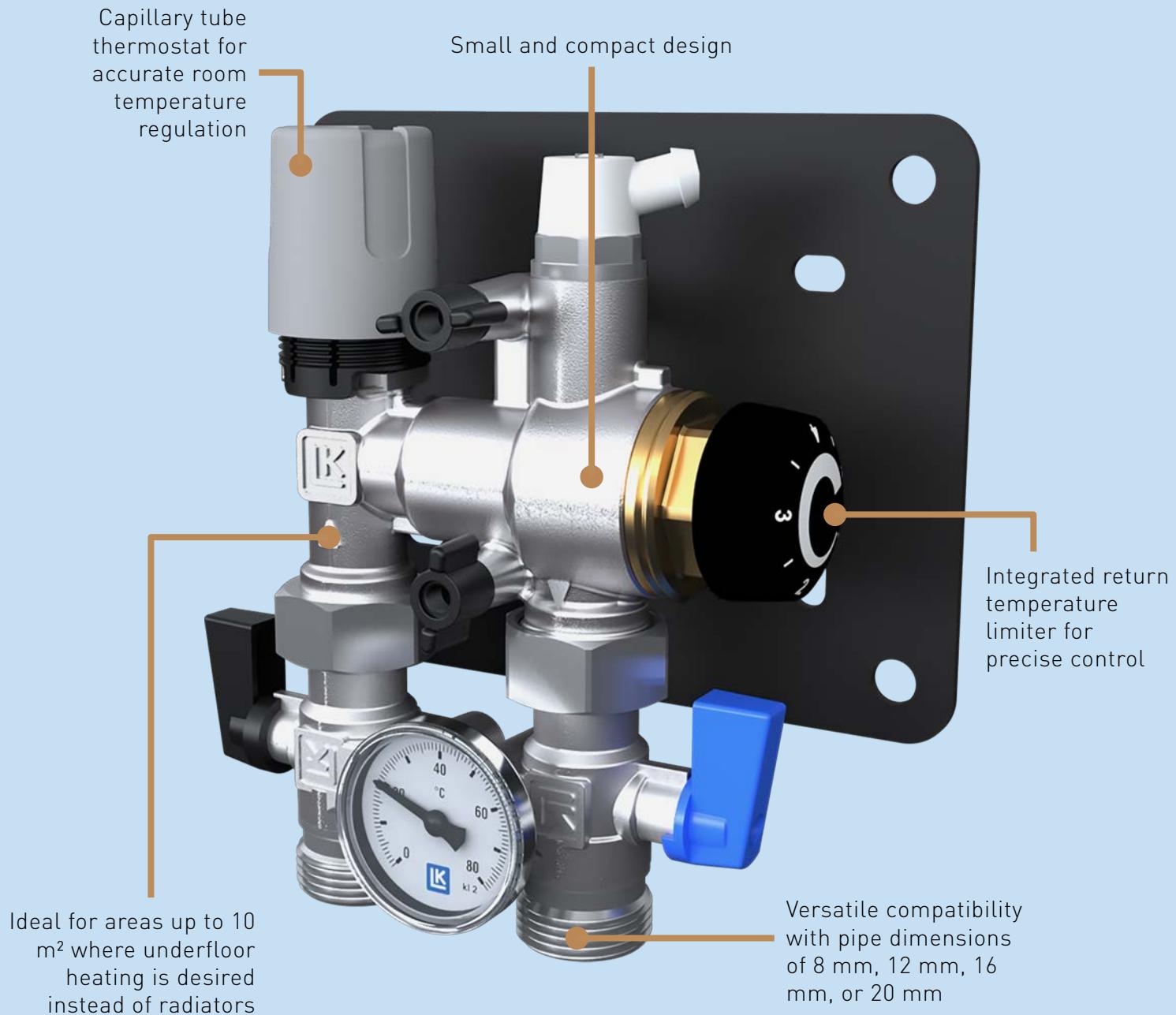


2



Article no.	Article	Position
187172	Circulating pump Grundfos UPM3 Auto 15/70	1
095018	Thermometer T40, 0 - 80 °C	2
095221	Bracket	3

# LK 423 MiniLoop RTC



Keep your smaller underfloor heating systems under control with the **LK 423 MiniLoop RTC**. Designed for pipes of 8 mm, 12 mm, 16 mm, or 20 mm in concrete or leveling compound, it's got integrated return temperature limiting for surface temperature control. Room temperature is precisely managed with a capillary tube thermostat. Compact and ideal for areas up to 10 m<sup>2</sup>.

# Shunt Group

## LK 423 MiniLoop RTC

- Small and compact
- Suitable for areas up to 10 m<sup>2</sup>



### TECHNICAL DATA

Max. working pressure	0.6 MPa (6 bar)
Working temperature	Max. 55 °C
Media	Water - Glycol mixture max. 50%
Adjustment range	Return valve: 23 - 44 °C Thermostat: 6 - 28 °C
Length	Capillary tube: 2 m
Diameter	Capillary tube bulb: Ø 16 mm

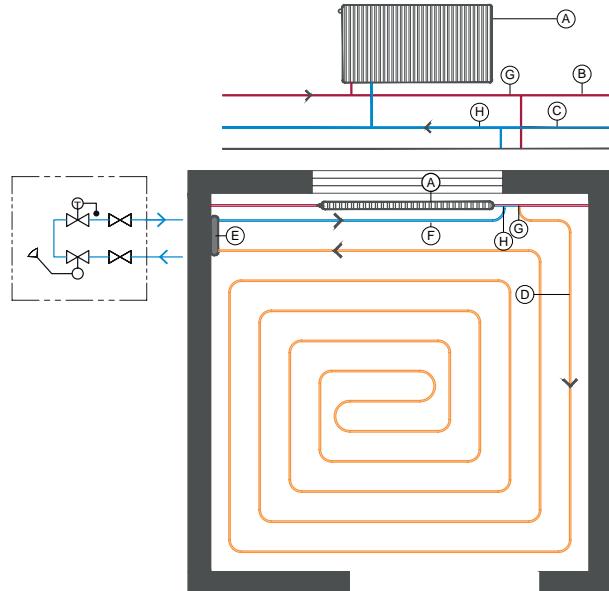
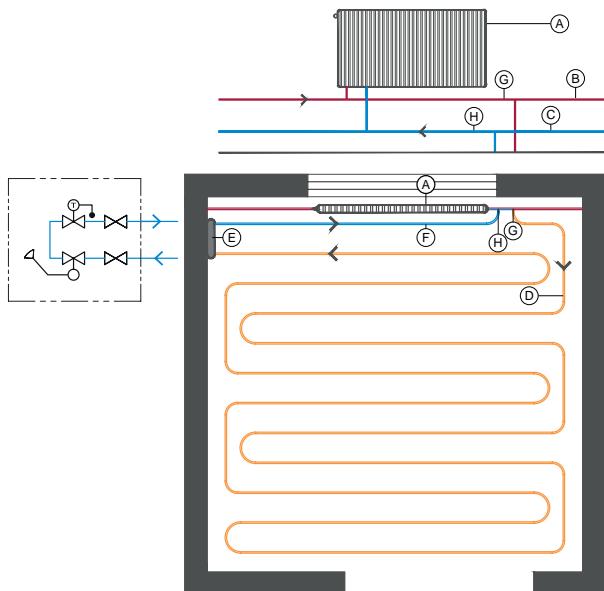
LK 423 MiniLoop RTC is designed to control smaller under floor heating systems that are embedded in concrete or levelling compound with a pipe dimension of 8 mm, 12 mm, 16 mm or 20 mm.

LK 423 MiniLoop RTC has integrated return temperature limiter that make it possible to limit the floor surface temperature.

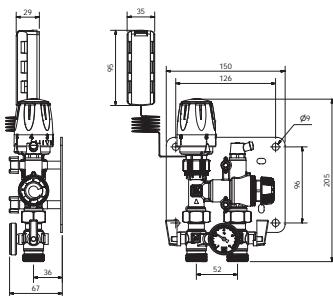
The room temperature is regulated via a capillary tube thermostat. It is also possible to install a wireless or wired electronic room temperature control.

- A. Radiator
- B. Radiator system, supply
- C. Radiator system, return
- D. Floor heating circuit
- E. LK 423 MiniLoop RTC
- F. Return pipe, floor heating circuit (from RTC)
- G. Connection point, supply floor heating circuit
- H. Connection point, return floor heating circuit (from RTC)

Recommended max. underfloor heating surface installation 10 m<sup>2</sup>



## LK 423 - Male thread



Article no.	Dim.	Kvs m³/h	Weight kg
299355	¾" Eurocone	1.48	0.4

## SPARE PARTS AND ACCESSORIES



1.



2.



### Article no.

095391

2988856

1882348

### Article

Thermostat with sensor

LK Installation cabinet RTB

LK Frame/hatch

### Position

1

2

3

# Flow Adjustment Valve

## LK 435 OptiFlow



- With MemoStop for locking setting
- Adjusted with Allen key while reading off flow on a clear scale



### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1,0 bar)
Working temperature	
Water/Glycol 50/50%	Min. -20 °C / Max. 80 °C (90 °C briefly)
Water/Ethanol 70/30%	Min. -20 °C / Max. 70 °C (85 °C briefly)
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Nickel-plated Brass EN 12165 CW617N
Measure accuracy	Flow meter: +/- 12%
Flow ranges	2-16 l/min, 4-36 l/min
Standard	Adjustment valve inlet: M - male thread Adjustment valve outlet: F - female thread

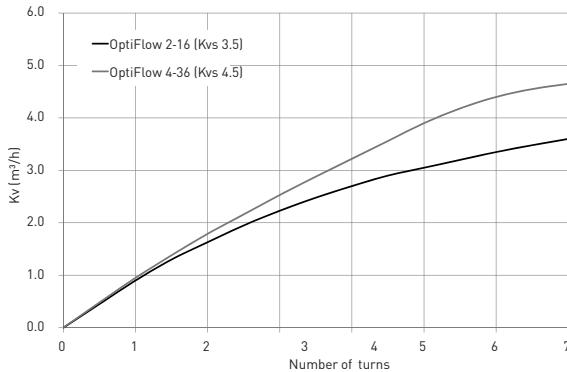
LK 435 OptiFlow is a group valve for flow adjustment of hydraulic systems such as underfloor heating, traditional heating and cooling systems. Adjustments are easily made using an Allen key. No measuring equipment is needed. The flow rate is read off directly from the visual flow indicator. The flow meter continuously measures and displays the actual flow rate during operation.

LK 435 OptiFlow has a MemoStop function for locking the setting. This means that the valve can be used as a shut-off valve without losing settings. A marking plate for labelling and documenting the setting is enclosed. LK 435 OptiFlow can be supplemented with a thermometer and threaded union parts, straight or angular, with rotating nut for simple assembly to, for example, an LK 430 Manifold RF - see under Accessories. The thermometer is placed in the valve's integrated sensor pocket.

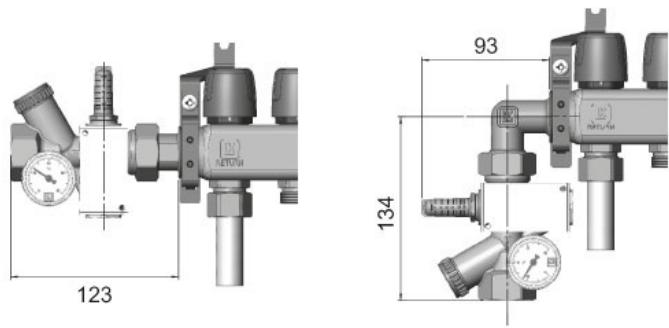
The valve can be mounted in any position. The arrow on the valve body indicates the flow direction. For accurate measurement a straight piece of tube at least of the same length as the valve body should precede the balancing valve. When assembling to an LK 430 Manifold RF the adjustment valve can be fitted directly to the manifold, thus replacing the shut-off valve.

The flow meter is designed so that the fluid does not flow through the glass in order to protect it from debris and dirt. However, after a period of time the glass may still have to be cleaned as the fluid often becomes contaminated and blackened. It is then easy to remove the glass to clean it. The function/setting of the valve is not affected by deposits in the glass.

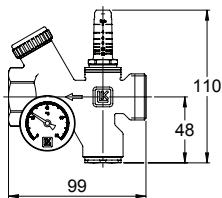
### VALVE CHARACTERISTICS



### WITH LK 430 MANIFOLD RF

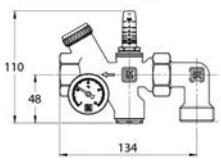
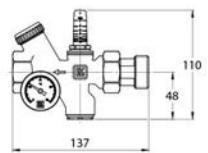


## LK 435 - Male thread / Female thread



Article no.	Dim.	Kvs m³/h	Flow range	Weight kg
090275	Adjustment valve - M 1" / F 1"	3.5	2-16 l/min	0.5
090276	Adjustment valve - M 1" / F 1"	4.5	4-36 l/min	0.5

### SPARE PARTS AND ACCESSORIES



#### Article no. Article

#### Position

095222 Threaded union part straight M 1" with rotating nut 1

095223 Threaded union part angle M 1" with rotating nut 2

095018 Thermometer T40, 0 - 80 °C 3

# Electric Portable Boiler

## LK 440 EasyHeat

- Complete portable electrically heated boiler
- Available in 3 kW and 9 kW
- Easy installation



### TECHNICAL DATA

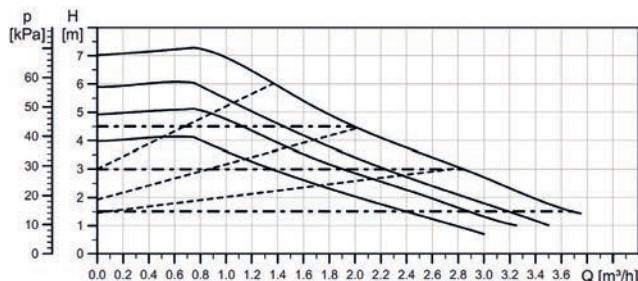
Protection class	IP 44
Media	Max. glycol solution 30%
Circulating pump	Grundfos UPM3 AUTO L EEI < 0.23 (see pump datasheet/ label for exact value)
Thermostat	Operating thermostat Max 60 °C Safety thermostat 80 °C
Expansion vessel	12 l
Safety valve	3 bar
Other data	Boiler volume 2.8 l
Type approval certificate	CE

The LK 440 EasyHeat is a complete portable electrically heated boiler. It is primarily meant to be used as a temporary heater, e.g. for drying concrete slabs installed with under floor heating and for heating buildings under construction.

LK 440 EasyHeat is available in two versions, with 3-phase 400V or 1-phase 230V. The total output capacity on 3-phase 400V is 9 kW and works in two steps of 4.5 kW. The total output capacity on 1-phase 230V can be manually set between 2 or 3 kW.

The boiler is supplied complete with a circulation pump, an expansion tank, and auxiliary devices including a safety valve and air vent valve. Connection to the under floor heating manifold or heating system is simple, using steel-reinforced flexible hoses. Temperature regulation is controlled by the boiler's operating thermostat.

### CAPACITY DIAGRAM

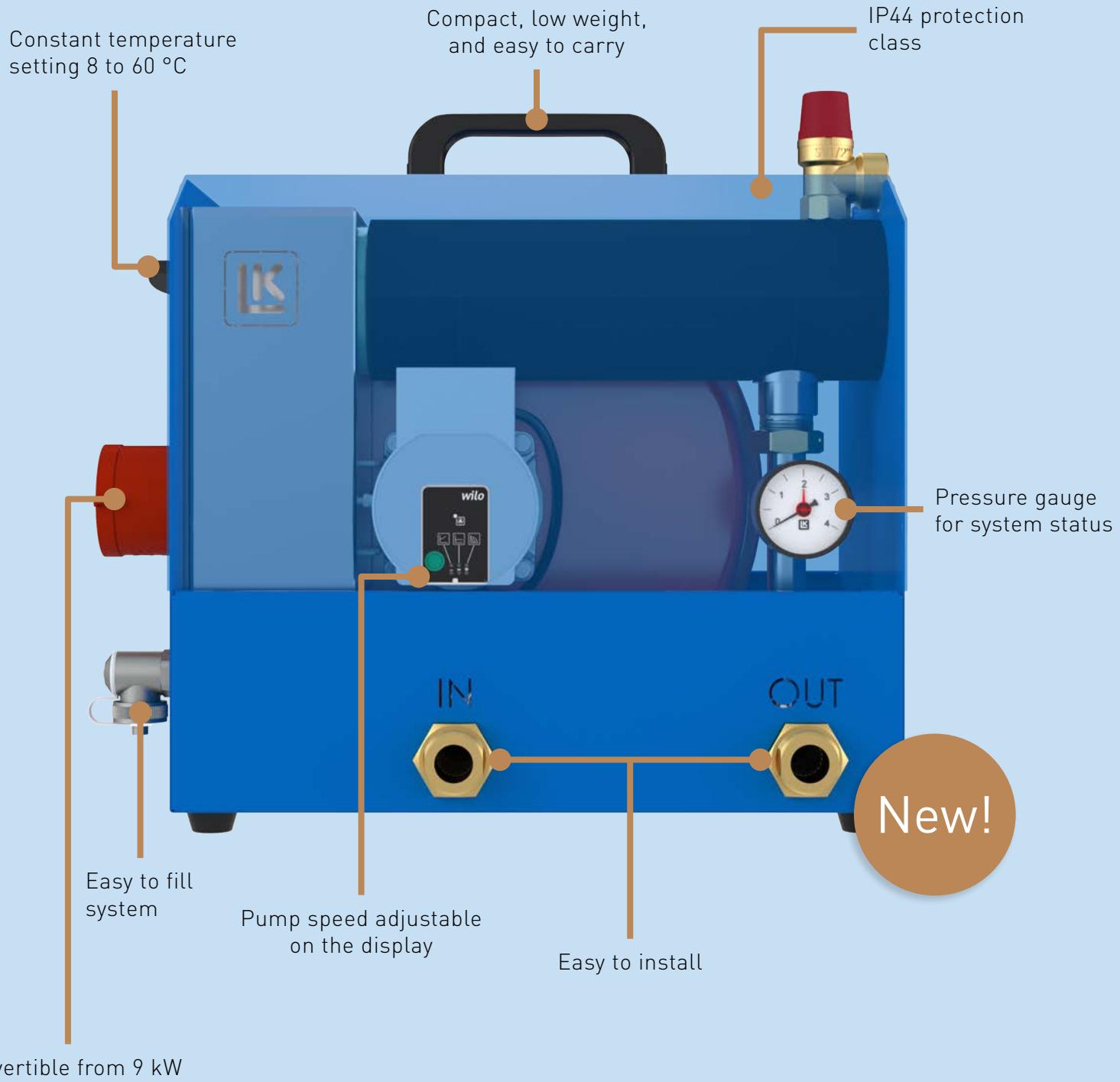


### LK 440 - Female thread



Article no.	Dim.	Connection	Power	B mm	H mm	L mm	Safety thermostat	Weight kg
298470	F 1"	3-phase 400 V Boiler must be protected using 3 x 16 A fuses (max. current 13.5 A)	9 kW (2x4.5 kW)	430	650	710	80 °C	24.0
298588	F 1"	1-phase 230V Boiler must be protected using 8,5 A 2 kW, 13 A 3 kW	2 / 3 kW	430	650	710	80 °C	23.0

# LK 440 EasyHeat 2.0



**LK 440 EasyHeat 2.0** is a portable electric boiler for fast, reliable temporary heat on site. Delivers 9 kW with 3-phase 400 V or 3 kW with 1-phase 230 V using an adapter, with a constant setpoint from 8 to 60 °C. Compact, lightweight and protected in a durable blue cabinet for easy transport.

# Electric Portable Boiler

## LK 440 EasyHeat 2.0

- Complete portable electrically heated boiler
- Convertible from 9 kW to 3 kW with adapter
- Easy installation



### TECHNICAL DATA

Voltage	400 V, 230 V (with adapter)
Max. boiler power	9 kW, 3 kW (with adapter)
Sound level	< 30 dB
Max. working pressure	3 bar
Working temperature	8-60 °C
Min. supply temperature	8 °C
Max. supply temperature	60 °C
Thread standard	G - female thread
Protection class	IP 44
Media	Water - Glycol mixture max. 30%
Electrical connection	CEE-socket 400 V/16 A triple phase
Circulating pump	Wilo Para 15-130/6 SC FS14, EEI < 0.23 (see pump datasheet/label for exact value)
Thermostat	Operating thermostat Max 60 °C Safety thermostat 80 °C
Expansion vessel	6 l
Safety valve	3 bar
Overheating protection	80 °C
Boiler volume	1 l
Type approval certificate	CE

LK 440 EasyHeat 2.0 is a complete portable electric boiler with an output of 9 kW or 3 kW. It is primarily intended as a temporary heater for e.g. drying out concrete slabs with underfloor heating or for heating buildings during their construction.

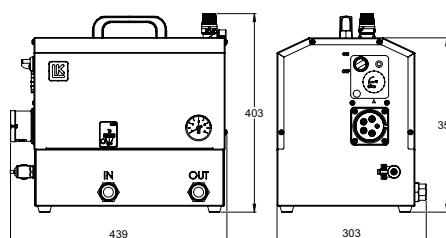
You can easily set the desired constant temperature between 8 and 60°C.

With a 3-phase 400 V connection, the output is 9 kW.

By connecting an adapter for 1-phase 230 V, the output is 3 kW.

The LK 440 is delivered in a blue cabinet for best protection. A pressure gauge shows the system pressure and any adjustment of the circulation pump speed is easily made on the pump's display. With its compact design, low weight and handle, the LK 440 is easy to transport.

## LK 440 2.0 - Female thread



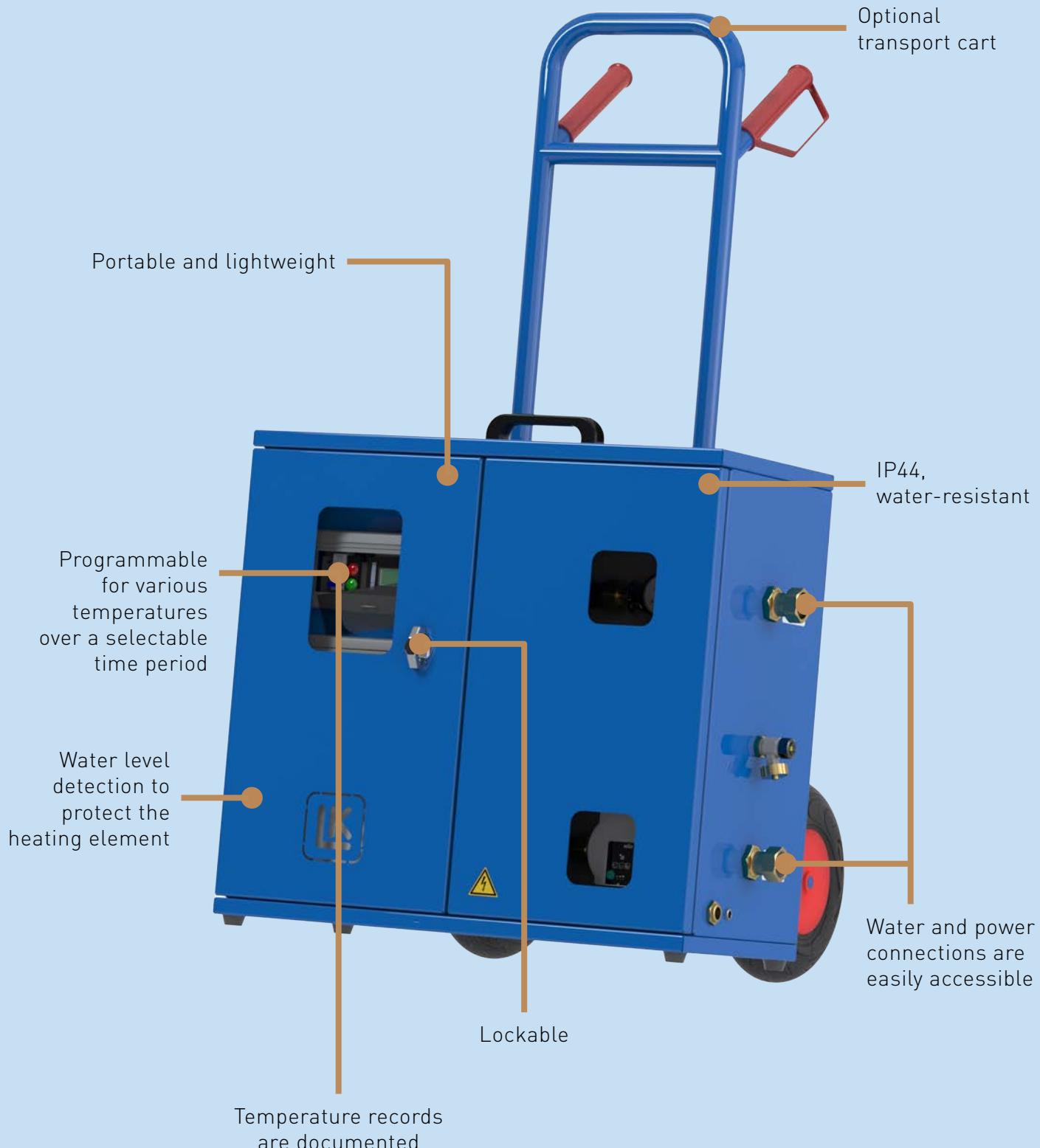
Article no.	Dim.	Connection	Power	Safety thermostat	Weight kg
396587	F 1"	3-phase 400 V Boiler must be protected using 3 x 16 A fuses (max. current 13.5 A)	9 kW (2x4.5 kW)	80 °C	16

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187960	Wilo Para 15-130/6 SC FS14	1
187353	2 pcs. flexible hoses 1" F x 1" M, 1,5 m	2
092320	LK 321 MultiFill®	3
182437	LK 522 FilterBall Magnet	4
187992	Immersion heater	5

# LK 450 EasyHeat P



Temperature records are documented

Designed for temporary heating needs, this complete electric boiler is your solution for drying concrete slabs and heating construction sites. With programmable precision, constant temperature control, and a sturdy lockable cabinet, the **LK 450 EasyHeat P** is the reliable choice for your heating requirements.

# Electric Portable Boiler

## LK 450 EasyHeat P

- Portable
- Water level detection
- Lockable cabinet



### TECHNICAL DATA

Voltage	400 V
Primary voltage adapter	400 V
Max. boiler efficiency	9 kW (3 + 6 kW)
Sound level	<30 dB
Max. working pressure	3 bar
Working temperature	8-60 °C
Min. supply temperature	8 °C
Max. supply temperature	60 °C
Thread standard	G - female thread
Protection type	IP44
Media	Water - Glycol mixture max. 30%
Electrical connection	CEE-socket 400 V/16 A 5-pole
Circulating pump	Wilo Para 15/6 - Composite EEI < 0.23 (see pump datasheet/ label for exact value)
Expansion vessel	6 l
Antifreeze function	Yes
Level guard	Yes
Overheating protection	80 °C
File import / export	Micro SD-card (not included)

The LK 450 EasyHeat P (programmable) 9 kW is a complete portable electrically heated boiler. It is primarily meant to be used as a temporary heater, e.g. for drying concrete slabs installed with under floor heating or for heating buildings under construction.

The temperature can be set between 8 and 60°C.

With the LK 450 EasyHeat P 9 kW, setting individual drying period programs is possible.

60 individual heating steps enable full control of the drying process and to receive a report on process afterwards if a micro SD-card is used.

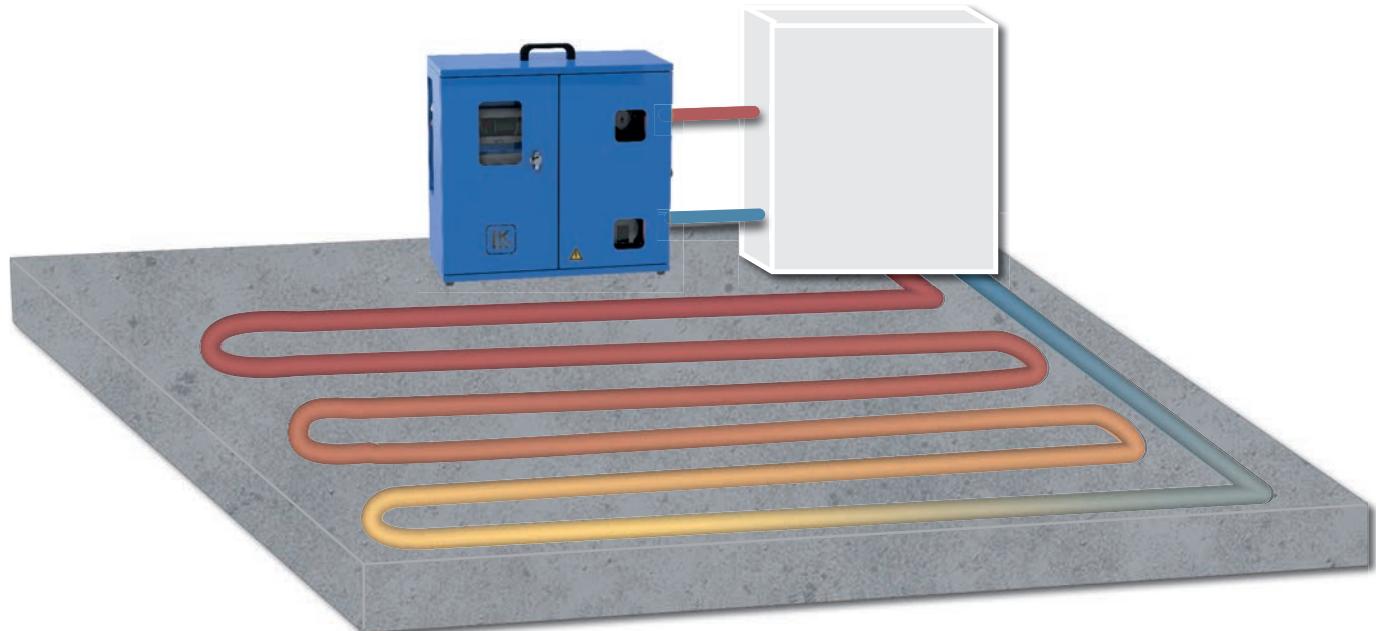
When a program is finished, the boiler maintains a supply temperature of 8 °C to avoid risk of freezing.

With its built-in water level detection, damage to the immersion heater is prevented if the water level in the system gets too low.

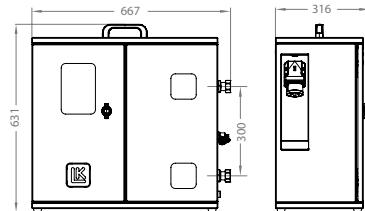
A constant temperature can be set when used as a temporary electric boiler.

EasyHeat comes in a blue aluminum cabinet with inspection window, so you can monitor the unit during operation. The cabinet can be locked to prevent accidental changes to the set temperature.

The LK 321 MultiFill® is available as an accessory, and makes it easy to fill the system. The LK 522 filter ball is used to protect EasyHeat from dirt and magnetite. Transport trolley to simplify moving unit. Connection pipes for easy connection between EasyHeat and the heating system. Refer to Accessories & Spare parts.



## LK 450 EasyHeat P - Female thread - 9 kW



Article no.	Dim.	Voltage	Weight kg
299529	F 1"	400 V	<25kg

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187354	Wilo <sup>Para</sup> 15/6 - Composite	1
187352	Transport trolley	2
187353	2 pcs. flexible hoses 1" F x 1" M, 1,5 m	3
092320	LK 321 MultiFill®	4
182437	LK 522 FilterBall Magnet	5

# Electric Portable Boiler

## LK 450 EasyHeat M

- Portable
- Water level detection
- Lockable cabinet



### TECHNICAL DATA

Voltage	3 kW: 230 V 9 kW: 400 V
Primary voltage adapter	3 kW: 230 V 9 kW: 400 V
Max. boiler efficiency	3 kW (1,5 + 1,5 kW) 9 kW (3 + 6 kW)
Sound level	<30 dB
Max. working pressure	3 bar
Working temperature	8-60 °C
Min. supply temperature	8 °C
Max. supply temperature	60 °C
Thread standard	G - female thread
Protection type	IP44
Media	Water - Glycol mixture max. 30%
Electrical connection	3 kW: CEE 16 A/230 V/50 Hz/1~ 1-Phase 9 kW: CEE-socket 400 V/16 A 5-pole
Circulating pump	Wilo Para 15/6 - Composite EEI < 0.23 (see pump datasheet/label for exact value)
Expansion vessel	6 l
Antifreeze function	Yes
Level guard	Yes
Overheating protection	80 °C
Type approval certificate	CE

The LK 450 EasyHeat M (manual) 3 kW or 9 kW is a complete portable electrically heated boiler. It is primarily meant to be used as a temporary heater, e.g. for drying concrete slabs installed with underfloor heating or for heating buildings under construction.

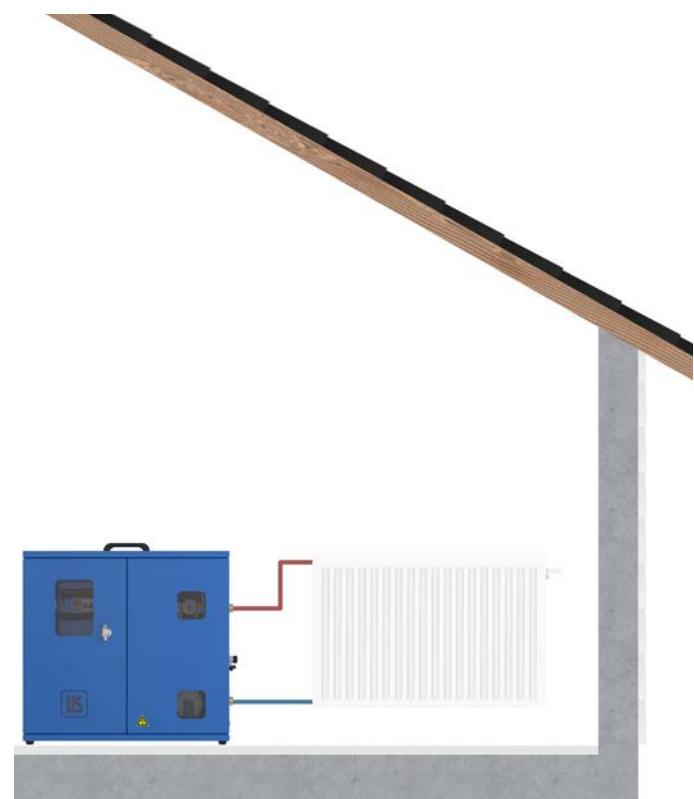
With the LK 450 EasyHeat M, setting the required constant temperature between 8 and 60°C is easy.

The LK 450 EasyHeat is available in two versions: single phase 230 V with 3 kW output or 3-phase 400 V with 9 kW output.

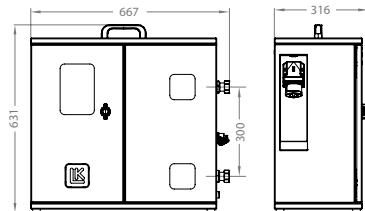
With its built-in water level detection, damage to the immersion heater is prevented if the water level in the system gets too low.

EasyHeat comes in a blue aluminum cabinet with inspection window, so you can monitor the unit during operation. The cabinet can be locked to prevent accidental changes to the set temperature.

The LK 321 MultiFill® is available as an accessory, and makes it easy to fill the system. The LK 522 filter ball is used to protect EasyHeat from dirt and magnetite. Transport trolley to simplify moving unit. Connection pipes for easy connection between EasyHeat and the heating system. Refer to Accessories & Spare parts.

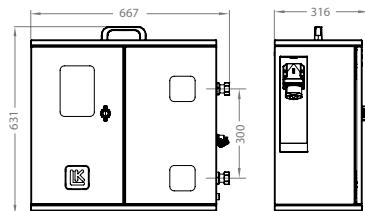


## LK 450 EasyHeat M - Female thread - 3 kW



Article no.	Connection	Voltage	Weight kg
299742	F 1"	230 V	<25

## LK 450 EasyHeat M - Female thread - 9 kW



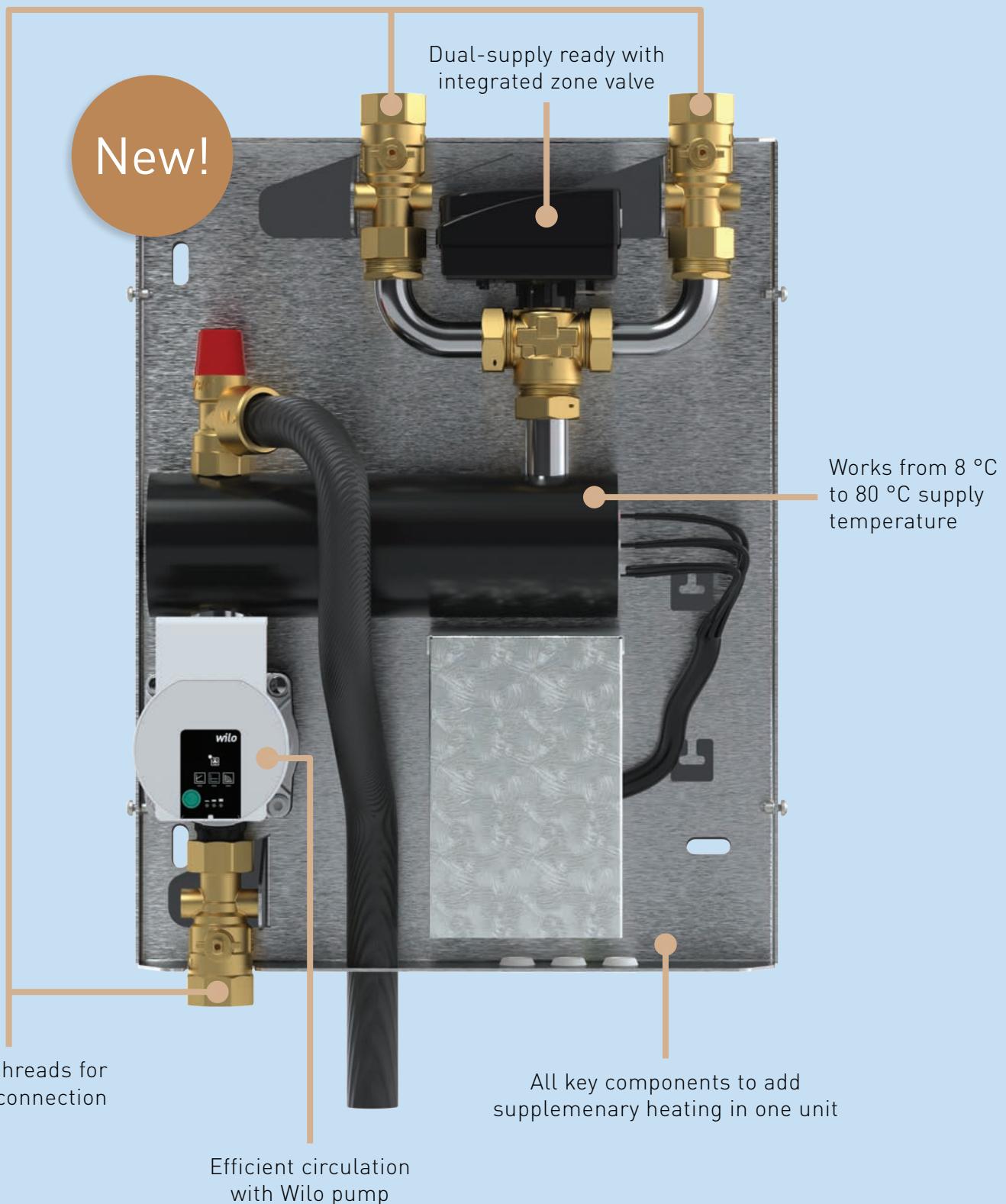
Article no.	Connection	Voltage	Weight kg
299748	F 1"	400 V	<25

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187354	Wilo Para 15/6 - Composite	1
187352	Transport trolley	2
187353	2 pcs. flexible hoses 1" F x 1" M, 1,5 m	3
092320	LK 321 MultiFill®	4
182437	LK 522 FilterBall Magnet	5

# LK 472 HeatBooster



Keep your heating system steady with **LK HeatBooster**. It adds supplementary heating when demand rises or when no immersion heater is fitted. Available in two versions: LK 471 delivers 3 kW and connects to one supply line and LK 472 delivers 9 kW and connects to two supply lines with an integrated zone valve that directs flow to the prioritised heat source.

# Supplementary Heating

## LK HeatBooster

- Extra power when needed
- Complete unit
- Integrated zone valve (LK 472)



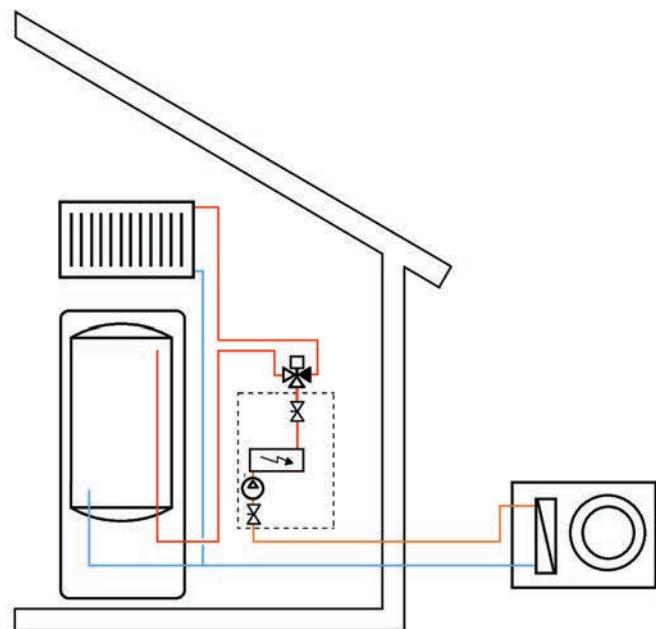
## TECHNICAL DATA

Voltage	230 V: 3 kW 400 V: 9 kW
Max. boiler power	9 kW / 3 kW
Max. working pressure	3 bar
Min. supply temperature	8 °C
Max. supply temperature	80 °C
Thread standard	G - female thread
Protection class	IP44
Media	Water - Glycol mixture max. 30%
Circulating pump	Wilo Para 15-130/8 IPWM1, EEI < 0.23 (see pump datasheet/ label for exact value)
Overheating protection	80 °C
Type approval certificate	CE

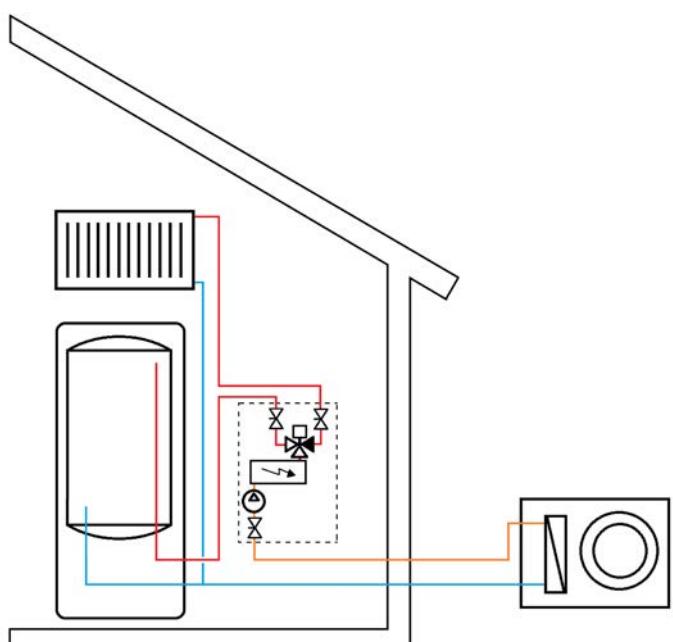
LK HeatBooster is designed to provide supplementary heating in systems where extra energy is needed, ensuring stable and efficient operation even during peak demand. LK HeatBooster has an output of 3 kW or 9 kW and contains all the necessary components for safe operation.

LK HeatBooster is available in two versions: LK 471 HeatBooster has a connection to one heat source and LK HeatBooster 472 has connections to two heat sources, e.g. for heating and tap water systems, where the integrated zone valve controls the flow to the prioritized heat source.

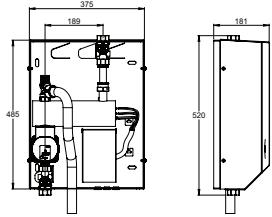
LK 471



LK 472

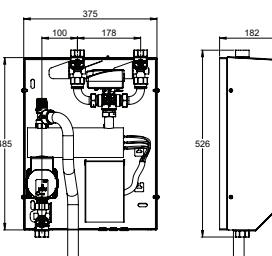


## LK 471



Article no.	Dim.	Voltage	Weight kg
396620	M 1"	230 V: 3 kW	15

## LK 472 - Integrated zone valve



Article no.	Dim.	Voltage	Operation time	Weight kg
396621	M 1"	400 V: 9 kW	8 s / 60°	15.3

## SPARE PARTS AND ACCESSORIES

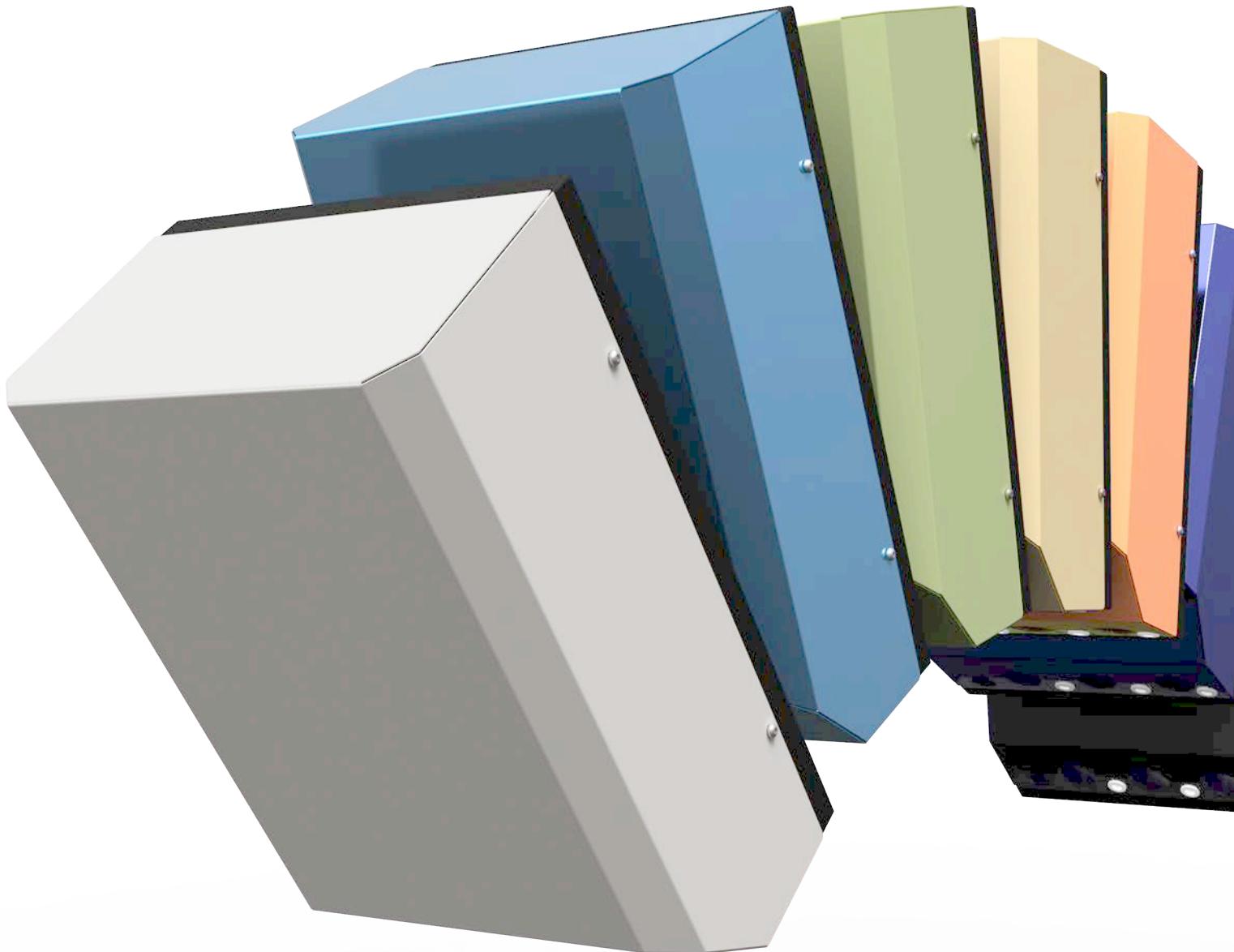


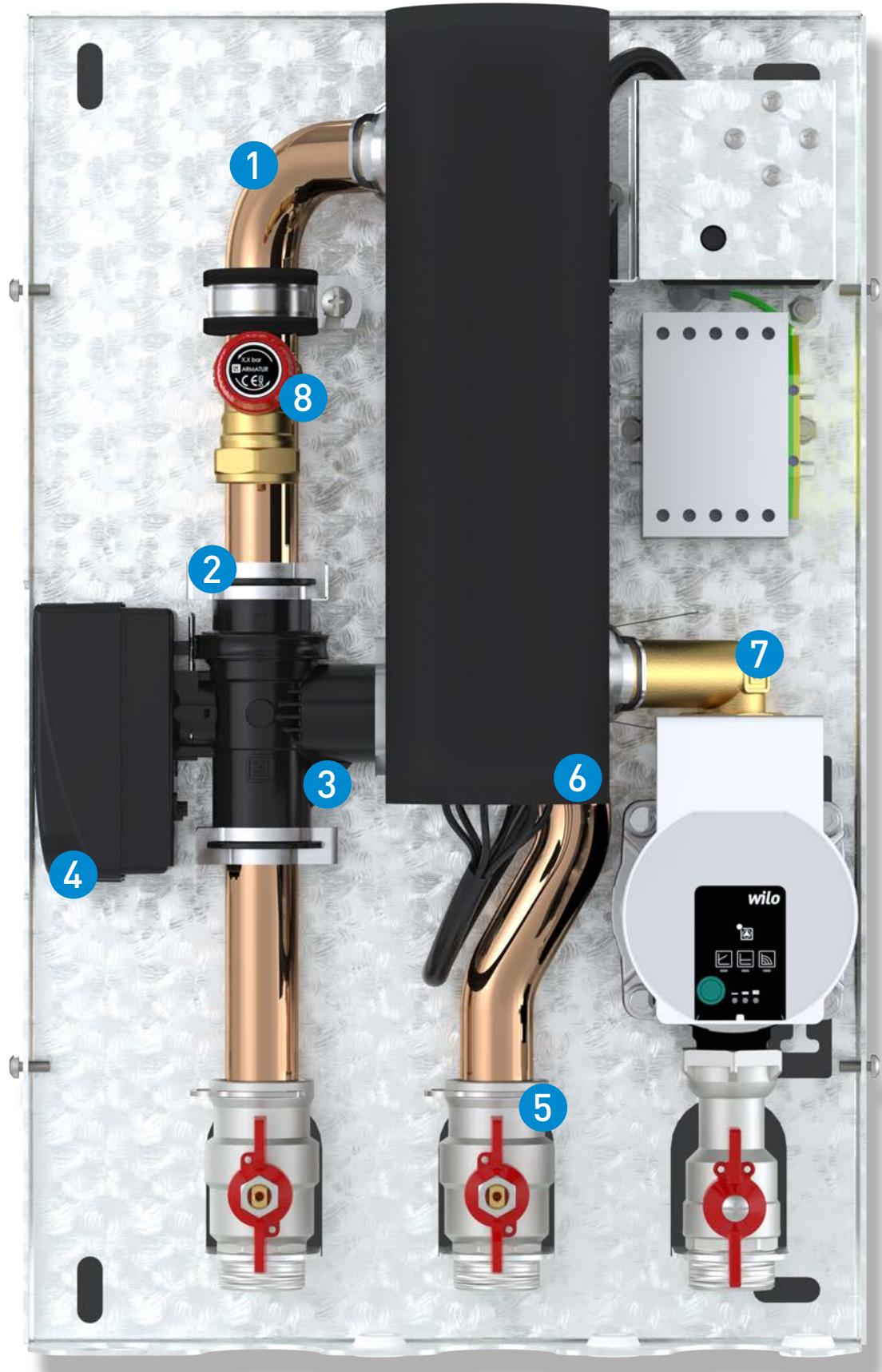
Article no.	Article	Position
066061	Actuator 230 VAC with cable 1 m	1
066379	525 MultiZone 3W, M 1"	2
187988	Ball valve without handle F 1" x F 1"	3
095472	Wilo Para IPWM1 15-130/8	4
187991	Immersion heater	5

# Your vision, our HeatBooster

**Imagine a heating component crafted specifically for your system – seamlessly integrated, perfectly tailored, and engineered to deliver exceptional performance. Designed for seamless integration, the LK HeatBooster ensures your system delivers reliable heating even in demanding conditions. As the ideal addition to heat pump systems without an electric immersion heater, it provides the extra heating capacity required to maintain reliable performance, even under the toughest conditions. We don't believe in one-size-fits-all.** With the LK HeatBooster, every detail is customised to your needs. From sizes and colours to capacities and components, **we work with you to create a product that not only fits your system but elevates it.** Whether you require specific pipe configurations, bespoke valves, or unique brass fittings, we make your vision a reality.

From start to finish, we're by your side. Our team is dedicated to supporting you throughout the process, from the initial concept and design to final delivery. Every LK HeatBooster is manufactured to the highest standards, meeting the latest directives and industry requirements, ensuring quality, reliability, and peace of mind. For manufacturers who value flexibility, performance, and a partner they can trust, **LK HeatBooster is the smart choice.** It's not just a product; it's a tailored solution, built to align with your system and exceed your expectations. **Elevate your system with LK HeatBooster –** engineered to meet your needs, crafted to match your vision, and built to leave a lasting impression. **Prefer a ready-made option? We also offer standard HeatBooster models: LK 471 and LK 472.**





# Choose your custom features



1 Available in both copper and stainless steel, our **pipes** can be cut, bent, collared, and flanged to meet your exact specifications.



2 All connections (except the pump) are equipped with **quick connection fittings** for fast, secure, and hassle-free assembly.



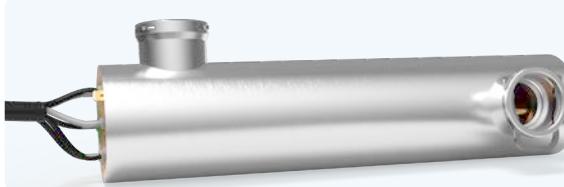
3 Our extensive range of **zone valves and mixing valves** is designed for different flow rates and functionalities, available in various materials to meet your needs.



4 With extensive expertise in **electronics**, we offer advanced solutions to enhance system functionality and performance.



5 Our wide selection of **ball valves** can be customized to your specific needs, ensuring flexibility and compatibility.



6 We offer **immersion heaters** in various power outputs, tailored to your system's specific needs.



7 We provide high-quality **brass components** that can be tailored to your unique requirements.

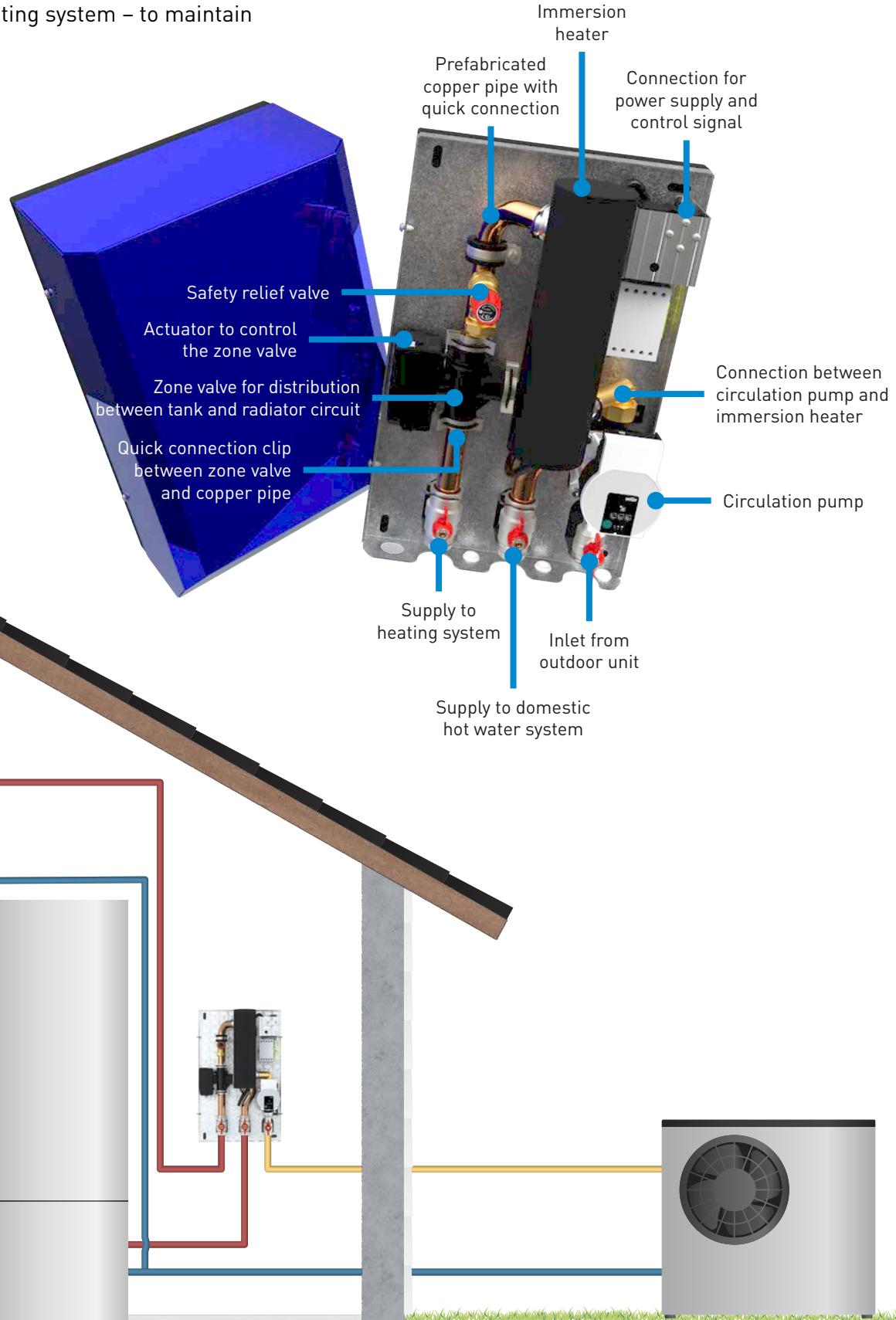


8 We offer **safety valves** in a range of pressure ratings and dimensions to suit various system requirements.

# How it works

The LK HeatBooster is designed to provide supplemental heating in systems without an electric immersion heater, ensuring stable and efficient operation even during peak demand. When connected to the heat pump's controller, it seamlessly integrates into the heating system, automatically activating when additional heat is needed – whether for domestic hot water or to support the overall heating system – to maintain optimal performance.

Customisable in size, capacity, and components, the HeatBooster is engineered for flexibility, making it easy to adapt to different system requirements. This application scheme illustrates how it functions within your setup, enhancing efficiency and reliability.



# Ball Valve

## LK 315 Ball Valve

- Low pressure drop
- Thermometer pocket

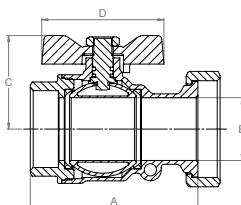


### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. -20/Max. 110 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Brass EN 12165 CW617N
Material sealing	PTFE
Spindle sealing	EPDM

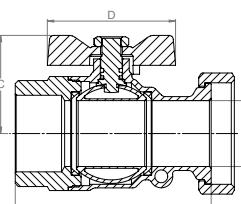
Ballvalve for heating systems. The valve has a 2" rotating nut on one side, for an easy connection on e.g. a circulating pump. A sensor pocket is integrated in the valve body. Thermometer 180352 is available as an accessory.

### LK 315 - Female thread



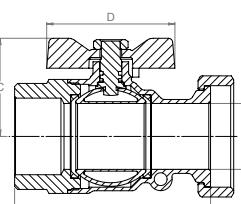
Article no.	Dim.	A mm	B mm	C mm	D mm	Weight kg
055840	F 2", rotating nut / F 1½"	98.5	37	55.5	72	0.9

### LK 315 - Female thread / Male thread



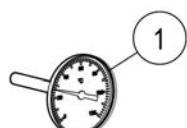
Article no.	Dim.	A mm	B mm	C mm	D mm	Weight kg
055841	F 2", rotating nut / M 2"	110	37	55.5	72	1.2

### LK 315 - Female thread



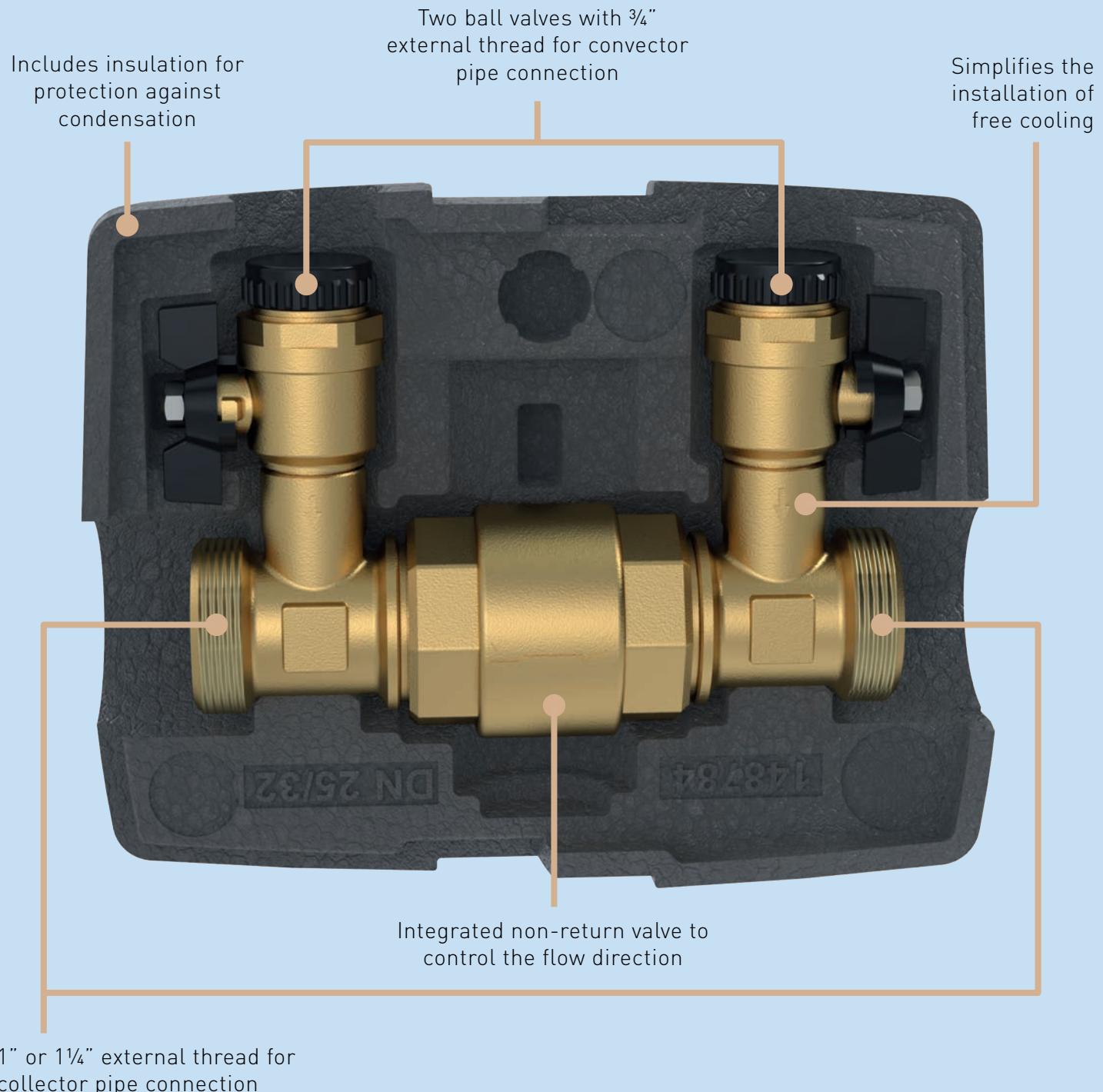
Article no.	Dim.	A mm	B mm	C mm	D mm	Weight kg
055842	F 2", rotating nut / F 2"	101.5	37	55.5	72	1.0

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
180352	Thermometer 120 °C	1

# LK 322 CoolUnit



The **LK 322 CoolUnit** is a valve combination for geothermal heat pumps that channels cold brine to a fan coil, cooling your home with natural ground cold. It also recharges the borehole in summer, improving heat pump performance. With a non-return valve for proper flow and flexible 1" or  $1\frac{1}{4}$ " collector and  $\frac{3}{4}$ " convector connections, it offers an efficient, versatile free cooling solution.

# Valve Combination

## LK 322 CoolUnit

- Insulation against condensation
- Energy effective way for free cooling
- Recharge the borehole during the summer



### TECHNICAL DATA

Max. working pressure	0,6 MPa (6 bar)
Working temperature	Min. -20 °C/Max. 80 °C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50%
Material valve body	Brass EN 12165 CW617N
Material sealing	EPDM

LK 322 CoolUnit is a valve combination that utilises the cold available in a system with a geothermal heat pump.

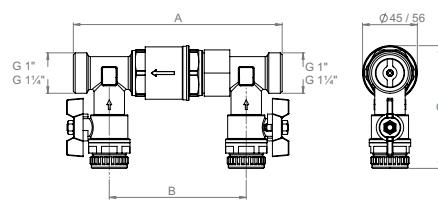
By running the brine in the collector hose to a fan coil, you can cool your home with the cold naturally found in the ground. In addition, the borehole is recharged during the summer, which increases the performance of the heat pump.

The LK 322 CoolUnit also contains a non-return valve to ensure the liquid is run in the right direction when fitting the shunt group with its own circulation pump. See LK HydronicGroup C/C 90 and 125 Cooling for a suitable shunt group.

The LK 322 have two 1" alt. 1¼" male thread for connection to the collector pipe. Two ball valves with ¾" male thread for connection to convector pipe.



LK 322 - Male thread



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	Weight kg
092366	M 1"	9.5	168	110	112	1.6
092367	G 1¼"	16	168	110	112	1.7

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095072	LK Insulation, 521 DN 25-32	1
299189	Flanged pipe - 22 mm, F 1", L=120 mm	2
299190	Flanged pipe - 28 mm, F 1 1/4", L=120 mm	2
396425	LK HydronicGroup H/C 125	3

# Cyclone Filter

## LK 360 NetMag

- Extend the service life of your heating system
- Energy-saving
- Rotatable filter housing, can be installed vertically and horizontally

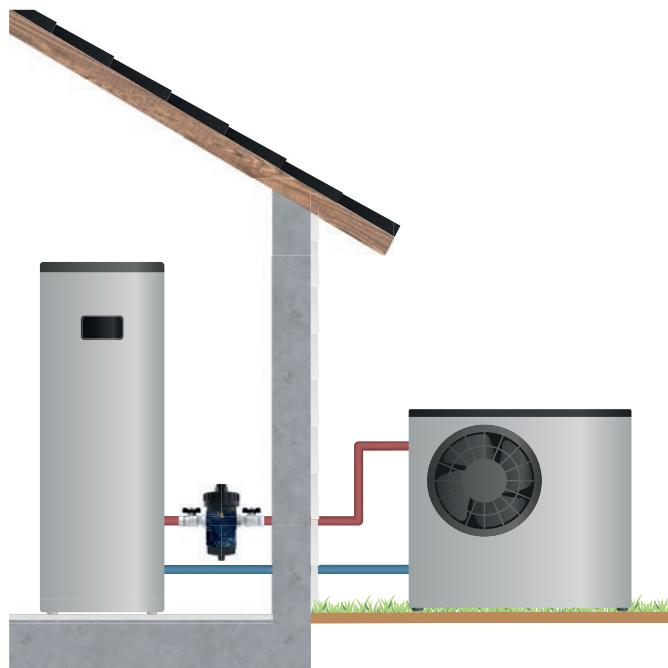


### TECHNICAL DATA

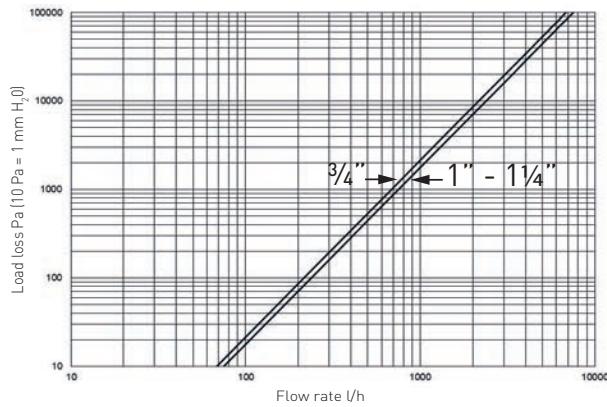
Max. working pressure	0.4 MPa (4 bar)
Working temperature	0-90 °C
Thread standard	G - female thread, ISO 228/1
Media	Water - Glycol mixture max. 30%
Material valve body	Nickel-plated Brass EN 12165 CW617N
Material filter element	Polyamide PA66
Material ball valve	Nickle-plated brass CW617N
Material magnet	Neodymium 11,000 gauss

The LK 360 NetMag is a magnetic cyclone filter that effectively protects your boiler and other components in your heating system by trapping dirt and magnetite.

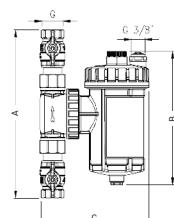
LK 360 shall be installed on the return pipe at the boiler inlet to protect the boiler from contamination. The filter housing is rotatable and can be installed vertically or horizontally, making it suitable for most spaces.



### PRESSURE DROP DIAGRAM

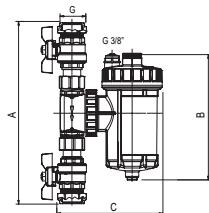


### LK 360 - Female thread



Article no.	Dim.	DN	Kvs m³/h	A mm	B mm	C mm	Weight kg
50801619	F 3/4"	20	6.81	237	190	153	1.2
50801620	F 1"	25	7.51	253	190	153	1.3
50801621	F 1 1/4"	32	7.51	256	190	153	1.3

## LK 360 - Compression Fitting



Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	Weight kg
50802032	22 mm	6.81	240	190	153	1.2
50802033	28 mm	7.51	273	190	153	1.3

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095501	Insulation	1
095500	Magnet	2

# Safety Valve

## LK 519 ThermoSafe

- Protect your boiler against overpressure
- Protective flexible hose for capillary tube



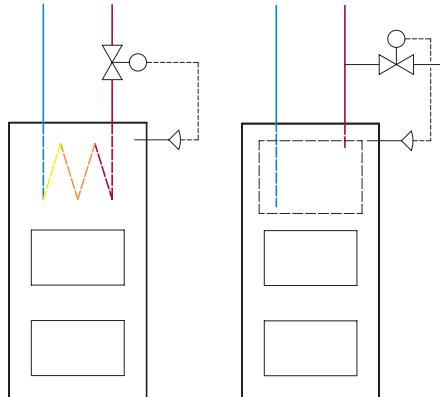
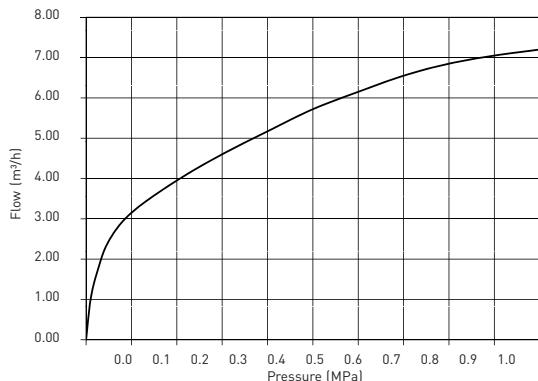
### TECHNICAL DATA

Max. working pressure	1.0 MPa (10 bar)
Working temperature	Min. 5 °C/Max. 110 °C
Opening temperature	97±2 °C
Thread standard	Rp - female thread, G - male thread
Material valve body	Brass EN 12165 CW617N
Material sealing	Viton
Material	Spring: Stainless steel
Material pipe	Capillary pipe: Copper, length 1300 mm, with insulation
Discharge capacity	Max. 6,5 m <sup>3</sup> /h at 0,6 MPa (6 bar)
Type approval certificate	CE

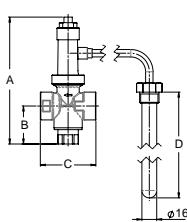
LK 519 ThermoSafe is a thermal safety valve for solid fuel boilers with built-in water heaters or cooling coils. The safety valve prevents the temperature of the boiler water from rising above the boiling point. When temperature levels are too high the valve opens to let cold water flow through water heater or cooling coil, thus reducing the temperature of the boiler. LK 519 ThermoSafe has two, separately functioning, temperature sensors for added safety.

LK 519 ThermoSafe safety valve is installed on the outlet pipe of water heaters. The inlet pipe is recommended for cooling coils as such an installation would protect the armature from impurities caused by lime scale and other deposits. The arrow on the valve housing indicates the direction of the flow. The sensor pocket is screwed into the designated connection on the boiler. It is easier to install if the sensors are first removed from the pocket.

### VALVE CHARACTERISTICS



### LK 519 - Female thread



Article no.	Dim.	A mm	B mm	C mm	D mm	Weight kg
091777	F 3/4" / M 1/2"	120	36	60	144	0.7

# Filter Ball Valve

## LK 522 FilterBall

- DZR Brass
- Easy to clean the filter



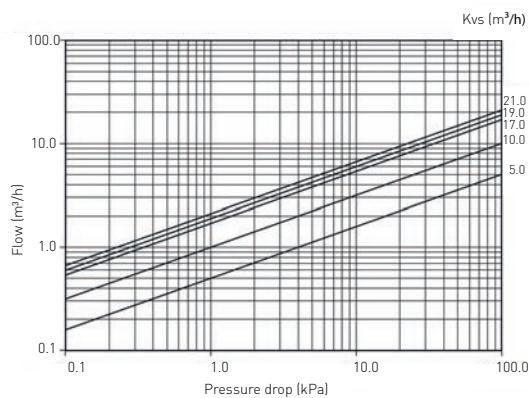
### TECHNICAL DATA

Max. working pressure	1.6 MPa (16 bar)
Working temperature	Min. -20 °C/Max. 120 °C
Mesh opening filter	0.7 mm / 0.5 mm
Thread standard	ISO 228/1
Media	Water - Glycol mixture max. 50%
Material valve body	DZR Brass EN 12165 CW625N
Material filter element	Stainless Steel
Material sealing	PTFE
Material cover sealing	EPDM
Spindle sealing	Two O-rings, EPDM

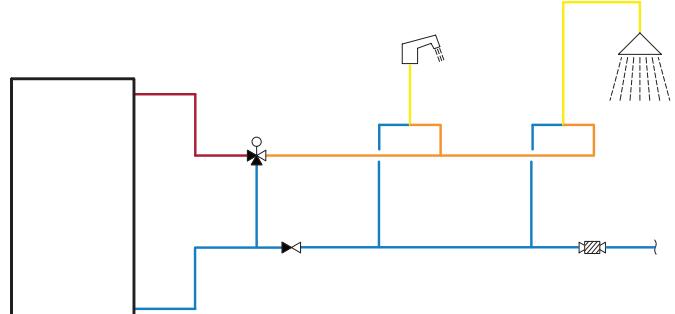
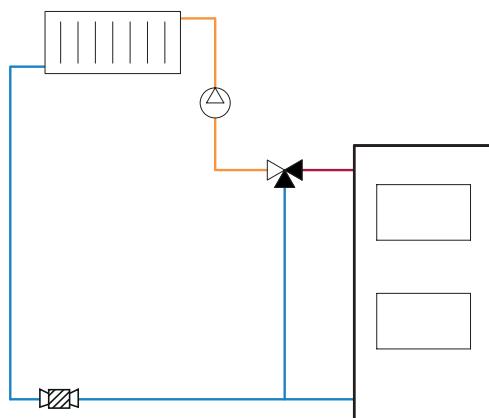
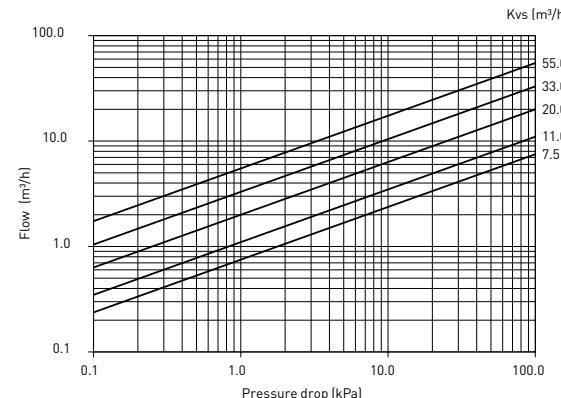
LK 522 FilterBall is a ball valve with an integrated filter suitable for heating, cooling and tap water systems.

The filter is easy to clean, just close the ball valve, unscrew the lid and remove the filter.

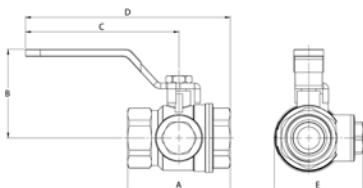
CAPACITY DIAGRAM - 0,5 MM



CAPACITY DIAGRAM - 0,7 MM

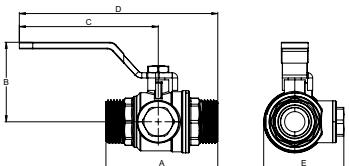


## LK 522 - Female thread



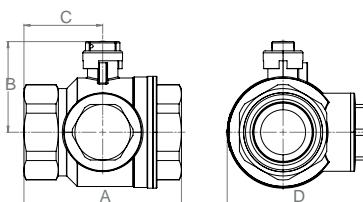
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Note	Weight kg
182015	F 3/4"	7.5	60	55	87	117	51	Mesh opening filter: 0.7 mm	0.3
182016	F 1"	11.0	71	60	107	142	61	Mesh opening filter: 0.7 mm	0.5
182017	F 1 1/4"	20.0	84	65	107	149	75	Mesh opening filter: 0.7 mm	0.9
182018	F 1 1/2"	33.0	93	80	143	189	88	Mesh opening filter: 0.7 mm	1.3
182019	F 2"	55.0	119	90	143	203	105	Mesh opening filter: 0.7 mm	2.1

## LK 522 - Male thread



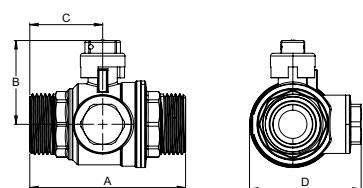
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Note	Weight kg
182432	M 3/4"	5.0	74	55	87	126	51	Mesh opening filter: 0.7 mm	0.4
182433	M 1"	10.0	85.5	60	107	153	61	Mesh opening filter: 0.7 mm	0.6

## LK 522 without handle - Female thread



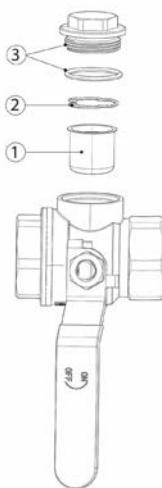
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182337	F 3/4"	5.0	60	42	30	51	Mesh opening filter: 0.5 mm	0.3
182338	F 1"	10.0	71	46	36	61	Mesh opening filter: 0.5 mm	0.5
182339	F 1 1/4"	17.0	84	54	42	75	Mesh opening filter: 0.5 mm	0.9
182340	F 1 1/2"	19.0	93	61	47	88	Mesh opening filter: 0.5 mm	1.3
182341	F 2"	21.0	119	69	60	105	Mesh opening filter: 0.5 mm	2.1

## LK 522 without handle - Male thread



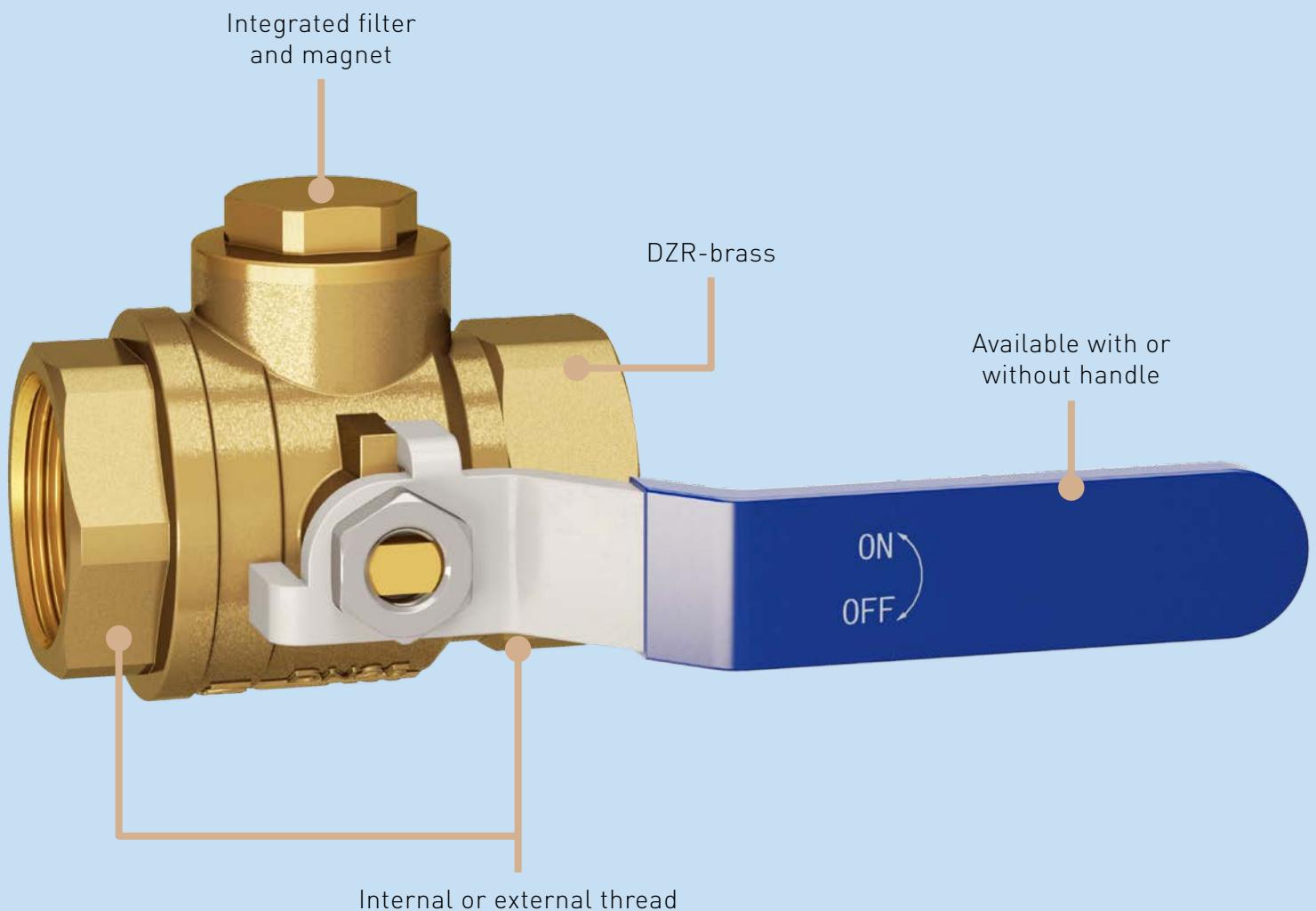
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182434	M 3/4"	5.0	74	42	39	61	Mesh opening filter: 0.5 mm	0.4
182435	M 1"	10.0	85.5	46	45.5	61	Mesh opening filter: 0.5 mm	0.6

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095414	Filter $\frac{3}{4}$ ", Mesh opening: 0.7 mm	1
095415	Filter 1", Mesh opening: 0.7 mm	1
095416	Filter $1\frac{1}{4}$ ", Mesh opening: 0.7 mm	1
095417	Filter $1\frac{1}{2}$ , Mesh opening: 0.7 mm	1
095418	Filter 2", Mesh opening: 0.7 mm	1
095419	Filter $\frac{3}{4}$ ", Mesh opening: 0.5 mm	1
095420	Filter 1", Mesh opening: 0.5 mm	1
095421	Filter $1\frac{1}{4}$ ", Mesh opening: 0.5 mm	1
095422	Filter $1\frac{1}{2}$ ", Mesh opening: 0.5 mm	1
095423	Filter 2", Mesh opening: 0.5 mm	1
095425	Locking ring / Clip $\frac{3}{4}$ "	2
095426	Locking ring / Clip 1"	2
095427	Locking ring / Clip $1\frac{1}{4}$ "	2
095428	Locking ring / Clip $1\frac{1}{2}$ "	2
095429	Locking ring / Clip 2"	2
095437	Cover & O-ring $\frac{3}{4}$ "	3
095438	Cover & O-ring 1"	3
095439	Cover & O-ring $1\frac{1}{4}$ "	3
095440	Cover & O-ring $1\frac{1}{2}$ "	3
095441	Cover & O-ring 2"	3

# LK 522 FilterBall Magnet



Optimise your heating, cooling, or tap water system with the **LK 522 FilterBall Magnet** – a ball valve with an integrated filter and magnet that effectively captures magnetite and impurities. Designed for quick and easy cleaning of both the filter and magnet, ensuring optimal performance with minimal maintenance.

# Filter Ball Valve with Magnet

## LK 522 FilterBall Magnet

- DZR Brass
- Easy to clean the filter
- Magnet Neodym, 12.000 gs



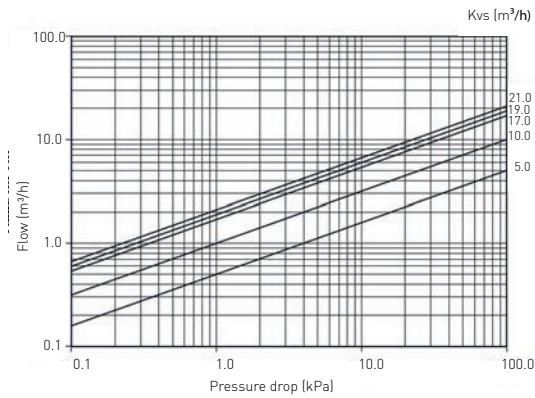
### TECHNICAL DATA

Max. working pressure	1.6 MPa (16 bar)
Working temperature	Min. -20 °C/Max. 120 °C
Mesh opening filter	0.7 mm / 0.5 mm
Thread standard	ISO 228/1
Media	Water - Glycol mixture max. 50%
Material valve body	DZR Brass EN 12165 CW625N
Material filter element	Stainless Steel
Material sealing	PTFE
Material cover sealing	EPDM
Material magnet	Neodymium
Spindle sealing	Two O-rings, EPDM

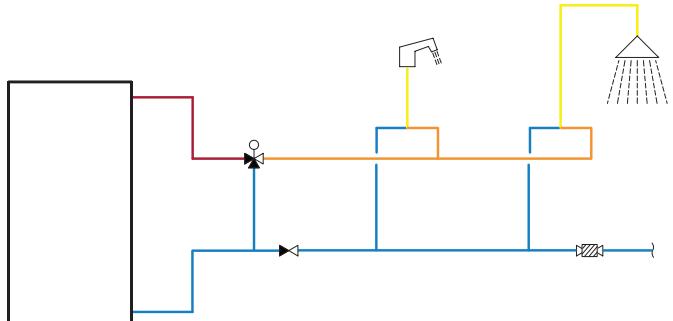
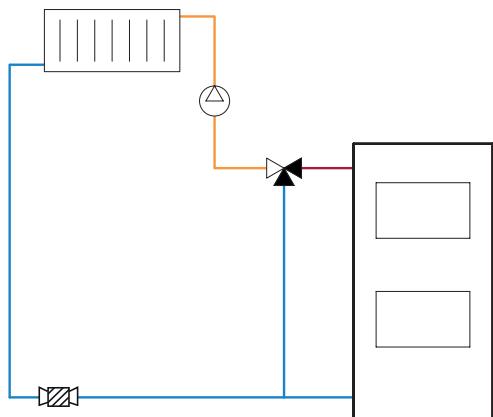
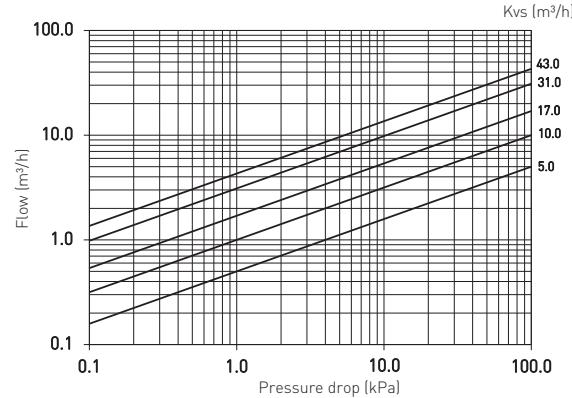
LK 522 FilterBall Magnet is a filter ball valve with an integrated magnet for collecting magnetite, suitable for heating, cooling and tap water systems.

The filter and the magnet is easy to clean, just close the ball valve, unscrew the lid and remove the filter and the magnet.

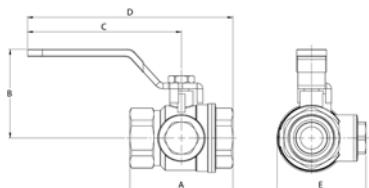
CAPACITY DIAGRAM - 0.5 MM



CAPACITY DIAGRAM - 0.7 MM

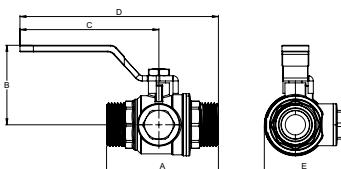


## LK 522 Magnet - Female thread



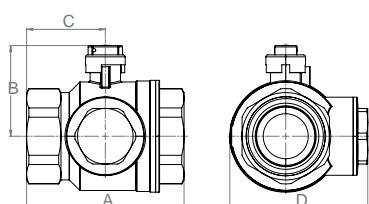
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Note	Weight kg
182274	F 3/4"	5.0	60	55	87	117	51	Mesh opening filter: 0.7 mm	0.3
182275	F 1"	10.0	71	60	107	142	61	Mesh opening filter: 0.7 mm	0.5
182276	F 1 1/4"	17.0	84	65	107	149	75	Mesh opening filter: 0.7 mm	0.9
182277	F 1 1/2"	31.0	93	80	143	189	88	Mesh opening filter: 0.7 mm	1.3
182278	F 2"	43.0	119	90	143	203	105	Mesh opening filter: 0.7 mm	2.1

## LK 522 Magnet - Male thread



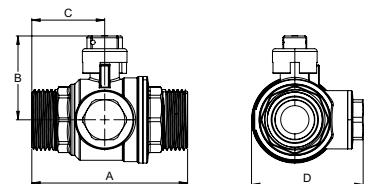
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	E mm	Note	Weight kg
182436	M 3/4"	4.5	74	55	87	126	51	Mesh opening filter: 0.7 mm	0.4
182437	M 1"	9.0	85.5	60	107	153	61	Mesh opening filter: 0.7 mm	0.6

## LK 522 Magnet, without handle - Female thread



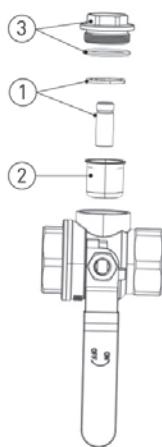
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182342	F 3/4"	4.5	60	42	30	51	Mesh opening filter: 0.5 mm	0.3
182343	F 1"	9.0	71	46	36	61	Mesh opening filter: 0.5 mm	0.5
182344	F 1 1/4"	16.0	84	54	42	75	Mesh opening filter: 0.5 mm	0.9
182345	F 1 1/2"	19.0	93	61	47	88	Mesh opening filter: 0.5 mm	1.3
182346	F 2"	21.0	119	69	60	105	Mesh opening filter: 0.5 mm	2.1

## LK 522 Magnet, without handle - Male thread



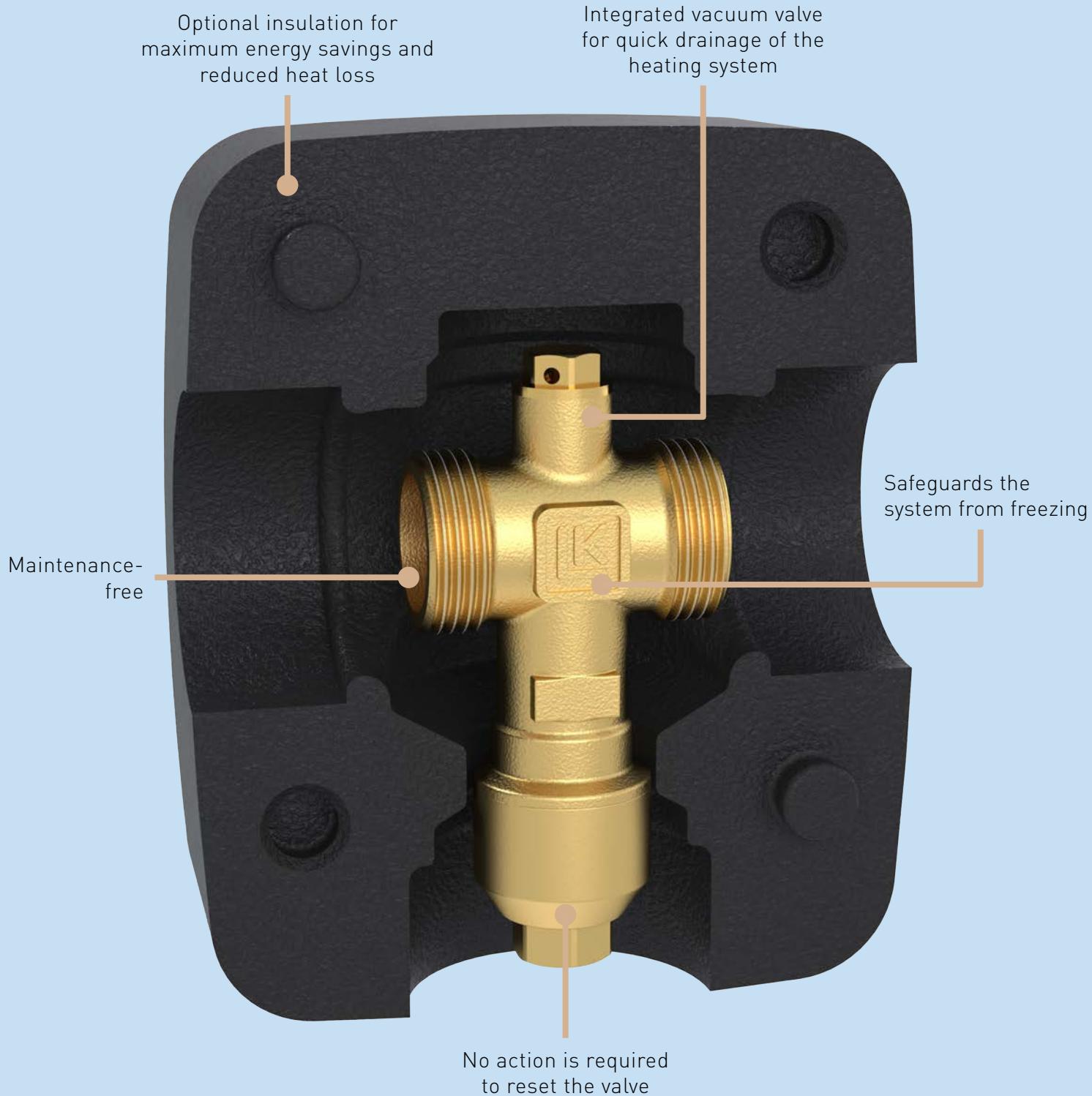
Article no.	Dim.	Kvs m³/h	A mm	B mm	C mm	D mm	Note	Weight kg
182438	M 3/4"	4.5	74	42	39	61	Mesh opening filter: 0.5 mm	0.4
182439	M 1"	9.0	85.5	46	45.5	61	Mesh opening filter: 0.5 mm	0.6

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095355	522 3/4" Magnet, Spring	1
095356	522 1" Magnet, Spring	1
095357	522 1 1/4" Magnet, Spring	1
095358	522 1 1/2" Magnet, Spring	1
095359	522 2" Magnet, Spring	1
095414	Filter 3/4", Mesh opening: 0.7 mm	2
095415	Filter 1", Mesh opening: 0.7 mm	2
095416	Filter 1 1/4", Mesh opening: 0.7 mm	2
095417	Filter 1 1/2", Mesh opening: 0.7 mm	2
095418	Filter 2", Mesh opening: 0.7 mm	2
095419	Filter 3/4", Mesh opening: 0.5 mm	2
095420	Filter 1", Mesh opening: 0.5 mm	2
095421	Filter 1 1/4", Mesh opening: 0.5 mm	2
095422	Filter 1 1/2", Mesh opening: 0.5 mm	2
095423	Filter 2", Mesh opening: 0.5 mm	2
095437	Cover & O-ring 3/4"	3
095438	Cover & O-ring 1"	3
095439	Cover & O-ring 1 1/4"	3
095440	Cover & O-ring 1 1/2"	3
095441	Cover & O-ring 2"	3

# LK 556 AntiFreeze



Protect your heating system from freezing with the **LK 556 AntiFreeze**. Designed for air/water heat pumps, it automatically drains the system if temperatures dip below 3 °C, ensuring your heating system remains safe and operational. Boost energy efficiency with available insulation, and enjoy the benefits of a maintenance-free valve.

# Safety Valve

## LK 556 AntiFreeze

- Protects heating system from freeze damage
- The valve is maintenance-free
- Insulation available as an accessory to save energy



### TECHNICAL DATA

Min. working pressure	0.05 MPa (0.5 bar)
Max. working pressure	0.6 MPa (6 bar)
Working temperature	0-75 °C
Opening temperature	3 °C
Ambient temperature	-30-60 °C
Storage temperature	-30-60 °C
Thread standard	G - male thread
Media	Water
Material valve body	Brass EN 12165 CW617N
Material sealing	EPDM

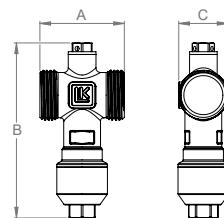
LK 556 AntiFreeze protects your heating system, usually in an air/water heat pump, if the fluid temperature should drop below +3°C by draining the system. This prevents the heating system from freezing.

If the valve opens and drains the system, no action is required to reset the valve, the system can be refilled again as soon as normal circulation in the heating system is resumed.

Insulation is available as an accessory for maximum energy saving. Refer to Accessories & Spare parts.

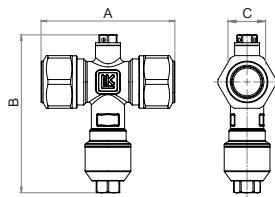


LK 556 - Male thread



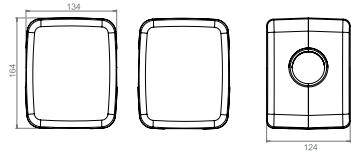
Article no.	Opening temp.	Dim.	DN	Kvs m³/h	A mm	B mm	C mm	Weight kg
182740	3 °C	M 1"	25	55	55	114	32	0.35
182741	3 °C	M 1¼"	32	70	55	123	42	0.4

## LK 556 - Compression fitting



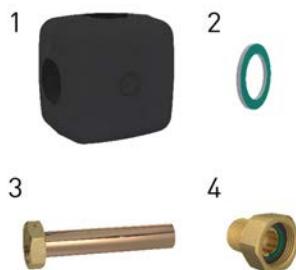
Article no.	Opening temp.	Dim.	DN	Kvs m³/h	A mm	B mm	C mm	Weight kg	
182805	3 °C		Ø22	20	40	97	114	32	0.65
182806	3 °C		Ø28	25	40	95	114	42	0.65
182807	3 °C		Ø35	25	45	95	123	42	0.7

## LK 556 Kit - incl. 2 x LK 556 and insulation



Article no.	Note	Weight kg
182776	Contains 2 pieces 182740 and 2 pieces 187109	0.8
182777	Contains 2 pieces 182741 and 2 pieces 187109	0.9

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187109	Insulation, DN 25-32	1
013010	Gasket Klingsil C4430 M32	2
013016	Gasket Klingsil C4430 M25	2
299189	Flanged pipe - 22 mm, F 1", L=120 mm	3
299190	Flanged pipe - 28 mm, F 1 1/4", L=120 mm	3
095380	Connection kit M 3/4" x F 1"	4
095381	Connection kit F 1" x M 1 1/4"	4

# Air Vent Valve

## LK 700/705 AeroMat

- Stainless steel



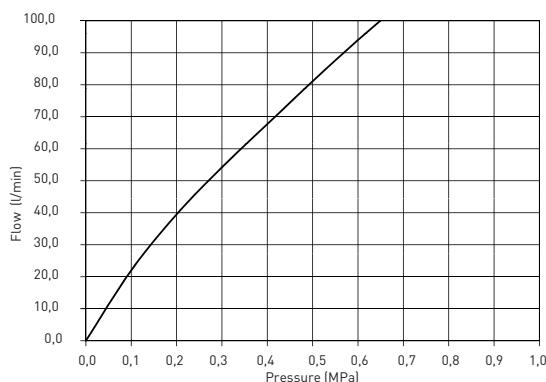
### TECHNICAL DATA

Max. working pressure	1.6 MPa (16 bar)
Working temperature	Min. 5 °C/Max. 130 °C
Thread standard	G - male thread, G - female thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Stainless Steel EN 10088 1.4301
Material sealing	PTFE
Material ball valve	Brass EN 12165 CW617N, externally sandblasted and nickel-plated. Chrome ball

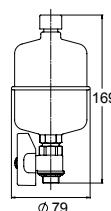
LK 700 and 705 AeroMat are automatic free floating air vent valves suitable for heating and cooling systems where pressure, temperature or media place high performance demands on the air vent valve.

The float vent valve is mounted vertically at a high point in the system. The shut-off valve is to be installed first and thereafter the float vent valve. The system should be flushed through and pressurized before mounting the float vent and opening the shut-off valve. Threads towards the system and the float vent are sealed in the usual manner.

### CHARACTERISTICS

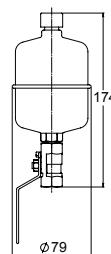


### LK 700 - Male thread



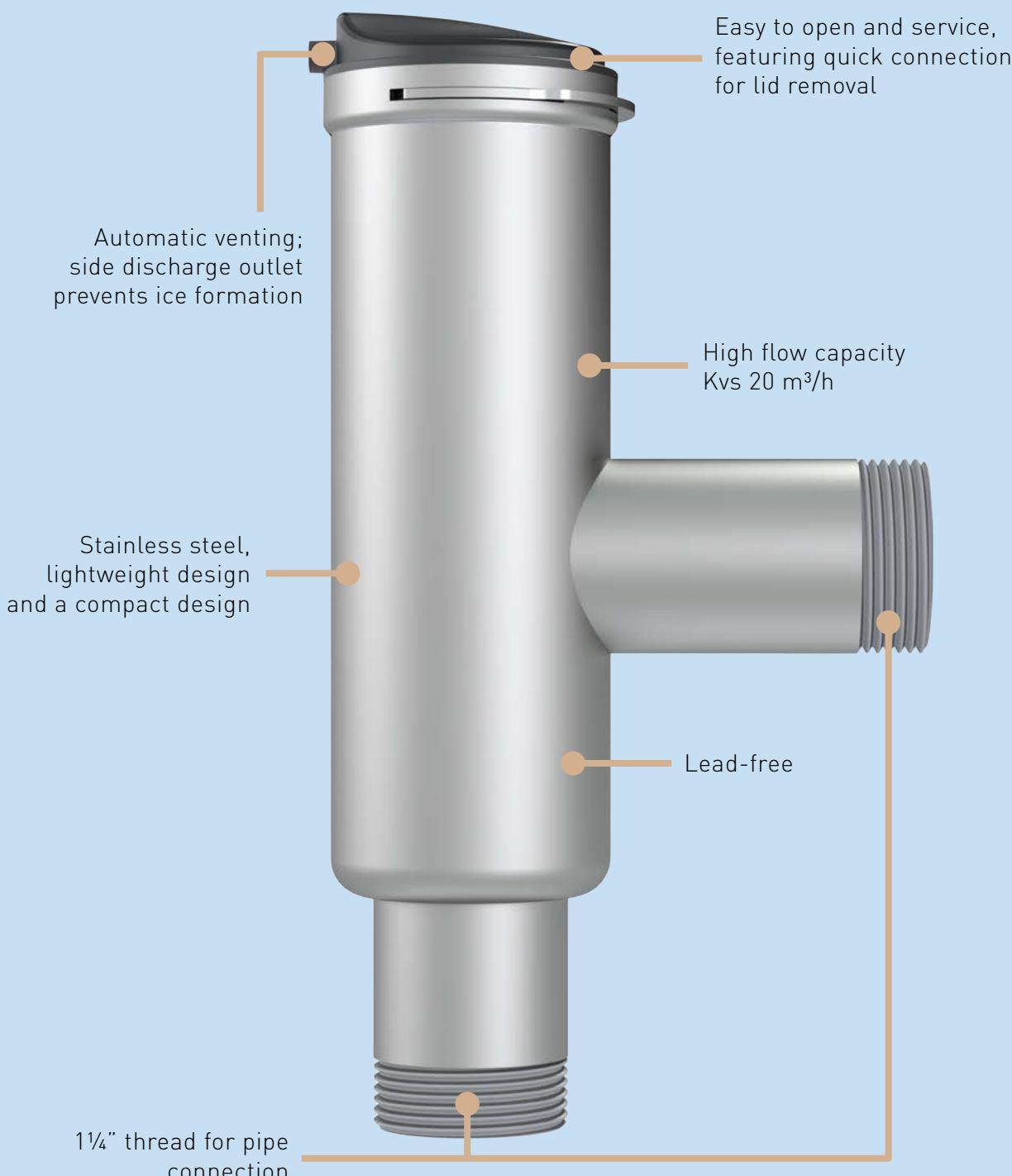
Article no.	Dim.	Note	Weight kg
094107	M 3/8"	without shut-off valve	0.4
4845228	M 3/8"	with shut-off valve	0.5

### LK 705 - Female thread



Article no.	Dim.	Note	Weight kg
4845244	F 3/8"	with shut-off valve	0.5

# LK 770 AeroSafe®



**LK 770 AeroSafe®** is an automatic venting valve designed to effectively remove air or gas from the system. One possible application is in an air/water heat pump, where it safely removes gas in the event of a potential leak from the refrigerant fluid into the heating system. Made from lightweight, lead-free stainless steel, it's easy to install and service with a removable lid. With a Kvs value of 20 m³/h, low pressure drop, and side discharge to prevent ice formation, it ensures optimal performance and system longevity.

# Air Vent Valve

LK 770 AeroSafe®



- Low pressure drop
- Lead-free
- Side discharge prevents ice formation



## TECHNICAL DATA

Max. working pressure	6 Bar
Working temperature	0-95 °C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50% Ethanol mixture max. 30%
Material valve body	Stainless Steel EN 10088 1.4301
Material external cover	PPE + PS Composite
Material sealing	EPDM

LK 770 AeroSafe® is used to continuously remove gases / air from hydraulic circuits.

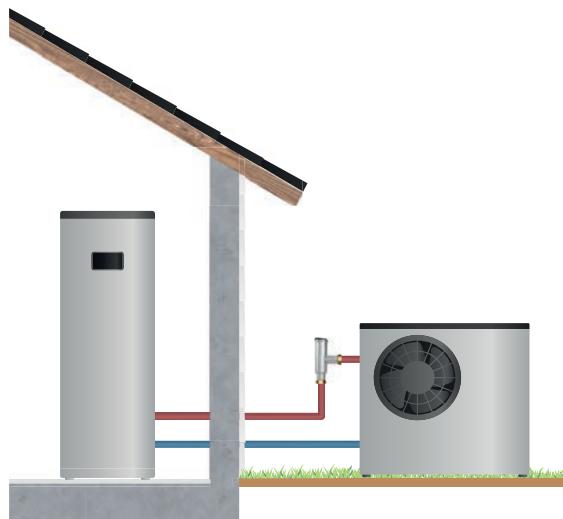
With an integrated stainless-steel mesh and large area of the chamber, the air / gas can be efficiently collected and automatically released. The venting outlet is located on the side of the top, which minimizes the risk of ice formation and blockage when installed in places where freezing temperatures can occur. However, the product should always be insulated if there is a risk of freezing temperatures.

If cleaning is required, the inner part can be easily dismantled using the quick-release connection.

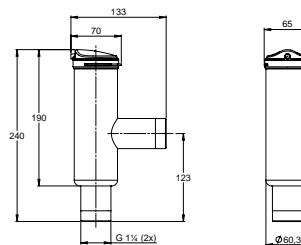
If LK 770 AeroSafe® is installed in connection with, for example, an air/water heat pump that uses flammable refrigerant gases (such as R290), it is important that LK 770 is installed outdoors or in well-ventilated areas where there is no risk for ignition (in case of leakage between the heat exchanger and the circuit with refrigerant gases).

In addition to the top cover and float mechanism, the LK 770 is made of stainless steel to maintain a high quality and avoid hazardous substances such as lead.

When used for gas evacuation of flammable refrigerants (e.g R290), the LK 770 should be tested in its application to ensure that the system meets necessary requirements.



## LK 770 - Male Thread



Article no.	Kvs m³/h	Connection	Weight kg
182803	20	M 1 1/4"	0.9

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
187965	770 Float spare parts kit	1
187967	770 Clips	2
187966	770 O-rings	3

# Safety Group

## LK 924 / 925 SafetyGroup

- Many connection options
- Several pressure classes possible
- Compact



### TECHNICAL DATA

Max. working pressure	See the table below
Working temperature	Min 5 °C/Max 110 °C
Ambient temperature	Min 5 °C/Max 60 °C
Thread standard	Rp - female thread, G - male thread
Material valve body	Brass EN 12165 CW617N

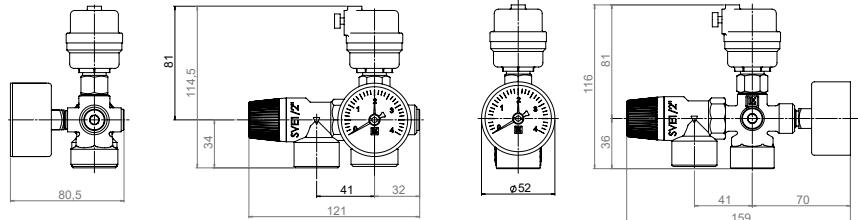
LK 924 / 925 SafetyGroup is a safety group for heating systems. The safety group contains manifold, manometer, safety valve and an air vent. 924 SafetyGroup has an automatic air vent with a float and 925 SafetyGroup has an automatic air vent with fibre discs. The manifold has two  $\frac{1}{2}$ " connections for safety valve and for example an expansion vessel, one  $\frac{3}{8}$ " connection for air vent.

The manometer shall be mounted in one of the three  $\frac{1}{4}$ " connections, plug the other  $\frac{1}{4}$ " connections with supplied plugs. Depending on model the manifold has a female  $\frac{3}{4}$ " connection or a male 1" connection towards the heating system.

The manometer, air vent with a float and one  $\frac{1}{2}$ " connection on the manifold are provided with a PTFE seal.

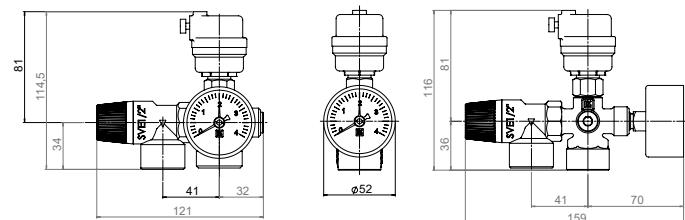
Safety valves in other pressure classes can be supplied upon request.

### LK 924 - Female Thread



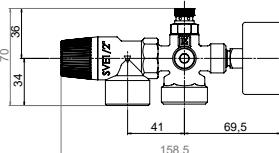
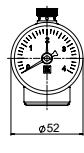
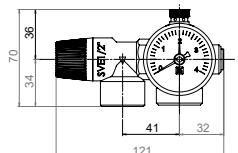
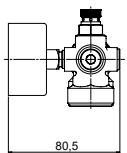
Article no.	Dim.	Opening pressure	Weight kg
092309	F $\frac{3}{4}$ "	0.3 MPa	0.6

### LK 924 - Male thread



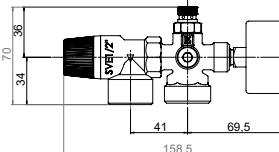
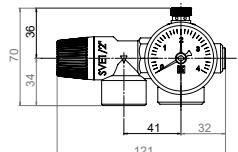
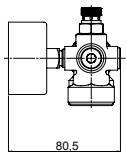
Article no.	Dim.	Opening pressure	Weight kg
092310	M 1"	0.3 MPa	0.6

## LK 925 - Female thread



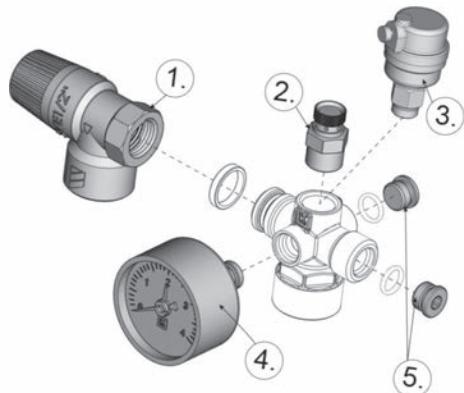
Article no.	Dim.	Opening pressure	Weight kg
092307	F 3/4"	0.3 MPa	0.5

## LK 925 - Male thread



Article no.	Dim.	Opening pressure	Weight kg
092308	M 1"	0.3 MPa	0.5

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095491	Safety relief valve 0.3 MPa	1
095492	750 G10 Ventilating valve	2
095497	740-G10 Floating air vent	3
095279	Manometer 50-4 bar M 1/4"	4
095493	Plug 1/4"	5

# Safety Group

## LK 994 SafetyGroup

- Adjustable bracket
- Automatic shutdown when removing expansion vessel
- Self-sealing, no additional thread locking



### TECHNICAL DATA

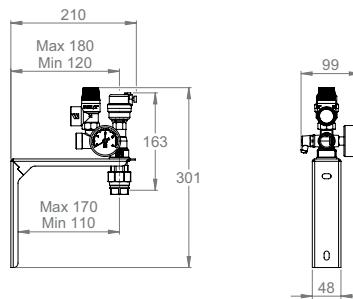
Working temperature	5-110 °C
Ambient temperature	5-60° C
Thread standard	G - male thread
Media	Water - Glycol mixture max. 50%
Material valve body	Brass EN 12165 CW617N

The LK 994 SafetyGroup is a safety group for heating systems.

It contains a floating air bleed valve, drain valve, manometer, shut-off valve and wall bracket. During disassembly of the expansion vessel, the shut-off valve automatically closes against the heating system. The bracket is adjustable to fit different expansion tank sizes.

Assembly of the LK 994 is done by the installer to adapt to the specific application. The details are provided with Teflon or O-ring sealing for the easiest possible assembly. The safety group can be rotated 360° for maximum flexibility.

### LK 994 - Male thread



Article no.	Dim.	Connection	Opening pressure	Discharge capacity	Weight kg
092371	M 3/4"		0.3 MPa	89 kW	0.9
092377	M 3/4"	3/4"	0.25 MPa	89 kW	0.9

### SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
095279	Manometer 50-4 bar M 1/4"	1
095491	Safety relief valve 0.3 MPa	2
095497	740-G10 Floating air vent	3
095498	Drainage valve 1/4"	4
095511	Shut-off valve f/m 3/4"	5

# Fittings

## LK MultiConnection



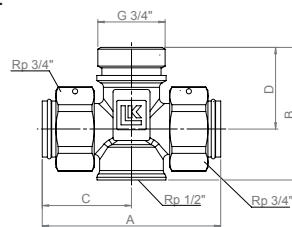
### TECHNICAL DATA

Max. working pressure	1.6 MPa (16 bar)
Working temperature	Min -20 °C/Max 120 °C
Thread standard	Rp - female thread, G - male thread
Media	Water - Glycol mixture max. 50%
Material valve body	DZR Brass EN 12165 CW625N

LK MultiConnections are a series of fittings for easy installation. Connections with fixed threads are designed for LK Armatur systems with O-ring seals (except 935).

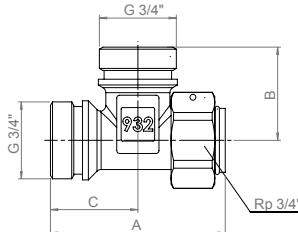
Flat surfaces are sealed with fibre gaskets. See accessories for suitable fibre gaskets, below.

### LK 931 - Male / Female / Rotating nut



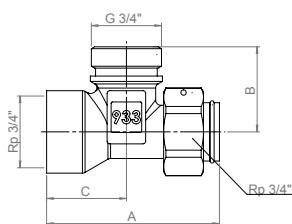
Article no.	Dim.	A mm	B mm	C mm	D mm	Weight kg
090090	M 3/4" x F 1/2" x F 3/4" rotating nuts x 2	70	52	35	32	0.2

### LK 932 - Male / Rotating nut



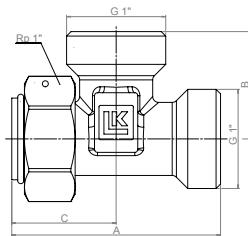
Article no.	Dim.	A mm	B mm	C mm	Weight kg
090091	M 3/4" x F 3/4" rotating nut	60	32	30	0.2

### LK 933 - Male / Female / Rotating nut



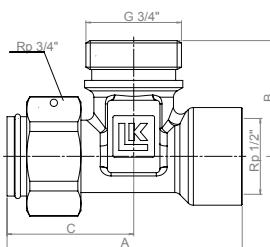
Article no.	Dim.	A mm	B mm	C mm	Weight kg
090092	M 3/4" x F 3/4" x F 3/4" rotating nut	65	32	30	0.2

## LK 935 - Male / Rotating nut



Article no.	Dim.	A mm	B mm	C mm	Weight kg
090257	M 1" x M 1" x F 1" rotating nut	70	36	35	0.2

## LK 936 - Female / Male / Rotating nut



Article no.	Dim.	A mm	B mm	C mm	Weight kg
090258	F 1/2" x M 3/4" x F 3/4" rotating nut	65	32	35	0.2

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
013035	Gasket C4400 1"	1
013032	Gasket C4400 3/4"	2
012018	O-ring for M 3/4"	3

# Transition Fittings

## Transition Fittings

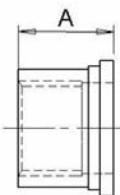


### TECHNICAL DATA

Material, Union parts	Red brass, according to DIN 1705, ISO 1338
Material, Nuts	Brass
Material, Gaskets	Aramid fibre (type KLINGERsil C-4400)

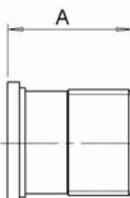
Transition fitting kits includes union, nut and gasket.

## Female thread / Rotating nut



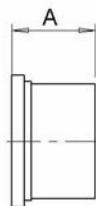
Article no.	Dim.	A mm	Weight kg
095364	F 3/8" x F 3/4"	21	0.07
095365	F 1/2" x F 1"	22	0.10
095366	F 3/4" x F 1 1/4"	22	0.15
095367	F 1" x F 1 1/2"	25	0.17
095368	F 1 1/4" x F 2"	29	0.35
095369	F 1 1/2" x F 2 1/4"	32	0.50

## Male thread / Rotating nut



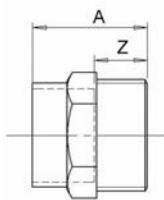
Article no.	Dim.	A mm	Weight kg
095379	M 1/2" x F 3/4"	27	0.08
095380	M 3/4" x F 1"	31	0.07
095381	M 1" x F 1 1/4"	35	0.01
095382	M 1 1/4" x F 1 1/2"	39	0.02
095383	M 1 1/2" x F 2"	41	0.02

## Internal solder / Rotating nut



Article no.	Dim.	A mm	Weight kg
095371	15 mm x F 3/4"	19	0.02
095372	18 mm x F 3/4"	17	0.03
095373	18 mm x F 1"	19	0.04
095374	22 mm x F 1"	19	0.06
095375	28 mm x F 1 1/4"	25	0.08
095376	35 mm x F 1 1/2"	27	0.07
095377	42 mm x F 2"	31	0.02
095378	54 mm x F 2 1/2"	37	0.02

## Internal solder / Male thread



Article no.	Dim.	A mm	Z mm	Weight kg
2008134	15 mm x F 1/2"	25	14	0.03
2008217	18 mm x F 3/4"	26	13	0.06
2008241	22 mm x F 3/4"	29.5	15	0.05
2008258	22 mm x F 1"	30	15	0.06
2008282	28 mm x F 3/4"	41	22	0.1
2008290	28 mm x F 1"	36	17	0.1
2008332	35 mm x F 1 1/4"	43	20	0.1
2008381	42 mm x F 1 1/2"	48	21	0.2
2008423	54 mm x F 2"	58	26	0.3

# Prefabricated Pipes

## Prefabricated pipes



### TECHNICAL DATA

Thread standard	Rp - female thread
Material pipe	Stainless pipe / Copper pipe

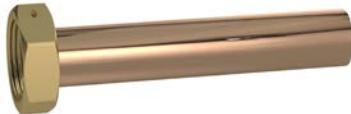
Prefabricated pipes.

Flanged stainless pipe - for use between flat sealing connection to compression/pressfitting etc.



Article no.	Dim.	Dim. 2	Length	Weight kg
299103	Pipe 15 mm	Rotating nut F 20	L=120 mm	0.09
299104	Pipe 18 mm	Rotating nut F 20	L=120 mm	0.09
299105	Pipe 22 mm	Rotating nut F 25	L=120 mm	0.12
299106	Pipe 28 mm	Rotating nut F 32	L=120 mm	0.17
299107	Pipe 28 mm	Rotating nut F 40	L=120 mm	0.22

Flanged copper pipe - for use between flat sealing connection to compression/pressfitting etc.



Article no.	Dim.	Dim. 2	Length	Weight kg
299187	Pipe 15 mm	Rotating nut F 20	L=120 mm	0.09
299188	Pipe 18 mm	Rotating nut F 20	L=120 mm	0.09
299189	Pipe 22 mm	Rotating nut F 25	L=120 mm	0.12
299190	Pipe 28 mm	Rotating nut F 32	L=120 mm	0.17
299191	Pipe 28 mm	Rotating nut F 40	L=120 mm	0.22

## Flanged copper pipe - for use between flat sealing connection



Article no.	Dim.	Dim. 2	Length	Weight kg
298972	Pipe 22 x 1	Rotating nut F 25	L=21 mm	0.1
298992	Pipe 18 x 1	Rotating nut F 20	L=20 mm	0.08
298993	Pipe 28 x 1.2	Rotating nut F 32	L=20 mm	0.14
S180810	Pipe 35 x 1.5	Rotating nut F 40	L=30 mm	0.16

## SPARE PARTS AND ACCESSORIES



Article no.	Article	Position
013012	Gasket Klingsersil C4430 M20	1
013016	Gasket Klingsersil C4430 M25	1
013010	Gasket Klingsersil C4430 M32	1
013015	Gasket Klingsersil C4430 M40	1

# Flexible Hose

## Diffusion-tight hose



### TECHNICAL DATA

Max. working pressure	DN8-DN25: 10 bar, DN32: 6 bar
Working temperature	Min. -20 / Max. 90 °C
Material	Connections: Brass Inner Hose: Butyl Braiding: Stainless steel

### FLEXIBLE HOSE FOR HEATING AND COOLING SYSTEMS.

Our high-quality flexible hose is designed to meet the demands of both heating and cooling systems. With an inner hose made of butyl rubber and a stainless steel braiding, it offers superior durability and performance.

### ADVANTAGES AND SPECIFICATIONS:

- Meets DIN 4726: The hose is manufactured according to the DIN 4726 standard, which prevents oxygen diffusion into the system and protects against corrosion and other oxygen-related issues.
- Effective Protection: The diffusion-tight construction reduces the risk of corrosion and performance degradation, ensuring long-lasting and reliable operation.

Application: Perfect for both heating and cooling systems, making it versatile and adaptable to various applications.

Customer-Specific Manufacturing: We offer customized solutions to meet your specific needs. See our available dimensions and connections below.

Choose our flexible hose to ensure efficient and trouble-free operation of your heating and cooling systems.

- Prevents Oxygen Infiltration: Protects against corrosion in metallic components of heating and cooling systems by preventing oxygen from penetrating through the hose.
- Increases System Lifespan: Reduced risk of corrosion and deposits contributes to the longer lifespan of the entire system.
- Energy Savings: Improved system efficiency by maintaining optimal heat transfer and reducing energy losses.
- Compatibility with Various Systems: Can be used in both heating and cooling systems, providing flexibility in installation and use.
- Cost-Effective: Reduced maintenance and repair costs due to decreased corrosion and longer system lifespan.
- Compliance with International Standards: Meets the stringent requirements of the DIN 4726 standard, ensuring high quality and reliability.

DN8	Push-Fit, ø 8	Male thread G 3/8", G 1/2"	Female thread, G 3/8", G 1/2"	Angle, Female thread G 3/8, 1/2"
DN10	Push-Fit, ø 12	Male thread G 3/8", G 1/2"	Female thread, G 3/8", G 1/2", G 3/4"	Angle, Female thread G 3/8, 1/2", G 3/4"
DN13	Push-Fit, ø 12	Male thread G 1/2", G 3/4"	Female thread, G 1/2", G 3/4"	Angle, Female thread G 1/2", G 3/4"
DN15	Male thread G 1/2", G 3/4"	Female thread G 1/2", G 3/4"	Angle, Female thread G 1/2", G 3/4"	
DN18	Male thread G 3/4", G 1"	Female thread G 3/4", G 1"	Angle, Female thread G 3/4", G 1"	
DN25	Male thread G 1"	Female thread G 1", G 1 1/4", G 1 1/2"	Angle, Female thread G 1"	
DN32	Male thread G 1 1/4"	Female thread G 1 1/4"		

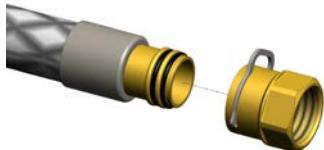
Nominal Diameter (DN)	Inner Diameter (mm)	Outer Diameter (mm)	Min. Bending Radius (mm)	Flow Rate at 3 bar (l/min)	Max Working Pressure (Bar)	Max Working Temperature (°C)	Min Working Temperature (°C)	Fittings	Braiding	Inner Hose
<b>DN 8</b>	8.5	12.0	48	28	10	90	-20	Brass	Stainless Steel	Butyl
<b>DN 10</b>	9.4	13.5	56	46	10	90	-20	Brass	Stainless Steel	Butyl
<b>Butyl</b>	12.5	18.0	72	74	10	90	-20	Brass	Stainless Steel	Butyl
<b>DN 15</b>	15.0	20.0	80	83	10	90	-20	Brass	Stainless Steel	Butyl
<b>DN 18</b>	19.0	26.0	104	200	10	90	-20	Brass	Stainless Steel	Butyl
<b>DN 25</b>	25.5	33.0	132	280	10	90	-20	Brass	Stainless Steel	Butyl
<b>DN 32</b>	32.0	42.0	168	490	6	90	-20	Brass	Stainless Steel	Butyl

### Diffusion-tight hose with rotating nut



Article no.	Dim.	DN	Length	Weight kg
50802177	Rotating nut F 1"	25	600	0.65
50802178	Rotating nut F 1"	25	800	0.79
50802179	Rotating nut F 1"	25	1000	0.91
50802180	Rotating nut F 1 1/4"	32	600	1.00
50802181	Rotating nut F 1 1/4"	32	800	1.20
50802182	Rotating nut F 1 1/4"	32	1000	1.40

### Diffusion-tight Hose with Fitting



Article no.	Dim.	DN	Length	Weight kg
396533	Quick connection 1"	25	600	0.75
396534	Quick connection 1"	25	800	0.90
396535	Quick connection 1"	25	1000	1.00
396536	Quick connection 1 1/4"	25	600	0.85
396537	Quick connection 1 1/4"	25	800	1.00
396538	Quick connection 1 1/4"	25	1000	1.10

# Easy to Choose

From concept to finished product

## Customised Pipe Systems



We process pipes, develop systems, and produce components tailored to your specifications using state-of-the-art machinery.

## Wide Range of Applications



Our solutions are used in heating and tap water systems, hospital equipment, commercial dishwashers, and more.



## Optimised Installation

Fully customised solutions designed to streamline installation times and reduce complexity.



## Expertise in Key Areas

We excel in polymers, mechanical engineering, electronics, and compliance with legislation and directives.

## Complete Fabrication



We handle everything from pipe fabrication to the assembly of complete units in our prefabrication department.

## From Concept to Completion



Our team of developers, sales staff, and specialists will guide you through every step, from concept to the finished product.



## Flexible Material Choices

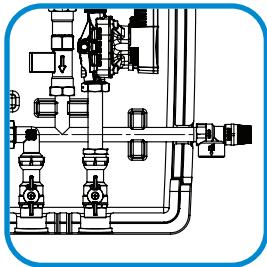
We offer a large selection of materials to suit your specific needs.



## Collaborative Approach

Let's explore your prefabrication needs together. Schedule a no-obligation meeting to discover how we can improve your solutions.

Concept



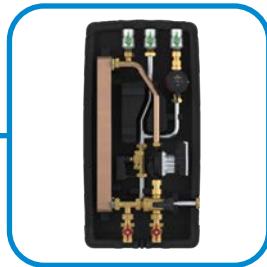
Project



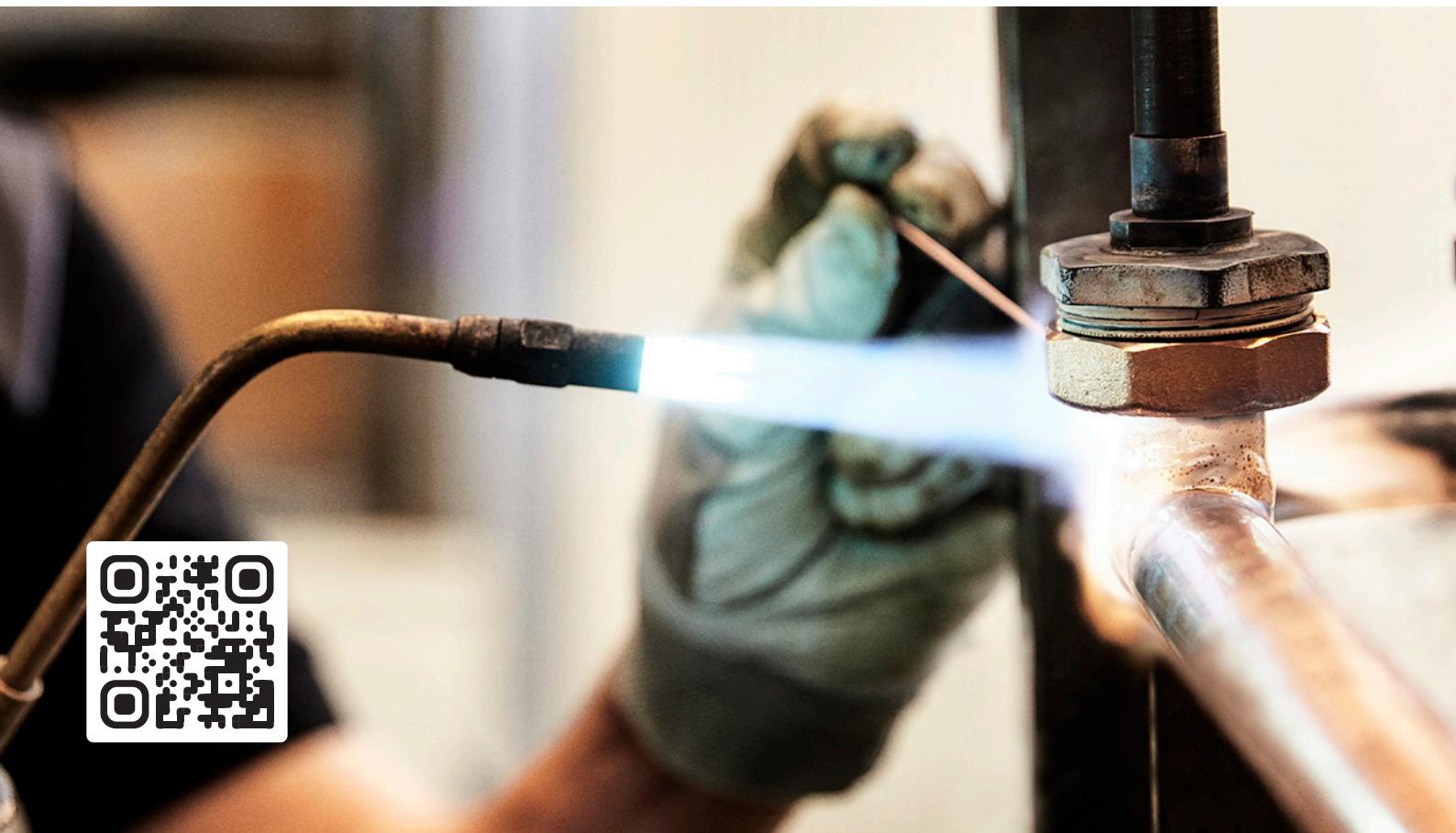
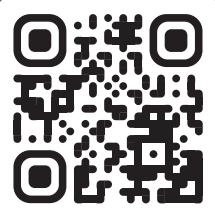
Testing



Finished product



Follow-up with customer



# Simpler, smarter, more sustainable

At LK Armatur, sustainability drives everything we do. Our energy-efficient valves and heating solutions serve our customers and protect the planet by using sustainable materials, minimizing waste, and ensuring long-lasting performance.

Our goal is simple: reduce our environmental impact while delivering the high-quality products our customers rely on. Sustainability fuels our innovation, leading us to lower CO<sub>2</sub> emissions associated with energy use, reduce waste, and phase out harmful substances - all steps toward a greener future.

## Smart Production, Lasting Design

Our production is energy-efficient and waste-conscious, with practices like recycled brass usage that conserve resources without compromising quality. Sustainability starts at design, where we create durable, resource-efficient products that benefit both projects and the planet.

## Collaboration for Change

By partnering with customers and suppliers, we're building a value chain aimed at net zero emissions by 2050. Nearly all of our suppliers are based within the EU, supporting a more sustainable and efficient supply chain.

## Moving Forward

Guided by curiosity and a commitment to better solutions, we're investing in fossil free energy and circular practices. Together with our team and partners, we're shaping a smarter, more sustainable future for people and the planet.

## What Makes Our Products Sustainable?

- **Materials that Last:** We choose tough, resource-efficient materials to extend product life and reduce replacements.
- **Energy-Efficient Processes:** Our production is designed to save energy, minimize waste, and includes a high degree of automation throughout the value chain.
- **Eco-Friendly Designs:** Every product is crafted with sustainability in mind, so you can build greener, more efficient systems.



- Elisabeth Johansson  
Sustainability Specialist  
LK Armatur



LK 525 MultiZone - made with recycled brass



LK 160 SmartBio® - engineered for energy efficiency



LK 521 MultiFill® - built to last for a lower environmental impact



Packaged with sustainable, recyclable materials



# For the simpler, smarter everyday

## LK

Simpler. Smarter. More sustainable. At LK, we believe there's a better way to do everything. That's why – from water, heating and hydronic solutions to pipe extrusion – we push for innovation over status quo and simplicity over complexity. It's a belief all of us at LK apply to every product and solution we create.

### Our history

Founded in 1910, LK is a family business, working internationally in the heating, water and sanitation industry. A market leader in Sweden, the group currently employs approximately 400 people and actively increasing sales of products, systems and solutions in the Nordic region, Europe and the United States. LK works with continuous improvement and strives for a sustainable, long-term and respectful relationships with its employees, suppliers and customers.

### Our companies

**LK Armatur** is a leader in Europe, producing millions of valves per year for the global HVAC market. Beyond individual products, we understand how all parts interact in your complete application. From standard to sophisticated customizations of valves, controllers, components and prefabricated units, our full-spectrum expertise makes it easy to get the results you need today, while anticipating your needs tomorrow.

**LK Pex** is a leading OEM manufacturer of high-quality plastic pipes for the HVAC industry, particularly housing applications. Our proprietary production technology for cross-linking PE-Xa tubes gives pipes unique flexibility and compressive strength. With this and every advancement we make, we aim to simplify your everyday challenges for smarter results today and tomorrow.

**LK Systems** is the leading manufacturer of easy-to-install systems for heating and tap water distribution in the Nordics. Through our prefabrication unit, we also provide tailor-made solutions that simplify the installation process even further.

For more information about the LK group, visit [www.lk.nu](http://www.lk.nu)

# LK Armatur

## - A One-Stop Supplier

LK Armatur was founded in 1985 when the LK Group increased its focus on supplying manufacturers of heaters and hot water heaters with valves and components.

We are a complete supplier of customised products and solutions and we produce millions of valves annually. We have advanced pipe manipulation & bending facilities for both stainless steel and copper pipes and our accessories come from leading suppliers in Europe. Our extensive product range consists of 4 product areas:

- Valves
- Electronic Heat Regulation
- Prefabrication
- Accessories



**Helsingborg, Sweden;** Our Main Office. We develop and manufacture most of our products here.

**Bad Oeynhausen, Germany;** Main Office for Germany sales company, LK Armatur Deutschland GmbH.

**Zrenjanin, Serbia;** Production unit focusing on pipe prefabrication.

Our aim is to provide high quality, technically advanced products that are easy to install and uncomplicated to use. We constantly develop and design new products and the demands are high to meet our customers' as well as our own high expectations.

We focus on customers who see energy saving and environmental awareness as a matter of course. The risk of energy shortage, the steady increase in energy prices and the problem of global warming have created a great need for cost and energy

efficient heating systems in which renewable energy sources can be utilized. The common denominator for our customers is their stringent requirements for quality, customization and delivery reliability.

Our management system complies with ISO 9001:2008 and ISO 14001:2004 for the development, manufacture and distribution of valves, electronic heating controls and prefabricated systems.



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You can always find our updated assortment and documentation at [www.lkarmatur.com](http://www.lkarmatur.com)



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