JK Ecoline & LT Manifold

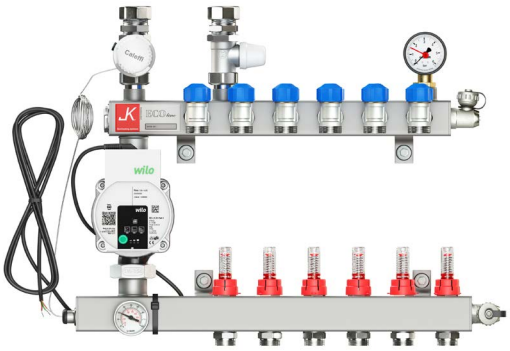
DATASHEET

floorheating

JK – Manifold Features and Benefits

- **In-House Design and Manufacturing:** JK floorheating designs and manufactures its own manifolds at its HQ in EDE, Netherlands, ensuring quality control and innovation from start to finish
- **High-Quality Stainless Steel Construction:** Built from durable stainless steel, these manifolds are corrosion-resistant and come with a **25-year warranty** for long-term reliability
- **Temperature Gauges:** Integrated temperature gauges allow for precise commissioning and ongoing system monitoring
- **Independent Filling and Draining Points:** Both bars have independent filling and draining points, enabling the system to be filled, tested, and purged separately from the primary system
- **Built-In Pressure Gauge:** A pressure gauge helps monitor system pressure, providing reassurance throughout building projects and maintenance periods
- **Flow Gauges for System Balancing:** Each manifold includes flow gauges, facilitating accurate system balancing during commissioning for optimal performance

JK Ecoline Manifold

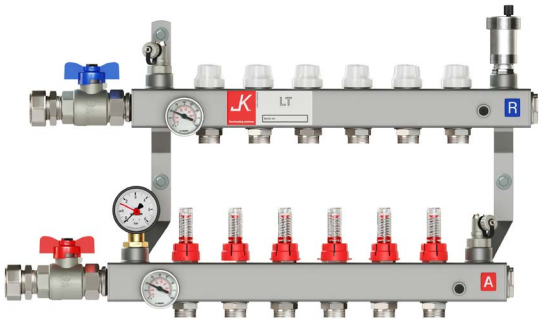


The **JK Ecoline manifold** has a unique, compact design incorporating the pump and blending valve within the manifold body. Ideal for use with high-temperature heat sources such as boilers, where the incoming water temperature may exceed the design flow temperature of the underfloor heating. The ecoline manifold features;

- A-rated energy-efficient Wilo brand circulation pump
- Caleffi thermostatic head with temperature range of 25°C-55°C, ideal for underfloor heating applications
- Overheat sensor detects if the incoming water temperature exceeds safe levels, safeguarding the system, preventing potential damage to sensitive floor coverings and enhancing operational reliability

JK LT (Low Temperature) Manifold

The **JK LT (Low Temperature) manifold** is designed for use with lower temperature heat sources such as heat pumps or modern weather-optimised / compensated boilers; where the incoming water temperature is appropriate for use directly into the floor heating system and therefore has no circulation pump or mixing capability. The LT manifold also features isolation valves and an auto-air vent.



Please see back page for additional notes about your manifold

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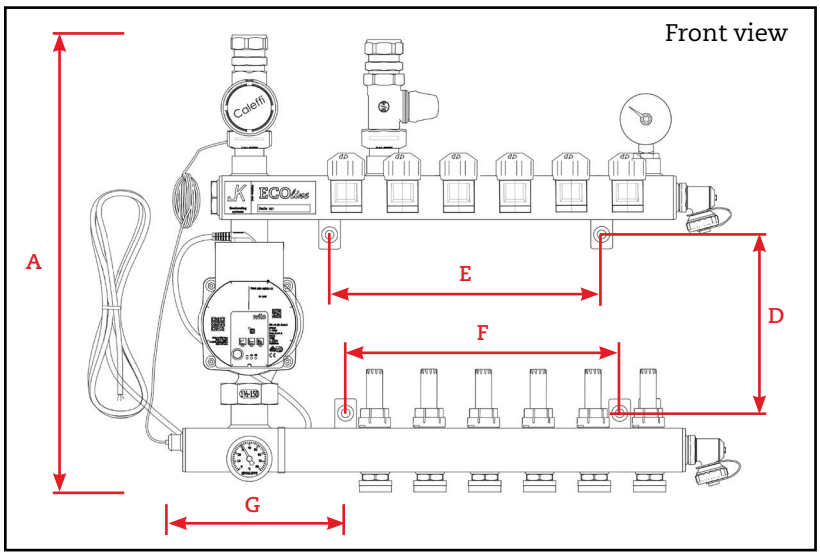
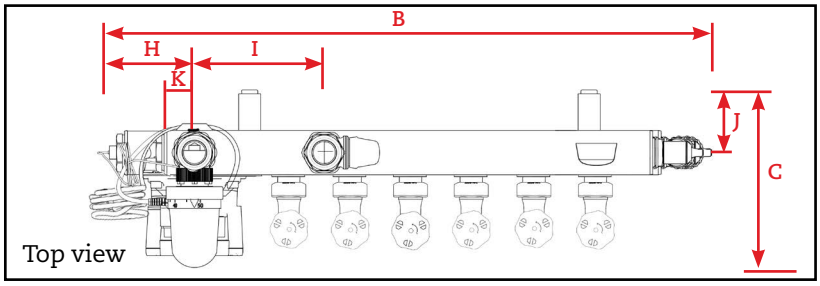
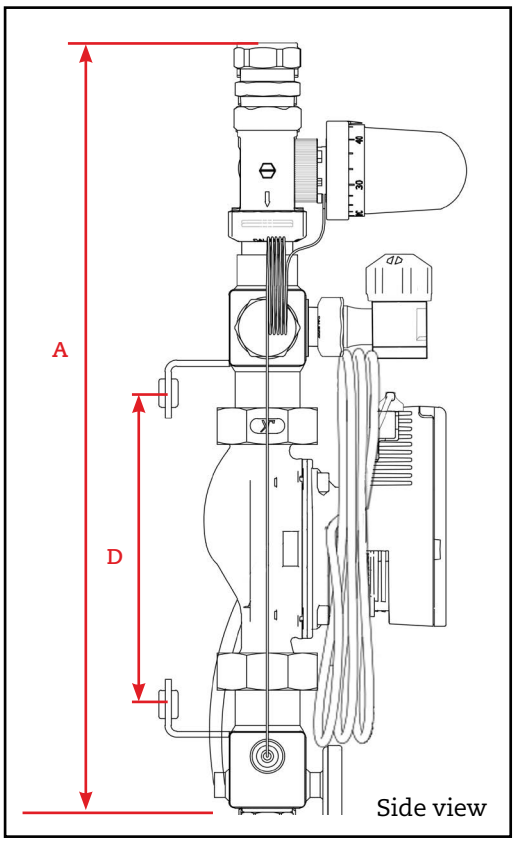
JK Ecoline Manifold Dimensions

Measurement (mm)	Ports										
	2	3	4	5	6	7	8	9	10	11	12
A (Height)	430	430	430	430	430	430	430	430	430	430	430
B (Width)	330	350	400	450	500	550	600	650	700	750	800
C (Depth)	140	140	140	140	140	140	140	140	140	140	140
D	155	155	155	155	155	155	155	155	155	155	155
E	150	150	150	200	250	300	300	400	400	450	500
F	100	100	150	200	250	300	350	400	450	500	500
G	160	160	160	160	160	160	160	160	160	160	160
H	90	90	90	90	90	90	90	90	90	90	90
I	100	100	100	100	100	100	100	100	100	100	100
J	50	50	50	50	50	50	50	50	50	50	50
K	35	35	35	35	35	35	35	35	35	35	35

- The Ecoline manifold bars are spaced 220mm apart, measured from the center of one bar to the center of the other
- To facilitate easy maintenance, it is recommended to allow 150mm of clearance on the left side and 50mm on the right side of the manifold







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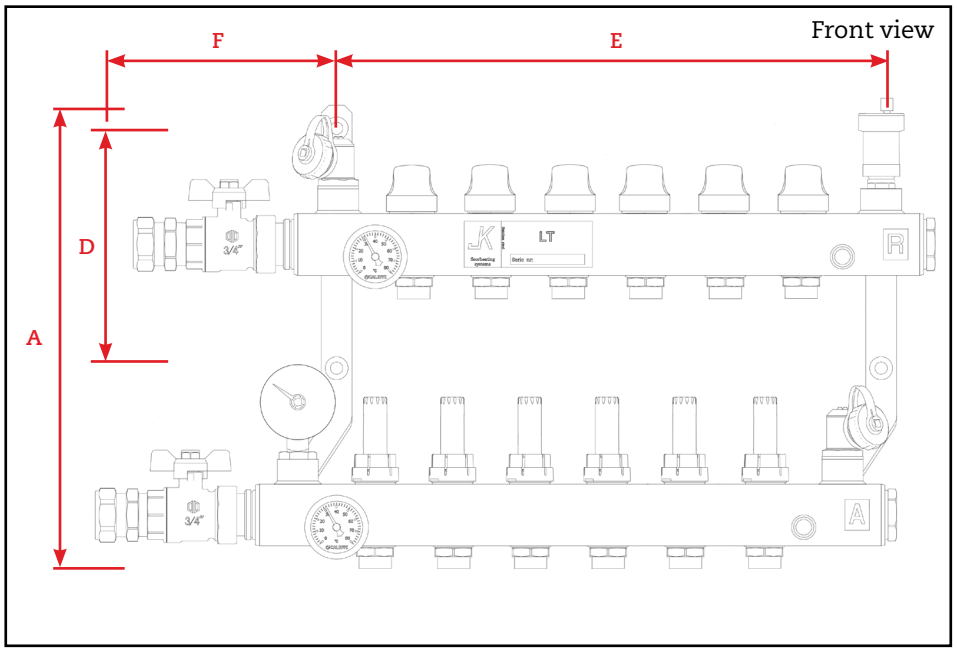
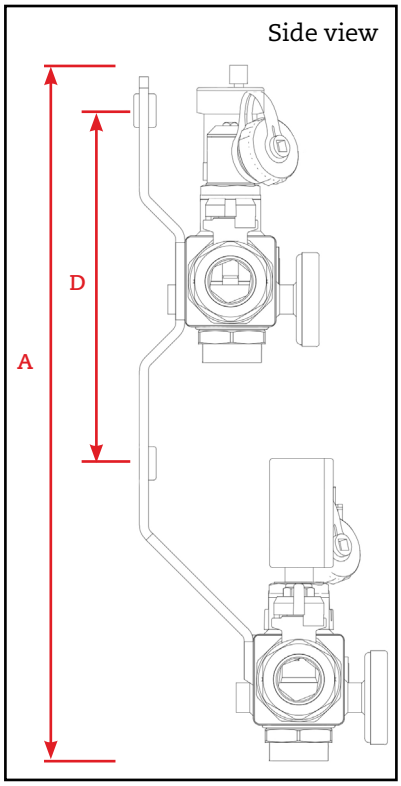
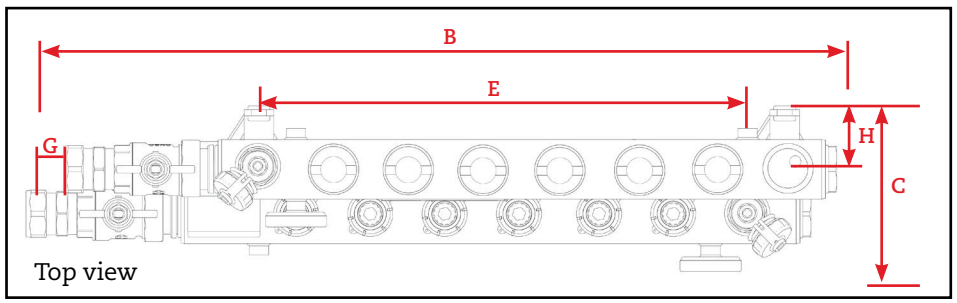
JK LT Manifold Dimensions

Measurement (mm)	Ports										
	2	3	4	5	6	7	8	9	10	11	12
A (Height)	330	330	330	330	330	330	330	330	330	330	330
B (Width)	380	430	480	530	580	630	680	730	780	830	880
C (Depth)	110	110	110	110	110	110	110	110	110	110	110
D	155	155	155	155	155	155	155	155	155	155	155
E	165	200	250	300	350	400	445	500	542.5	595	642
F	130	130	130	130	130	130	130	130	130	130	130
G	40	40	40	40	40	40	40	40	40	40	40
H	40	40	40	40	40	40	40	40	40	40	40
I	70	70	70	70	70	70	70	70	70	70	70

- If the primary connections are installed on the left, it is recommended to allow 50mm of clearance on the right side for maintenance. The isolation valves can be relocated to the right side on request







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Manifold Installation information and Terms & Conditions

Manifold Location: This should be decided in consultation with the purchasing company or directly with JK floorheating Ltd. A reasonable location has to be selected from a technical point of view, with due regard for the following conditions:

- Ensure there is **at least 200mm** of space from the underside of the manifold to the floor and at least 150mm of clear space above the manifold
- For optimal venting* the manifold should ideally **not be lower** than the level of the **underfloor heating** loops it serves
- The manifold should be installed on the same floor/storey as the loops it serves*
- The manifold must be installed **within 2 metres** of the area it is serving
- The **connections from the primary heating system** to the manifold are outside the scope of JK's installation work and should be;
    - 22mm for an Ecoline manifold
    - 28mm for an LT manifold
- It must be possible to route or drill the floor at the manifold location so that the underfloor heating pipes can be laid directly from the manifold into the floor

**please consult the JK technical team for advice*

Electrical Requirements:

- 230V electrical supply, ideally supplied from the main heat source isolation point to ensure safe isolation when working on the system
- 2-core signal cable from the heat source to the manifold location. This connection can achieved with either a 5 core flex or 2 x twin and earth cables or similar
- A control system to operate the JK manifold and underfloor heating system which can be purchased separately from the heating control manufacturer directly - Popular systems include, but are not limited to; Danfoss, Genius Hub, Heatmiser, Hive, Nest. You will need;
    - Room thermostat (Per zone)
    - Wiring centre (if more than one zone/thermostat to a single manifold)
    - 2 port motorised valve (22mm) incorporated into the primary connection in an **s-plan configuration**
    - Actuators (230V) with an M30x1.5mm thread

ADDITIONAL NOTES:

ECOLINE MANIFOLD NOTE: The JK Ecoline manifold is an injection-style manifold, designed to be hydraulically neutral, allowing it to integrate seamlessly with a variety heating systems. The primary system must be designed to provide adequate circulation to the manifold.

LT MANIFOLD NOTE: To ensure efficient circulation through the low-temperature (LT) manifold from the heat source or buffer vessel, the primary pump must be sized correctly.