



In North America for Technical Assistance
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Installation and User Guide

Low-Loss Header, Type MW



MW 20



MW 25

Important note

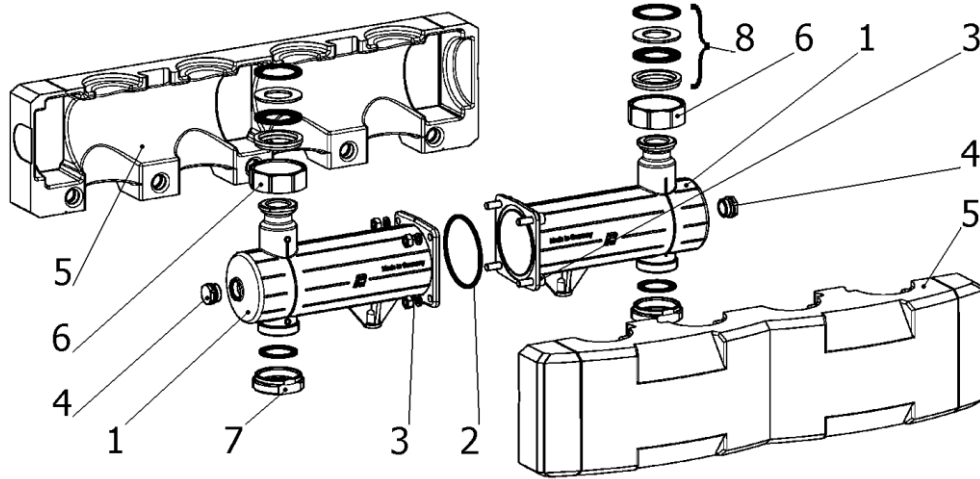
These installation and use instructions have been designed carefully to the best of our knowledge and belief. The illustrations used are to be considered as conceptual.

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Note: Product information is subject to change without notice and supersedes all previous publications.

Scope of Supply



Specifications Low-Loss Header DN 20 – Type MW

Pos.	Description
1	Body cast of Low-Loss Header DN20, brass
2	O-Ring- Ø 48 mm/ 1 7/8" EPDM/ NBR
3	Hexagon socket head screw, M6 x 20, hex nut, split washer
4	Plug, brass 1/2", with O-Ring
5	EPP- insulation set for Low-Loss Header
6	Union nut 1"
7	Reducing Rings 1 1/2"IG x 2"AG (only MW 25/32 – 1" / 1 1/4")
8	Spacers (Extension pieces, only MW 25/32 – 1" / 1 1/4")

Material	
Fittings	Brass
Seals	NBR / EPDM
Thermal insulation	EPP
Specifications	
Maximum operating pressure	6 bar/ 87psi
Maximum temperature	110°C/230°F; short-term 130°C/266°F
Flow Rate	2200 l/h by 20°K ΔT/ 9.69 GPM by 36°F ΔT
Output (approx.)	50 kW / 170 MBH
Dimensions	
Inlet (Boiler side)	BSP 1" male thread flat union / BSP 3/4" female thread
Outlet	3/4" flange for 1", flat union nut
Spacing (supply/ return)	240 mm/9 1/2"
Overall height	118 mm/ 4 5/8"
Width of thermal insulation	430 mm/16 7/8"

Function

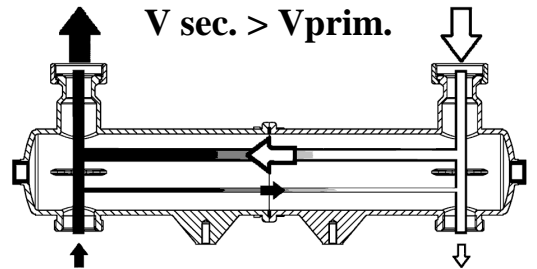
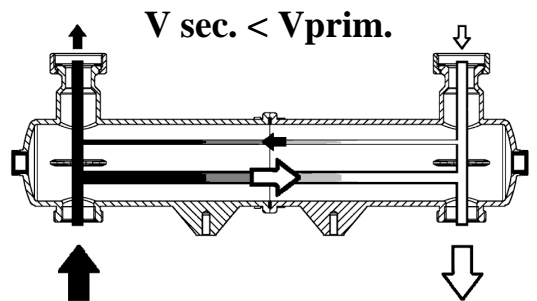
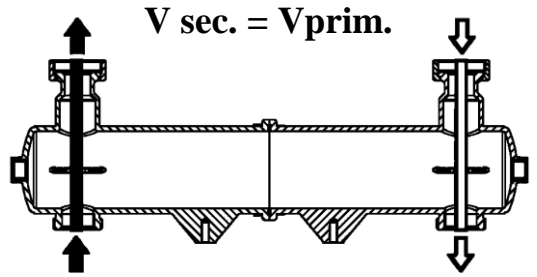
Description

When used in conjunction with boilers that have build-in pump, the low-loss header acts as hydraulic break, decoupling boiler and system circuits from each other. It's creating a primary – secondary arrangement of the heating loops.

It is recommended to use the low-loss header in applications in which the total system flow rate (because of multiple –pumps use) exceeds the maximum boiler flow rate.

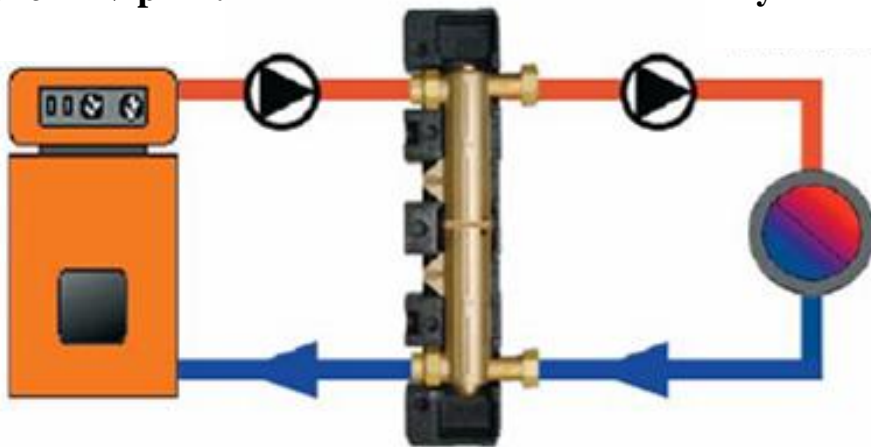
PAW strongly recommends the use of a low-loss header in cases where the system head and flow rates are unknown.

These are typical functional conditions.
See examples of three possible situations of hydraulic stability.



V boiler = V prim.

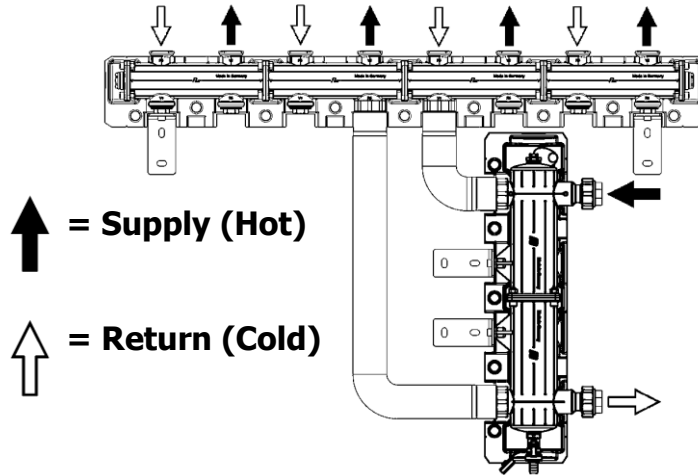
V system = V sec.



Possible connections (schematic)

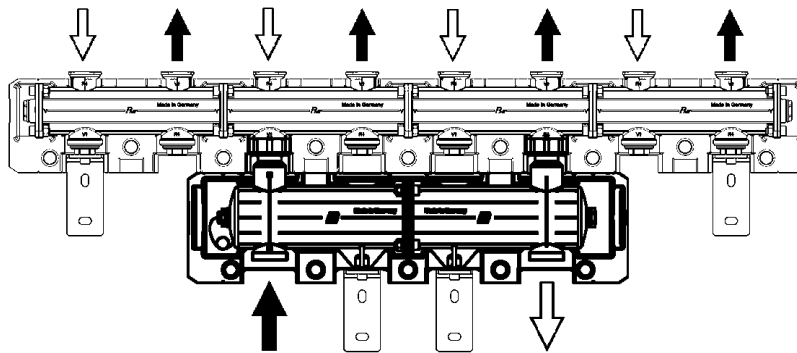
Vertical Installation

Example: with PAW Armored hoses connecting PAW 4-fold Manifold. Supply Sensor, PAW Drain valve and Wall brackets as optional accessories.



Horizontal Installation

Example: direct connection to PAW 4-fold Manifold. Supply Sensor and Wall brackets as optional accessories.



Installation

This Low-Loss Header is suitable for reversing the supply – return lines depending on installation requirements. The incoming and outgoing supply and return lines are to be connected to the manifold according to the cast-in marks (○—○ and —). In the event that these marks should be inverted, turn the manifold horizontally by 180 degrees.

The low –Loss Header can be installed horizontally (and directly connected to PAW distribution Manifold) as well as vertically (using the PAW flexible armored hoses or rigid piping).

Remove the Low-Loss header from the insulation prior to installation. Remove front the insulation first and pull cast body out of the rear part of foam the insulation. Mount the Low-Loss header using wall brackets or directly to the manifold.

Always install and tighten union connections before installing the insulation!

Optional Sensor well or/and PAW Drain valve (by vertical installation) could be installed in 1/2" connection ports on both sides of the Low-Loss header.