MIYAWAKI

# LH SERIES - Steam Fired Instantaneous Water Heater

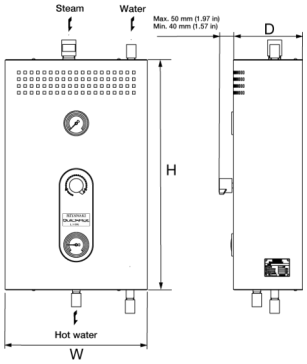
## LH15-II

- Environmentally friendly – does not emit CO, CO2, and Nox.
- Clean hot water by indirect heating from steam.
- High thermal efficiency of 91% that surpasses gas and electric hot water supplies.
- Easy maintenance.

| Model | Connection | | | | | Heating method | Installation method | Hot water supply method |
|---|---|---|---|---|---|---|---|---|
| | Type | Size | | | | | | |
| | | Water inlet | Steam inlet | Hot water outlet | Steam condensate discharge outlet | | | |
| LH15-II | Screwed Rc | 1/2" | 1" | 1/2" | 1/2" | Indirect heating | Wall mounted | One-way hot water supply (circulated water supply not possible) |

| Model | Hot water supply temperature range | | Hot water supply pressure | Steam pressure range | | Water supply pressure range | | Max. steam use rate | | Max. heat exchange volume (kW) |
|---|---|---|---|---|---|---|---|---|---|---|
| | (°C) | (°F) | | (MPa) | (psig) | (MPa) | (psig) | (kg/h) | (lb/h) | |
| LH15-II | 70 - 90 | 158 - 194 | Depends on water supply pressure | 0,2 - 0,5* (flow pressure) | 29 - 72.5* (flow pressure) | 0,1 - 0,4* (flow pressure) | 14.5 - 58* (flow pressure) | 220 | 485.0 | 118 |

| Steam pressure | | Water supply pressure | | Hot water supply rate (ℓ/min) by water temperature | | |
|---|---|---|---|---|---|---|
| (MPa) | (psig) | (MPa) | (psig) | 70°C 158°F | 80°C 176°F | 90°C 194°F |
| 0,2 | 29 | 0,1 | 14.5 | 17 | 15 | 12 |
| | | 0,2 | 29 | | | |
| | | 0,3 | 43.5 | | | |
| | | 0,4 | 58 | | | |
| 0,3 | 43.5 | 0,1 | 14.5 | 19 | 17 | 15 |
| | | 0,2 | 29 | 22 | 19 | |
| | | 0,3 | 43.5 | | | |
| | | 0,4 | 58 | | | |
| 0,4 | 58 | 0,1 | 14.5 | 19 | 17 | 16 |
| | | 0,2 | 29 | 27 | 23 | 18 |
| | | 0,3 | 43.5 | | | |
| | | 0,4 | 58 | | | |
| 0,5 | 72.5 | 0,1 | 14.5 | 20 | 18 | 16 |
| | | 0,2 | 29 | 26 | 24 | 20 |
| | | 0,3 | 43.5 | 30 | 26 | |
| | | 0,4 | 58 | | | |




| Dimensions (mm) | | | Dimensions (in) | | | Weight | |
|---|---|---|---|---|---|---|---|
| W | H | D | W | H | D | (kg) | (lb) |
| 401 | 648 | 195 | 15.8 | 25.5 | 7.7 | 30,0 | 66.2 |

- Accessories: Y strainer (100 mesh) 1"x1, Y strainer (100 mesh) 1/2" x1.
- The maximum rated heat output through steam pressure is 101450 kcal/h.
  *Do not exceed 0,5 MPa (73psig) of steam pressure or 0,4 MPa (58psig) of water supply pressure under static pressure.
- Condensate recovery not possible because if condensate were to be recovered, main water discharged from the pressure relief valve and other such types of water would be returned to the tank.
- Hot water supply rate is for when water supply temperature is 15˚C (59°F)
- Min. flow rate 3L/min.
- If the flow rate drops below the minimum then this may cause fluctuations in hot water supply temperature.

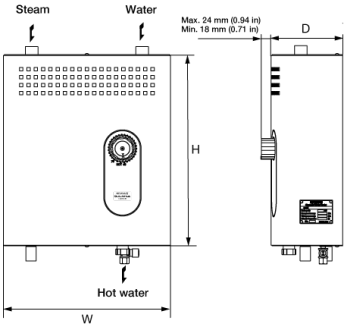
## LM15-IV

- Environmentally friendly – does not emit CO, CO2, and Nox.
- Clean hot water by indirect heating from steam.
- High thermal efficiency of 91% that surpasses gas and electric hot water supplies.
- Quiet operation with a background noise of around 45dB.
- Suitable for food manufacturing (leaching tests passed).
- Easy maintenance.

| Model | Connection | | | | | | | Heating method | Installation method | Hot water supply method |
|---|---|---|---|---|---|---|---|---|---|---|
| | Type | Size | | | | | | | | |
| | | Steam inlet | Water inlet | Hot water supply | Steam condensate discharge | Pressure relief valve discharge | Inspection valve | | | |
| LM15-IV | Screwed Rc | 1/2″ | 1/2″ | 1/2″ | 3/8″ | 3/8″ | 1/8″ | Indirect heating | Wall mounted | One-way hot water supply (circulated water supply not possible) |

| Model | Hot water supply temperature range | | Hot water supply pressure | Steam pressure | | Water supply pressure | | Max. steam use rate (kg/h) | Max. rated heat output (kW) |
|---|---|---|---|---|---|---|---|---|---|
| | ℃ | °F | | Range (MPa) | Range (psig) | Range (MPa) | Range (psig) | | |
| LM15-IV | 40 - 70℃ | 104 - 158°F | Depends on water supply pressure | 0,1 - 0,3 (flow pressure) | 14.5 - 43.5 (flow pressure) | 0,1 - 0,4* (flow pressure) | 14.5 - 58* (flow pressure) | 92 | 54 |

| Steam pressure | | Water supply pressure | | Hot water supply rate (ℓ/min) by water temperature | | | |
|---|---|---|---|---|---|---|---|
| (MPa) | (psig) | (MPa) | (psig) | 40℃ 104°F | 50℃ 122°F | 60℃ 140°F | 70℃ 158°F |
| 0,1 | 14.5 | 0,1 | 14.5 | 16 | 11 | 8 | 7 |
| | | 0,2 | 29 | | | | |
| | | 0,3 | 43.5 | | | | |
| | | 0,4 | 58 | | | | |
| 0,2 | 29 | 0,1 | 14.5 | 18 | 16 | 12 | 10 |
| | | 0,2 | 29 | 23 | | | |
| | | 0,3 | 43.5 | | | | |
| | | 0,4 | 58 | | | | |
| 0,3 | 43.5 | 0,1 | 14.5 | 19 | 17 | 15 | 13 |
| | | 0,2 | 29 | 26 | 22 | 16 | |
| | | 0,3 | 43.5 | 30 | | | |
| | | 0,4 | 58 | | | | |




| Dimensions (mm) | | | Dimensions (in) | | | Weight | |
|---|---|---|---|---|---|---|---|
| W | H | D | W | H | D | (kg) | (lb) |
| 375 | 408 | 153 | 14.8 | 16.1 | 6.0 | 16,0 | 35.3 |

- The maximum rated heat output through steam pressure is 46,200kcal/h.
  *Do not exceed 0,4 MPa (58psig) of water supply pressure under static pressure.
- If recovering condensate, ensure a pressure differential of at least 0,03MPa (4.4psig). If back pressure is applied to the condensate discharge pipe, the maximum hot water supply rate drops.
- Low-temperature options: A 30˚C - 50˚C (86°F - 122°F)type*1 can be manufactured. Please do not hesitate to make inquiries. *1 The 30˚C - 50˚C (86°F - 122°F) type has not undergone any leaching performance tests.
- In the event of deterioration of internal components, performance may fall below the performance when the product passed its leaching performance test.
- Hot water supply rate is for when water supply temperature is 15˚C (59°F)
- Minimum flow rate 5ℓ/min
- If the flow rate drops below the minimum then this may cause fluctuations in hot water supply temperature.

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