

New Larger Watlow® FLUENT® Heaters

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([abcimg://fluent%20in-line%20heater](#))

Expand your thermal systems options with our new, larger Watlow® FLUENT® heaters ([/en/products/heaters/circulation-heaters/fluent-in-line-heater](#)). These larger diameter, higher kilowatt in-line heaters can replace many existing immersion-type heaters. Discover how our design engineers have improved this high-performance heater line.

The latest addition to a successful in-line heating solution

The latest Watlow FLUENT offerings improve an already successful line of heating systems. Design engineers within medical, clinical and analytical segments have successfully implemented these compact heaters for years. The larger models now allow more expansive use and upgrading of traditional immersion-type heating systems.

Since the (<https://www.watlow.com/about-watlow/news/fluent-press-release>) first announcement (<https://www.watlow.com/about-watlow/news/fluent-press-release>) of the FLUENT line, industrial facilities around the world have taken advantage of the reduced complexity, improved temperature uniformity and low mass of this in-line heater. This is why the FLUENT heater system has proved popular when compared to traditional immersion-type or wrapped heating products.

The advantages of larger FLUENT heaters

These advanced thermal products are designed to give you efficient, uniform temperature control with an ultra-fast response time. The latest FLUENT heaters feature:

- Up to 1 5/8-inch outside diameter

- Outer protection tubes up to 12 inches long
- Power levels between one and eight kilowatts
- Either 1/2-inch straight tube or 1/4-inch female NPT inlet and outlet fittings

Increased surface area

A larger tube length and wider outside diameter increases the overall surface area of your in-line heater when compared to earlier FLUENT in-line heaters and gives you higher power levels for rapid heating of your materials.

Improved flow rate and reduced pressure drop

The inlet and outlet fittings of the initial line of (<https://www.watlow.com/products/heaters/circulation-heaters/fluent-in-line-heater>)FLUENT in-line heaters limited the flow rate and also affected the pressure drop. OEMs needing improved flow rates were limited by the compact size and small fittings of previous FLUENT systems.

Using 1/2-inch straight tube and 1/4-inch female NPT fittings increases the overall flow rate making new and more demanding heating applications possible. These larger flow-through heaters now make it available for new applications where only traditional immersion heating equipment could be used.

The future of Watlow FLUENT heaters

Current baffle designs are optimized for liquid applications, but the future of the FLUENT line will include gas-optimized baffles. Look for hard-coded designs of these and other heating products that easily integrate with your existing power and temperature controllers. Expect to see our standard five-day lead time and one-day expedite options for future orders of FLUENT and other products.

Discover the latest Watlow offerings to expand your business at [Watlow.com](http://www.watlow.com), including (<http://fluent.watlow.com/>)FLUENT drawings (<http://fluent.watlow.com/drawings>), and improve the efficiency of your thermal systems. Enjoy the latest in streamlined heating with our high-kilowatt, large-diameter in-line heaters available for your heating applications.