BUILD YOUR OWN | SHARE DETAILS & QUOTE

Flow Torch™ 800

High-Flow, Low Pressure Drop Industrial Air Heating Solution

MADE IN THE USA

The **Flow Torch™ 800** is TUTCO Farnam's premier open coil air heater designed for industrial applications that demand **high airflow at low pressure drop**. Its innovative design minimizes flow restrictions while maximizing heat transfer efficiency, making it an ideal choice for processes that require rapid heating, precise temperature control, and large-volume airflow.

Constructed with an **8-inch diameter stainless steel body**, the Flow Torch 800 offers robust durability, long-life performance, and reduced operational costs. At the core of its design is a spiral wound open coil element made from the highest-grade materials, which ensures fast heat-up and cool-down cycles while delivering maximum thermal output to your process air. Engineered for versatility, reliability, and high efficiency, the Flow Torch 800 is an excellent solution for industries ranging from chemical processing to textile manufacturing and environmental test chambers.

Flanged Fittings!

We have flanges available as a standard option on our Flow Torch heaters. Click here to build your FT400, FT600 & FT800 with flanged inlet and exhaust fittings.

MAX WATT	MAX INLET	MAX EXHAUST	MIN SCFM	MAX SCFM	PSIG*
75000 W	250° F	900° F	76	2000	3

** with minimal leakage.*

WATTAGE	20.0 kW	35.0 kW	50.0 kW	65.0 kW	75.0 kW
MIN. SCFM REQUIRED	76.3	133.6	190.8	248.0	286.2

Key Features & Benefits

High Airflow Capacity with Minimal Pressure Drop
With the ability to handle up to 2000 SCFM at a maximum operating pressure of 3 PSIG, the Flow Torch 800 enables large-volume air heating with minimal resistance. This reduces energy consumption and enhances the efficiency of your air-handling system.

Rapid Thermal Response
The spiral wound open coil element allows for near-instantaneous heating and fast cooldowns. This rapid thermal response improves process control, reduces downtime, and helps maintain consistent production quality.

Wide Temperature Range
The Flow Torch 800 reaches a maximum output temperature of 482°C (900°F), with standard inlet temperatures up to 250°F and modifications available for higher inlet conditions. This flexibility accommodates a wide variety of industrial applications.

Robust Construction
The stainless steel heater body, inlet, and exhaust fittings are engineered for durability in demanding environments, offering reliable long-term performance and reduced maintenance requirements.

Customizable Power Options
Available in wattages from 2 kW to 750 kW, the Flow Torch 800 can be configured to meet specific process requirements, ensuring optimal performance for your unique application.

Optional Control Panels
Precision temperature control is available with optional control panels, allowing operators to maintain consistent process conditions and ensure optimal thermal performance.

UL Recognized Components
All Flow Torch heaters are UL recognized under UL file number E365755, providing assurance of quality, safety, and compliance with rigorous industrial standards.

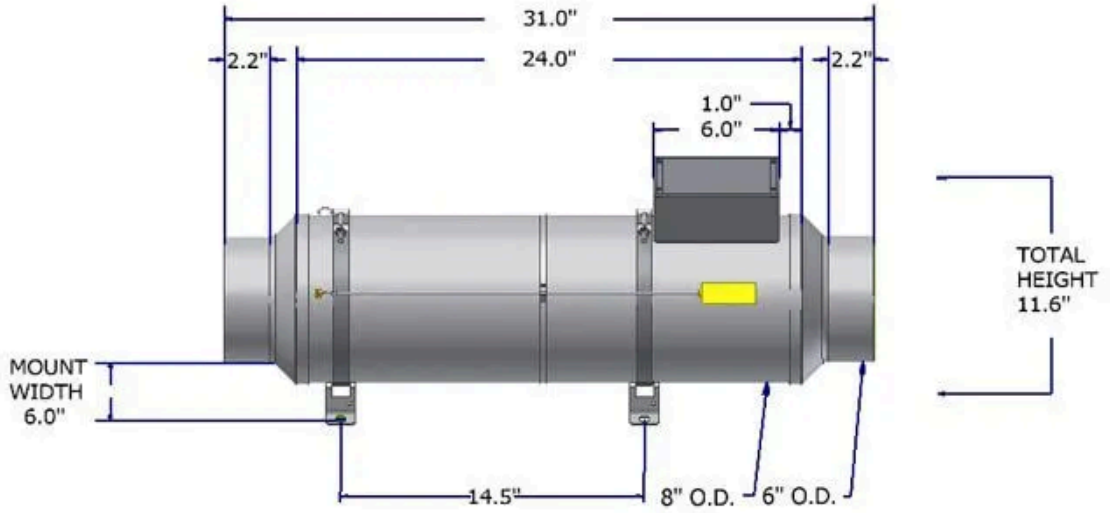
Flanged Fittings
Standard flanged inlet and exhaust options simplify integration into your system. Customers can select flanged fittings for the FT400, FT600, and FT800 models to accommodate their specific duct or airflow setup.

Specifications

Mounting ..... Horizontal / Vertical
Leads ..... 20 AWG, 12" Long
Heater Body ..... Stainless Steel
Air Entryway Fitting ..... Stainless Steel
Inlet Fitting ..... Stainless Steel
Exhaust Fitting ..... Stainless Steel

*Note: Minor leakage may occur through stranded leads.

A	INLET FITTING	B	EXHAUST FITTING	C
24.0"	NF	0	NF	0
24.0"	6T	3.5"	6T	3.5"



RESOURCES

Brochures and Manuals

Flow Torch 800 Brochure
Insulation Blanket Sheet
Quickstart Guide

Drawings

Dimensions.PDF
Dimensions.DWG
Wiring Diagram
FT800w/6"Reducer.STP
FT800-6T-6T-TF2.STP
FT800-FL1-FL1-TF2.STP
FT800-NF-NF-TF2.STP

Videos

Flow Torch Product Demo
Flow Torch Options
Process Heaters

Ready to Build Your Solution?

Request a Quote or Contact our Applications Engineers to learn how a Flow Torch™ heater can improve your process consistency, energy efficiency, and thermal performance.

Applications

The Flow Torch 800 is designed to serve a wide range of industrial and manufacturing processes where controlled, high-volume heated air is essential. Its combination of high airflow, rapid response, and durable construction makes it suitable for even the most demanding operations. Typical applications include:

Hot Air Curtains – Maintain temperature separation in industrial environments, reducing energy loss and improving workspace conditions.

Air Drying – Efficiently dry products, coatings, or materials while maintaining precise temperature control.

Baking – Achieve uniform heating for baked goods, industrial coatings, or composite materials.

Chemical Processing – Provide consistent, controlled heat for chemical reactions, drying, or curing processes.

Dehumidification – Support controlled drying processes in facilities requiring regulated humidity levels.

Laminating & Coating – Ensure consistent heat for adhesives, laminates, and coatings to improve product quality.

Textile Applications – Maintain precise air temperatures for fabric drying, curing, or finishing operations.

Web & Ink Drying – Deliver high-volume heated air for printing presses or other continuous web-processing equipment.

Paint Baking/Drying – Support rapid drying of paints and coatings, reducing cycle times and increasing productivity.

Plastic Curing & Metallization – Provide stable, uniform heating for plastics, films, or metalized surfaces.

Gas Heating & Hopper Drying – Supply controlled heat for gas or material drying processes.

Sterilization – Maintain high airflow at elevated temperatures for sterilizing equipment or materials in industrial or laboratory settings.

Advantages Over Conventional Heaters

The Flow Torch 800 is engineered to outperform traditional air heating technologies, delivering benefits that improve both process efficiency and operational reliability:

High Airflow, Low Resistance – The open coil design ensures minimal pressure drop, enabling efficient high-volume heating without straining your blower or fan systems.

Fast, Precise Thermal Control – Quick heat-up and cool-down cycles allow for precise temperature management and reduce downtime between operations.

Durable, Long-Lasting Design – Stainless steel construction and high-grade coil materials provide longevity, reducing replacement frequency and maintenance costs.

Flexible Integration – Flanged fittings, multiple wattage options, and optional control panels allow easy integration into a variety of industrial systems.

Energy Efficiency – Optimized design maximizes heat transfer to the airflow, reducing wasted energy and operational costs.

Why Choose the Flow Torch 800?

TUTCO Farnam's Flow Torch 800 is more than an industrial heater—it's a high-performance solution for modern manufacturing and research applications. Its combination of high-volume airflow, rapid response, precision control, and robust construction makes it ideal for operations where efficiency, reliability, and safety cannot be compromised. Whether you require a standard Flow Torch 800 unit or a custom-configured solution, TUTCO Farnam provides the expertise, engineering support, and quality components needed to optimize your system.

Control Systems & Temperature Regulation

Check out these upgrade options for the Flow Torch™

Control Panels

Closed-loop heater control systems use a power controller, temperature controller, and thermocouples to monitor and provide constant output temperature.

VIEW PRODUCT

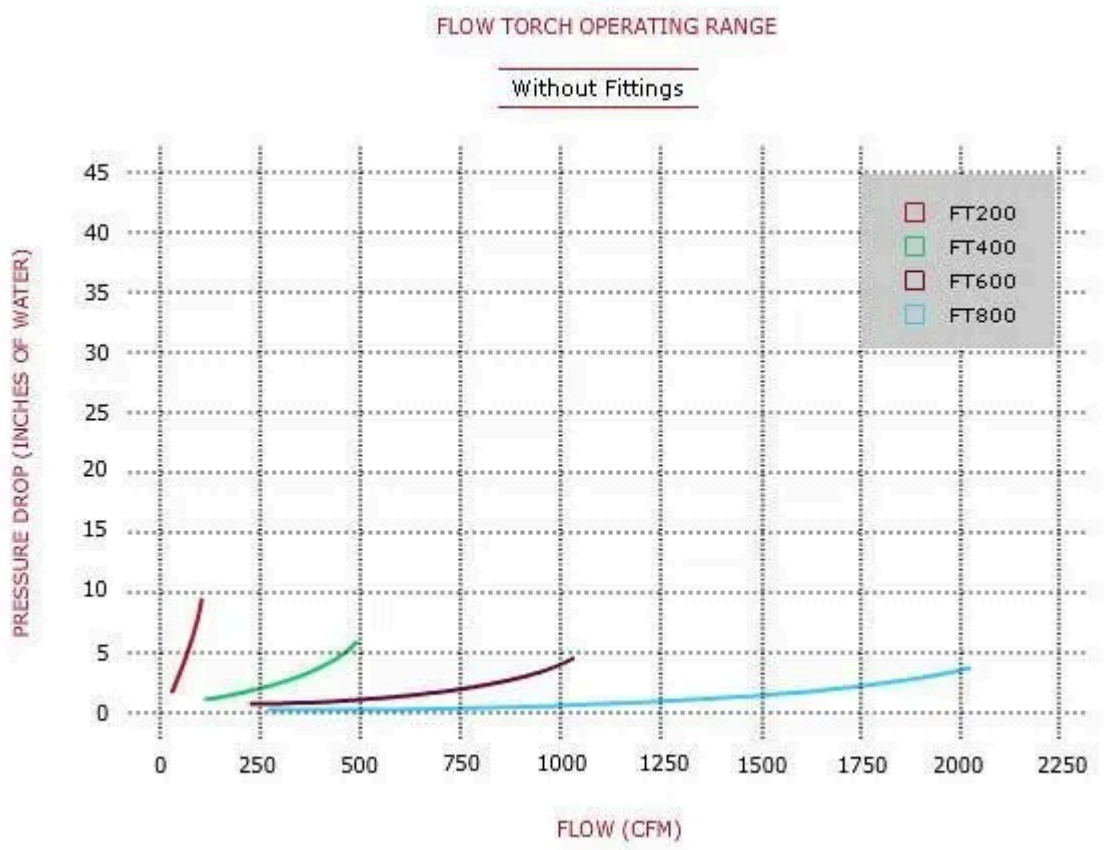
Insulation Blankets

Our insulation blankets are made specifically for the Flow Torch family of products. Improve safety for people and products, and save money by reducing waste heat.

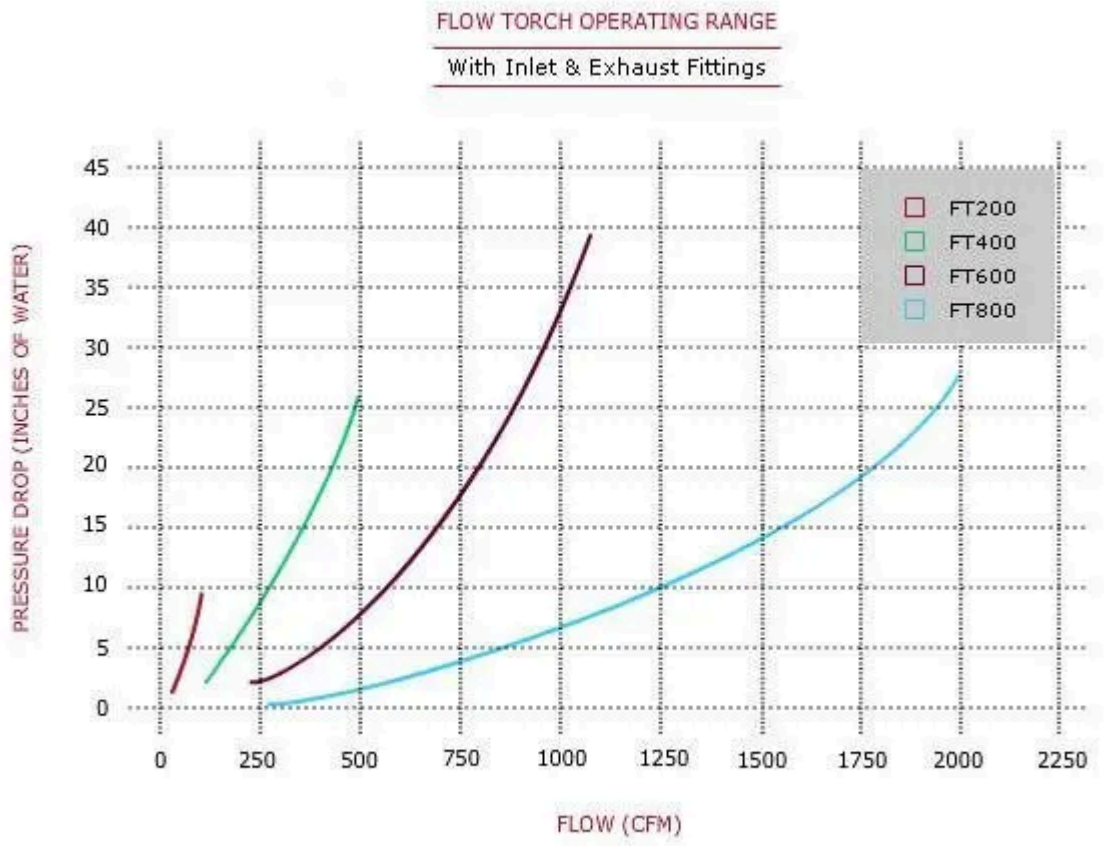
GET INFO

Additional Information

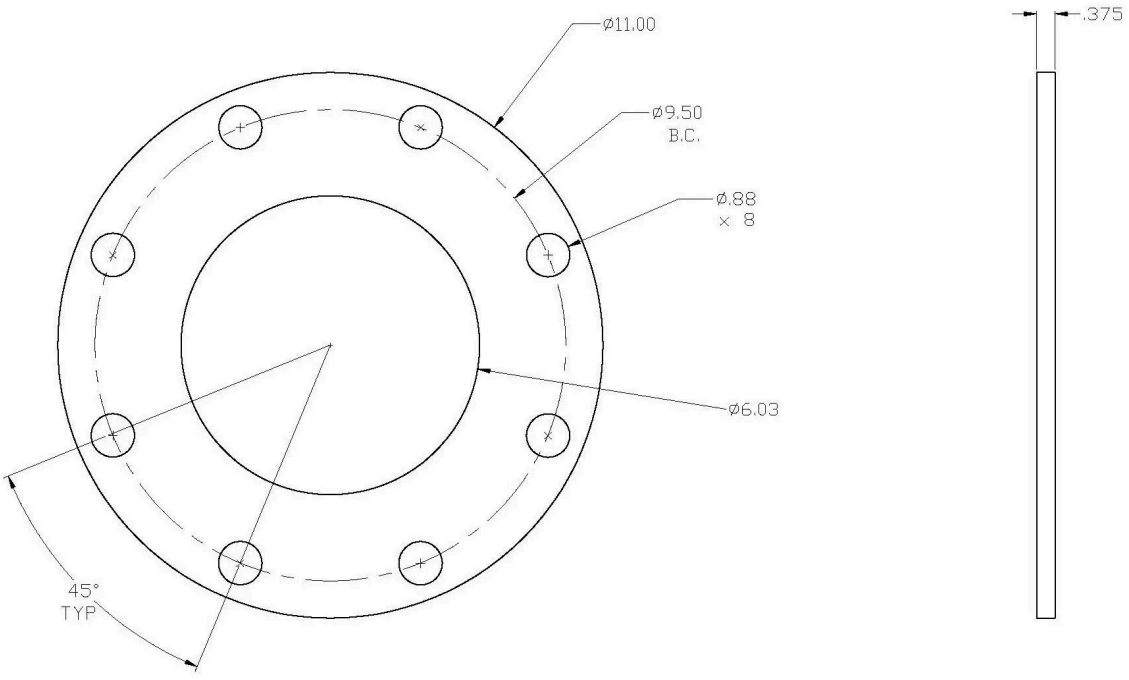
PRESSURE DROP CHART (WITHOUT FITTING)



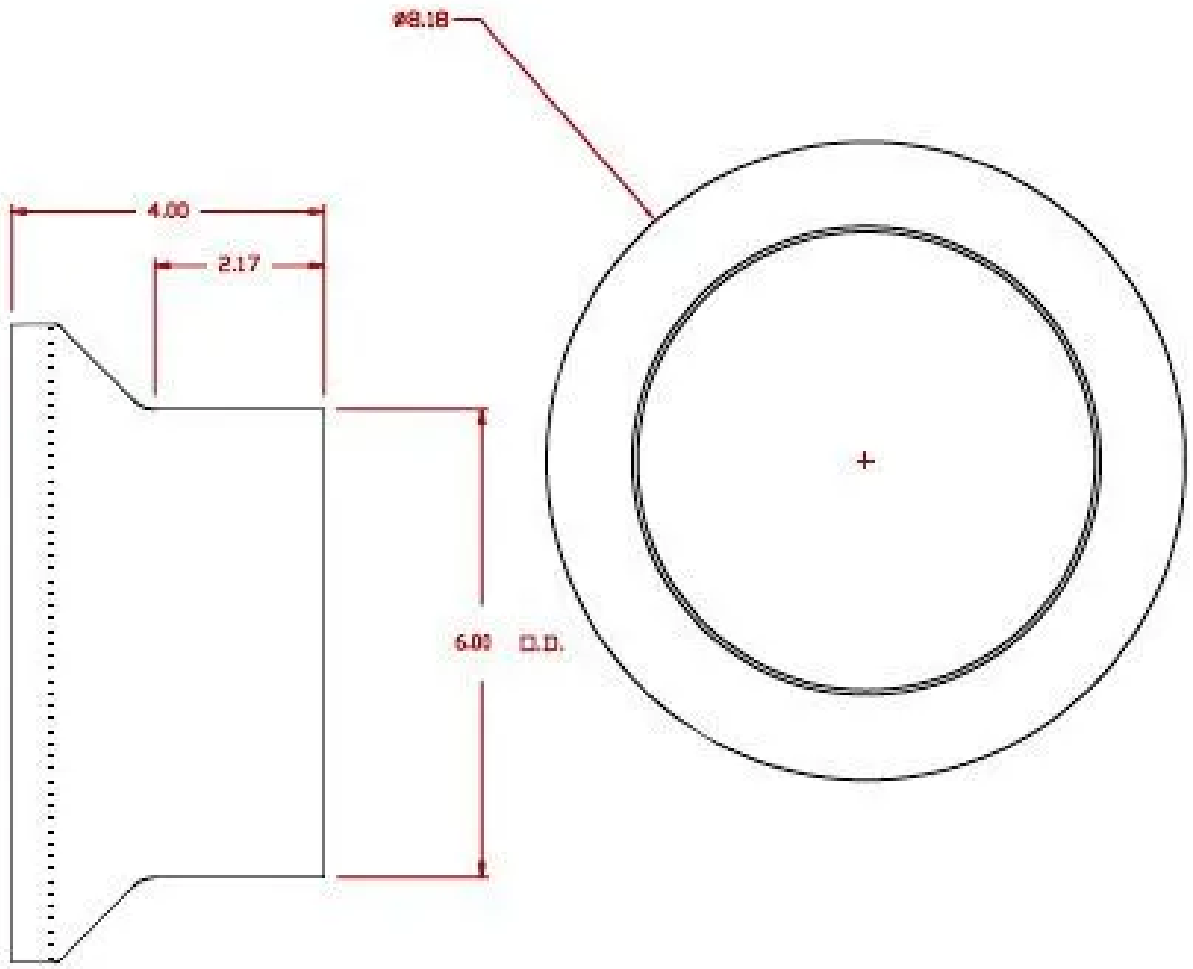
PRESSURE DROP CHART (WITH FITTING)



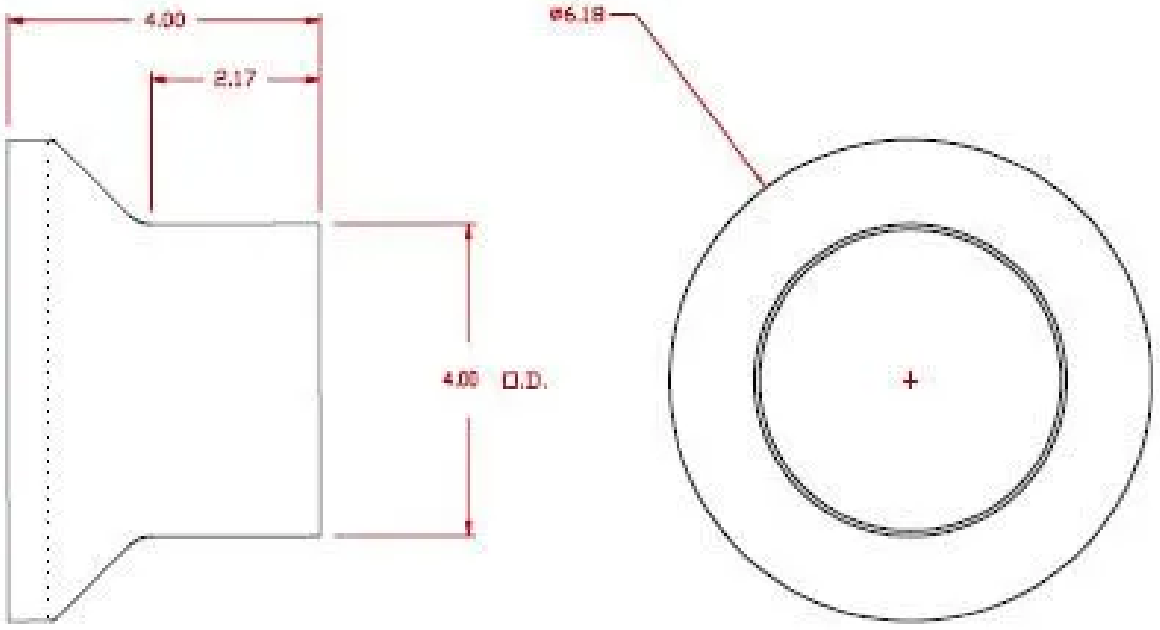
PRODUCT FITTINGS



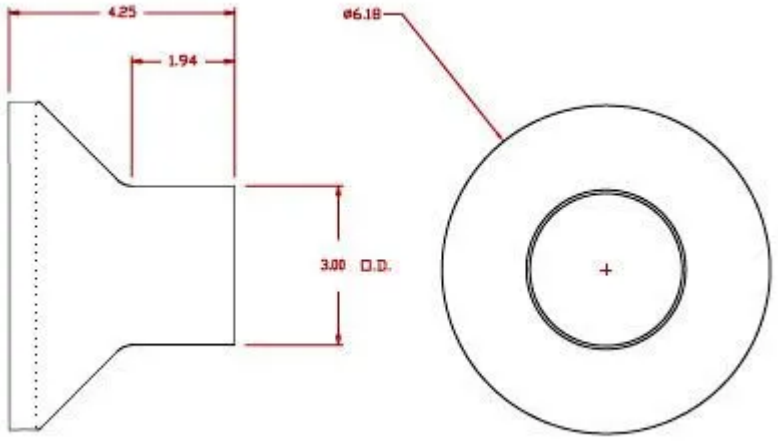
Exhaust Fitting
11" Flanged Fitting



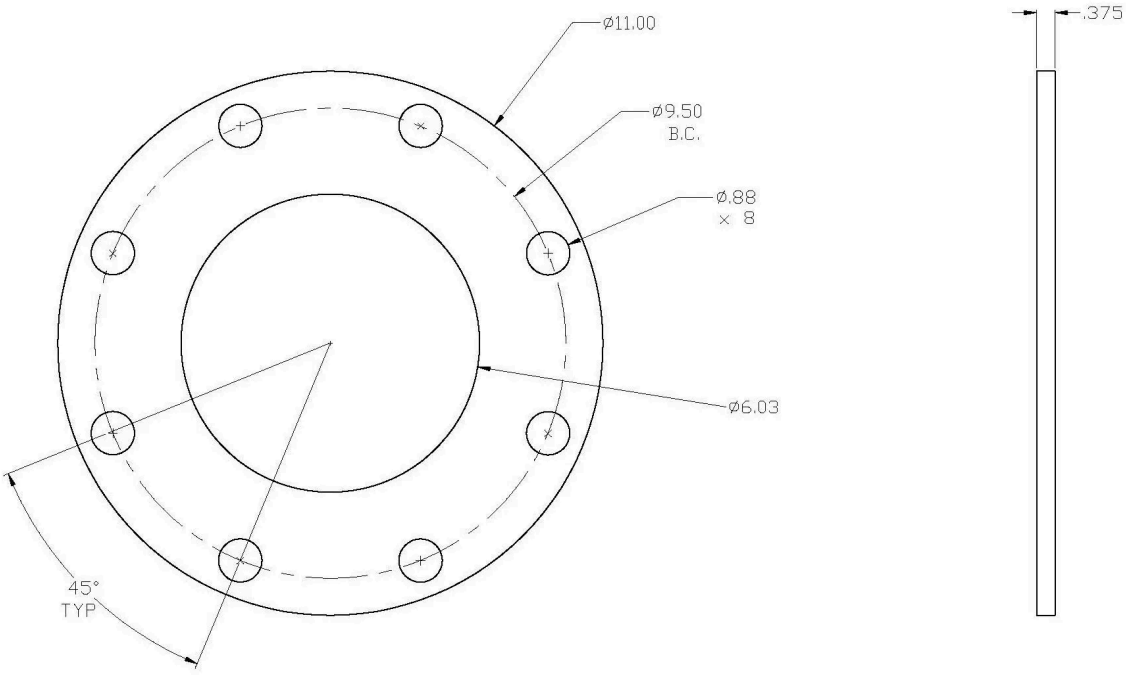
Exhaust Fitting
6" Diameter Tube



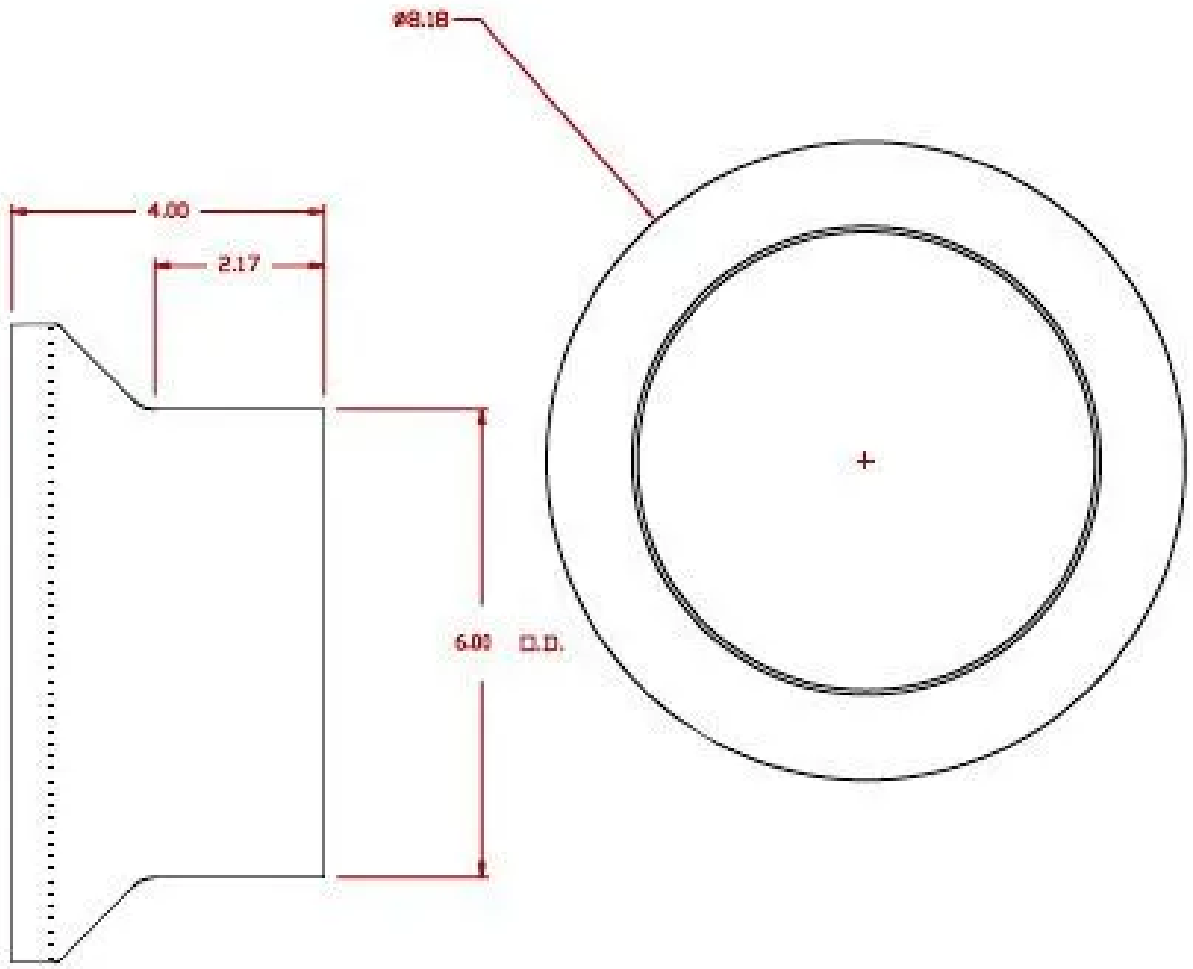
Exhaust Fitting
4" Diameter Tube



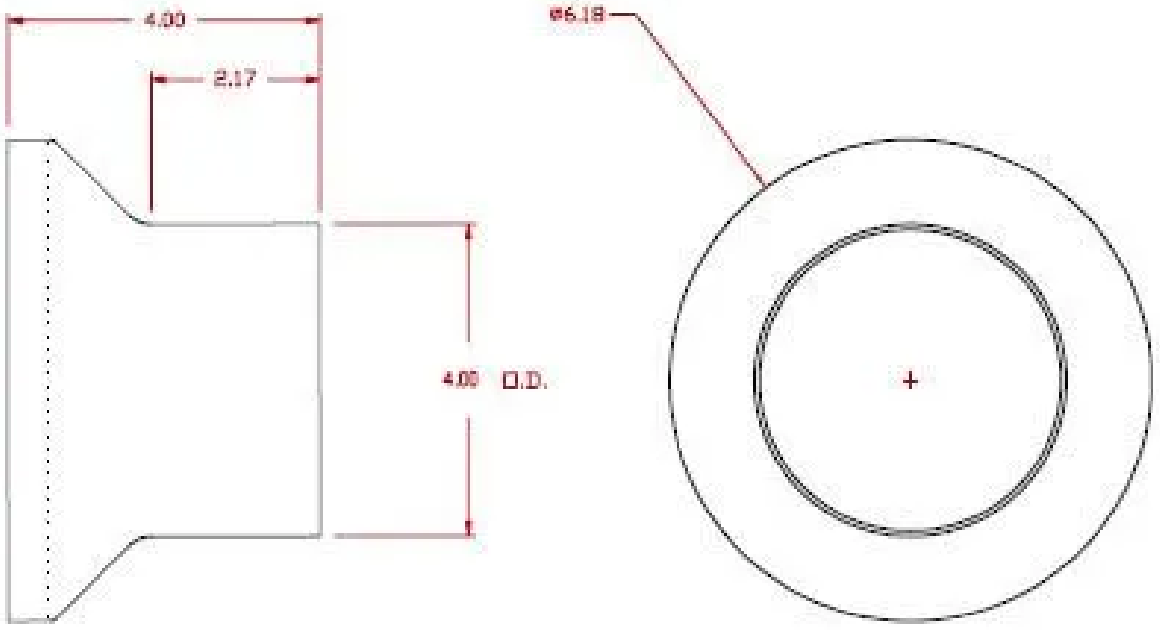
Exhaust Fitting
3" Diameter Tube



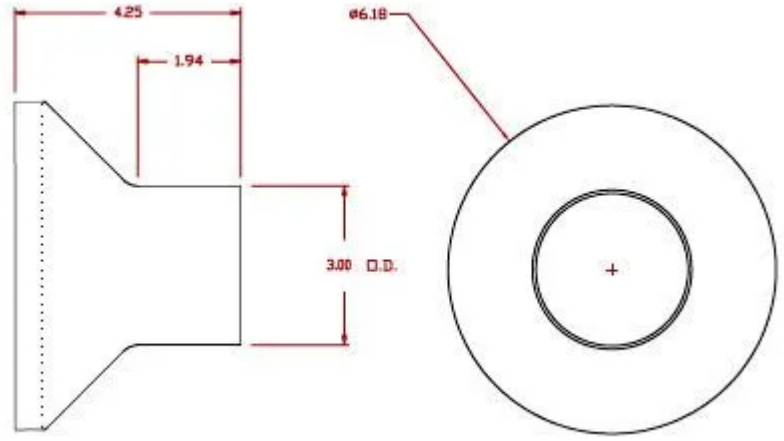
Inlet Fitting
11" Flanged Fitting



Inlet Fitting
6" Diameter Tube



Inlet Fitting
4" Diameter Tube



Inlet Fitting
3" Diameter Tube

Frequently Asked Questions

CAN THE FLOW TORCH 800 OPERATE CONTINUOUSLY AT HIGH TEMPERATURES? —

Yes. It is specifically designed for continuous-duty, high-temperature operation in industrial environments. The open-coil design dissipates heat efficiently, while the stainless steel body ensures long-term durability under demanding cycles.

WHAT SHOULD I CONSIDER WHEN PAIRING THE FLOW TORCH 800 WITH A REGENERATIVE BLOWER OR HIGH-CFM FAN? —

Because the heater is optimized for low pressure drop, it integrates well with blower systems. However, verify that the blower maintains consistent SCFM at operating temperature, as air density decreases when heated. For applications using VFD-controlled blowers, we suggest implementing airflow verification interlocks.

HOW DO I DETERMINE THE CORRECT MINIMUM AIRFLOW FOR MY WATTAGE SELECTION? —

Minimum SCFM requirements increase with wattage to prevent overheating of the coil. For example, 20 kW requires 76 SCFM, while 75 kW requires 286 SCFM. When in doubt, oversizing airflow is safer than undersizing. If airflow drops below the minimum threshold, the heater's temperature will spike rapidly.

WHAT DIFFERENTIATES THE FLOW TORCH™ 800 FROM THE FLOW TORCH 600 OR 400 SERIES? —

The Flow Torch 800 is engineered for extreme airflow volumes up to 2,000 SCFM, making it the highest-capacity open-coil heater in the product line. Its 8-inch diameter body and wattage options up to 75 kW allow it to serve applications far beyond the thermal and airflow capabilities of smaller models.

Part number: FT800