

PRIMUS RAPID FLARE IGNITION

FOR FLARE GAS RECOVERY & STANDBY FLARES

A Simpler Approach with Superior Results

Sometimes, simpler is better. That's the case with pilot ignition for flares. Other systems rely on multiple, complex components that require ongoing maintenance and a design that causes early or late ignition issues. But at John Zink, we combined our decades of experience in the field with our expertise in research and development to simplify ignition and solve those problems. The result: the Primus Rapid Flare Ignition. No moving parts. Just superior results.

A Smarter Design For Faster, More Reliable Performance

The Primus Rapid Flare Ignition delivers near-zero flaring because of its lightning quick performance. Primus lights the flare in seconds. There's no waiting for air egress and as a result, no delay in fuel delivery. This gives you near-instant lighting as reliable as your existing pilot.

Eliminates timing issues: No need to worry about vapor cloud accumulation due to a late ignition. Primus early ignition ensures the flare is safely lit.

Free of moving parts: Minimizes potential problems and maintenance issues and expenses.

Utilizes proven technologies: Uses existing John Zink pilot technology with a proven track record.

Easy to retrofit: With no new pilot technology needed, it's easy to mate to your existing John Zink electronic pilot.

No explosives needed: Eliminates many safety concerns, the need for special permits, and the added expense of projectiles.

No additional line required for deployment: Minimizes installation costs and concerns for ongoing maintenance.



A Simple Concept. A Complex Solution.

The concept behind the Primus Rapid Flare Ignition is simple. But engineering that concept into a reliable solution requires decades of experience. Many factors affect how the design is applied. Our engineering experts consider a variety of elements including:

- Transient phenomenon presents many variables
- Stack height and location impacting volumes in fuel header
- Number of pilots and pilot configuration
- Orifice sizes
- Fuel supply pressure
- Length and diameter of system
- Types of pilot gas

Only proper design and engineering oversight of this patent pending technology by John Zink will correctly address these variables and ensure successful operation and reliable performance light after light.

More than 80 years ago, John Steele Zink shook up the natural gas industry by designing and manufacturing a more efficient burner. Today, his spirit lives on in John Zink. Through years of strategic acquisitions and in-house innovation, we've remained a global leader in emissions-control and clean-air systems. Our Primus Rapid Flare Ignition and flare gas recovery solutions are proof positive.



Comprehensive Flare Gas Recovery

The Primus Rapid Flare Ignition can be an integral part of a comprehensive flare and flare gas recovery system from John Zink. Our advanced flare gas recovery systems can result in a near 100% reduction of normal flaring, limiting flare operation to emergency releases and scheduled maintenance. And with Primus Rapid Flare Ignition, additional gas savings can be achieved by eliminating the need for the pilot to remain lit. Near-zero flaring reduces costly emissions, giving you environmental control with an immediate return on investment.

Our flare gas recovery systems provide many benefits to the end user including:

- Reduction of plant fuel consumption
- Reduction of plant steam consumption
- Increase in flare tip life
- Rapid return on investment
- Reduction of plant emissions

Custom-Engineered Flare Gas Recovery Solutions

At John Zink, we have a unique perspective and knowledge of the entire flare system. This gives us an advantage when recommending system integration strategies and engineering custom solutions to meet your specific requirements.

- **System design, manufacturing and in-field start-up assistance:** Our engineering team will work with you to design the right system for your operation. From project beginning to final execution, we'll ensure your flare gas recovery system is optimized to reduce NO_x, SO_x, CO and CO₂ emissions.
- **Engineering studies and packages:** We offer engineering studies and packages that analyze your specific flare system and evaluate the economic feasibility of installing a flare gas recovery system at your facility.
- **Compressor selection:** We evaluate all compressor technologies — reciprocating, screw, liquid ring and sliding vane — to determine which is best suited for your specific application.

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