



TRUEFIRE **3000**

Gas Igniter



# TrueFire 3000 Gas Igniter

*Breen's TrueFire™ 3000 provides unmatched repeatability and reliability for main burner ignition, stabilization, furnace warm-up, and temperature stabilization, in any duty service.*

## Product Overview:

The TrueFire™ 3000 Series gas igniters are the industry-leading gas igniters for use in any NFPA Class rating (1, 2 or 3). The all-in-one design makes it the easiest retrofit, creates a clean burner front and provides the highest level of performance.

The signature characteristic of the TrueFire™ 3000 Series is simplicity in design, installation, performance. Simplicity of design, coupled with innovative engineering of the internal combustion process translates to nuisance trip-free performance.

TrueFire™ 3000 igniters are comprised of components designed for long lasting service. All service connections flow to one location: the igniter head assembly.

The TrueFire™ 3000 is designed with a unique 'safe-zone' near the barrel tip. Inside this zone the fuel is ignited by an internal high tension spark system. Flame is maintained due to the unique nozzle design and mixed with the exact amount of air for maximum efficiency and performance. Within the 'safe-zone' is the flame ionization rod, which reliably proves flame.

**“The integration of flame monitor, spark rod advanced nozzle design with constant-light pilot holes, and the Flame Anchor within the ‘Safe-Zone’ guarantees reliable and repeatable performance.”**



## Features & Benefits:

- Class 1, 2, or 3 per NFPA 85. Heat release from 0.5MMBtu/hr to 20MMBtu/hr
- 'Safe-zone' guarantees reliable light-off (99.99%) and continuous performance no matter the furnace conditions
- Rugged design, forced-draft means years of trouble-free service; no moving parts.
- Material components selected for continuous duty service, regardless of heat-release selected.
- Fits easily into existing igniter penetration, the ONLY penetration required.
- All-in-one design and advanced combustion engineering creates the simplest and cleanest retrofit for the burner front.

### Standard specifications TrueFire™ 3000 Series

Model	Heat Release (MMbtu/Hr)	Barrel OD	Air Conn. NPT	Gas Conn. NPT	F-D Air Reqt.*	Fuel pressure**
3100	0.5 – 1.2	1.9"	1"	1/2"	18-37scfm	10-14.5 psig
3300	1.5 – 4.0	2.75"	1-1/2"	3/4"	60-75scfm	10-14.5 psig
3500	10 – 20	3.5"	2"	2"	60-150scfm	10-14.5psig***

\*Air pressure must be maintained at 8"wc above furnace pressure

\*\*Varies with heat release; must be at 6"wc above furnace pressure

\*\*\*3500 series requires 10"wc above furnace pressure



### Standard specifications

<b>Ambient Temperature:</b>	-20°F - 175°F	<b>Barrel materials:</b>	main barrel SS304; safe-zone incoloy
<b>Protection Class:</b>	NEMA 4	<b>Voltage:</b>	120 VAC 50/60 cycles; 105VA
<b>Barrel lengths<sup>2</sup> :</b>		<b>Outputs:</b>	One NO dry contact; one SPDT dry contact <sup>3</sup>
Model 3100 (-1, -2, -3)	(2', 3', 4')	<b>Ignition transformer rating:</b>	Continuous duty
Model 3300 (-1, -2, -3)	(4', 5', 6')	<b>Flame monitor rating:</b>	Continuous duty
Model 3500 (-1, -2, -3)	(6', 8', 10')		

<sup>1</sup> Barrels can be supplied for horn igniters or in flexible mode for corner-fired igniters.

<sup>2</sup> Each equipped with sliding flange to allow for precise adjustment at site.

<sup>3</sup> 4-20mA available as option



**BREEN**<sup>®</sup>  
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**DESIGNED FOR:**

- Gas, Coal, or Oil fired utility power generation units with gas ignition requirements
- Gas, Coal or Oil fired auxiliary steam boilers on industrial sites
- Bio-fuel units
- Oil-fired heat recovery steam generators (HRSGs)
- Coal-fired circulating fluidized bed boilers (CFB)
- Industrial boilers
- Pulp and paper mills
- Combustion and heater vessels in
  - Refining
  - Petrochemical
  - Chemical process industries
  - Metals
  - Mining
  - and more

**COMPLIANCE:**

- NFPA 85 Code
- UL Approved for Safety Application
- C-UL Approved for Safety Application
- ANSI/ISA S-82 (SIL 2 optional)
- NEC Explosion Proof (optional)

**TRUE**  <sup>TM</sup>  
**FIRE**  
**COMBUSTION PRODUCTS**