

# Pilot burner ZMI, ZMIC

Product brochure · GB 7 Edition 04.13







- Pilot burner with forced air supply
- Safe flame control thanks to ionization electrode
- Reliable electrical ignition
- Space-saving slim design due to single-electrode operation
- Optimum positioning thanks to moveable mounting device
- Different lengths make it suitable for many installation situations
- Maintenance-friendly thanks to simple design
- Can be used in many applications
- Optional: ZMIC with ceramic tip





ZMI with a single electrode for igniting and monitoring

ZMIC with ceramic tip

### Application

For safely igniting gas burners on furnaces in the metal, ceramics and non-ferrous metal industries and on heat treatment installations.

The ZMI can also be used as an independently operated burner.

Suitable for operation with natural gas, town gas/coke oven gas or LPG.

The pilot burner is ignited electronically and monitored by a single ignition and ionization electrode.

The ZMIC 28 with ceramic tip has a longer, sharper flame. The ceramic tube has a longer service life and is suitable for higher temperatures.

# **Examples of application**



Main burner BBG with integrated pilot burner ZMI



Main burner ZIO with integrated pilot burner ZMI



Industrial furnace for housings



Roller hearth kiln in the ceramics industry

In the case of combined pilot and main burners, EN 746-2:2010 stipulates the monitoring of pilot and main burner via the automatic burner control unit. Exceptions are permitted provided that the safety of the installation is not impaired.

Alternating pilot burner with modulatingcontrolled main burner



As soon as voltage is supplied to the ignition transformer, the pilot burner ZMI is ignited using an ignition spark. If the pilot burner detects a stable ionization signal, the enable signal for operation of the main burner is issued via the automatic burner control unit. The main burner is ignited. If the main burner provides a stable flame signal, the pilot burner ZMI can be switched off.

Igniting a flame curtain



As soon as voltage is supplied to the ignition transformer, the pilot burner ZMI is ignited using an ignition spark. If the pilot burner provides a stable ionization signal, the enable signal for the flame curtain is then issued via the automatic burner control unit. The flame curtain is ignited.

### Type code

Code	Description
ZMI	Pilot burner
ZMIC	Pilot burner with ceramic flame tube
16	16 mm burner size
25	25 mm burner size
28	28 mm burner size
Т	T-product
B	For natural gas
G	For LPG
D	For town gas/coke oven gas
150 200 300	Flame tube length [mm]*
R	Rp internal thread
N	NPT internal thread
К	Bellows unit

\* Burner lengths as of 200 mm in 100 mm increments/ lengths of the ZMIC 28..K as of 250 mm in 50 mm increments

# **Technical data**

Capacity:

ZMI 16: 1 to 2 kW (3.8 to 7.6 10<sup>3</sup> BTU/h), ZMI 25: 2.5 to 4 kW (9.5 to 15.1 10<sup>3</sup> BTU/h) (1.5 to 3.3 kW when used with town gas, coke oven gas), ZMIC 28: 2.5 to 4.2 kW (9.5 to 15.9 10<sup>3</sup> BTU/h). Capacities in kW refer to the lower calorific value  $H_u$  and capacities in BTU/h refer to the upper calorific value  $H_o$ .

Gas inlet pressure:

ZMI: up to 80 mbar (up to 32 "WC), ZMIC: up to 100 mbar (up to 40 "WC), air inlet pressure: up to 120 mbar (up to 47 "WC), each depending on the gas type. Burner pressures: see www.docuthek.com → Elster Kromschröder Search term: ZMI, ZMIC Kind of document: Flow rate curves

#### Registration in the Docuthek required.

Burner length increments: 100 mm (4"), length increments of the ZMIC 28..K: 50 mm (2").

Gas types: natural gas, LPG (gaseous) and coke oven gas; other gases on request. For cold air only.

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Flame control: with ionization electrode. Ignition: direct spark ignition (5 kV ignition

transformer).

Angle plug: interference-suppressed.

Housing: aluminium.

Flame tube: ZMI: heat-resistant steel, ZMIC: ceramic flame tube.

Max. temperature at the tip of the flame tube:

ZMI: 1000°C (1832°F),

for lambda < 1: 900°C (1652°F), ZMIC: 1450°C (2642°F).

## Maintenance cycles

We recommend a function check at least once a year.



# Detailed information on this product



Contact www.kromschroeder.com → Sales

Elster GmbH Postfach 2809 · 49018 Osnabrück Strotheweg 1 · 49504 Lotte (Büren) Germany T +49 541 1214-0 F +49 541 1214-370 info@kromschroeder.com www.kromschroeder.com

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