

## High frequency ignition unit

**For oil and gas dual burners of small to medium rating. With plug-in ignition and power supply cables, designed to fit beneath the burner safety control box.**

### INTRODUCTION

The ZT 980 high frequency ignition transformer is suitable for use with oil, gas and dual fuel burners of small to medium rating. The ZT 980 enables a big spark deformation on burners with a high fire-rating or high combustion-air velocity. In addition to this, it generates the lowest electromagnetic interferences of all known electronic ignition devices, which is especially important if the burner has to comply with EN 55014. The ZT 980 combines a low power consumption with a low inrush current. The power connector is compatible with the widely used 3-wire connector. A replacement with a plugable coil trafo is therefore possible without any problems.

### CONSTRUCTIONAL FEATURES

A transistorised oscillator produces a high frequency voltage, which is then increased to 16 kV by a conventional iron-cored transformer. Despite the very compact dimensions of the ZT 980 ignition device, it has an outstanding performance in comparison to conventional stray field ignition transformers. The high frequency voltage produces an interrupting arc with high thermal energy and ideal ignition properties. The dimensions of the housing and fixing holes are such that it can be mounted underneath the burner control box wiring base. The power supply for the ZT 980 is provided in the form of a 3 pin AMP type socket connection with a corresponding plug and cable supplied.

In order to meet all likely requirements, the ZT 980 is available in 2 versions:

- ZT 980 4.0 mm pin to suit standard ignition cable connectors, e.g. for pre-assembled "Teflon" H.T. cables.
- ZT 980 1.0 mm pin to suit 7.0 mm silicon H.T. cable in conjunction with the Satronic clip.

### INSTALLATION INSTRUCTIONS

The applicable regulations must be observed when mounting the device and carrying out the electrical connections. Particular attention must be given to method used to instal the H.T. cables. If the high tension cable passes trough the burner housing an edge protection must be used. Avoid unnecessary lengths, sharp bends over hard edges, extremely high temperatures etc., any of which could give rise to reduced performance or possible problems.

Recommended ignition cable: Silicon cable  $\varnothing$  3-7mm



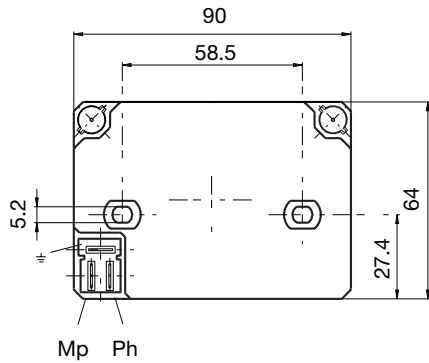
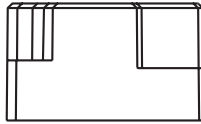
For trouble-free operation, the correct spark gap at the ignition electrodes must be observed, supply voltage reductions and low ambient temperatures can give rise to problems if this is incorrect, see "Technical data" for recommended settings. The positioning of the H.T. ignition cables with regard to TV and radio interference is also extremely important. The cables should be kept short, run as close together as possible and should not cross or be in contact with any other power cables or fittings.



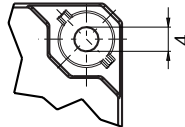
### TECHNICAL DATA

Supply voltage	220 / 240 V (-15... +10%) 50 Hz (40 - 60 Hz)
Connections:	
Live / neutral / earth	3 AMP plug type terminals 6.30 x 0.8 mm
High tension	$\varnothing$ 4 mm pin or $\varnothing$ 1 mm pin
Primary current	0.25 A
Rating	Intermittent, 33 % E.D. in 3 minutes
Electromagnetic compatibility	Emmission EN 50081-1 Immunity EN 50082-1
Ignition voltage	2 x 8 kV
Secondary current	36 mA rms
Secondary frequency	20 kHz
Recommended Spark gap	3 mm
Ignition cable	plug-in type
Insulation standard	IP 40
Permissible ambient temperature	-10° C... +60° C
Mounting attitude	any
Weight	210 g

## ZT 980 DIMENSIONS

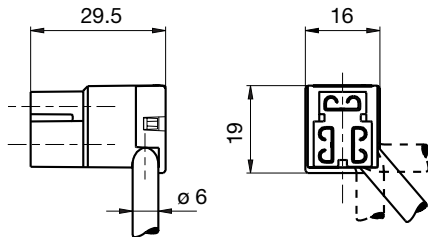


Version HF-pin  $\varnothing$  1 mm

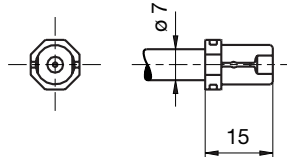


Version HF-pin  $\varnothing$  4 mm

## ZT 980 POWER CABLE PLUG DIMENSIONS



## HIGH VOLTAGE CABLE CLIP DIMENSIONS



## ORDERING INFORMATION

ITEM	DESIGNATION	ITEM NO.
Ignition Unit	ZT 980 pin $\varnothing$ 1 mm	13141
or	ZT 980 pin $\varnothing$ 4 mm	13144
Power cable	Power cable , 0.3 m	7283001
Ignition cable with clip, suitable for Item no. 13141	Silicon cable $\varnothing$ 7 mm, 0.4 m	7274009
Clip separat to silicon cable	High Voltage Cable Clip	74993

The above ordering information refers to the standard version.  
Special versions are also included in our product range.

Specifications subject to change without notice.

# ZT 930

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