General

Burnerlance types -H, -EH and -HA are especially suitable for use in or on oil burners and, depending on the configuration, are used with light fuel, medium fuel or heavy fuel. They can, in accordance with the configuration, be equipped with either mechanical atomisers, compressed air atomisers or steam atomisers.

The use of mechanical atomisers makes fuel outputs from 10 kg/h up to 5000 kg/h, turn down ratios from 1:3 to 1:5 and spray angles from 30° to 90° possible. With compressed air atomisers or steam atomisers one reaches fuel outputs from 2,5 kg/h up to 5000 kg/h, turn down ratios from 1:5 to 1:10 and spray angles from 20° to 120°.

The three types can be manufactured in standard series 12, 24, 32 and 40 and have the following characteristics:

- **-H**  A piston actuates the needle to open by means of fuel. The necessary external solenoids are not part of our delivery program.

- **-EH**  A piston actuates the needle to open by means of fuel. This fuel flow is being controlled by an integrated solenoid on the lance.

- **-HA**  A piston actuates the needle to open by means of compressed air. The necessary external solenoids are not part of our delivery program.

The shut-off needle is located directly inside the atomiser outlet bore or way upfront inside the burnerlance, close to the atomiser outlet. The head of the needle is bullet shaped and the seat for the needle is a cone. This way, when the needle is closed, there is a continuous circle shaped sealing line. A strong spring takes care of the closing force to ensure a reliable shut-off, even in case the hydraulic, pneumatic or electrical energy suddenly fails.

The lance types -H, -EH and -HA are fully compliant with the "Specification for safety requirements and testing of safety shut-off devices for combustion plants using liquid fuels" as in EN 264, but only with original atomisers or original atomiser parts from our company built in.

All burnerlances are available in any length between 180 mm and 6000 mm. Certain configurations allow a length less than 180 mm.

The delivery program comprises many different configurations. The head of the lance can be welded or brazed. There are lances for mechanical atomisation or compressed air atomisation or steam atomisation, with or without volume regulator, with or without pressure regulator, with or without internal heater and with or without circulation. The shape of the connection block, the position of the ports and the diameter of the outer tube vary with series and configuration.

More details about configurations of burnerlances can be found in the appropriate information sheets.
Identification

The identification of burnerlances is composed as `<series> <type> <configuration>`. As an example, 12-H-500 is a series 12 lance of the type -H configured with a length of 500 mm.

 `<series>`

With the choice of series, the maximum achievable fuel output is predetermined. Standard series are 9, 12, 24, 32, 40, 50, 60 and 80. Burnerlances have the same series identification as the corresponding atomisers or atomiser parts. So, `<series>` always is a number.

 `<type>`

Besides of the types -H, -EH and -HA, the delivery program contains other types such as for instance burnerlances without needle shut-off. However, `<type>` always consists of a hyphen followed by one or more alphabetic characters.

 `<configuration>`

In the identification element `<configuration>`, always at least the length is present. The diversity of configurations, because of the general character of this sheet, does not allow an elaborate explanation of the details with regard to the coding of `<configuration>`.

Support

Our support team will gladly assist you with the choice of an optimum solution for your special application.