

MANN-FILTER

Product information

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New PreLine heater DH 32 KIT

Used in automotive applications

Heater DH 32 KIT, fitted in the filter head on the PreLine pre-filter system, is now available from MANN-FILTER.

This heater is based on a PTC heating element controlled by a bi-metallic switch. Directly situated in the diesel fuel flow, this switch very quickly responds to any changes in temperature of the fuel and thus also the driving cycles.

The heater delivers very constant output in the operating range of the vehicle.

Field measurements of cold diesel at -18°C and a flow rate of 160 l/h recorded a power consumption of approx. 190 Watts with typical 12V and 24V nominal voltage.



This output is completely adequate to heat the fuel on start-up: it creates a small channel in the filter head where diesel – which would otherwise tend to gel - remains liquid, and the vehicle can operate. In the gelling process, paraffin crystals are formed at low temperatures which clog up the fuel line and filter. After starting, the heat of combustion in the engine and the continuous fuel circuit increases the temperature enough to liquefy all the diesel fuel. The operating temperature is reached instantly and fuel flows through the entire filter. With its wide voltage range from 9 to 32 Volts, this heater can be used at nominal voltage between 12 and 24 Volts.

Heating power consumption on an ISO standard diesel (Arctic diesel, -20°C) demonstrates in the laboratory a low wattage of up to 170 W with a typical flow rate of 160 l/h. It makes minimal difference if the heater is operated at a typical 12 Volts or 24 Volts.

MANN+HUMMEL is successfully applying this heating technology for OE manufacturers.

Separate ABE and KBA type approvals are available.

