Oil Meter HZ 5/HZ 6 Mounting Instructions

Scope of supply

1. HZ 5 / HZ 6 oil meter
2. Aluminium sealing ring (2 off)
3. Fixing screws with washers (2 off each)
4. Mounting instructions

In addition an extension set can be ordered:

5. Aluminium punched plate (retaining plate)
6. Screwed pipe connections (2 off)
7. Cooper pipe (2 off)

Safety advice

- Before mounting the oil meter these instructions must be carefully read through and followed!
- Danger of fire from combustible liquids! Take great care during grinding, cutting and welding work!
- Fires, open lights and smoking are forbidden! Always keep fire extin- guisher ready for use!
- Danger of injury from sharp edges! Be careful during mounting!

Purpose

The oil meter may only be used for measuring the consumption of heating oil (L and EL) or diesel fuel.

Mounting

1. Check measuring device and accessories for completeness and the required operating and ambient conditions (-> see section: “Technical data”).

2.Building in the oil meter on the suction side, a filter has to be installed in front of the oil meter with a mesh size of 50-75 µ.
Air inclusions have to be avoided since they cause measuring errors. If necessary the pipeline system or the screwed connections should be checked for tightness.

3. Switch off heating plant and remove burner hood if necessary.

The measuring unit can be fitted under or outside the burner hood.

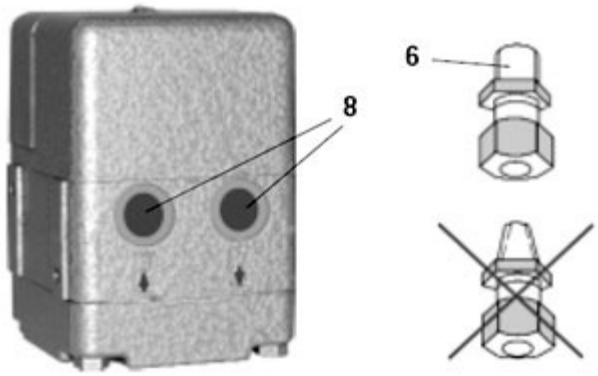
4. Adapt the pipeline as appropriated.

The measuring unit must be easily accessible.

- **Clean any swarf and other contamination from the lines.**

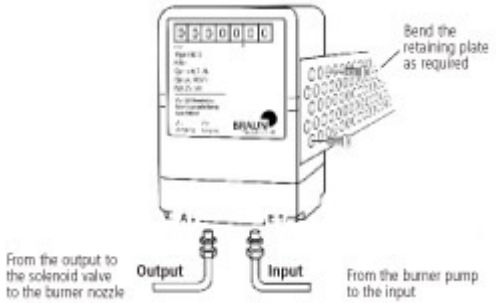
5. Attach retaining plate [5].

- **To ensure correct venting during commissioning, the instrument can be mounted with the connections facing downwards or backwards. Ensure that the counter wheels are easily visible.**



6. Remove sealing plugs [8] from the back of the oil meter and screw in screwed plugs [6] **with cylindrical threads.**

- **Do not mix up the inlet and outlet.**



- **A professional and tight pipe connection is achieved using the supplied aluminium sealing rings [2]. Hemp or sealing tape is <u>unnecessary</u>.**

7. Attach oil meter [1] to the retaining plate [5] using the fixing screws and washers.

8. Connect pipes and tighten up the screwed connections.

Starting up

- **If the oil meter is installed in the pressure pipe before the burner nozzle, on the discharge side, the pressure in the closed pumps should be temporarily reduced**

before the appliance is operated, in order to prevent damage to the oil meter's membrane caused by pressure surges.

1. Switch on pump.

2. Slowly open shut-off valve.

- **Avoid pressure surges so as not to damage the measuring unit!**
- **Entrapped air causes false measured results and can lead to damage!**

Recommendation

When installing the oil meter in the pressure line in front of the burner nozzle.

In order to prevent the possible occurrence of subsequent dripping, we recommend the installation of an additional solenoid valve after the meter.

Maintenance

- Regularly clean the prefixed filter
- Check connections and lines for leaks

The measuring unit must be kept clean but requires no maintenance.

After 8-10 years, we recommend a factory inspection of the oil meter to ensure its measuring accuracy.

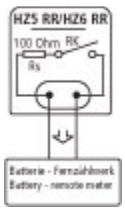
Technical Data

Flow rate range HZ 5 Burner capacity	0,7 … 40 l/h (0,6 … 34 kg/h)7 kW … 400 kW
Flow rate range HZ 6 Burner capacity	1 … 60 l/h (0,8 … 50,4 kg/h)10 kW … 600 kW
Possibility to read from the oil meter	0,01 l … 99999,98 l
Measuring accuracy	±1 %
Nominal pressure	25 bar
Pressure loss (Take particular care of this when installing in the suction line!)	0,05 bar … 0,2 bar
Heating oil type	EL according to DIN 51603
Temperature range/ ambient temperature	–5°C … +70°C
Connecting thread	DIN 3852-X-G 1/8″ internal
Dimensions	60 x 60 x 85 mm
Weight	0,6 kg

HZ 5 / HZ 6- Reed Contact Data

Example 1:

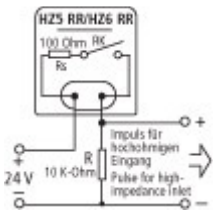
Connection to the active port e.g.: Battery gauge



or similar

Example 2:

Connection to the passive port



R can also be plugged into the downstream inlet: at least 10 kohm

Reed contact: Pulse value: 1 Pulse = 0.1 l

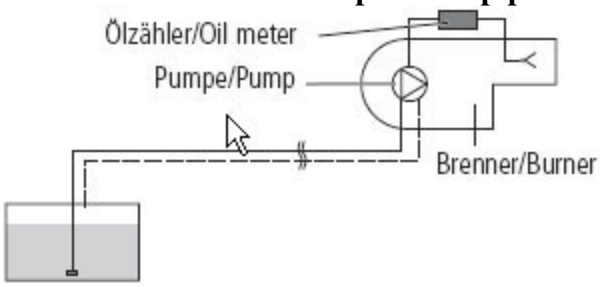
Type of contact – NO switch: max. electricity 70 mA/max. voltage 30 V
integrated protective resistor RS: 100 Ohm/ 0.6 Wvoltage drop across Rs at 10 mA: 1 V

Pulse Frequency: at 40l/h ca. 0.2 Hz (HZ 5)
at 60l/h ca. 0.2 Hz (HZ 6)

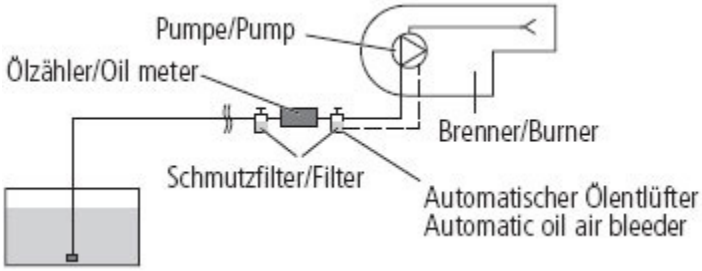
Attention: Avoid contact with the magnetic field e.g. fan or solenoid valve.
On the relay contact be mindful of the flyback diode.
Do not connect the low-impedance voltage source parallel to the clamp!

Installation options

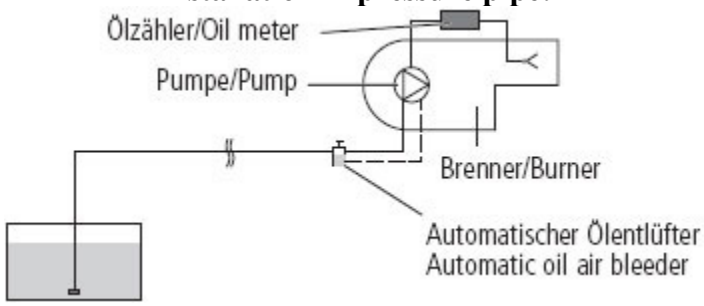
Twin pipe system
Installation in pressure pipe:



Single pipe system
Installation in suction pipe:



Installation in pressure pipe:



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