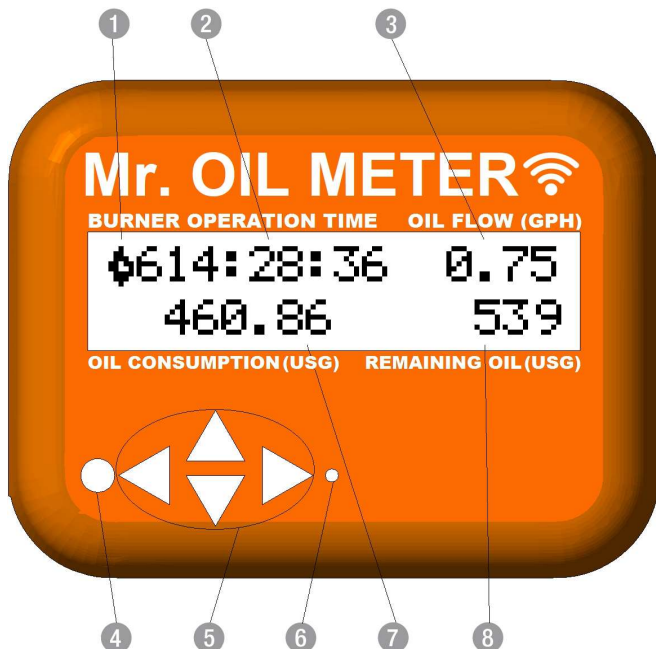


The easiest to install heating oil consumption meter / tank level gauge

Mr. Oil Meter control panel and main menu



- ❶ Flame symbol. Burner is in operation. Also means there is actual oil consumption.
- ❷ Hour meter. Total time of burner operation (hours:minutes:seconds).
- ❸ Fixed burner oil flow rate, expressed in US gallons per hour (GPH).
- ❹ Menu key ●.
- ❺ Arrow keys ◀, ▶, ▲, ▼.
- ❻ Reset key. Use paperclip to press this key.
- ❼ Total oil consumption, expressed in US gallons.
- ❽ Remaining oil tank content, expressed in US gallons.

Above example explained: Burner is in operation. For 614 hours, 28 minutes and 36 seconds oil has been burned at a fixed oil flow rate of 0.75 US gallons per hour. This results in a total oil consumption of 460.86 US gallons. The remaining oil quantity is 539 US gallons.

Mr. Oil Meter other menu screens

OIL FLOW (GPH) 0.75	REMAINING OIL 1000 (USG)	▶ RESET COUNTER ◀ TEST SIGNAL	SIGNAL STRENGTH ***
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Oil flow menu

Tank menu

Diagnostic menu

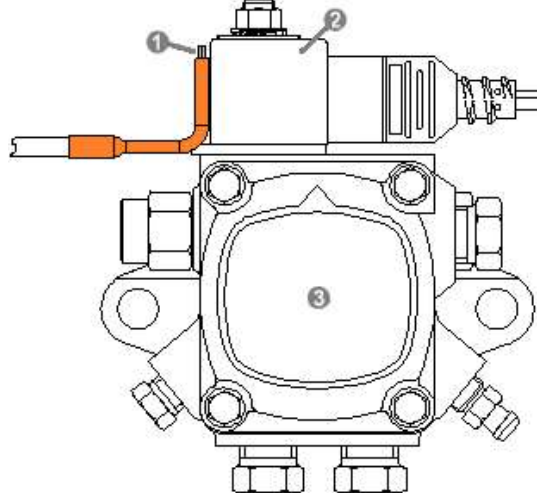
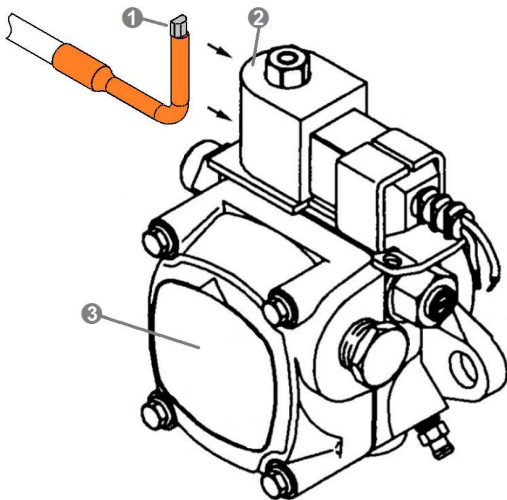
Signal test menu

Mr. Oil Meter installation

⚠ WARNING: installation requires removing the burner cover. Do not remove the burner cover unless the electricity is cut off. Risk of fire and electrocution. Follow all safety measures as described in the documentation of your burner installation and only proceed if you are a qualified technician.

Mr. Oil Meter has two wires. One is a USB-cord for the 5 volt power supply. The other wire holds the sensor that detects oil consumption.

- Ⓐ Plug **Mr. Oil Meter** into the wall socket. It powers up. Wait until the startup screen disappears.
- Ⓑ Navigate to the signal test menu. This menu will help you to find the right position for the sensor placement. In the main menu, press the menu key ● three times. Now you are in the diagnostic menu. Press ◀ and now you are in the signal test menu.
- Ⓒ Remove the burner cover. Start your burner. Position the sensor to the magnetic valve as shown in the figures below. It will take about ten seconds after the motor has started before the valve opens. You can also position the sensor on the motor. You should see one or more asterisks (*) on the display, meaning the sensor is well positioned and that there is good signal detection. Fix the sensor in this position with the provided polyimide tape.
- Ⓓ Refit the burner cover.
- Ⓔ Press the menu key ● to navigate to the main menu. Installation is complete.



① Sensor ② Magnetic valve ③ Oil pump

Mr. Oil Meter setting up

set the fixed oil flow rate

In the main menu press the menu key ● once to navigate to the oil flow menu (OIL FLOW). Set the value for the fixed oil flow rate expressed in US gallons per hour by pressing the arrow keys. Press ▲ or ▼ to change the integer part and ◀ or ▶ to change the fractional part of the value.

set the remaining oil quantity

In the oil flow menu press the menu key ● once to navigate to the tank menu (REMAINING OIL). Set the value for the oil quantity in US gallons by pressing the arrow keys. Press ▲ or ▼ to change the hundreds and ◀ or ▶ to change the tens. From now on the remaining tank content is continuously calculated and displayed. The ideal moment to set the oil quantity is right after the tank has been refilled. Then the value to input is the maximum capacity of the tank.

backup of the data

After every operating hour, Mr. Oil Meter stores the actual meter readings in its memory. To manually store the data, cycle through the menus by pressing the menu key ● until you are back in the main menu.

reset all values

After your tank has been refilled, we advise to reset the total consumption figure to zero. From the main menu press the menu key ● three times to navigate to the diagnostic menu. Then press and hold ▶ for three seconds. By doing this, also all other values will be reset to zero. Note these values before you do the reset. Set these values again as described above.

determination of the fixed oil flow rate of your burner

On your maintenance report, you will find the nozzle size and pump pressure. These will determine the oil flow rate very precisely. On the next page you will find a table that gives you the corresponding oil flow rate.

set the backlight of the display

In the main menu press ▲ or ▼ to brighten or darken the display backlight.

Turn off the backlight display to minimize electrical power consumption .

set up the WiFi settings - only available if you have bought Mr. Oil Meter WiFi

While the startup screen is shown, right after plugging in, press ◀ to enter the WiFi settings menu. You may have to restart Mr. Oil Meter by unplugging it and plugging it in again. Input the SSID (this is the network name). Pressing ▲ and ▼ will change the character. Pressing ◀ or ▶ will change the position of the cursor. When the SSID is set correctly, press ●. Now you have to enter the password the same way as you entered the SSID. Mr. Oil Meter will now connect. The connection status will appear on the display. It will not work with hotspot WiFi stations where you have to agree with terms that are displayed on a webpage, as Mr. Oil Meter has no browser to display these. The metal of your boiler and furnace housing may form a shield that blocks the WiFi signal. Therefore fix the device in place without these metal surfaces between. To help you find a character, the character sequence is :

space !"#%&'()*+,-./0123456789;:<=>?@ABCDEFGHIJKLMNPOQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~

After each burner cycle, data are sent to your personal account. While in the main menu, pressing ◀ will also send data. You can use this to test your data connection. To consult your meter readings online, navigate to <https://www.mazoutman.com/login/> and enter your username and password. You will find these on the label on the next page. If you don't have this label, contact us.

set the prevention time

For burners with a valve that is not constantly energized, you will have to attach the sensor to your motor instead of the valve. When a burner cycle starts, the motor starts and will drive the fan and oil pump while oil is not yet directed to the nozzle. Only after a specified time, determined by your burner relay, oil is directed to the nozzle and is burnt. This time span is about 10 seconds. You will find this time in the manual, but you can also easily time this. To set this time in the prevention menu, you'll have to restart Mr. Oil Meter by unplugging it and plugging it in again. While the startup screen is shown, press ●. Press ◀ and ▶ to change the amount of seconds and confirm with ●. Prevention is shown in the main menu as a dot.

nozzle (USgal/h) ->	Oil flow rate in US gallons per hour for burners without oil preheater																	
	0,40	0,50	0,55	0,60	0,65	0,75	0,85	0,90	1,00	1,10	1,20	1,25	1,35	1,50	1,65	1,75	2,00	2,25
100 psi	0,40	0,50	0,55	0,60	0,65	0,75	0,85	0,90	1,00	1,10	1,20	1,25	1,35	1,50	1,65	1,75	2,00	2,25
110 psi	0,42	0,52	0,58	0,63	0,68	0,79	0,89	0,94	1,05	1,15	1,26	1,31	1,42	1,57	1,73	1,84	2,10	2,36
120 psi	0,44	0,55	0,60	0,66	0,71	0,82	0,93	0,99	1,10	1,20	1,31	1,37	1,48	1,64	1,81	1,92	2,19	2,46
130 psi	0,46	0,57	0,63	0,68	0,74	0,86	0,97	1,03	1,14	1,25	1,37	1,43	1,54	1,71	1,88	2,00	2,28	2,57
140 psi	0,47	0,59	0,65	0,71	0,77	0,89	1,01	1,06	1,18	1,30	1,42	1,48	1,60	1,77	1,95	2,07	2,37	2,66
150 psi	0,49	0,61	0,67	0,73	0,80	0,92	1,04	1,10	1,22	1,35	1,47	1,53	1,65	1,84	2,02	2,14	2,45	2,76
160 psi	0,51	0,63	0,70	0,76	0,82	0,95	1,08	1,14	1,26	1,39	1,52	1,58	1,71	1,90	2,09	2,21	2,53	2,85
170 psi	0,52	0,65	0,72	0,78	0,85	0,98	1,11	1,17	1,30	1,43	1,56	1,63	1,76	1,96	2,15	2,28	2,61	2,93
180 psi	0,54	0,67	0,74	0,80	0,87	1,01	1,14	1,21	1,34	1,48	1,61	1,68	1,81	2,01	2,21	2,35	2,68	3,02
190 psi	0,55	0,69	0,76	0,83	0,90	1,03	1,17	1,24	1,38	1,52	1,65	1,72	1,86	2,07	2,27	2,41	2,76	3,10
200 psi	0,57	0,71	0,78	0,85	0,92	1,06	1,20	1,27	1,41	1,56	1,70	1,77	1,91	2,12	2,33	2,47	2,83	3,18
210 psi	0,58	0,72	0,80	0,87	0,94	1,09	1,23	1,30	1,45	1,59	1,74	1,81	1,96	2,17	2,39	2,54	2,90	3,26
220 psi	0,59	0,74	0,82	0,89	0,96	1,11	1,26	1,33	1,48	1,63	1,78	1,85	2,00	2,22	2,45	2,60	2,97	3,34

nozzle (USgal/h) ->	Oil flow rate in US gallons per hour for burners with preheater to 140°F to 150°F -> results in average oil flow reduction of 15%																	
	0,40	0,50	0,55	0,60	0,65	0,75	0,85	0,90	1,00	1,10	1,20	1,25	1,35	1,50	1,65	1,75	2,00	2,25
100 psi	0,34	0,43	0,47	0,51	0,55	0,64	0,72	0,77	0,85	0,94	1,02	1,06	1,15	1,28	1,40	1,49	1,70	1,91
110 psi	0,36	0,45	0,49	0,53	0,58	0,67	0,76	0,80	0,89	0,98	1,07	1,11	1,20	1,34	1,47	1,56	1,78	2,01
120 psi	0,37	0,47	0,51	0,56	0,61	0,70	0,79	0,84	0,93	1,02	1,12	1,16	1,26	1,40	1,54	1,63	1,86	2,10
130 psi	0,39	0,48	0,53	0,58	0,63	0,73	0,82	0,87	0,97	1,07	1,16	1,21	1,31	1,45	1,60	1,70	1,94	2,18
140 psi	0,40	0,50	0,55	0,60	0,65	0,75	0,85	0,91	1,01	1,11	1,21	1,26	1,36	1,51	1,66	1,76	2,01	2,26
150 psi	0,42	0,52	0,57	0,62	0,68	0,78	0,88	0,94	1,04	1,15	1,25	1,30	1,41	1,56	1,72	1,82	2,08	2,34
160 psi	0,43	0,54	0,59	0,65	0,70	0,81	0,91	0,97	1,08	1,18	1,29	1,34	1,45	1,61	1,77	1,88	2,15	2,42
170 psi	0,44	0,55	0,61	0,66	0,72	0,83	0,94	1,00	1,11	1,22	1,33	1,39	1,50	1,66	1,83	1,94	2,22	2,49
180 psi	0,46	0,57	0,63	0,68	0,74	0,86	0,97	1,03	1,14	1,25	1,37	1,43	1,54	1,71	1,88	2,00	2,28	2,57
190 psi	0,47	0,59	0,64	0,70	0,76	0,88	1,00	1,05	1,17	1,29	1,41	1,46	1,58	1,76	1,93	2,05	2,34	2,64
200 psi	0,48	0,60	0,66	0,72	0,78	0,90	1,02	1,08	1,20	1,32	1,44	1,50	1,62	1,80	1,98	2,10	2,40	2,70
210 psi	0,49	0,62	0,68	0,74	0,80	0,92	1,05	1,11	1,23	1,35	1,48	1,54	1,66	1,85	2,03	2,16	2,46	2,77
220 psi	0,50	0,63	0,69	0,76	0,82	0,95	1,07	1,13	1,26	1,39	1,51	1,58	1,70	1,89	2,08	2,21	2,52	2,84