



Badger Meter

Industrial line registers

Type ILR 700, 701, 720, 740, 750(T)

FEATURES

- Large six-digit LCD display
- Display in liters, pints, quarts or gallons
- 11 digits, non-resettable totalizer, 6-digits resettable totalizer
- Temperature -20 °C to +80 °C (-4 °F to +140 °F)
- Replaceable long life battery (not used if external power connected)
- field programmable
- 9-point linearization (ILR 750, ILR 701)
- Scalable pulse output (ILR 750)
- programmable analog (4-20mA) output (ILR 750)
- Protection class IP65

DESCRIPTION

The electronic register module contains a microprocessor board powered by a lithium battery. It can be programmed to measure in liters, pints, quarts, or gallons. A calibration factor and unit of measure are programmed during factory test. Unlike mechanical registers, these units can be electronically recalibrated in the field when necessary. A 6-digit LC display, accurate to three decimal places, shows the exact amount of fluid that has passed through the meter. The entire register module is protected from normal wear and tear by a rugged, shock resistant housing.

OPERATION

Industrial oval gear meters and nutating disc meters have rotating magnets that cause the reed switches to send pulses to the register when fluid passes the meter.

The register is in a sleep mode until it detects these pulses caused by fluid going through the meter. The microprocessor in the register then measures the flow and will display the totalization and the flow rate of the fluid going through the meter on the 6-digit display.

The registers batch totalizer is a 6-digit display with three places of resolution after the decimal point.

If the total dispensed exceeds 999.999 then the display will shift and only 2 digits will be displayed after the decimal point, 9999.99 and will continue to shift to the maximum value of 999999.



After reaching 999999 the batch totalizer will rollover to 0.000. The batch totalizer is reset to zero when the reset button is depressed.

The register also has a resettable totalizer that requires that the total and reset button both be depressed to reset (hold the "Total" button, then press the "Reset" button to reset this totalizer while resettable totalize is displayed). This would be used for multiple batch totalization purposes.

The register's life time totalizer is 11 digits and will either be in gallons or liters based on the unit of measure selected. Pushing and holding the total button while the life time totalizer is displayed will display the full 11-digit life time totalizer value.

Register model	Register features
ILR 700 standard register	- Flow rate or totalizer display selectable in the programming menu - Selectable unit of measure
ILR 701	9 point linearization
ILR 750 pulse output + 4-20mA output	- Scalable pulse output - Ability to set pulse output length - Analog 4-20mA output representing the flow rate of the meter - Minimum and maximum values can be set for analog output 9 point linearization
Note: The ILR 750 has the standard features of the ILR 700.	
ILR 740 transmitter	Transmitter (reed switch)

First row: 6 digits 12mm height

Resettable totalizer xxx.xxx change of decimal place if rollover reached xxx.x; xxxxx.x; xxxxxx (as shown in the sample)

OR

flow rate, format xxx.x, in l/min, Qt/min, Pt/min, Gal/min



Battery box (1pc CR123A battery) 8-24VDC
External power supply needed if using any output [pulse output or analog – ILR 750(T)]

Unit of measurement

Second row: 5 digits 6 mm height
Resettable totalizer (format xxxxx) and non-resettable totalizer, showing the last 5 digits of life time total. By pushing and holding the "TOTAL" button, all 11 digits are shown.

Remote version ILR701 and ILR750



Meter	ILR700	ILR701	ILR701T	ILR750	ILR750T
Oval gear meter IOG	✓	✓ (remote for ¼")	-	✓ (remote for ¼")	-
Nutating disc meter RCDL	-	✓	-	✓	-
Turbine meter Vision	-		✓	-	✓