



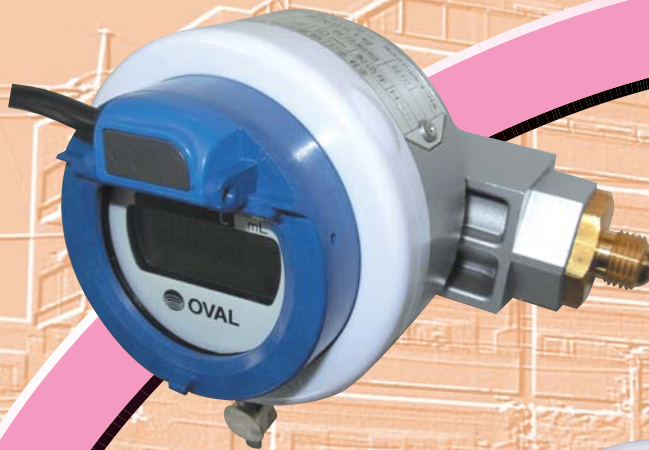
MICRO FUEL FLOWMETER

**KEROMATE-RN**

MODEL LSN39, LSN41



# NEW WAVE SURGE IN OIL HEATING SYSTEM by KEROMATE-RN



MODEL LSN39

Display in KEROMATE-RN itself and a remote counter utilize highly reliable LCD clearly visible and stable in low temperature. Totalized value and alarming mark for voltage reduction are also displayed.

OVAL Flowmeter is used with high reliability based on severe quality control proved by long carrier in industrial application. Excellent accuracy and durability were concentrated in a compact configuration.

MODEL LSN41



## NOW, "KEROMATE-RN" OFFERS :

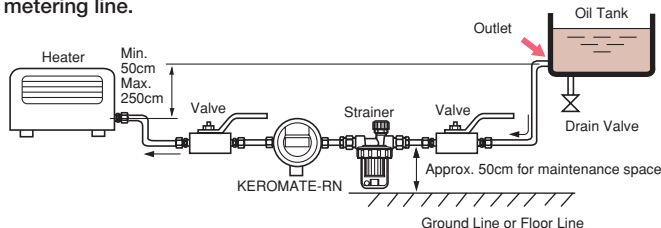
1. Control of fuel oil supply such as residual quantity check in the storage tank and timely supply.
2. Collection of a payment converted from a totalized counter reading.

# KEROMATE-RN

## MOUNTING INSTRUCTION

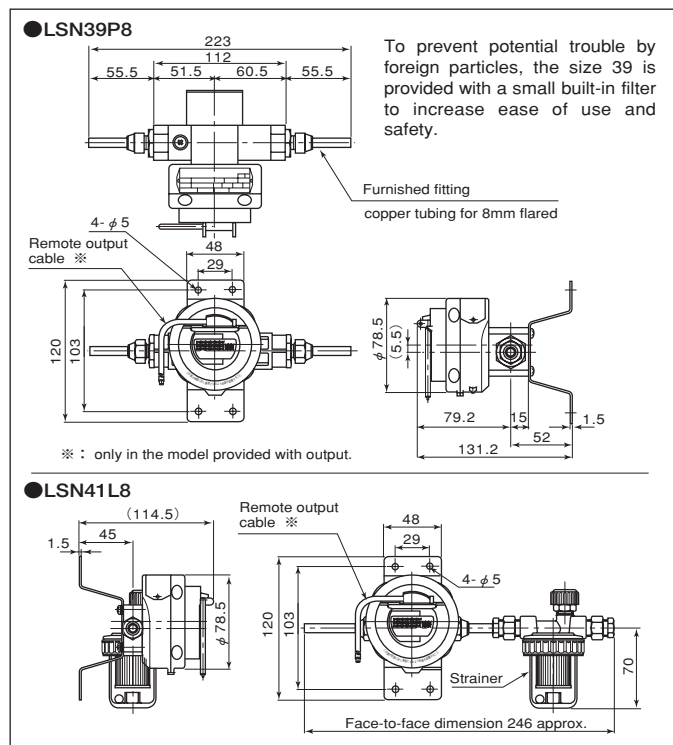
KEROMATE-RN must be installed on the vertical or horizontal pipe line lower than the outlet of the oil tank by more than 50cm as shown by → mark.

Drain valve of the tank must be installed independent from the metering line.



## DIMENSIONS (Unit in mm)

KEROMATE-RN is delivered being assembled with a strainer as illustrated below. Meter Bracket is installed on request.



## MODEL CODE NUMBER

Item	Code Number									Description
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	
Model	L	S	N							KEROMATE
Meter size			3	9						39 (1 to 10 L/h)
			4	1						41 (3 to 30 L/h)
Materials					P					Double-case construction (size 39):Al diecast body,PPS register
					L					Single-case construction(size 41):Al alloy body,special plastic register
Destination category (※1)						8	—			Domestic market oriented: (Weights and Measures Law compliant) dedicated flared fittings are furnished.
						E	—			Export oriented (not compliant to Weights and Measures Law): dedicated flared fittings are furnished.
Register output							A	0		No output provided
							A	3		Unfactored pulse output (2-wire system)
							A	4		5-bit message output (2-wire system)
							A	5		8-bit message output+unfactored pulse output (4-wire system)

※1: Register output codes available for export are "A0" and "A3" only.

## GENERAL SPECIFICATIONS

### ■KEROMATE-RN

Meter model	LSN39P8-A□	LSN41L8-A□
Acceptable fluid	Kerosene, light oil, and heavy oil (100mPa · s or less)	
Max.operating pressure	0.29MPa	0.098MPa
Operating temp.range	-10 to +50°C	
Flow range (※1)	(0.1) 1 to 10 L/h	(0.3) 3 to 30 L/h
Accuracy	±1% of reading or better	
Materials	Meter body : Al diecast Register : PPS resin	Meter body : Al alloy Register : Special resin
Process connection	8mm flare fitting (8mm copper tubing for flare provided)	
Strainer	Built in the body	Connect an exclusive strainer to the main body
Register	Indication	Grand total, low battery alarm, RUN indicator
	Display capacity	99999.999L
	Resolution	0.001L
	Output	① No output ② 5-bit data output (per data format recommended by the Integrated Telemetry System Development Committee) ③ 8-bit data output (per Automatic Remote Meter Reading Communication spec. ver. 26A of Tokyo) ④ Unfactored open collector pulse Drive current : 10mA max. Terminal voltage : 24V max. When turned "ON" : 1.5V DC max. Pulse width : 1.95ms min. Type approval can be granted (combined with EL0122).
Max.transmission length	200m	
Signal cable	Vinyl sheathed, round cord 1.5 meters long	
Battery life	8 years in normal use (3VDC lithium battery : Not replaceable)	
Number of pulses	2P/rev	
Meter factors	0.158/0.159/0.160 0.161/0.162	0.500/0.504/0.507

※1: Flow range in brackets (ex.model 39: 0.1 to 1L/h) is out of guaranteed accuracy.

### ■APPLICABLE EN DIRECTIVES

Applicable EU Directive	Electro-Magnetic Compatibility Directive:2004/108/EC
Applicable EN Standards, etc.	For Electro-Magnetic Compatibility Directive EN55011:1998/A1:1999, Group 1, Class B EN61000-6-2:2001

### ■STRAINER (LSN41)

Model	YS02ZK
Connection	Rc 1/4 (with joint for 8mm copper tube)
Operating temp. range	-20 to +50°C
Max. operating press.	98kPa
Materials	Zinc / Resin
Screen mesh	Approx. 350mesh (40 μm paper)
Weight	250g

### ■TOTALIZER (EL0122)

Display	Display scrolls through variables with "MODE" button. 8- digit nonresettable Total reading 5- digit max., hourly Flowrate reading 5- digit max., per minute Flowrate reading 7- digit resettable Total reading
Power	85 to 264VAC 50/60Hz
Power consumption	16VA Max.
Weight	Approx. 400g

Type approval No.951 obtained.Couple with A3 type,both for meter sizes 39 and 41. Reminder:sealed to prevent changes in total units and scaler value pursuant to the Weights and Measures Law.

- Certification for transaction shall be made based on reading of the counter displayed in KEROMATE-RN.
- In case transaction will be made based on reading of a remote counter connected to unfactored pulse output, the displayed value evenly corresponding to reading of a OVAL's totalizing counter, EL0122 attached with a matching mark to be connected with a KEROMATE-RN shall be used.

Note :It is prohibited to use a counter reading other than(1) or (2)in the above.

The specification as of Aug., 2010 is stated in this catalog. Specifications and design are subject to change without notice.



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