

## KRAL Volumeter OME Compact.

Very affordable high precision flowmeter.

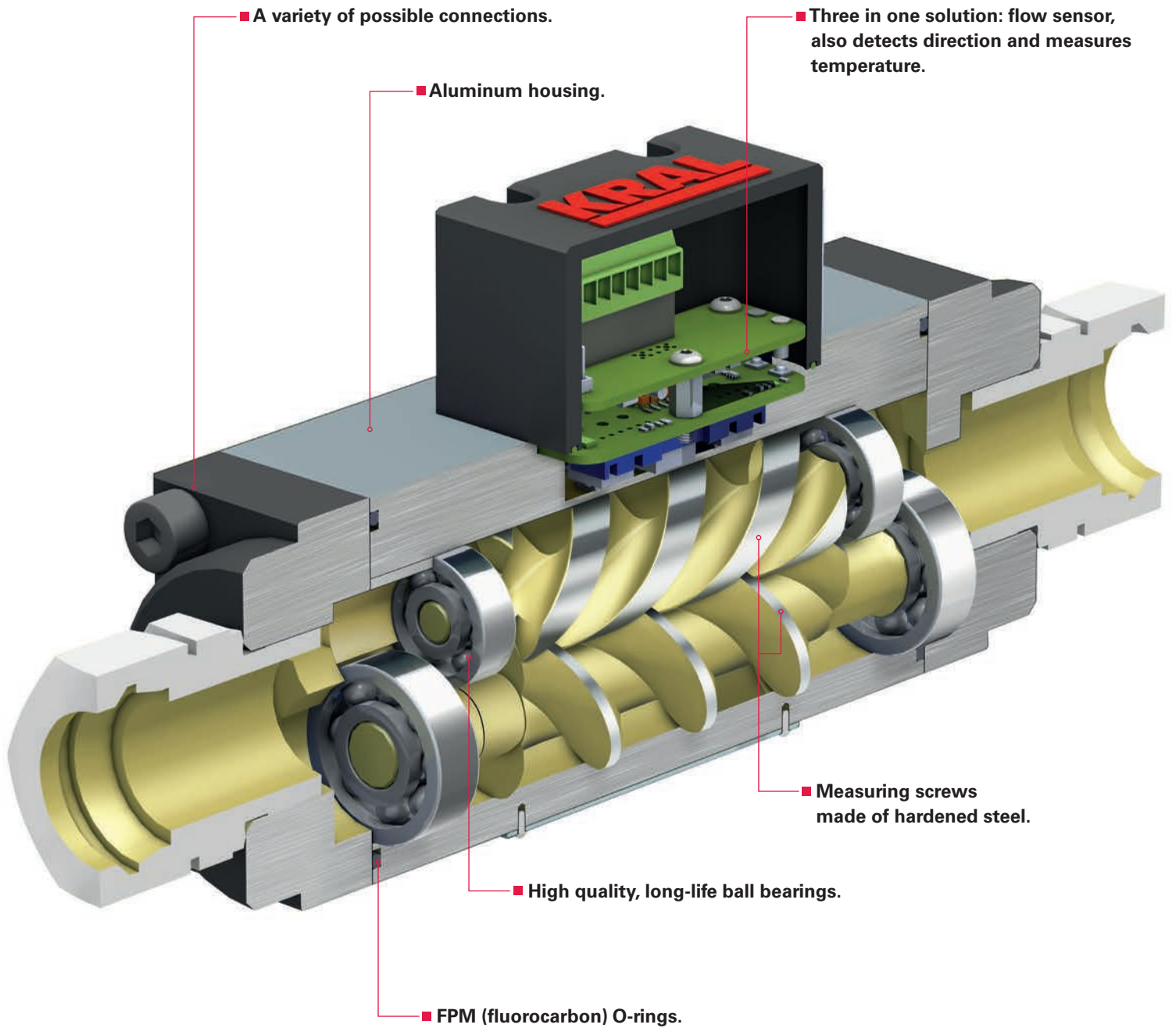


**AUSTRIA IS GREEN.  
KRAL THINKS GREEN.**

WE RESPECT THE NATURAL ENVIRONMENT  
IN WHICH WE WORK AND LIVE.

OUR FLOWMETERS HELP  
OUR CUSTOMERS TO SAVE FUEL.

# Flow Measurement



## Clear Advantages.

High accuracy flowmeter with a three-in-one sensor.



### Highly accurate.

The precision measurement chamber makes extremely accurate measurements to 0.1% possible. The turn-down ratio is 150:1.

### No flow conditioning.

Upstream or downstream flow conditioners are not required. Pipe elbows and T-pieces do not influence measurement accuracy.

### Minimal pressure loss.

Because of the high quality ball bearings, friction and pressure loss are low.

### Rapid response measurement.

The fast response spindles track any fluctuations in flow. Every drop counts.

### Bi-directional measurement.

The functional design means that a KRAL Volumeter can measure bi-directionally. The new sensor detects reverse flow and a temperature sensor is included.

The KRAL BEM electronic unit uses the flow direction information to calculate a precise measurement value.

### Industry standard output signal.

Flow sensor outputs are two 90° phase shifted square pulse signals for flow direction detection.

### Simple wiring.

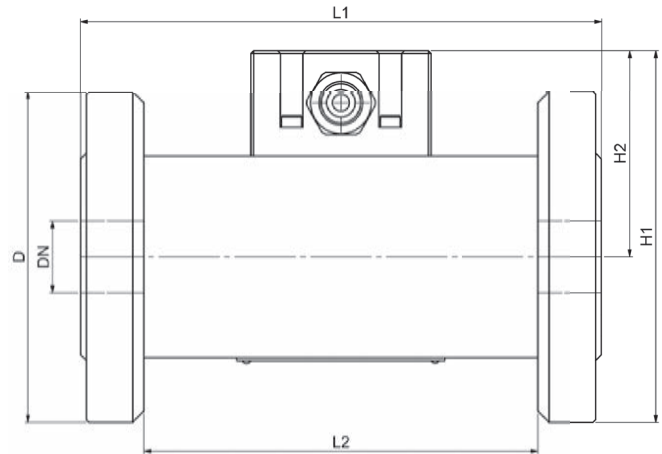
Wiring connections are clearly labeled. The integrated junction box fits perfectly with KRAL electronic units (BEM).

- A three in one solution – combines flow measurement, direction detection and temperature measurement in one sensor with a terminal connector.
- Flow range from 0.027 to 135 gpm.
- Max. operating temperature 257 °F.
- Max. design pressure 600 psi.
- Accuracy of  $\pm 0.1\%$ .
- Push-pull (PNP+NPN) and Pt100 output.

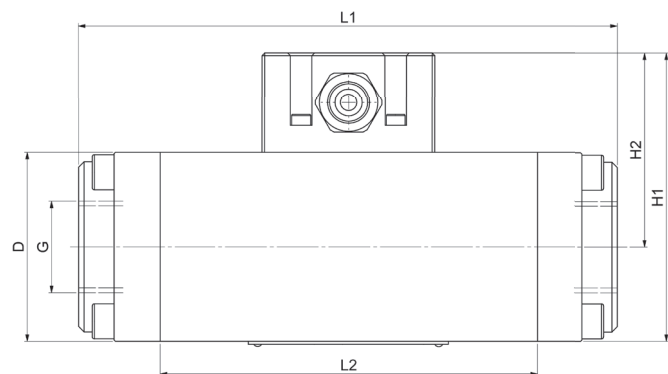
# Dimension Information.

Threaded and flanged flowmeter connections.

ANSI dimensions.		OME 13	OME 20	OME 32	OME 52
DN	[in]	1/2	3/4	1	1 1/2
Class		300	300	300	300
D	[in]	3.75	4.63	4.87	6.30
L1	[in]	4.13	5.71	7.68	12.40
L2	[in]	2.56	3.74	5.51	8.86
H1	[in]	4.21	4.85	5.27	6.77
H2	[in]	2.34	2.54	2.84	3.62
Weight	[lbs]	2.6	3.7	6.6	26.0



BSPB dimensions.		OME 13	OME 20	OME 32	OME 52
G	[in]	1/2	3/4	1	1 1/2
Pressure rating	[psi]	600	600	600	600
D	[in]	1.77 x 1.77	2.17 x 2.17	2.76 x 2.76	4.33 x 4.33
L1	[in]	4.33	5.71	7.87	12.20
L2	[in]	2.56	3.74	5.51	8.86
H1	[in]	3.23	3.62	4.21	5.19
H2	[in]	2.34	2.54	2.83	3.62
Weight	[lbs]	1.5	2.6	6.6	19.8



**Every KRAL Volumeter® is calibrated and tested at the factory.**

**Two types of calibration are available. A KRAL standard factory calibration or alternatively a calibration which is in compliance with the internationally recognized and used standard ISO/IEC 17025.**

## Technical Data.

The size to fit your application.

OME Compact series.		OME 13	OME 20	OME 32	OME 52
<b>Flow</b>					
$Q_{max}$	gpm	4	12	40	135
$Q_{nom}$	<b>gpm</b>	<b>2.7</b>	<b>8</b>	<b>27</b>	<b>90</b>
$Q_{min}$	gpm	0.027	0.08	0.27	0.9
<b>Pressure</b>					
$p_{max}$	psi	600	600	600	600
<b>Temperature</b>					
$t_{min}$ to $t_{max}$	°F	-4 to +257	-4 to +257	-4 to +257	-4 to +257
<b>Viscosity</b>					
$v_{min}$ to $v_{max}$	cSt	1 to $1 \times 10^6$	1 to $1 \times 10^6$	1 to $1 \times 10^6$	1 to $1 \times 10^6$
<b>K-factor</b>					
K	pulses/gal	4,595	1,215	295	67
<b>Frequency</b>					
f to $Q_{nom}$	Hz	202	161	130	104



## One Source.

KRAL electronics for flowmeter units.

### KRAL BEM electronics.

Users of conventional universal display units often cannot make use of all of a device's options. There is likewise sometimes a lack of functionality that can be important in unique applications.

Enjoy improved performance when using KRAL electronic units in combination with KRAL Volumeter.

The high quality electronic components and evaluation algorithms used result in precisely measured flow values that are presented via the display as well as through signal outputs.



