

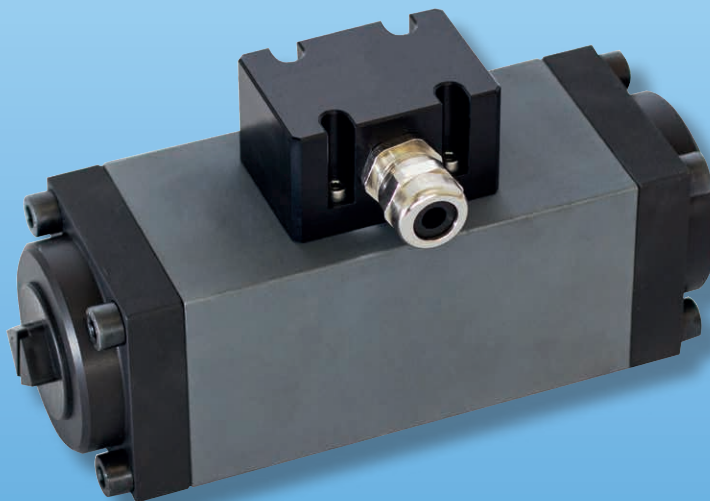
# Helical-Gear Positive Displacement Flowmeter

For Viscous Media



measuring  
•  
monitoring  
•  
analyzing

OME



- Measuring Ranges (Liquid): 0.027...2.7 to 0.9...90 GPM
- Measuring Accuracy:  $\pm 0.1\%$  of Measuring Span
- $p_{\max}$ : 580 PSIG;  $t_{\max}$ : 257 °F
- Viscosity Range: 1 ...  $1 \times 10^6$  mm<sup>2</sup>/s
- Connection: 1/2" ... 1-1/2" NPT
- Material: Aluminum
- Output: 2x PNP and Single Pt 100
- Quiet Operation
- Pulsation-Free Principle of Measurement



KOBOLD companies worldwide:

ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHILE, CHINA, COLOMBIA, CZECH REPUBLIC, EGYPT, FRANCE, GERMANY, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, ROMANIA, SINGAPORE, SPAIN, SWITZERLAND, TAIWAN, THAILAND, TUNISIA, TURKEY, UNITED KINGDOM, USA, VIETNAM

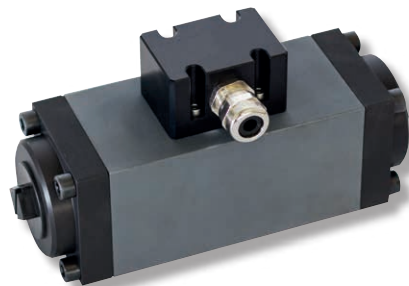
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## Helical-Gear Positive Displacement Flowmeter Model OME

### Description

KOBOLD OME compact flowmeters are extremely accurate with measurements of up to 0.1% possible. Because of the high quality ball bearings, friction and pressure loss are low. They offer bi-directional measurement. The sensor detects reverse flow and a temperature sensor is included. The electronic unit uses the flow direction information to calculate a precise measuring value. The turn-down ratio is 150:1. Neither upstream nor downstream flow requirements are required. Pipe elbows and T-pieces don't influence the measurement accuracy. The 3-in-1 sensor combines flow through metering, flow direction detection and temperature measurement. The fast response spindles can follow any rapid fluctuations in the flow. Flow sensor output are two square waves with 90° desynchronization for flow direction detection.

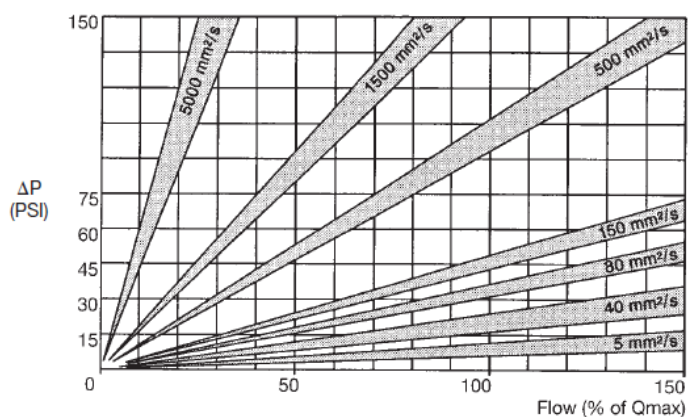


### Technical Details

#### Wetted Materials

<b>Housing:</b>	Aluminum (Material no. 3.0615)
<b>Spindles:</b>	Nitrated Steel
<b>O-rings:</b>	FKM
<b>Bearings:</b>	Deep-grooved Ball Bearing
<b>Connections:</b>	Aluminum (Material no. 3.0615)
<b>Temp. Range:</b>	-4...257 °F
<b>Max. Pressure:</b>	580 PSIG
<b>Accuracy:</b>	± 0.1% of Measured Value
<b>Filter:</b>	≤300 µm

### Pressure Loss Diagram



### Order Details\* (Example: OME-15N15)

Model	Nominal Flow Rate	Connection <sup>1)</sup>	K-factor pulses/gal	Frequency <sup>2)</sup> at Q <sub>nominal</sub>
OME-15N15	0.027...2.7 GPM	1/2" NPT	4595	202 Hz
OME-20N20	0.08...8.0 GPM	3/4" NPT	1215	161 Hz
OME-25N25	0.27...27.0 GPM	1" NPT	295	130 Hz
OME-40N40	0.90...90.0 GPM	1-1/2" NPT	67	104 Hz

<sup>1)</sup> Other connections upon request

<sup>2)</sup> Please refer to the accompanying test certificate for exact values.

\* With your order, please also submit the media type, viscosity and operating temperature

### Dimensions and Weights

#### NPT Thread

Model	D	L1	L2	H1	H2	Weight (lbs)
OME-15..	1.77" x 1.77"	4.33"	2.56"	3.23"	2.34"	1.5
OME-20..	2.17" x 2.17"	5.71"	3.74"	3.62"	2.54"	2.6
OME-25..	2.76" x 2.76"	7.87"	5.51"	4.21"	2.83"	6.6
OME-40..	4.33" x 4.33"	12.20"	8.86"	5.19"	3.62"	19.8

