OMG Series.

Universal device for manifold application needs.

Robust, precise and universally applicable. Due to their continuous ongoing development, the highly modular OMG series covers a broad range of areas of application. OMG is therefore particularly suitable for areas of application which have a manifold need for flow measurement, such as mechanical engineering, chemical engineering and marine.
The OMG series also combines robustness with highest precision, characteristics for which KRAL flowmeters are well-known worldwide. Due to the screw pump principle, all OMG series devices are very smooth-running and fast, and can follow quick, pulsation-related changes in flow rates. Stabilization zones are also unnecessary. Due to their extremely robust construction, the OMG series provides optimal protection against external influences, such as system vibrations and mechanical stresses in a harsh, industrial environment.

Mechanical engineering.
Determining the position of hydraulic cylinders.

Chemical engineering.
Measuring of plastic components.

Marine.
Fuel consumption measurement.

Technical data.		OMG-013.	OMG-020.	OMG-032.	OMG-052.	OMG-068.	OMG-100.	OMG-140.
Nominal diameter.	DN [mm]	15	20	25/32	40	50	100	150
	DN [inch]	½	¾	1	1 ½	2	4	6
Total length with DIN flange.	[mm]	145	185	255/265	285	340	460	610
Weight with DIN flange.	[kg]	6	6	13/15	21	31	77	190
Flow rate l/h.	Q_{max}	900	2,700	9,000	31,500	63,000	180,000	450,000
	Q_{nom}	600	1,800	6,000	21,000	42,000	120,000	300,000
	Q_{min}	6	18	60	210	420	1,200	3,000
Flow rate l/min.	Q_{max}	15	45	150	525	1,050	3,000	7,500
	Q_{nom}	10	30	100	350	700	2,000	5,000
	Q_{min}	0.1	0.3	1.0	3.5	7.0	20	50
Max. pressure.	[bar]	250	250	250	160	100	40	40
Temperature.	[°C]	-20 to +200	-20 to +200	-20 to +200	-20 to +200	-20 to +200	-20 to +200	-20 to +200
Viscosity.	[mm²/s]	1 to $1x10^6$	1 to $1x10^6$	1 to $1x10^6$	1 to $1x10^6$	1 to $1x10^6$	1 to $1x10^6$	1 to $1x10^6$
Precision of measurement value.		±0.1 %	±0.1 %	±0.1 %	±0.1 %	±0.1 %	±0.1 %	±0.1 %
Repeatability.		±0.01 %	±0.01 %	±0.01 %	±0.01 %	±0.01 %	±0.01 %	±0.01 %
K-factor.	K1 [P/l]	1,216	640	234	71.0	39.8	16.8	8.8
	K2 [P/l]	2,432	1,280	468	142	79.6	33.6	17.7
	K3 [P/l]	7,296	2,560	1,014	302	167	57.6	22.1
	K4 [P/l]	7,296	2,560	1,014	302	167	87.6	45.1
Frequency.	f1 at Q_{nom} [Hz]	203	320	390	414	464	560	738
	f2 at Q_{nom} [Hz]	405	640	780	828	929	1,120	1,475
	f3 at Q_{nom} [Hz]	1,216	1,280	1,690	1,760	1,949	1,920	1,842
	f4 at Q_{nom} [Hz]	1,216	1,280	1,690	1,762	1,948	2,920	3,758

KRAL

Technical data.
- Media: Chemically neutral, lubricating, clean, non-abrasive.
- Flow direction detection: Extended sensor range optional.
- Temperature measurement: Additional sensor optional.
- Signal: PNP, Namur and Push-pull.
- Signal detection: Via the pole wheel.
- Process fittings: DIN, ANSI, thread, further connections upon request.

Your benefits.
- Universally applicable.
- High precision.
- Extremely robust.
- Stabilization zones unnecessary.
- Very smooth-running and fast.
- Low friction and minimal loss of pressure.
- Easy installation.

Materials.
- Housing: Spheroidal graphite iron.
- Screws: Nitrided steel.
- Bearings: Steel or hybrid ball bearings.
- Sealing: FKM, other seal materials upon request.

Sensor.	BEG 06* / BEG 06A*.	BEG 43D.	BEG 44.	BEG 45 with BEV 13.	BEG 47D** / BEG 47E**.	BEG 53A* / BEG 54A*.
Application.	Ex-range.	Standard.	High pressures.	High pressures, wide temperature range.	Ex-range.	Flow direction detection.
K-factor.	K1.	K1.	K2.	K3.	K1.	K4.
Signal.	Namur.	PNP.	PNP.	PNP.	Namur.	Push-pull.
Temperature. [°C]	-25 to +85.	-20 to +100.	-40 to +150.	-40 to +250.	-25 (-40) to +100.	-40 to +125.
Max. pressure. [bar]	350	250	420	420	40	650

* Dependent on nominal diameter. ** Dependent on temperature.