


# OMG series

General purpose, helical screw, positive displacement flowmeter in cast iron and steel				
Model Type		Flow Rate Range	Pressure Drop (50cSt Fluid)	Pulses per litre**
OMG13/BEGxx		0 to 10 l/min	0.8 bar @ 5 l/min, 1.8bar @ 10 l/min	1216
OMG20/BEGxx		0 to 30 l/min	0.8 bar @ 15 l/min, 1.6bar @ 30 l/min	640
OMG32/BEGxx		0 to 100 l/min	0.8 bar @ 50 l/min, 1.8bar @ 100 l/min	234
OMG52/BEGxx		0 to 350 l/min	0.8 bar @ 175 l/min, 1.8bar @ 350 l/min	71
OMG68/BEGxx		0 to 700 l/min	0.8 bar @ 350 l/min, 1.8bar @ 700 l/min	39.8
OMG100/BEGxx		0 to 2000 l/min	0.8 bar @ 1000 l/min, 1.8bar @ 2000 l/min	16.8
OMG140/BEGxx		0 to 5000 l/min	0.8 bar @ 2500 l/min, 1.7bar @ 5000 l/min	8.85
		Pressure Rating	Connections	Dimensions (Without sensor)
OMG13/BEGxx	250 bar	½" BSP female threaded	90mm diameter x 145mm long	4.6 kg
OMG20/BEGxx	250 bar	¾" BSP female threaded	74mm diameter x 145mm long	4.1 kg
OMG32/BEGxx	250 bar	1" BSP female threaded	104mm diameter x 215mm long	11 kg
OMG52/BEGxx	160 bar	1½" BSP female threaded	118mm diameter x 295mm long	18 kg
OMG68/BEGxx	100 bar	2" BSP female threaded	138mm diameter x 355mm long	29 kg
OMG100/BEGxx	100 bar	4" BSP female threaded	180mm diameter x 188mm long	70 kg
OMG140/BEGxx	40 bar	6" BSP female threaded	267mm diameter x 645mm long	180 kg

Common Features:	Flow Rate Range	Over-range by 50% providing fluid is lubricating and pressure drop is less than 5bar – call factory for details.			
	Operating Temperature range	-20°C to +80°C BEGLM+	-20°C to +135°C BEGLML+	-20°C to +200°C BEG45	
	Viscosity Range	1 cPs and higher			
	Accuracy range	2cSt	±0.1% Actual (12% to 125% of range), ±0.3% Actual (6% to 12%), ±1% Actual (1% to 6%)*		
		20cSt	±0.1% Actual (6% to 150% of range), ±0.3% Actual (3% to 6%), ±1% Actual (1% to 3%)*		
		200cSt	±0.1% Actual (3% to 150% of range), ±0.3% Actual (2% to 3%), ±1% Actual (1% to 2%)*		
	Repeatability	±0.01% Reading*			
Output	BEGLM+:	NPN open collector with 4-way M12 sensor connector [IEC-61076-2-101] – e.g. compatible with Brad Harrison, Hirschmann, ERNI, Murr and Turck Banner. Supplied with 5m cable – bare ends.			
	BEG45:	PNP pulse			
	BEGRSX:	Reed switch output for hazardous area installation – Exi or Exd.			
Power Supply	8 to 28Vdc input. BEGRSX – no power required.				
Materials of construction	Body	Grey Cast Iron (0.6025)			
	Spindles	Nitrated steel (1.0737) Pole wheel - steel			
	Bearings	Roller bearings (roller bearing steel) with metal cage; conventional ball bearings for OMG13 to OMG32.			
	Seal	FPM 'O' ring			
	Sensor wetted Materials	316 stainless steel			
	Recommended Filtration	100 Micron filter located upstream of meter			
Options:	Temperature/Pressure	Higher ratings available in alternate styles. BEG45 allows operation to 200°C			
	Output	PNP or TTL (identified by green or blue cap respectively). Also divide by 2, 4 or by 10 function, **Higher or lower frequencies available with different sensors and pole wheels. Reed switch with BEGRSX.			
	Hazardous Area Version	BEG 47 Sensor available at extra cost to EEx ia IIC T6 (-20 to +100°C, 40 bar max) higher pressures with BEGLMZ. BEGRSX suitable for Exi and Exd.			
	Display	Flow rate and total indicator mounted on meter with 4-20mA and pulse output. Also EEx ia & Exd			
	Connections	DIN flange. ANSI flange and NPT available as a special.			
Documentation					
Operating and Maintenance Manuals		Kral: OIO 14en, Sensor: LM0562, LM0109, OII 04A			
* for a factory calibration on a low viscosity (4.8 cSt) fluid, within standard viscosity range					

## Flowmeter Specification Sheet