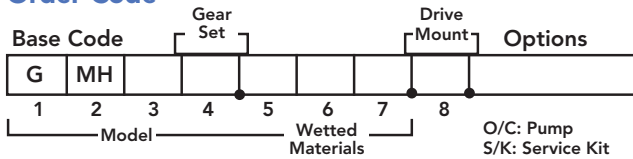


# Series GMH

## Magnetic Drive Gear Pump

**MICROPUMP®**

**Order Code**



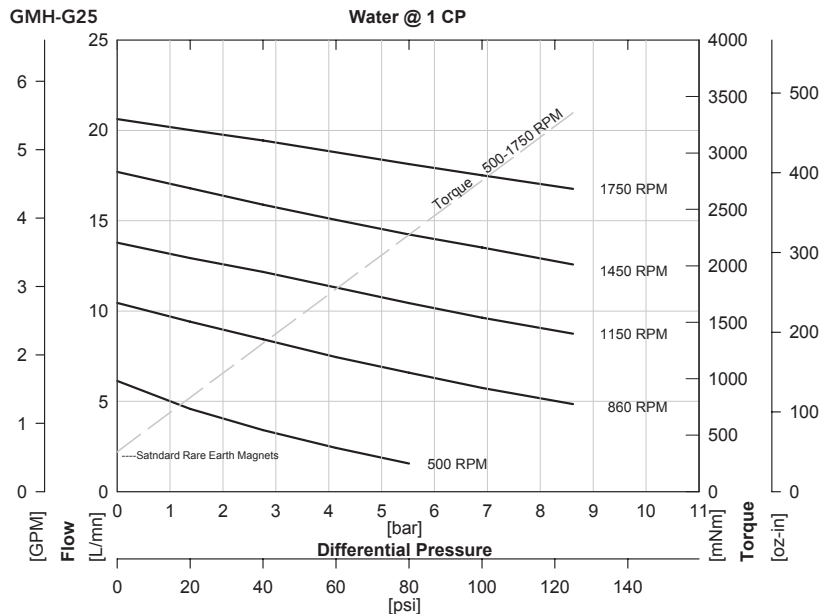
**Pump Construction**

Magnetic Drive Gear Pump  
 Cavity Style  
 Two Helical, Shafted Gears/DP10  
 Sleeve Bushings  
 O-Ring Seals (Qty 3)  
 Rare Earth Magnets

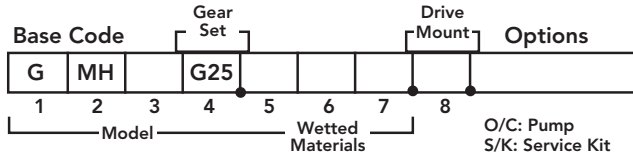


BASE	CODE	SPECIFICATIONS			
1	G	<b>Product Type</b> Gear Pump			
2	MH	<b>Product Series</b> Series GMH	<b>Max System Pressure (MAWP)</b> 103 Bar (1500 psi)	<b>Ports</b> 3/4-14 (F) NPT Side Ports	
3		<b>Modifier</b> High System Pressure			
4	G25	<b>Gear Set (Width/N°Gears/Pitch)</b> 1.250/2/10	<b>Displacement</b> 12.2 ml/rev (3.2 gal/1000*rev)	<b>Max Differential Pressure</b> 8.7 Bar (125 psi)	<b>Driven Magnet (Standard)</b> Samarium Cobalt (SmCo)
5	J	<b>Gear Material</b> PEEK (carbon fiber/ptfe)		<b>Max Differential Pressure</b> 8.7 Bar (125 psi)	<b>Temp Range</b> -46/121°C (-50/250°F)
6	V F5	<b>Static Seals</b> Viton® TEV (PTFE encap Viton®)			<b>Temp Range</b> -29/204°C (-20/400°F) -29/204°C (-20/400°F)
7	S10	<b>Base Materials</b> SS316 and Titanium			
8	E 8 K	<b>Drive Mount</b> NEMA 56C IEC 80-B14 NEMA 143/145TC	<b>Max System Pressure (MAWP)</b> 103 Bar (1500 psi) 103 Bar (1500 psi) 103 Bar (1500 psi)		<b>Weight (Pumphead)</b> 10.9 kg (24.0 lbs) 10.9 kg (24.0 lbs) 10.9 kg (24.0 lbs)

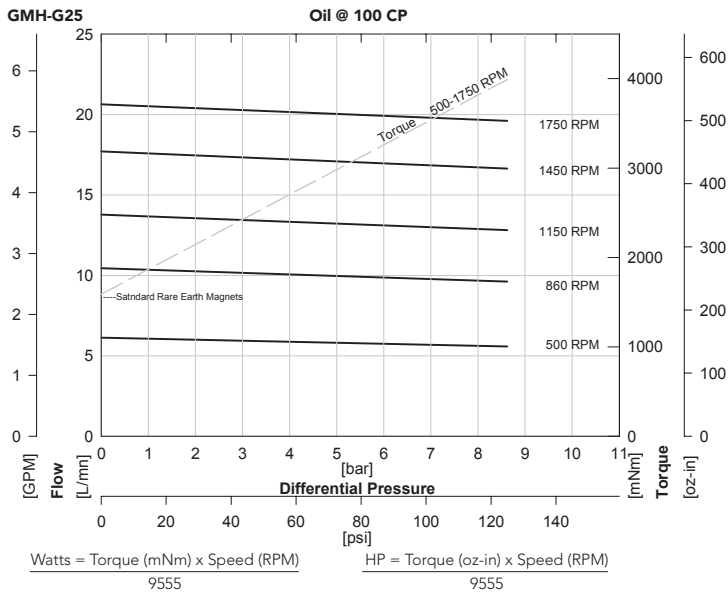
**Performance**



## Order Code



## Performance – High Viscosity



To calculate torque, multiply correction factor by torque from viscosity curve above.

### Torque Correction Factors: For Higher Viscosity Liquids

Viscosity (cp)		1	100	2500
Max Speed [RPM]		1750	1750	1750
[Bar]	[psi]			
0.3	5	0.2	1	3.0
1.4	20	0.4	1	2.6
2.8	40	0.6	1	2.2
4.1	60	0.7	1	
5.5	80	0.8	1	
6.9	100	0.8	1	

### Magnet Decouple Torque

Driven Magnet	Driving Hub Torque	[mNm]	[oz.in]
SmCo	SmCo	5650	800

## Pump Construction

Magnetic Drive Gear Pump  
 Cavity Style  
 Two Helical, Shafted Gears/DP10  
 Sleeve Bushings  
 O-Ring Seals (Qty 3)  
 Rare Earth Magnets



## Specifications

	SI	US
Displacement	12.2 ml/rev	3.2 gal/1000*rev
Max Flow (4 Pole Speed)	17.7 L/mn 1450 RPM (50Hz)	5.7 gal/mn 1750 RPM (60Hz)
Max Flow (2 Pole Speed)	34.8 L/mn 2850 RPM (50Hz)	11.2 gal/mn 3450 RPM (60Hz)
Max Differential Pressure	<b>1</b> 8.7 Bar	125 psi
Max System Pressure (MAWP)	See Drive Mount	See Drive Mount
NIPR (Absolute)	180 mBar	2.5 psia
Wet Lift (Typical)	<b>2</b> 51 cm.H <sub>2</sub> O (1450 RPM)	24 in.H <sub>2</sub> O (1750 RPM)
Temp Range	<b>3</b> See Gear Material	See Gear Material
Viscosity Range	<b>4</b> 0.2 to 2500 cp	0.2 to 2500 cp
Max Speed	1,750 RPM	1,750 RPM
Rotation (Facing Motor Shaft)	CW	CW
Weight (Pumphead)	10.9 kg	24.0 lbs
Dimensions (LxWxH)	See Drawing	See Drawing
Ports	3/4-14 (F) NPT Side Ports	3/4-14 (F) NPT Side Ports
Driven Magnet (Standard)		
Optional Internal Bypass	No	No

### Notes

- 1 Priming ability varies with operating conditions.
- 2 See Product Options for specific temp limits.
- 3 See Performance-High Viscosity for viscosity limits.

# MICROPUMP®

ACTUAL PERFORMANCE MAY VARY.

Specifications are subject to change without notice.

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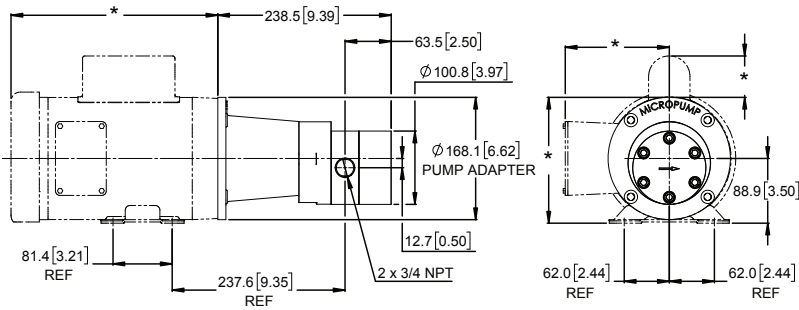
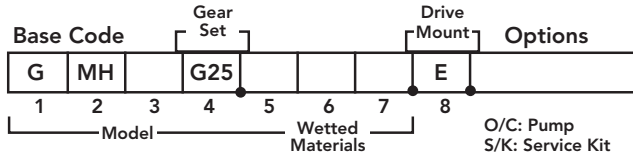
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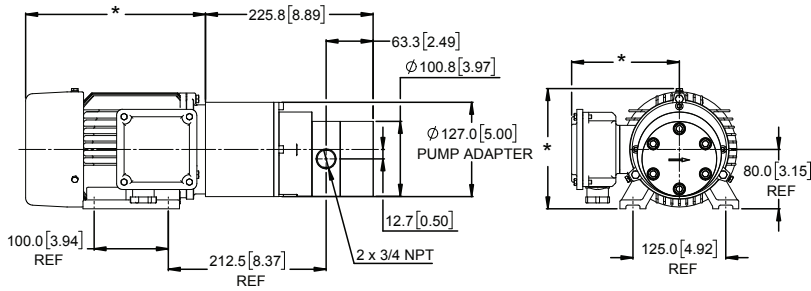
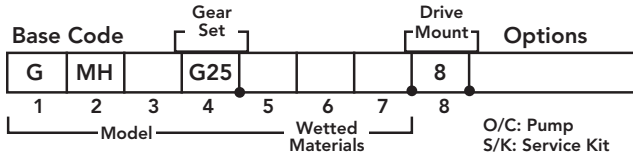
**Micropump, Inc.**  
 1402 NE 136th Avenue  
 Vancouver, WA 98684  
 Tel +1.360.253.2008  
 www.micropump.com

## Order Code



Mount	C mm (in)	E mm (in)	F mm (in)
E NEMA 56C	240.2 (9.46)	61.9 (2.44)	38.1 (1.50)
K NEMA 143TC	235.4 (9.27)	69.9 (2.75)	50.8 (2.00)
K NEMA 145TC	235.4 (9.27)	69.9 (2.75)	63.5 (2.50)

## Order Code



Mount	A mm (in)	B mm (in)	C mm (in)
8 IEC 80-B14	125.2 (4.92)	100.0 (3.94)	212.5 (8.37)
	D mm (in)	H mm (in)	P mm (in)
	225.8 (8.89)	80.0 (3.15)	127.05 (5.00)

### Notes

- \* These dimensions will vary based on motor selection.
- All dimensions are nominal.

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