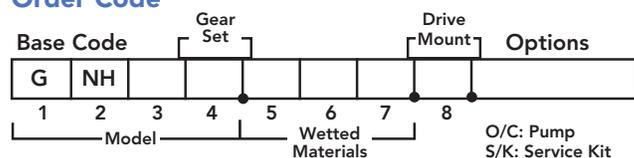


# Series GNH

## Magnetic Drive Gear Pump

**MICROPUMP®**

### Order Code



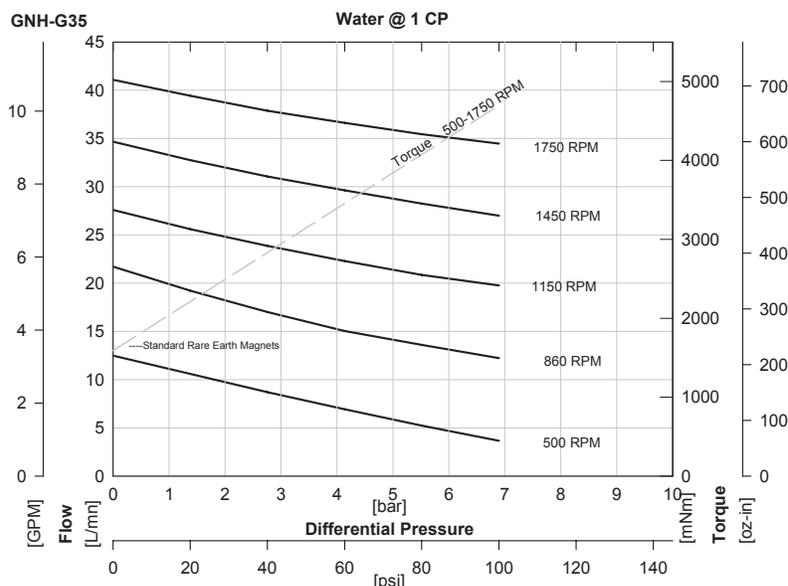
### Pump Construction

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

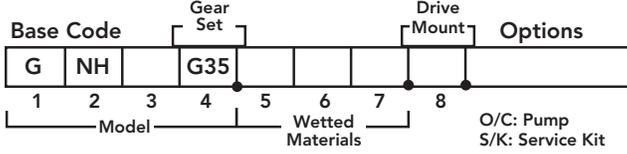


BASE	CODE	SPECIFICATIONS
1	G	<b>Product Type</b> Gear Pump
2	NH	<b>Product Series</b> Series GNH
3		<b>Modifier</b> Standard Design
4	G35	<b>Gear Set (Width/N°Gears/Pitch)</b> 1.250/3/10
5	F J	<b>Gear Material</b> PTFE PEEK (carbon fiber/ptfe)
6	F V	<b>Static Seals</b> PTFE Viton®
7	S10	<b>Base Materials</b> 316 Stainless Steel 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)
		<b>Ports</b> 3/4-14 (F) NPT Side Ports
		<b>Max Differential Pressure</b> 6.9 Bar (100 psi)
		<b>Driven Magnet (Standard)</b> Samarium Cobalt (SmCo)
		<b>Max Differential Pressure</b> 3.5 Bar (50 psi) 6.9 Bar (100 psi)
		<b>Temp Range</b> -46/54°C (-50/130°F) -46/121°C (-50/250°F)
		<b>Temp Range</b> -46/232°C (-50/450°F) -29/204°C (-20/400°F)
		<b>Max System Pressure (MAWP)</b> 103 Bar (1500 psi) 103 Bar (1500 psi) 103 Bar (1500 psi)
		<b>Weight (Pumphead)</b> 8.4 kg (18.5 lbs) 8.4 kg (18.5 lbs) 8.4 kg (18.5 lbs)

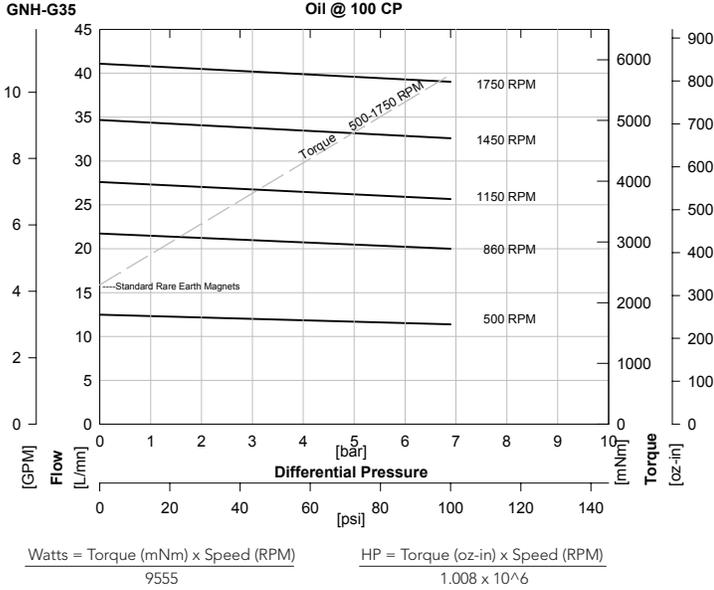
### Performance



## 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	200
[Bar]	[psi]			
0.3	5	0.7	1	1.6
1.4	20	0.7	1	1.6
2.8	40	0.8	1	1.6
4.1	60	0.8	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  
Three Helical, Shafted Gears/DP10  
Sleeve Bushings  
O-Ring Seals (Qty 3)  
Rare Earth Magnets



## Specifications

	SI	US
Displacement	24.5 ml/rev	6.5 gal/1000*rev
Max Flow (4 Pole Speed)	35.6 L/mn 1450 RPM (50Hz)	11.4 gal/mn 1750 RPM (60Hz)
Max Flow (2 Pole Speed)	69.9 L/mn 2850 RPM (50Hz)	22.4 gal/mn 3450 RPM (60Hz)
Max Differential Pressure	<b>1</b> 6.9 Bar	100 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.H2O (1450 RPM)	24 in.H2O (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)	8.4 kg	18.5 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 See Product Options. Max pressure depends on gear material.
- 2 Priming ability varies with operating conditions.
- 3 See Product Options for specific temp limits.
- 4 See Performance-High Viscosity for viscosity limits.

# MICROPUMP

ACTUAL PERFORMANCE MAY VARY.

Specifications are subject to change without notice.

Micropump, and the Micropump logo are registered trademarks of Micropump, Inc.

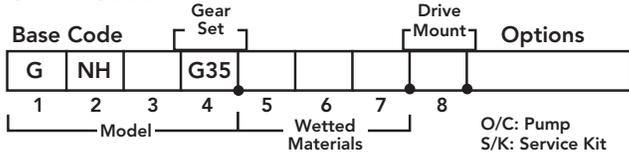
PEEK polymer is a trademark of Victrex plc.

Viton is a registered trademark of E.I. du Pont de Nemours and Company.

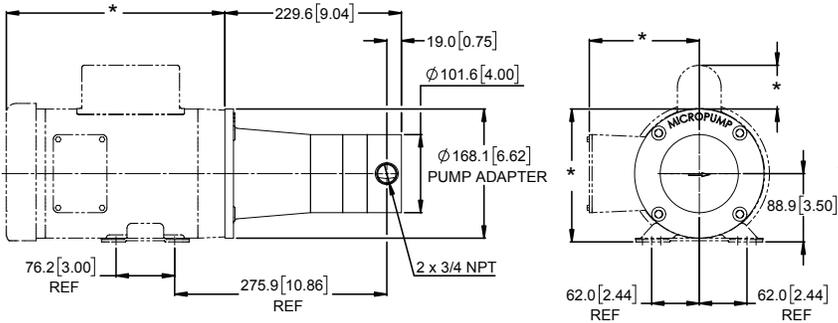


**Micropump, Inc.**  
1402 NE 136th Avenue  
Vancouver, WA 98684  
Tel +1.360.253.2008  
[www.micropump.com](http://www.micropump.com)

## Order Code

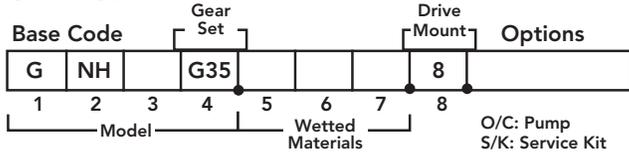


## Dimensions

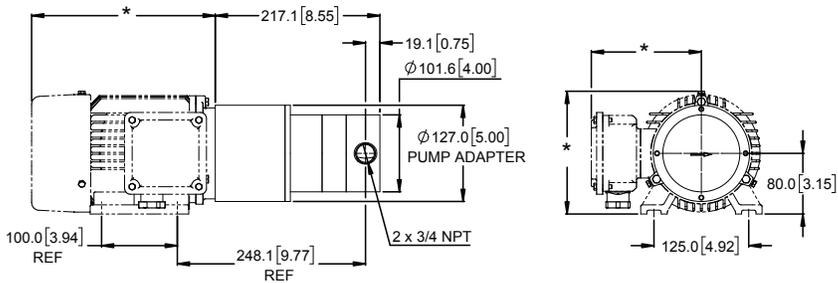


Mount	C mm (in)	E mm (in)	F mm (in)
E NEMA 56C	269.5 (10.61)	61.9 (2.44)	38.1 (1.50)
K NEMA 143TC	264.6 (10.42)	69.9 (2.75)	50.8 (2.00)
K NEMA 145TC	264.6 (10.42)	69.9 (2.75)	63.5 (2.50)

## Order Code



## Dimensions



Mount	A mm (in)	B mm (in)	C mm (in)
8 IEC 80-B14B3	125 (4.92)	100 (3.94)	241.2 (9.52)
	D mm (in)	H mm (in)	P mm (in)
	210.8 (8.30)	80 (3.15)	120 (4.72)

## Notes

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

# MICROPUMP

ACTUAL PERFORMANCE MAY VARY.

Specifications are subject to change without notice.

Micropump, and the Micropump logo are registered trademarks of Micropump, Inc.

PEEK polymer is a trademark of Victrex plc.

Viton is a registered trademark of E.I. du Pont de Nemours and Company.



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