

Series GNH

Magnetic Drive Gear Pump

MICROPUMP®**Order Code**

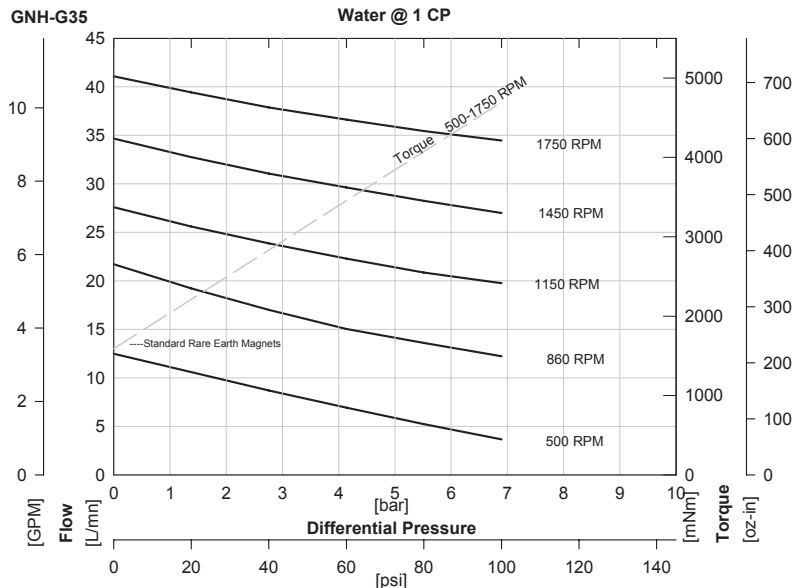
Base Code		Gear Set		Drive Mount		Options	
G	NH						
1	2	3	4	5	6	7	8
Model				Wetted Materials		O/C: Pump S/K: Service Kit	

Pump Construction

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



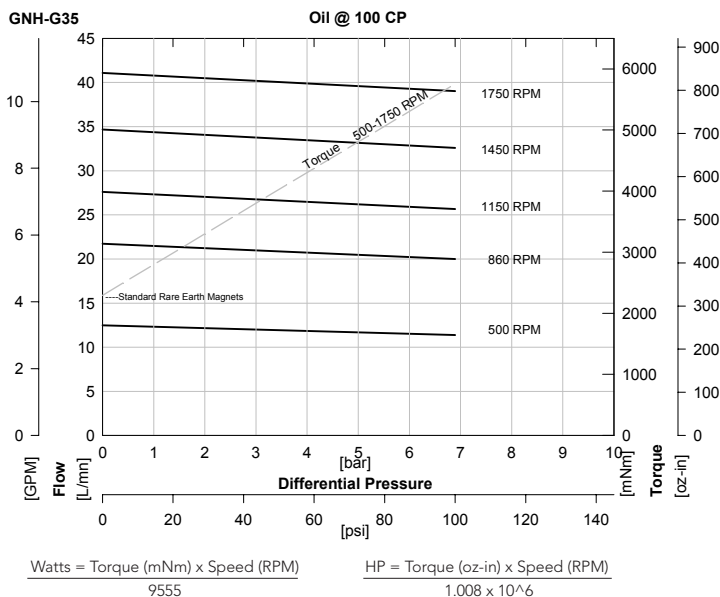
BASE	CODE	SPECIFICATIONS			
1	G	Product Type Gear Pump			
2	NH	Product Series Series GNH	Max System Pressure (MAWP) 103 Bar (1500 psi)	Ports 3/4-14 (F) NPT Side Ports	
3		Modifier Standard Design			
4	G35	Gear Set (Width/N°Gears/Pitch) 1.250/3/10	Displacement 24.5 ml/rev (6.5 gal/1000*rev)	Max Differential Pressure 6.9 Bar (100 psi)	Driven Magnet (Standard) Samarium Cobalt (SmCo)
5	F J	Gear Material PTFE PEEK (carbon fiber/ptfe)		Max Differential Pressure 3.5 Bar (50 psi) 6.9 Bar (100 psi)	Temp Range -46/54°C (-50/130°F) -46/121°C (-50/250°F)
6	F V	Static Seals PTFE Viton®			Temp Range -46/232°C (-50/450°F) -29/204°C (-20/400°F)
7	S10	Base Materials 316 Stainless Steel and Titanium			
8	E 8 K	Drive Mount NEMA 56C IEC 80-B14 NEMA 143/145TC	Max System Pressure (MAWP) 103 Bar (1500 psi) 103 Bar (1500 psi) 103 Bar (1500 psi)		Weight (Pumphead) 8.4 kg (18.5 lbs) 8.4 kg (18.5 lbs) 8.4 kg (18.5 lbs)

Performance

Order Code

Base Code			Gear Set		Drive Mount			Options
G	NH		G35					
1	2	3	4	5	6	7	8	
Model			Wetted Materials			O/C: Pump S/K: Service Kit		

Performance – High Viscosity



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

Torque Correction Factors: For Higher Viscosity Liquids

Viscosity (cp) Max Speed [RPM]		1 1750	100 1750	2500 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 Differential Pressure	1 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)	2 51 cm.H2O (1450 RPM)	24 in.H2O (1750 RPM)
Temp Range	3 See Gear Material	See Gear Material
Viscosity Range	4 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

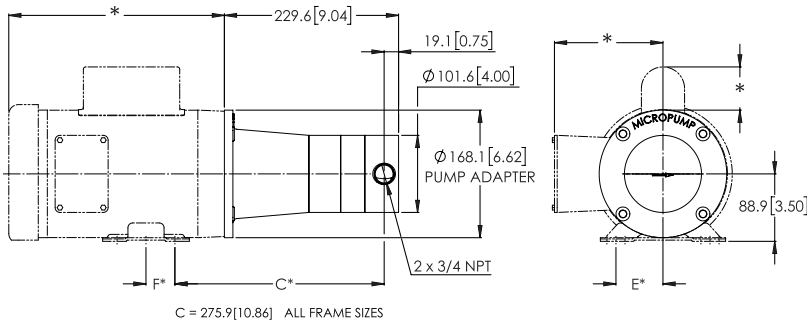
Tel +1.360.253.2008

www.micropump.com

Order Code

Base Code				Gear Set		Drive Mount		Options	
G	NH		G35						
1	2	3	4	5	6	7	8		
Model				Wetted Materials			O/C: Pump S/K: Service Kit		

Dimensions

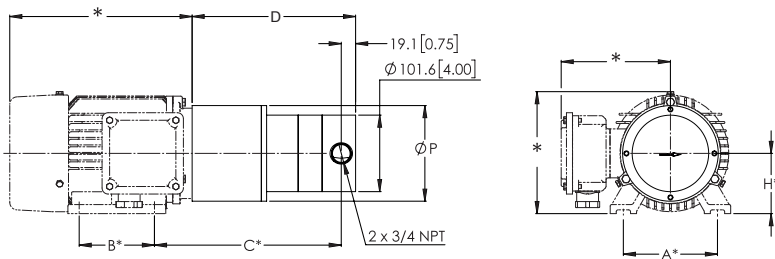


Mount	C mm (in)	E mm (in)	F mm (in)
E NEMA 56C	275.9 (10.86)	61.9 (2.44)	38.1 (1.50)
K NEMA 143TC	275.9 (10.86)	69.9 (2.75)	50.8 (2.00)
K NEMA 145TC	275.9 (10.86)	69.9 (2.75)	63.5 (2.50)

Order Code

Base Code				Gear Set		Drive Mount		Options	
G	NH		G35				8		
1	2	3	4	5	6	7	8		
Model				Wetted Materials			O/C: Pump S/K: Service Kit		

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 are guidelines based on the standards and may vary based on the motor selection. Orientation of the junction box on the motor may also vary.
- 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