Series Overview

Series GK

Order Code

Base Code		Gear Set				Drive Mount	Options
G	K						
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
Two Helical, Shafted Gears/DP16
Sleeve Bushings
O-Ring Seals (Qty 3)

Base Code

Select a code character for each numbered position to configure the product.

	Code	Product Type	Specifications		Notes
1	G	Gear Pump			
2		**Product Series**	*Max System Pressure (MAWP)*	*Ports*	
	K	Series GK	See Drive Mount	1/4-18 (F) NPT Side Ports	
3		**Modifier**			
	-	Standard Design			
4		**Gear Set (Width/NºGears/Pitch)**	*Displacement*	*Max Differential Pressure*	*Driven Magnet (Standard)*
	K23	0.850/2/16	3.15 ml/rev (0.83 gal/1000*rev)	4.2 Bar (60 psi)	Ferrite
5		**Gear Material**		*Max Differential Pressure*	*Temp Range*
	F	PTFE		3.5 Bar (50 psi)	-46/54°C (-50/130°F)
6		**Static Seals**			*Temp Range*
	F	PTFE			-46/232°C (-50/450°F)
	V	Viton®			-29/204°C (-20/400°F)
7		**Base Materials**			
	S	SS316			
8		**Drive Mount**	*Max System Pressure (MAWP)*		*Weight (Pumphead)*
	E	NEMA 56C	103 Bar (1500 psi)		2.3 kg (5.1 lbs)
	6	IEC 71-B14	103 Bar (1500 psi)		2.3 kg (5.1 lbs)

Options

Add Option codes after the Base Code to modify features or enhance the product.

	Driving Magnet (PC13)
N3	NdFeB Driving (Ring)

Notes

Order Code

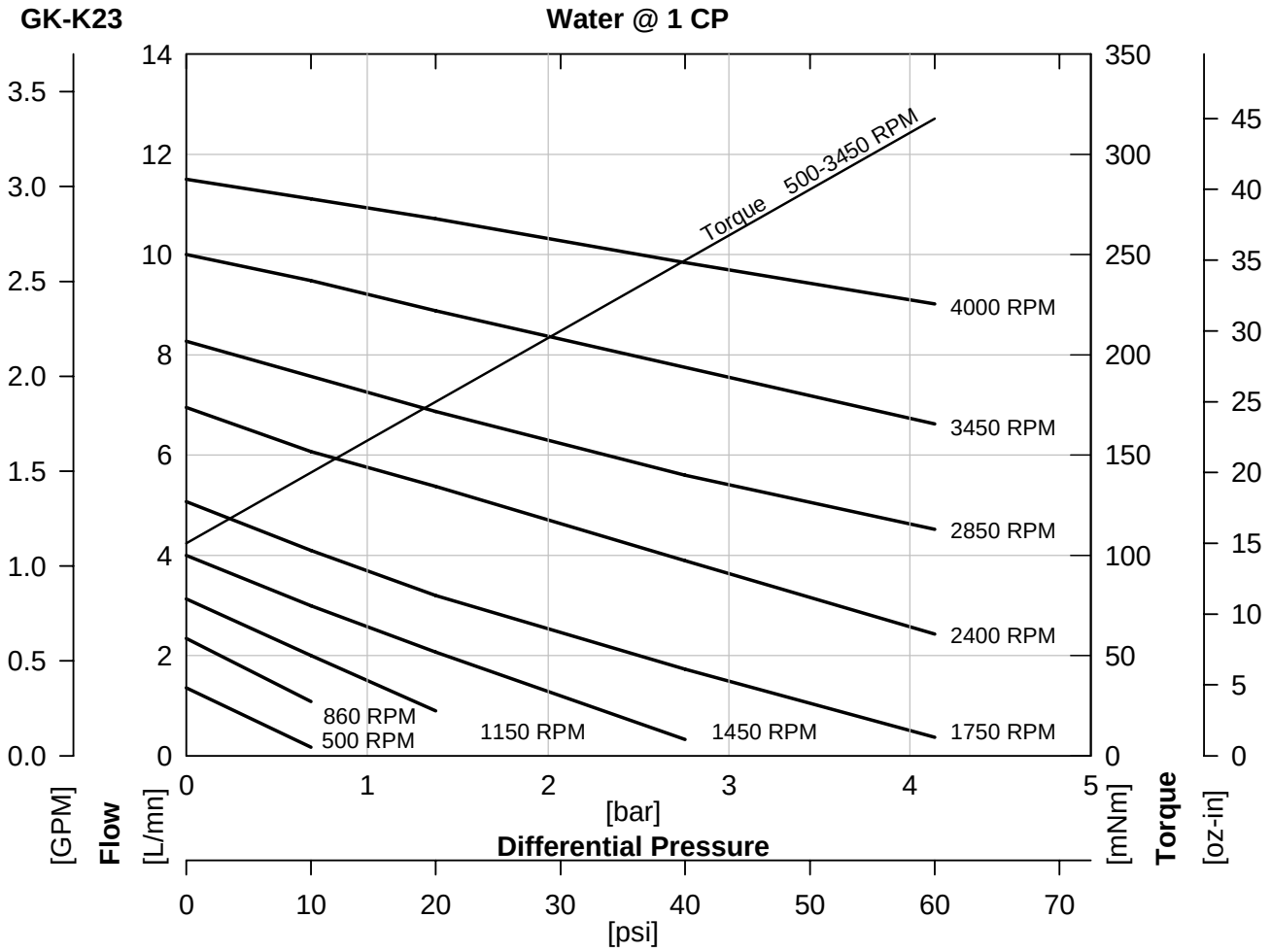
Base Code			Gear Set				Drive Mount	Options
G	K	-	K23					
1	2	3	4	5	6	7	8	

Model — Wetted Materials

O/C: Pump
S/K: Service Kit

Pump Construction
Magnetic Drive Gear Pump
Cavity Style
Two Helical, Shafted Gears/DP16
Sleeve Bushings
O-Ring Seals (Qty 3)

Performance



USA: Micropump, Inc., A Unit of IDEX Corporation • Phone 360.253.2008 • Fax 360.253.2401
UK: Micropump, Ltd., A Subsidiary of Micropump, Inc. • Phone +44 (1480) 356900 • Fax +44 (1480) 356920
info@micropump.com www.micropump.com

Order Code

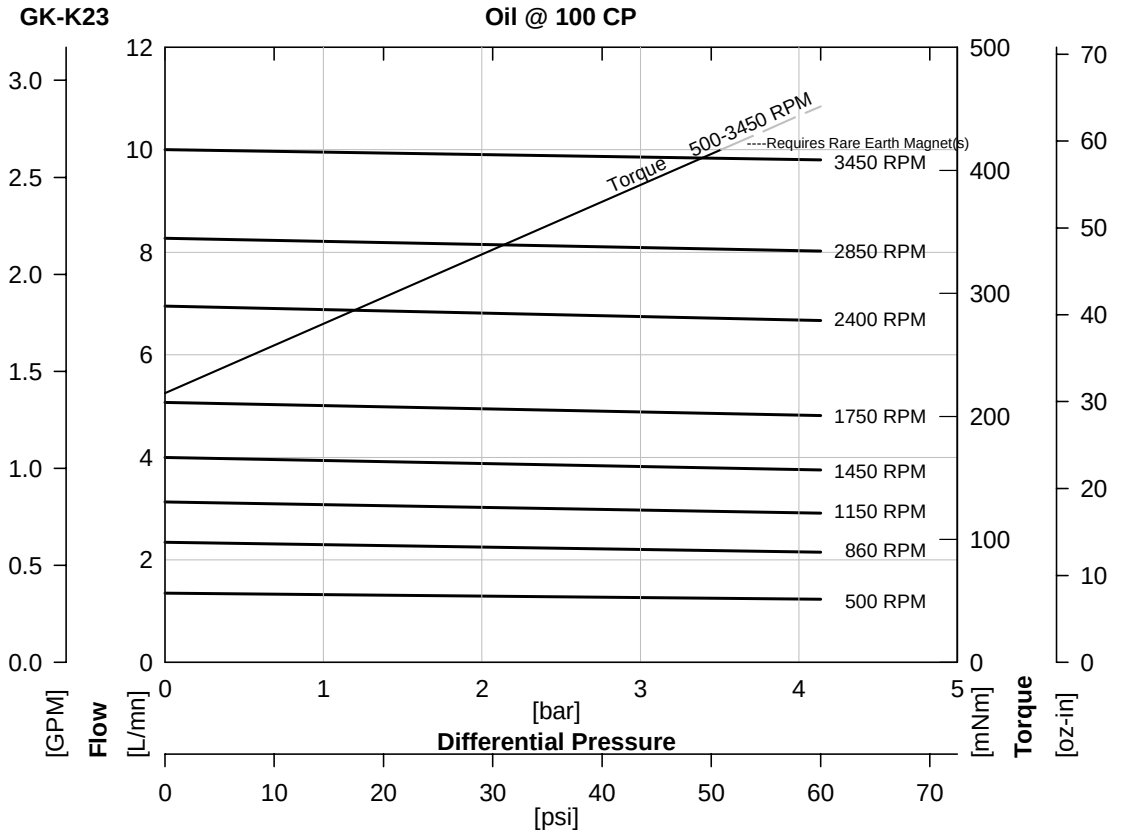
Base Code			Gear Set				Drive Mount	Options
G	K	-	K23					
1	2	3	4	5	6	7	8	

Model — Wetted Materials

O/C: Pump
S/K: Service Kit

Pump Construction
Magnetic Drive Gear Pump
Cavity Style
Two Helical, Shafted Gears/DP16
Sleeve Bushings
O-Ring Seals (Qty 3)

Performance-High Viscosity



$$\text{Watts} = \frac{\text{Torque [mNm]} \times \text{Speed [RPM]}}{9555}$$

$$\text{HP} = \frac{\text{Torque [oz-in]} \times \text{Speed [RPM]}}{1.008 \times 10^{6}}$$

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

Torque Correction Factors: For Higher Viscosity Liquids				
Viscosity [cp]		1	100	1500
Max Speed [RPM]		3450	3450	860
[Bar]	[psi]			
0.3	5	0.5	1	1.6
1.4	20	0.6	1	1.5
2.8	40	0.7	1	1.4
4.1	60	0.7	1	1.3

Magnet Decouple Torque			
Driven Magnet	Driving Hub	Torque [mNm]	Torque [oz.in]
Ferrite	Ferrite	417	59

Order Code

Base Code			Gear Set				Drive Mount	Options
G	K	-	K23					
1	2	3	4	5	6	7	8	

Model: 1–3 | Wetted Materials: 5–7

O/C: Pump
S/K: Service Kit

Pump Construction
Magnetic Drive Gear Pump
Cavity Style
Two Helical, Shafted Gears/DP16
Sleeve Bushings
O-Ring Seals (Qty 3)

Specifications

	SI	US
Displacement	3.15 ml/rev	0.83 gal/1000*rev
Max Flow (4 Pole Speed)	4.6 L/mn 1450 RPM (50Hz)	1.5 gal/mn 1750 RPM (60Hz)
Max Flow (2 Pole Speed)	9.0 L/mn 2850 RPM (50Hz)	2.9 gal/mn 3450 RPM (60Hz)
Max Differential Pressure [1]	4.2 Bar	60 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 1500 cp	0.2 to 1500 cp
Max Speed	4,000 RPM	4,000 RPM
Rotation (Facing Motor Shaft)	CW	CW
Weight (Pumphead)	1.7 kg	3.7 lbs
Dimensions (LxWxH)	See Drawing	See Drawing
Ports	1/4-18 (F) NPT Side Ports	1/4-18 (F) NPT Side Ports
Driven Magnet (Standard)	Ferrite	Ferrite
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.

USA: Micropump, Inc., A Unit of IDEX Corporation • Phone 360.253.2008 • Fax 360.253.2401
UK: Micropump, Ltd., A Subsidiary of Micropump, Inc. • Phone +44 (1480) 356900 • Fax +44 (1480) 356920
info@micropump.com www.micropump.com

Order Code

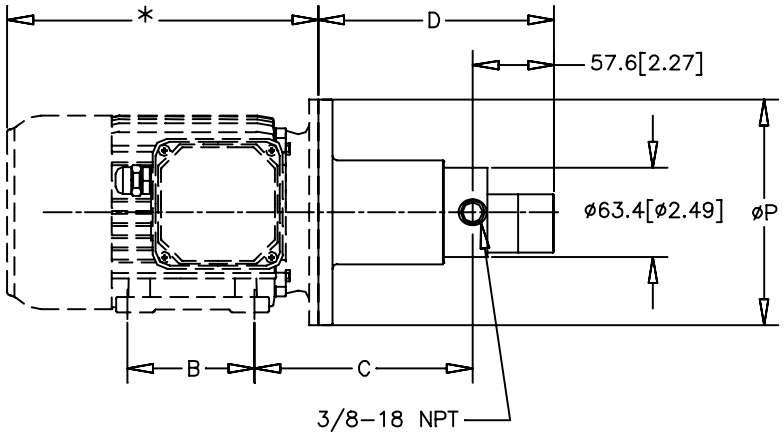
Base Code			Gear Set				Drive Mount	Options
G	K	-	K23				4/6	
1	2	3	4	5	6	7	8	

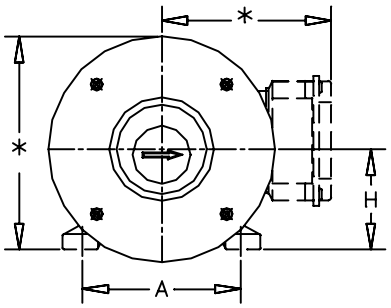
Model — Wetted Materials

O/C: Pump
S/K: Service Kit

Pump Construction
Magnetic Drive Gear Pump
Cavity Style
Two Helical, Shafted Gears/DP16
Sleeve Bushings
O-Ring Seals (Qty 3)

Dimensions





MOUNT	A mm [in]	B mm [in]	C mm [in]	D mm [in]	H mm [in]	P mm [in]
4 IEC63B14B3	100 [3.94]	80 [3.15]	142.3[5.60]	159.8[6.29]	63 [2.48]	140 [5.51]
6 IEC71B14B3	112 [4.41]	90 [3.54]	154.2[6.07]	166.8[6.57]	71 [2.80]	160 [6.30]

NOTES:

1. *THESE DIMENSIONS WILL VARY BASED ON MOTOR SELECTION.
2. ALL DIMENSIONS ARE NOMINAL.

USA: Micropump, Inc., A Unit of IDEX Corporation • Phone 360.253.2008 • Fax 360.253.2401
UK: Micropump, Ltd., A Subsidiary of Micropump, Inc. • Phone +44 (1480) 356900 • Fax +44 (1480) 356920
info@micropump.com www.micropump.com

Order Code

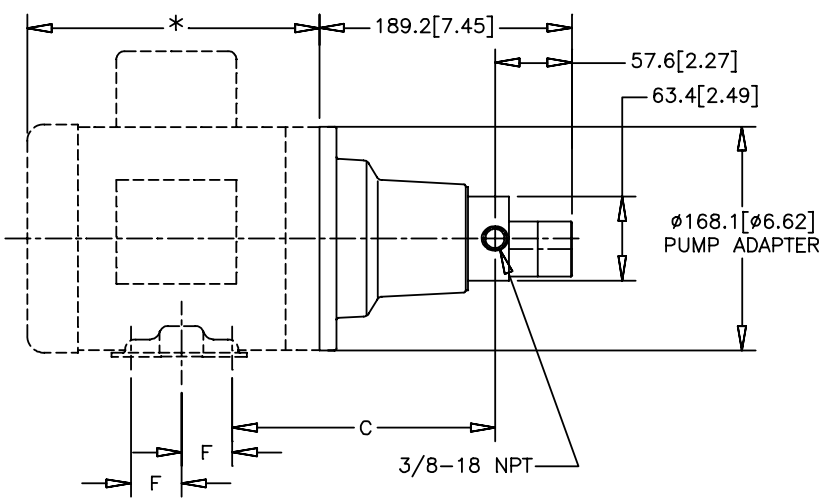
Base Code			Gear Set				Drive Mount	Options
G	K	-	K23				E	
1	2	3	4	5	6	7	8	

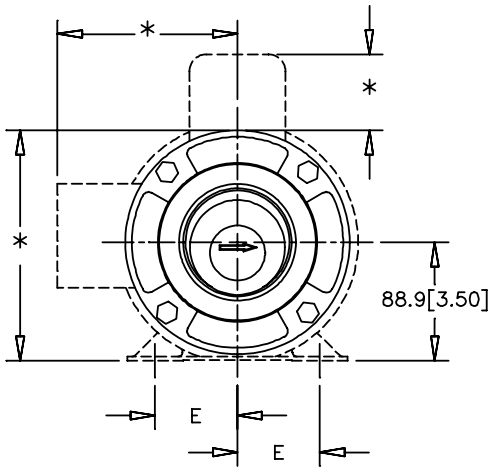
Model — Wetted Materials

O/C: Pump
S/K: Service Kit

Pump Construction
Magnetic Drive Gear Pump
Cavity Style
Two Helical, Shafted Gears/DP16
Sleeve Bushings
O-Ring Seals (Qty 3)

Dimensions





MOUNT	C mm [in]	E mm [in]	F mm [in]
E NEMA 56C	196.9 [7.75]	61.9 [2.44]	38.1 [1.50]
K NEMA 143TC	192.0 [7.56]	69.9 [2.75]	50.8 [2.00]
K NEMA 145TC	192.0 [7.56]	69.9 [2.75]	63.5 [2.50]

NOTES:

1. *THESE DIMENSIONS WILL VARY BASED ON MOTOR SELECTION.
2. ALL DIMENSIONS ARE NOMINAL.

USA: Micropump, Inc., A Unit of IDEX Corporation • Phone 360.253.2008 • Fax 360.253.2401
UK: Micropump, Ltd., A Subsidiary of Micropump, Inc. • Phone +44 (1480) 356900 • Fax +44 (1480) 356920
info@micropump.com www.micropump.com