

4 - SERIES LOW-FLOW GEAR PUMP
MAG-DRIVE

GENERAL INFORMATION



Liquiflo's 4-Series pumps are low-flow magnetically-driven external gear pumps that are completely field repairable. The 4-Series housings are manufactured from Bar Stock in 316 Stainless Steel, Alloy-C or Titanium. With several material options for shafts, gears, wear plates and bearings, these pumps can be used in a wide variety of chemical processing applications.



REPAIR KITS

Repair Kits simplify inventory and speed repair. All parts can also be purchased separately.

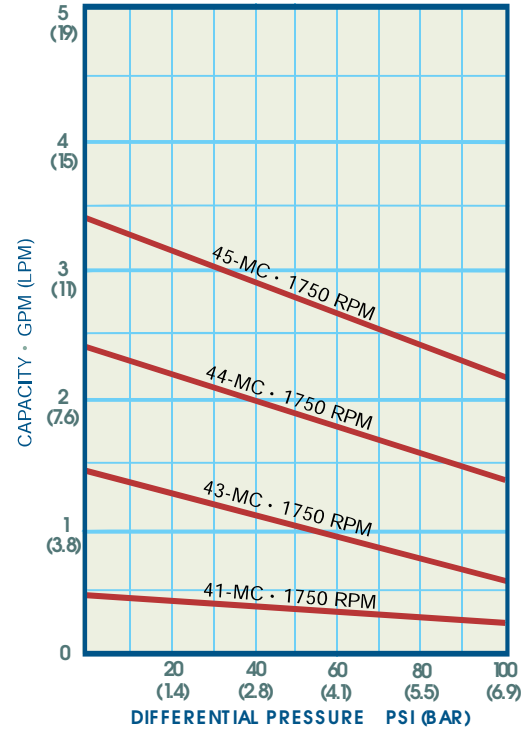
MATERIALS AVAILABLE

HOUSINGS	GEARS	WEAR PLATES	BEARINGS	SHAFTS
316 SS	316 SS	Carbon 60	Carbon 60	316 SS
Alloy-C	Alloy-C	Silicon Carbide	Silicon Carbide	Alloy-C
Titanium	Titanium	PEEK	PEEK	TC-Coated
	PEEK	Teflon	Teflon	CO-Coated
	Ryton			Titanium, TO-Coated
	Teflon			

Note: For information on the above materials, refer to the Engineering section, pages 132-135.

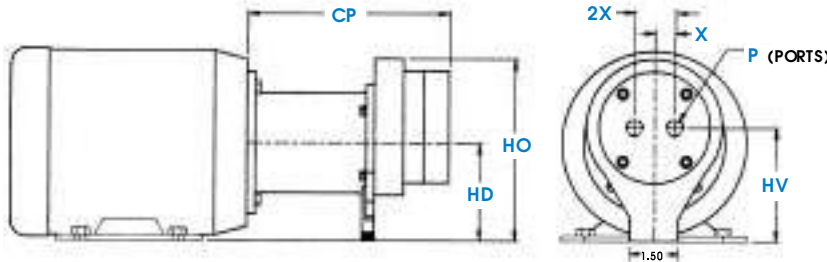
**COMPOSITE
GEAR PUMP
PERFORMANCE
CURVES**

TEST FLUID: WATER
(1 CPS)



Dimensional Data - inches mm

4-SERIES Low-Flow Mag-Drive Gear Pump



PUMP MODELS	MOTOR FRAME	CP	HD	HO	HV	X	2X	P	
								NPT	BSPT
41 & 43	IEC71-B14	5.93 (151)	2.80 (71.1)	5.40 (137)	3.30 (83.8)	0.75 (19)	1.50 (38.1)	1/4	3/8
	NEMA 48C	6.30 (160)	3.00 (76.2)	5.60 (142)	3.50 (88.9)	0.75 (19)	1.50 (38.1)	1/4	3/8
	NEMA 56C	6.67 (169)	3.50 (88.9)	6.10 (155)	4.00 (102)	0.75 (19)	1.50 (38.1)	1/4	3/8
44 & 45	IEC71-B14	6.43 (163)	2.80 (71.1)	5.40 (137)	3.30 (83.8)	0.75 (19)	1.50 (38.1)	3/8	3/8
	NEMA 48C	6.80 (173)	3.00 (76.2)	5.60 (142)	3.50 (88.9)	0.75 (19)	1.50 (38.1)	3/8	3/8
	NEMA 56C	7.17 (182)	3.50 (88.9)	6.10 (155)	4.00 (102)	0.75 (19)	1.50 (38.1)	3/8	3/8

PUMP MODEL CODING

EXAMPLE:

43S6PEEN200, designates a Model 43 Mag-Drive Pump.

43	S	6	P	E	E	N	2	0	0
1	2	3	4	5	6	7	8	9	10

Pos.	Description	Selection
1	Pump Model	43 43 Pump
2	Housing Mat I	S 316 SS NPT
3	Drive Gear Mat I	6 316 SS
4	Idler Gear Mat I	P PEEK
5	Wear Plate Mat I	E Carbon 60
6	Bearing Mat I	E Carbon 60
7	Magnetic Coupling	N MCN
8	Outer Magnet Bore	2 .625" (56C motor)
9	Shafts	0 Non-coated
10	Motor	0 None

Liquiflo's Model Code describes both the pump's size and materials selected. This model code is required for the future identification of your pump when reordering either a pump or replacement parts. Model code is permanently stamped into pump housing.

- n Available
- ⊗ Not Available
- CF Contact Factory



Liquiflo 4-Series Gear Pumps Selection & Availability



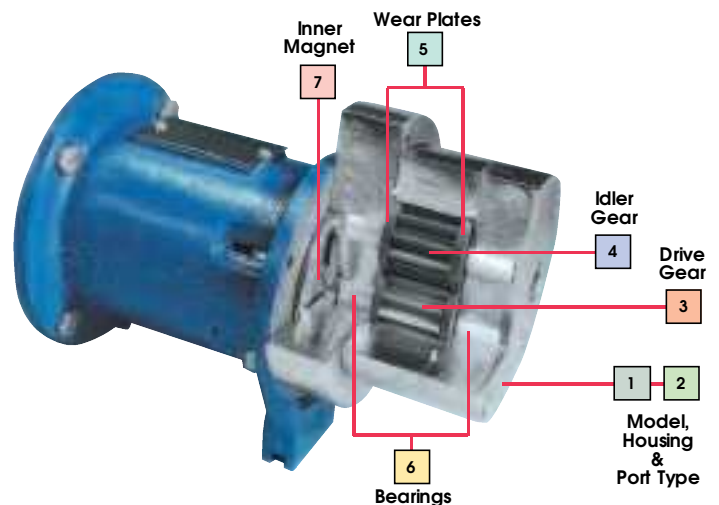
Sample Model No. **43 S 6 P E E N 2 0 0**

Position No. 1 2 3 4 5 6 7 8 9 10

Position	Model	41	43	44	45
1	Pump Model	41	43	44	45
2	Position Basic Material & Port Type	S	316 SS	NPT	n
		X	316 SS	BSPT	n
		H	Alloy-C	NPT	n
		Y	Alloy-C	BSPT	n
		T	Titanium	NPT	n
		Titanium	BSPT	n	
3	Position Drive Gear	1	Alloy-C	n	n
		3	Teflon	CF	n
		4	Titanium	n	n
		6	316 SS	n	n
				n	n
				n	n
4	Position Idler Gear	1	Alloy-C	n	n
		3	Teflon	CF	n
		4	Titanium	n	n
		6	316 SS	n	n
				n	n
		n	n		
5	Position Wear Plates	3	Teflon	n	n
		4	Ceramic (SiC)	n	n
		E	Carbon 60	n	n
		P	PEEK	n	n
6	Position Bearings	3	Teflon	n	n
		B	Silicon Carbide	n	n
		E	Carbon 60	n	n
		P	PEEK	n	n
7	Position Magnetic Coupling	N	20 in-lbs	n	n
		R	30 in-lbs	n	n
8	Position Outer Magnet Bore (Motor Frame)	0	.500 (NEMA 48C)	n	n
		1	14 mm (IEC 71 - B 14 Face)	n	n
		2	.625 (NEMA 56C/56HC)	n	n
9	Position Shafts	0	Material Same as Housing (uncoated)	n	n
		A	Chrome Oxide Coated	n	n
		C	Tungsten Carbide Coated	n	n
10	Position Motor	0	No Motor	n	n
		A	0.25 Hp/1750 RPM - TEFC-AC	n	n
		B	0.25 Hp/1150 RPM - TEFC-AC	n	n
		C	0.25 Hp/1750 RPM - TENV-DC w/ SCR Control	n	n
Suffix Trim Options	- 8	Temperature Trim	n	n	n
	- 9D	Viscosity Trim (double clearance)	n	n	n
	- 9T	Viscosity Trim (triple clearance)	n	n	n

Titanium pumps have TiO₂-Coated Shafts as standard

- 8 Outer Magnet Bore Size (not shown)
- 9 Shafts (not shown)
- 10 Motor (not shown)



4-Series Mag-Drive Gear Pump

4-SERIES MAG-DRIVE GEAR PUMP

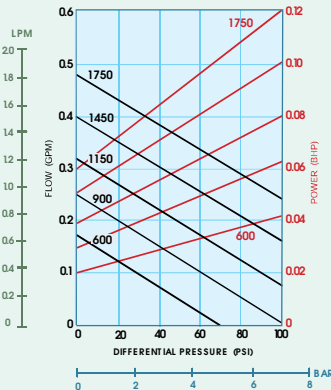
4-Series Specifications

MODEL	41	43	44	45
Port Size	1/4 NPT/3/8 BSPT	1/4 NPT/3/8 BSPT	3/8 NPT/BSPT	3/8 NPT/BSPT
Max Flow 1750 RPM	0.5 GPM (1.9 LPM)	1.4 GPM (5.3 LPM)	2.4 GPM (9.1 LPM)	3.4 GPM (13 LPM)
Max Diff. Press.	100 PSI (7 BAR)	100 PSI (7 BAR)	100 PSI (7 BAR)	100 PSI (7 BAR)
Max Discharge Press.	300 PSI (21 BAR)	300 PSI (21 BAR)	300 PSI (21 BAR)	300 PSI (21 BAR)
Max Temperature	500 F (260 C)	500 F (260 C)	500 F (260 C)	500 F (260 C)
Min Temperature	-40 F (-40 C)	-40 F (-40 C)	-40 F (-40 C)	-40 F (-40 C)
Max Viscosity 300 RPM	4,500 CPS	3,700 CPS	2,000 CPS	1,000 CPS
NPSHR 1750 RPM	4.5 FT (1.4 M)	3 FT (0.9 M)	3 FT (0.9 M)	2 FT (0.6 M)
Lift (Dry)	0.5 FT (0.15 M)	1.5 FT (0.45 M)	2.0 FT (0.6 M)	4 FT (1.2 M)
Weight	11 LBS (5 KGS)	11 LBS (5 KGS)	13 LBS (6 KGS)	13 LBS (6 KGS)

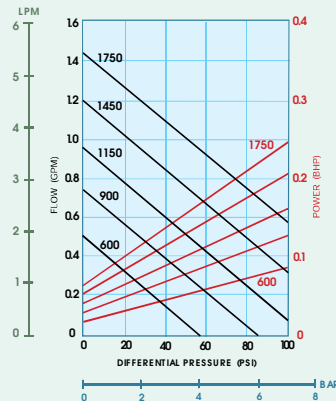
4-SERIES PERFORMANCE CURVES

1 CPS Fluid (Water)

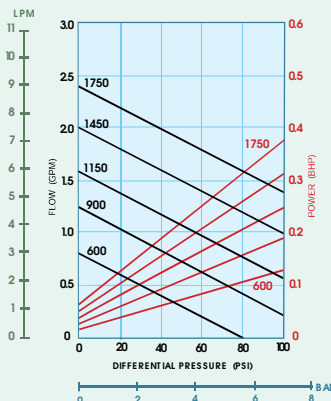
41-MC



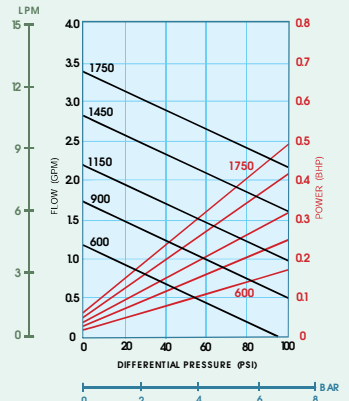
43-MC



44-MC

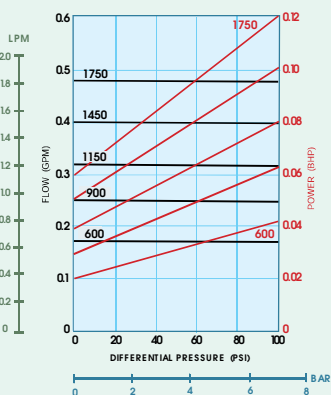


45-MC

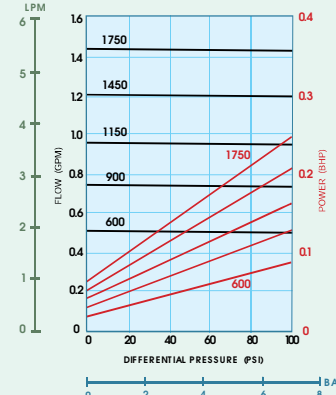


100 CPS Fluid (Oil)

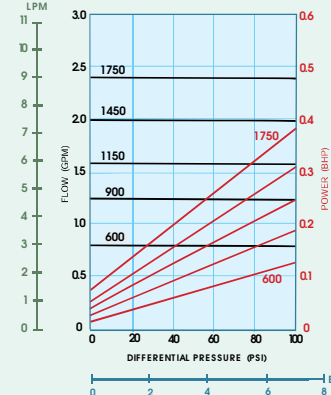
41-MC



43-MC



44-MC



45-MC

