

CLARK MG200 Gear Pump With DC Motor

Flow to 190 LPH

DESCRIPTION

The "MG 200" Series magnet drive gear pumps are compact precision performance products for high technology applications. The magnet drive principle provides a totally sealed pump chamber which is capable of handling a wide range of corrosive liquids with a high degree of safety. The housing of the pump and the internal metal parts are in AISI 316 stainless steel and the gears are available in PTFE or PEEK.

In operation the MG 200 Series pumps are noiseless, pulsation-free and capable of handling relatively hot liquids i.e. 120°C (248°F) at a low coefficient of expansion. The principle of the magnet drive comprises an inner magnet, embodied in the pump, connected to the driving gear and an outer magnet connected to the motor shaft. The pole-to-pole alignment of the magnets provides the driving motion to the pump. Decoupling occurs when the pump load exceeds the coupling torque between the magnets.

In/out ports have 1/8" NPT female threads. A built-in relief valve is available upon request.

Models are offered with a choice of 12 VDC or 24 VDC motors.

SPECIFICATIONS

Flow Range: Three pump sizes- 4 mm, 9 mm or 13 mm gears, see flow charts (Fig. 1)

Temperature ranges :

PTFE : -45°C (-49 F) / + 50°C (122F)

PEEK : -45°C (-49 F) / + 120°C (+248 F)



TYPICAL APPLICATIONS

- Medical and surgical equipment
- Hemodialysis apparatus
- Exhaust fumes treatment
- Cooling systems
- Ink-jet printing systems
- Water purification and ultra-filtration
- Lubrication
- Seal flush
- Sampling
- Lab instrumentation
- Laser apparatus



Max system pressure : 20 bar (290 psi)

Rotational Speed Limit: 5000 rpm

Priming With Water: 8m (26.7 ft), varies with operating conditions and fluid characteristics

Max Vacuum: 724 mm Hg (28.5" Hg)

FLOW WITH STANDARD PUMP HEADS & MOTORS

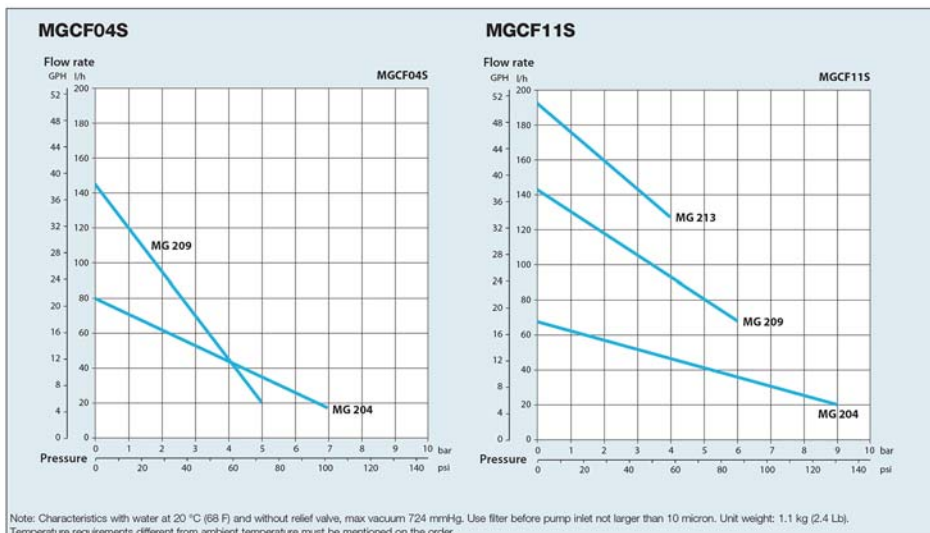


Fig. 1

Table 1 DC Motor Coupling Components			
Item	Description	Note	Order Code
A	Ferrite Drive Magnet	For 5 mm bore	MGAF05S
A+B	Complete Adaptor	For M56B14 Motor	MGBF42S
A+B+C	Complete Motor Assembly	See Table Below	MGCF04S MGCF11S

Table 2	Motor Assembly	
	MGCF04S	MGCF11S
Voltage	12 VDC	24 VDC
Rated Speed (rpm)	3300	3000
Current Consumption (A)	3.4	1.5
Output Power (W/HP)	25.9/.0347	23.6/.0316
Weight (g/lb)	700/1.54	700/1.54

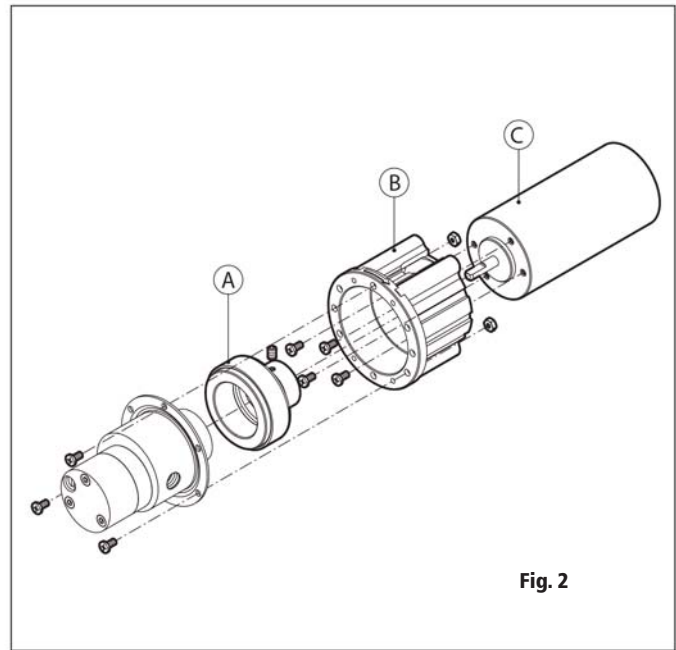
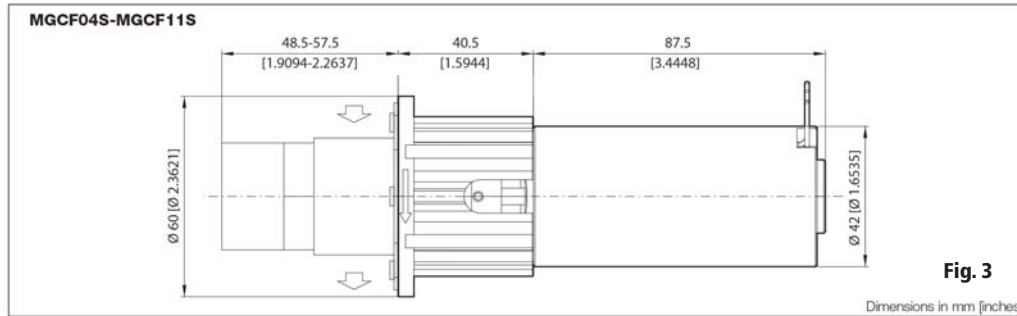


Fig. 2

DIMENSIONS



ORDERING INFORMATION

1) Order Complete Motor Assembly Per Tables 1&2

Example: MGCF11S

2) Order Pump Per Table 3: ABCDEFG

Example: MG204XD1PT

Table 3

A Pump Model	B Gear Width	C Housing Material	D Connections	E Relief Valve	F Gear Material	G Static Seal
MG2= Ferrite Magnet, PTFE Flat Seal	04= 4 mm 09= 9 mm 13= 13 mm	X= 316 SS	D= 1/8" NPT	1= Yes 0= No	P= PEEK T= PTFE	T= PTFE