CLARK MG200 Gear Pump With AC Motor or NEMA 56C Coupling

Flow to 200 LPH, Pressure to 9 bar

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. 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 selection of AC motors or with 56C frame adaptor couplings with drive magnet.

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)

FLOW WITH STANDARD PUMP HEADS & MOTORS



TYPICAL APPLICATIONS

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



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)



Clark Solutions • 10 Brent Drive • Hudson, MA 01749 • Tel. 978 / 568 3400 • Fax 978 / 568 0060

Table 1 AC Motor Coupling Components								
ltem	n Description Note		Order Code					
M56B14 Motors								
A	Ferrite Drive Magnet	For 9 mm bore	MGAF09S					
A+B	Complete Adaptor	For M56B14 Motor	MGBF56S					
A+B+C	Complete Motor Assembly	See Table Below	MGCF03S MGCF07S MGCF28S					
NEMA 56C Frame Motor Adaptor								
A	Ferrite Drive Magnet	For 5/8 bore	MGAF5BC					
A+B	Complete Adaptor	For NEMA 56C	95-05-08					

Table 2	Motor Assembly				
	MGCF03S	MGCF075	MGCF28S		
Voltago	230 VAC, Single	230/400 VAC,	110 VAC, Three		
vonage	Phase	Three Phase	Phase		
Frequency (Hz)	50	50	60		
Poles	2	2	2		
Rated Speed (rpm)	2610 2780		3550		
Current Consumption (A)	1.1	0.42	1.27		
Output Power (W/HP)	110/.147 130/.175		110/.147		
Operation	Continuous	Continuous	Continuous		
Weight (Kg/lb)	3.3/7.28	3.3/7.28	3.5/7.72		



DIMENSIONS





ORDERING INFORMATION

1) Order Complete Motor Assembly or Motor Coupling Components (if supplying motor separately) per Tables 1 & 2 Example: MGCF28S

2) Order Pump Per Table 3: ABCDEFG

Example: MG204XD1PT

A	B	C	D	E	F	G
Pump Model	Gear Width	Housing Material	Connections	Relief Valve	Gear Material	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

Clark Solutions • 10 Brent Drive • Hudson, MA 01749 • Tel. 978 / 568 3400 • Fax 978 / 568 0060