

The MG series magnet drive gear pumps are compact precision performance pumps for high technology applications.

The magnet drive principle provides a totally sealed pump chamber 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 316L stainless steel and the gears are available in Peek™, Ceramic Peek™ or PTFE™.

In operation the MG series pumps are noiseless, pulsation-free and able to handle relatively high temperature fluids with low coefficient of expansion.

The principle of the magnetic drive comprises an inner magnet embodied in the pump and connected to the driving gear, and an outer magnet connected to the motor shaft.

The pole-to-pole alignment of the two magnets provides the driving motion to the pump. Decoupling will occur when the pump load exceeds the maximum coupling torque provided by the alignment of the two magnets.



### "MAIN APPLICATIONS"

- Medical and surgical equipment
- Hemodialysis apparatus
- Laser apparatus
- Lubrication
- Ink-Jet printing systems
- Cooling systems
- Laboratory instrumentation
- Water treatment
- Sampling
- Food processing equipment
- Sanitization



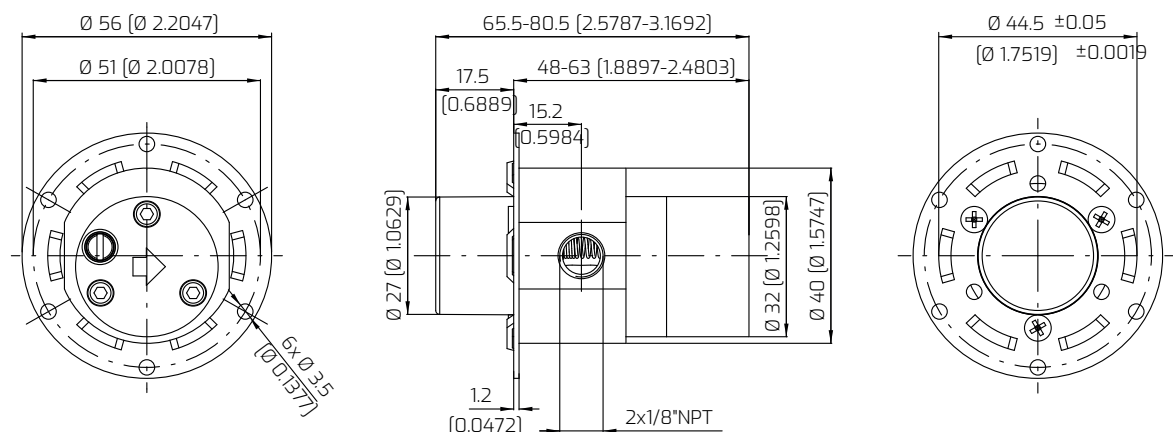
### TECHNICAL INFORMATION

|                         |                 |                     |                                          |
|-------------------------|-----------------|---------------------|------------------------------------------|
| Pump housing material   | Stainless steel | Max static pressure | 20 bar/290 psi                           |
| Gears and bushing mate- | 1/8" GAS or NPT |                     | Peek™ -45 to 120 °C/-49 to 248 F         |
| Ports                   | 380 g (0.8 lb)  | Max vacuum          | PTFE™ -45 to 50 °C/-49 to 122 F          |
| Pump weight (MG209)     | 5000 rpm        |                     | Ceramic Peek™ -45 to 120 °C/-49 to 248 F |
| Speed limit             | ~ 8m/26.7 ft    | Temperature range   | 724 mmHg/28.5 inHg                       |

\*Wet lift with water

Peek™/Ceramic Peek™/PTFE™

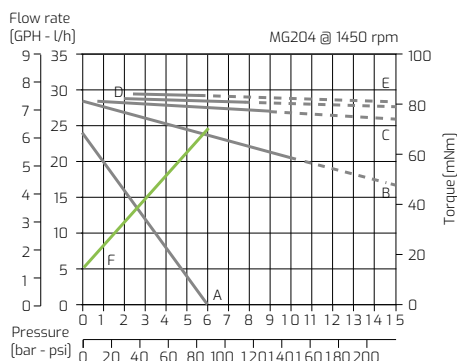
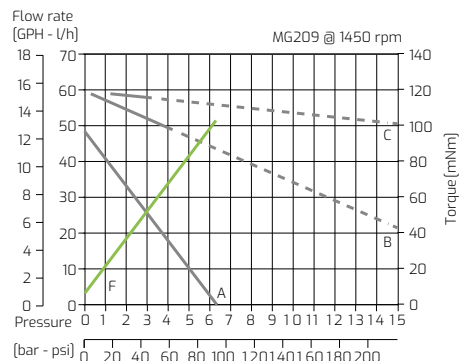
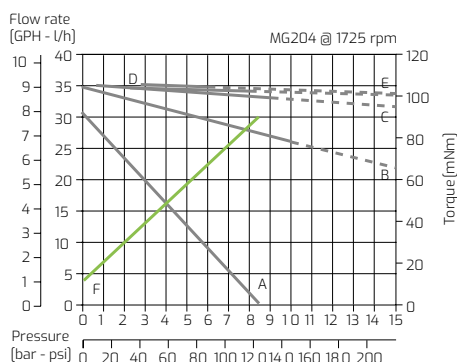
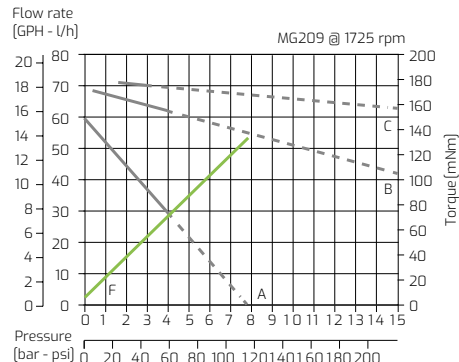
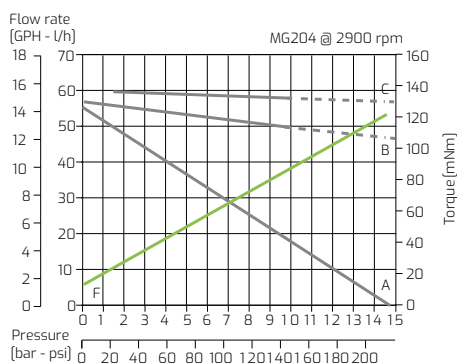
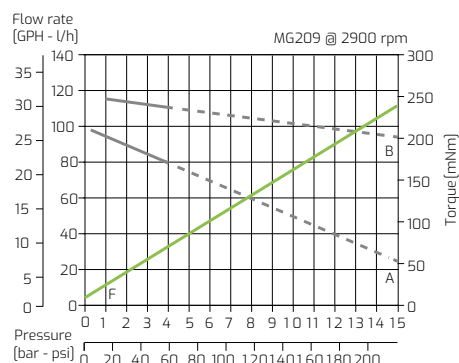
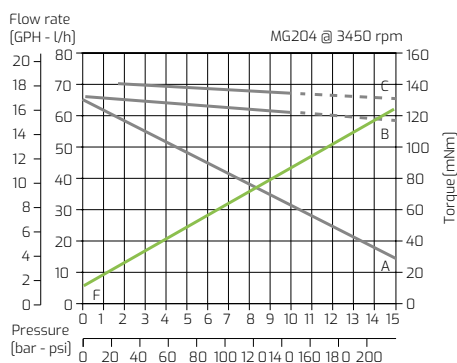
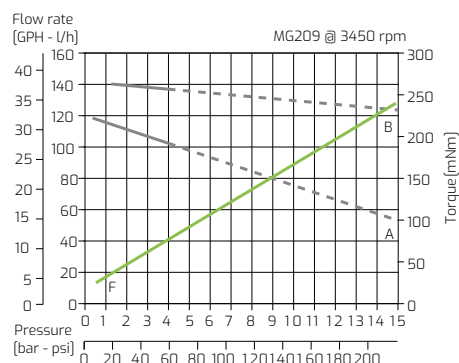
### DIMENSIONS



Dimensions in mm [inches]



### PERFORMANCE CURVES

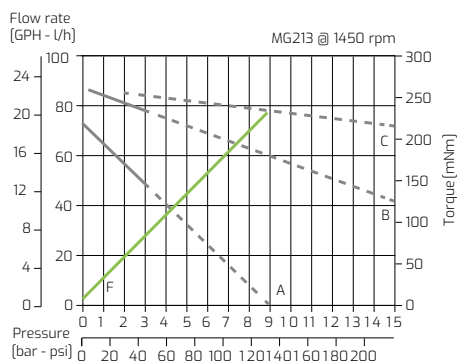
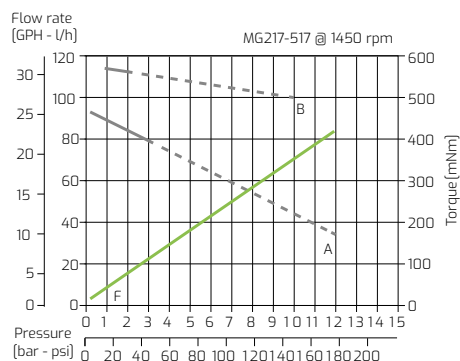
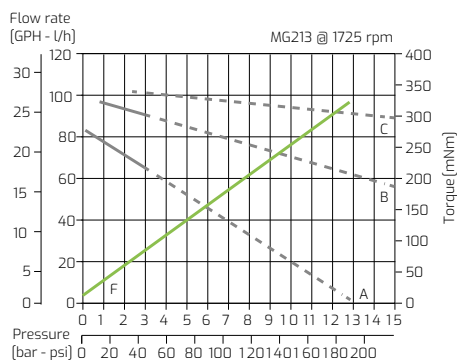
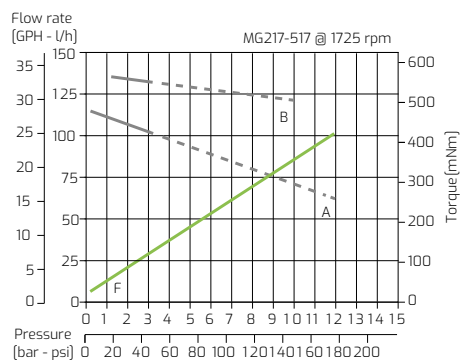
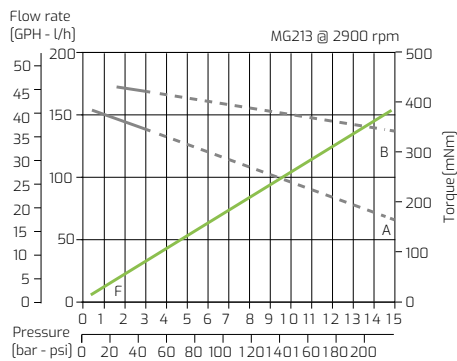
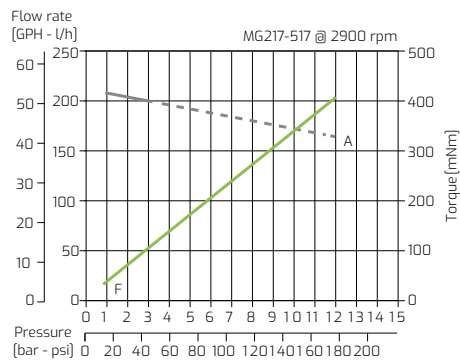
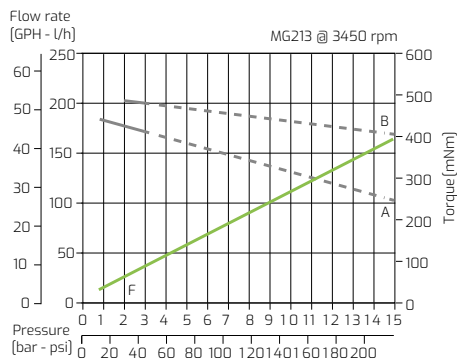
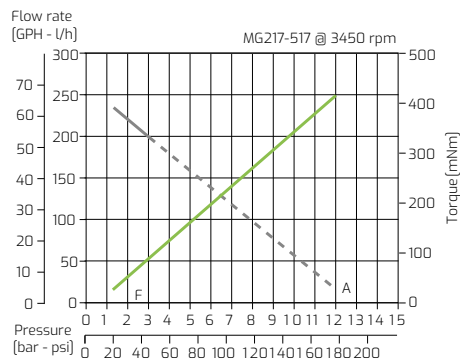


— Operating range with ferrite driving magnet  
 - - - Operating range with rare earth driving magnet  
 — Torque

A = 1 cP B = 20 cP C = 75 cP D = 180 cP E = 210 cP F = 1 cP Torque

Note: Characteristics with water at 20 °C (68 °F) and without relief valve. Fluids different from water must be validated by the Customer. Temperature requirements different from ambient temperature must be mentioned on the order. Different materials are available upon request. Use a filter before the pump inlet no larger than 10 micron

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