

Magnet drive gear pumps MG300 series

The MG300 series magnet drive gear pumps are compact precision performance pumps for a wide range of specialized applications. Thanks to the improved design, the MG300 series grant a more accurate and uniform delivery regardless of the fluid temperature.

The seal less design with the magnetic transmission of the rotation is guarantee of a leak proof product.

Static seals are available in PTFE™ / NBR / VITON® / EPDM / SILICON, in order to guarantee the highest chemical compatibility with a wide range of fluids.

The housing of the pump and the internal metal parts are in AISI 316 L stainless steel while gears and bushings are available in Peek™, Ceramic Peek™ or PTFE™.

In operation the MG300 series pumps are noiseless, pulsation-free and capable of handling relatively high temperature liquids (up to 120 °C or 248 F) with low coefficient of expansion.

Operation at different pressures ranges is possible thanks to a choice of materials for the magnets.

Available upon request:

- Rare earths driven magnet



MAIN APPLICATIONS

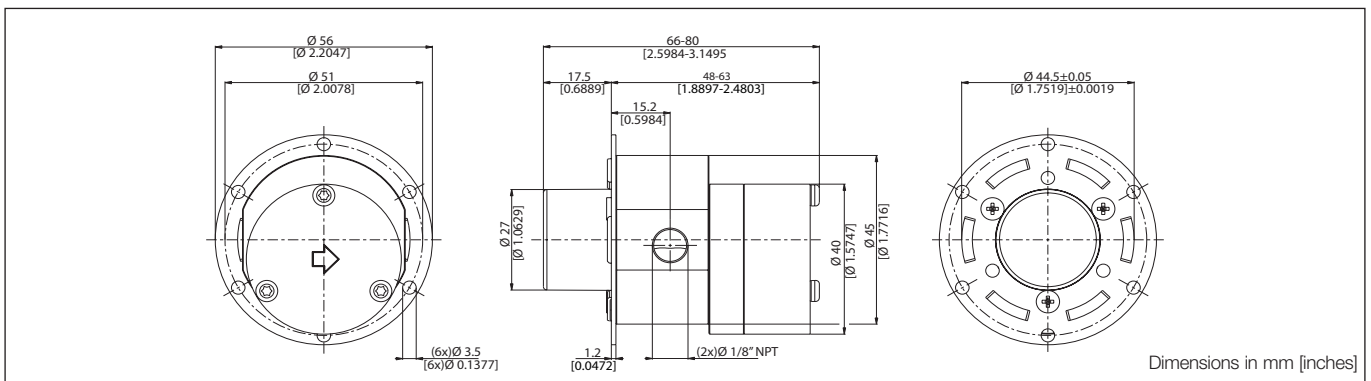
- Medical and surgical equipment
- Hemodialysis apparatus
- Laser apparatus
- Lubrication
- Ink-Jet printing systems
- Cooling systems
- Laboratory instrumentation
- Water treatment
- Sampling
- Food processing equipment

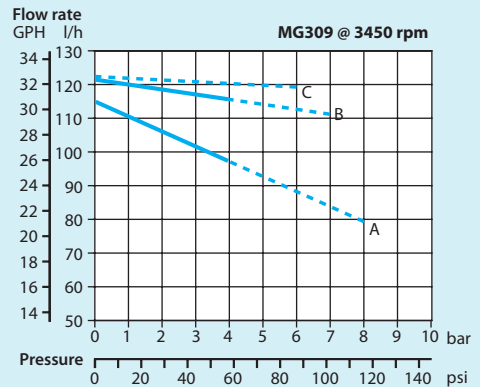
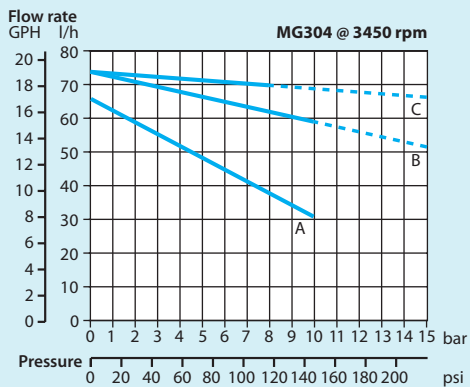
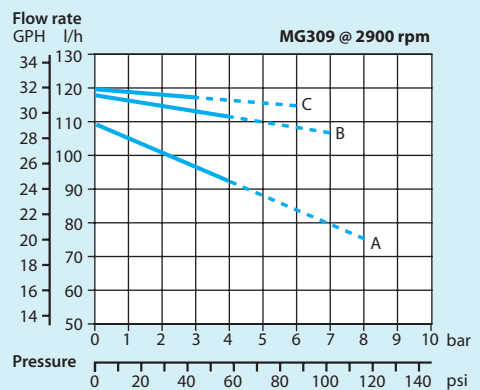
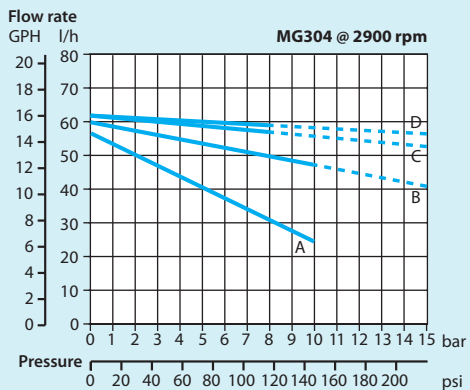
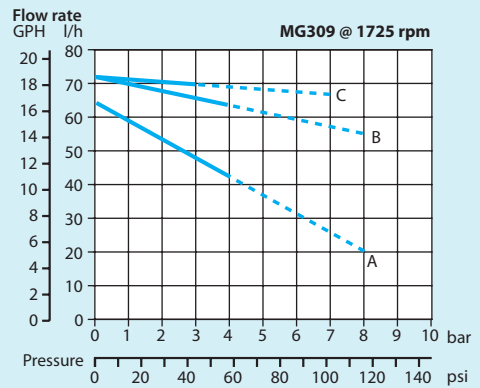
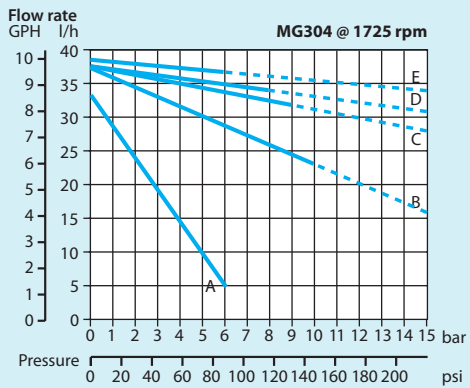
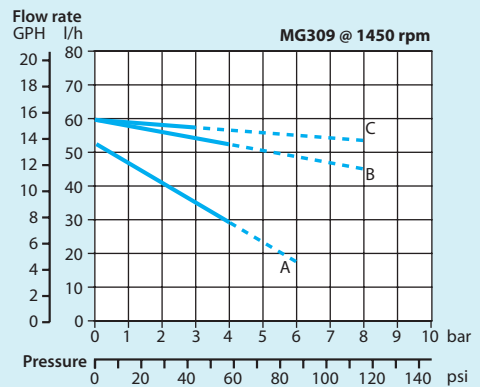
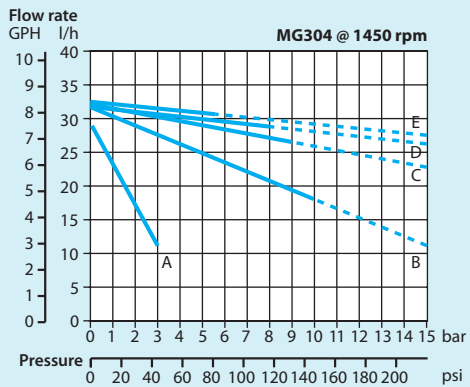


TECHNICAL INFORMATION

| | | | |
|-----------------------------|---------------------------|---------------------|--|
| Pump housing material | Stainless steel | Max static pressure | 20 bar/290 psi |
| Gears and bushing materials | Peek™/Ceramic Peek™/PTFE™ | Temperature range | Peek™ -45 to 120 °C/-49 to 248 F |
| Ports | 1/8" GAS or NPT | | Ceramic Peek™ -45 to 120 °C/-49 to 248 F |
| Pump weight (MG304) | 514 g (1.1 lb) | | PTFE™ -45 to 50 °C/-49 to 122 F |
| Speed limit | 5000 rpm | Max vacuum | 724 mmHg/28.5 inHg |
| *Wet lift with water | ~ 8m/26.7 ft | | |

* Priming ability varies with operating conditions and fluid characteristics

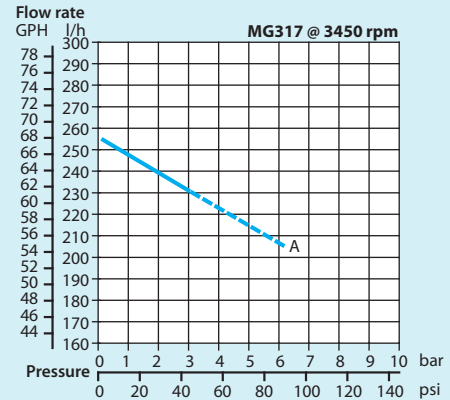
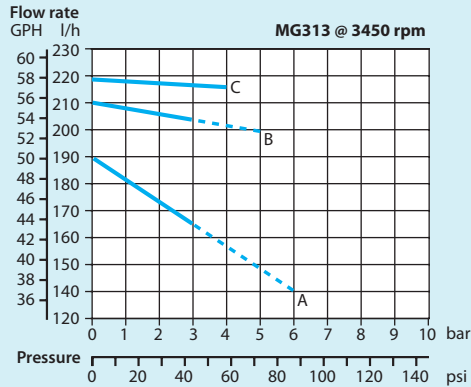
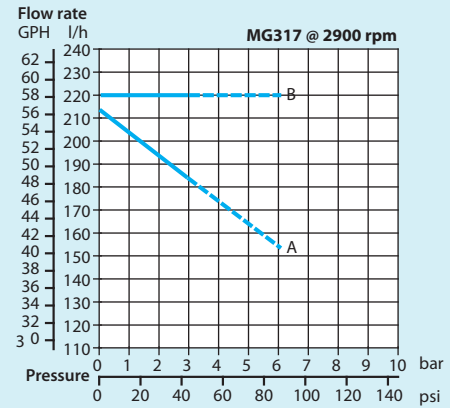
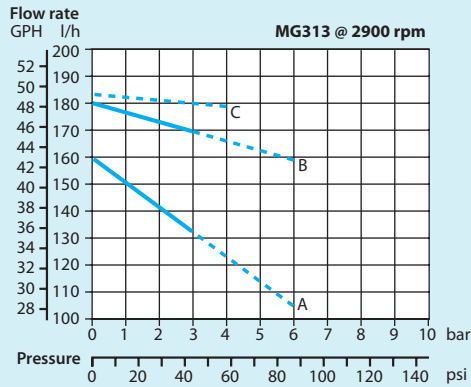
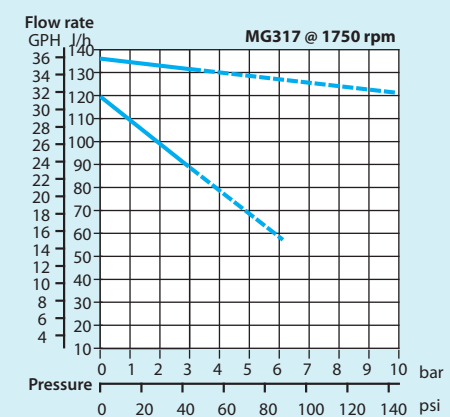
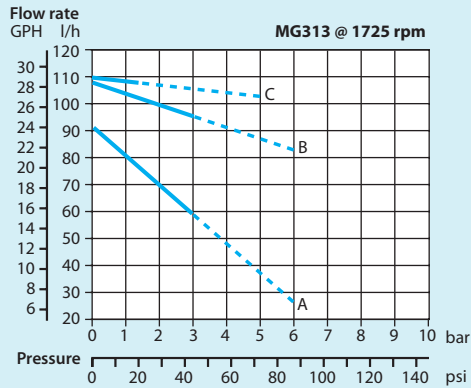
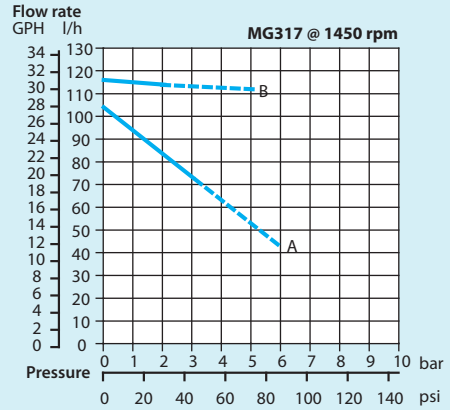
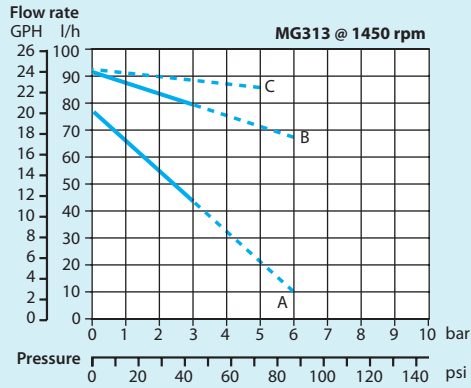




— Operating range with ferrite driving magnet
 - - - Operating range with rare earth driving magnet

A = 1 cSt B = 20 cSt C = 75 cSt D = 180 cSt E = 210 cSt

Note: Characteristics with water at 20 °C (68 F) and without relief valve. Use filter before pump inlet not larger than 10 micron. Temperature requirements different from ambient temperature must be mentioned on the order. Different materials available upon request.



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MODEL NUMBER MATRIX

| | | | | | | | | | |
|-----------------|-----------|----------|-----------|----------|----------|----------|----------|----------|---------------|
| Position | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Customization |
| Code | MG | 3 | 04 | X | D | 0 | P | S | 00000 |

| POS | DESCRIPTION | CODE | POS | DESCRIPTION | CODE |
|-----|--|---|-----|----------------------|-----------------------------------|
| 1 | Driven magnet | MG = ferrite MS = rare earths | 5 | Type of connections | D = 1/8" NPT |
| 2 | Pump series | 3 = with o-ring | 6 | Relief valve | 0 = without |
| 3 | Gear width in mm (Nominal displacement) | 04 = 4 mm (0.3 ml/rev) | 7 | Gear material | P = Peek™ T = PTFE™ |
| | | 09 = 9 mm (0.6 ml/rev) | | | G = Ceramic Peek™ |
| | | 13 = 13 mm (0.9 ml/rev) | | | T = PTFE™ E = EPDM |
| | | 17 = 17 mm (1.2 ml/rev) | | | N = NBR S = Silicon |
| 4 | Housing material* | X = AISI 316L S = SAF 2205 | 8 | Static seal material | V = Viton® |

* Other materials available upon request

Fluid-o-Tech reserves the right to alter the specifications indicated in this catalogue at any time and without prior notice.

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