Fluid-o-Tech
POWER THE FLOW

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

NSF COMPONENT



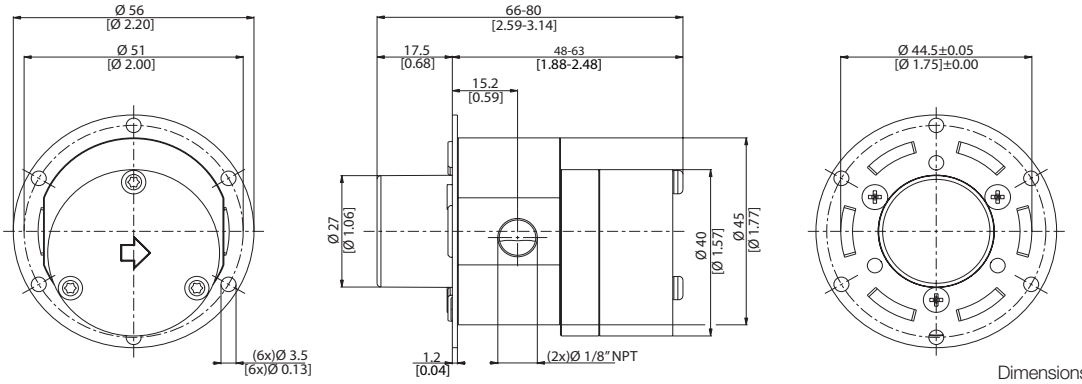
MAIN APPLICATIONS

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

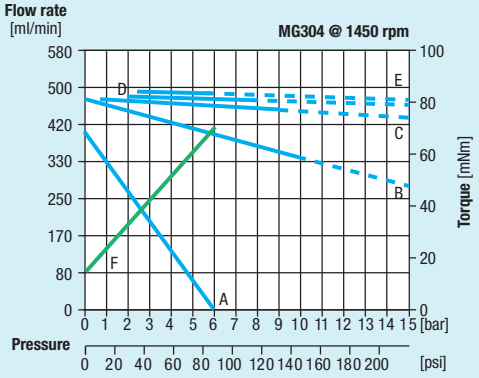
TECHNICAL INFORMATION

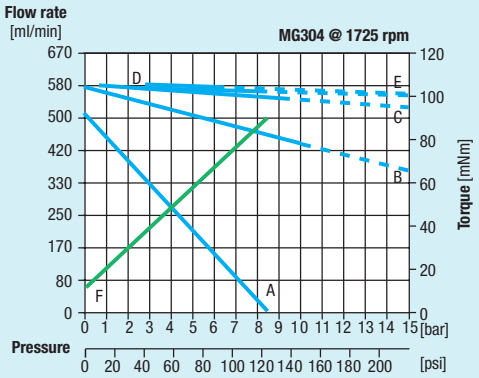
Pump housing material	Stainless steel	Max static pressure	20 bar/290 psi
Gears and bushing materials	Peek™/Ceramic Peek™/PTFE™	Temperature range	Peek™ -45 to 120 °C/-49 to 248 F
Ports	1/8" GAS or NPT		Ceramic Peek™ -45 to 120 °C/-49 to 248 F
Pump weight (MG304)	514 g (1.1 lb)		PTFE™ -45 to 50 °C/-49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

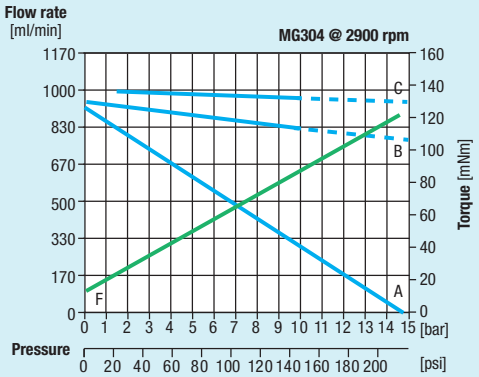
* Priming ability varies with operating conditions and fluid characteristics

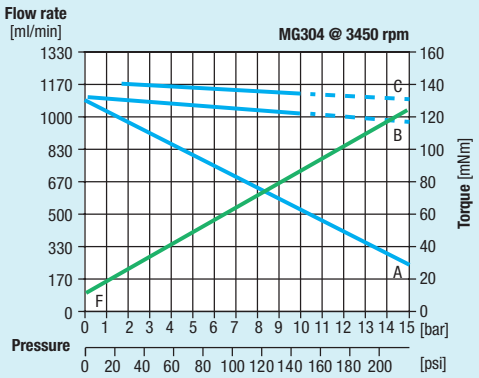


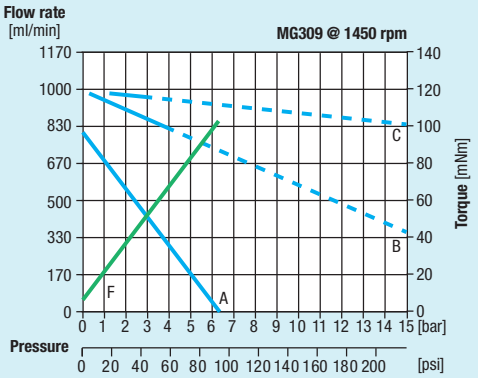
Dimensions in mm [inches]

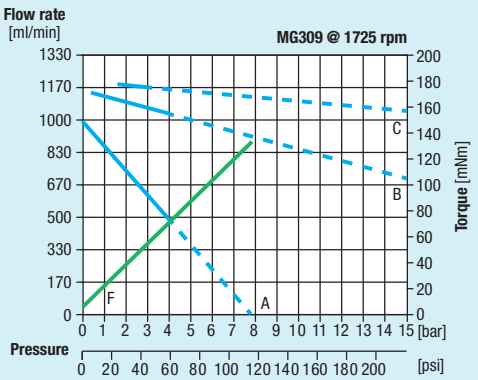


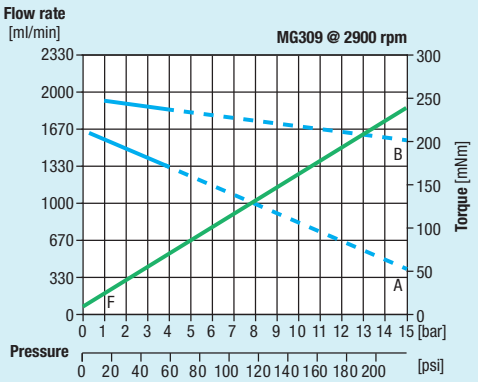


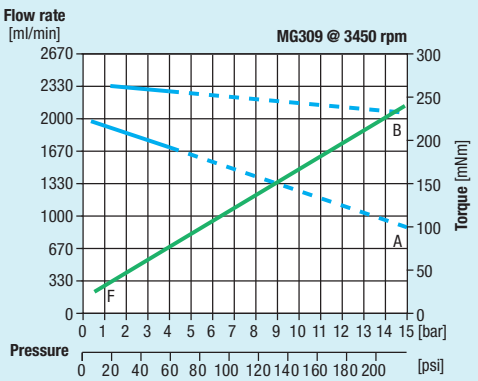








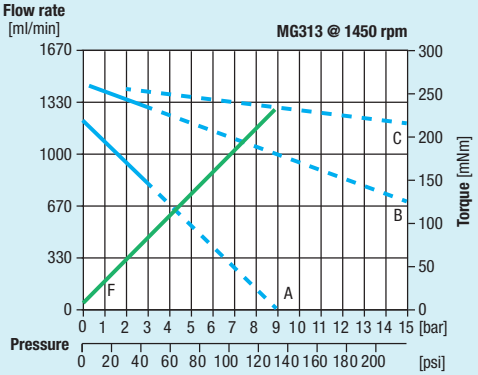


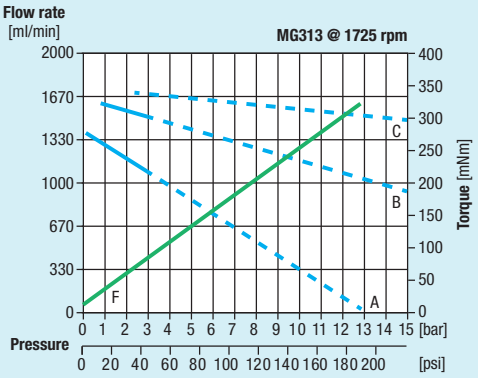


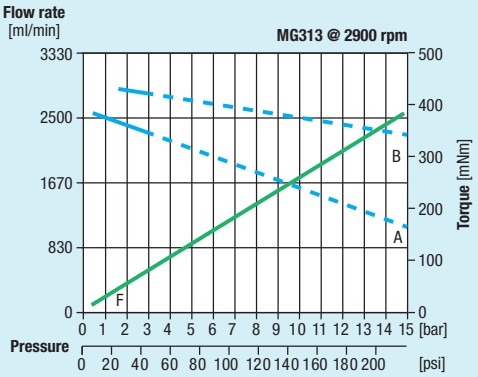
Operating range with ferrite driving magnet
Operating range with rare earth driving magnet
Torque

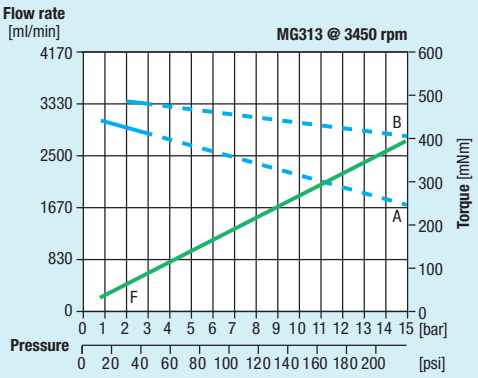
A = 1 cP **B** = 20 cP **C** = 75 cP **D** = 180 cP **E** = 210 cP **F** = 1 cP Torque

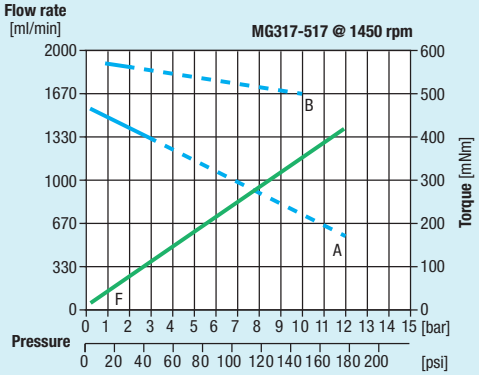
Note: Characteristics with water at 20 °C (68 F) and without relief valve. Fluids different from water must be validated by the Customer. Temperature requirements different from ambient temperature must be mentioned on the order. Dedicated configurations are available if the operating outlet pressure is in between 10bar/145psi and 15bar/217psi. In case of higher outlet pressure, 15bar/217psi to 20bar/290psi, please consult the factory. Different materials are available upon request. Use a filter before the pump inlet no larger than 10 micron

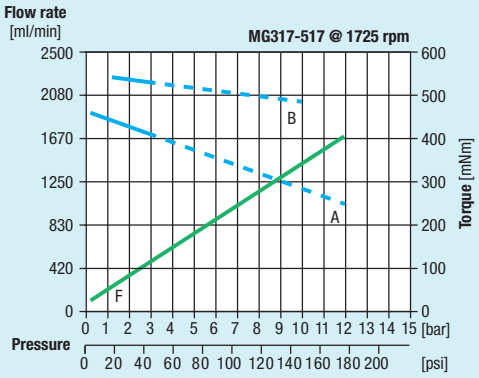


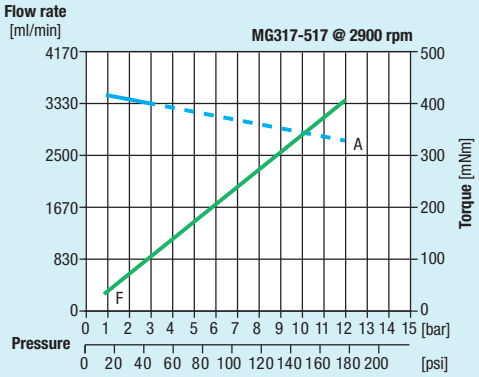


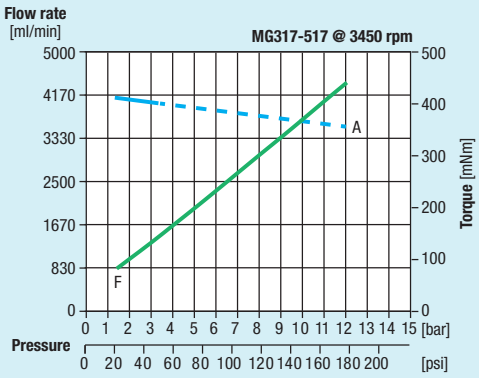












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MODEL NUMBER MATRIX

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)	8	Static seal material	**T** = PTFE™ **E** = EPDM
		17 = 17 mm (1.2 ml/rev)			**N** = NBR **S** = Silicon
4	Housing material*	**X** = AISI 316L **S** = SAF 2205			**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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