

Fluid-o-Tech pump-motor unit MGFR series



The Fluid-o-Tech MGFR series combines a 24V brushless DC drive motor in a rotor-less configuration with a high precision mag drive external MG series gear pump to deliver a high end system capable of handling fluids in the most demanding applications.

The service life of the unit, due to fewer moving parts and to the excellent balance of the system, is greatly extended compared to the traditional pump-motor units.

The integration of the pump, motor and variable speed controller provides an electromagnetically coupled, leak free fluidic system with a high degree of versatility.

The extreme accuracy of the design and of the finishing allows the unit to deliver a smooth and pulsation free flow in all conditions.

Different materials are available for a wide array of fluids.

- A built-in relief valve is available upon request

Main Applications

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



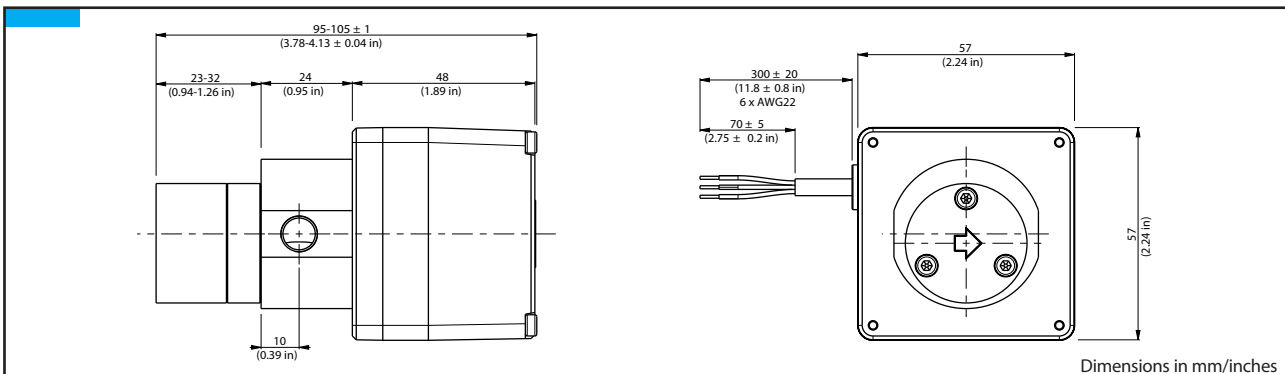
Technical Information

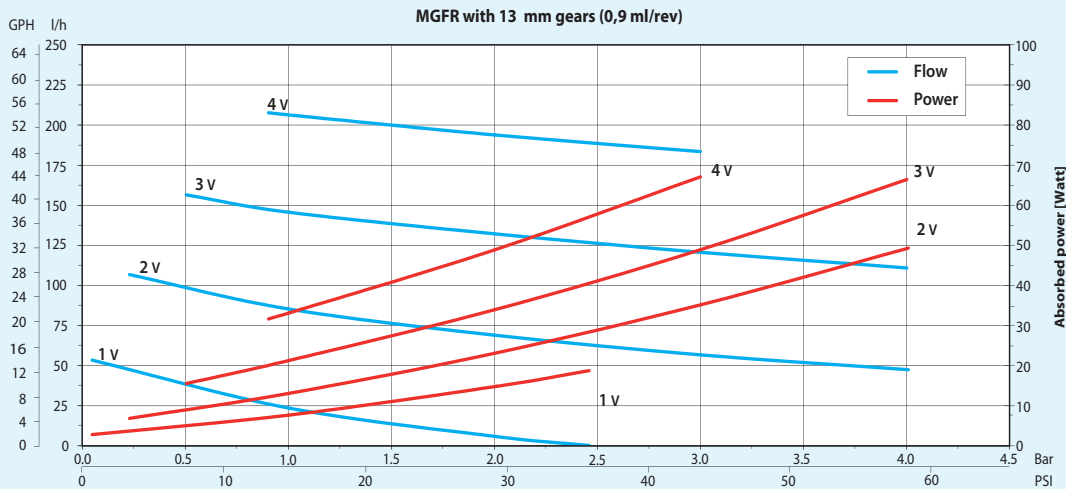
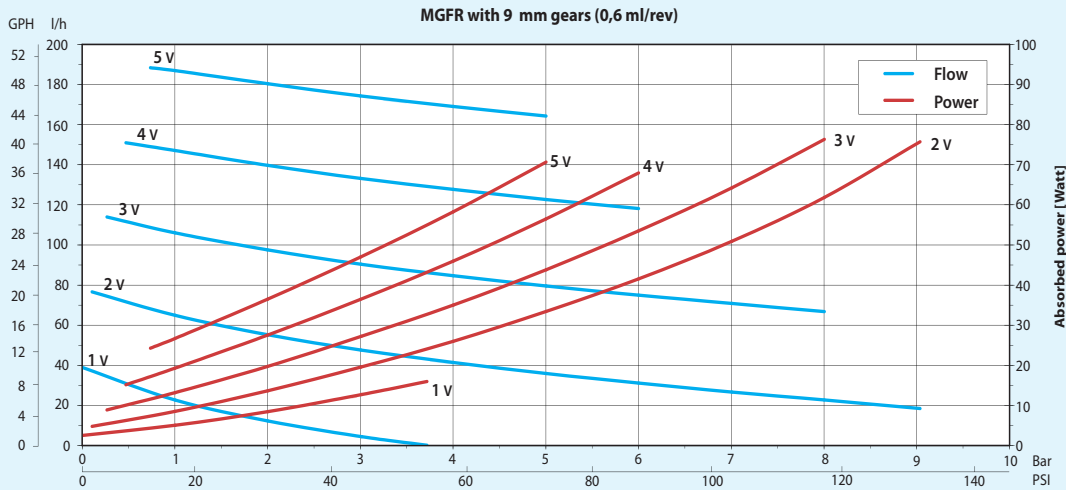
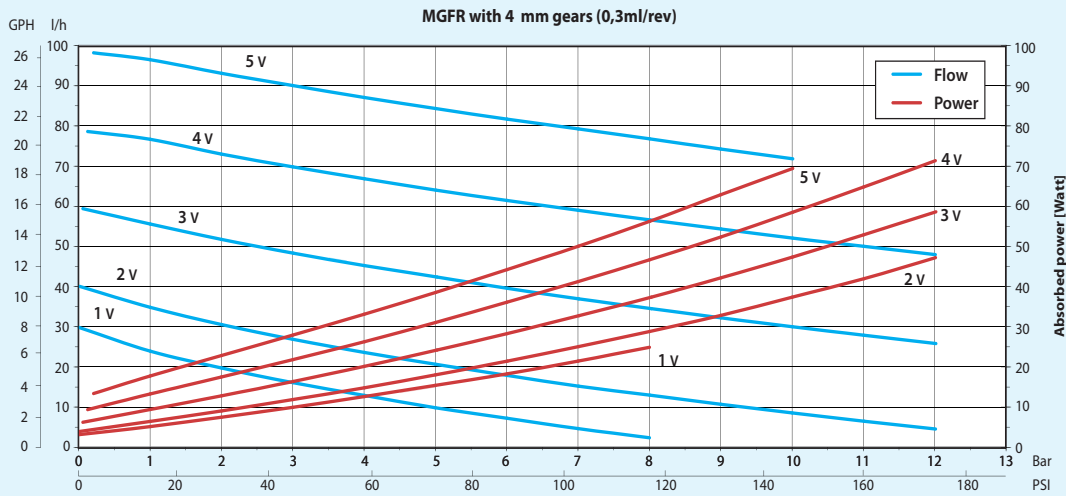
Pump housing material	AISI 316L or PPS	Speed range	from 500 to 5000 rpm
Gears and bushings material	Peek/PTFE	Max power	50 W
Ports	1/8" GAS or NPT	Max static pressure	20 bar/290 psi
Motor IP protection	IP52	Max Vacuum	724 mmHg/28.5 inHg
Unit weight	AISI 316L 910g/2Lb - PPS 550g/1.2Lb	*Wet lift with water	~ 8 m/26.2 ft

* Priming ability varies with operating conditions and fluid characteristics

Operating Range

Max ambient temperature	40 °C/104 °F	70 °C/158 °F	40 °C/104 °F
Fluid temperature	95 °C/203 °F	55 °C/131 °F	40 °C/104 °F
Max torque	30 mNm/4.2 in-oz at 5000 rpm	70 mNm/9.9 in-oz at 3500 rpm	100 mNm/14.1 in-oz at 3500 rpm
Min ambient temperature	5 °C/41 °F		





Note: Characteristics with water at 20 °C (68 °F) and without relief valve, max vacuum 724 mmHg. Use a filter before the pump inlet no larger than 10 micron. Temperature requirements different from ambient temperature must be mentioned on the order. Different materials are available upon request.

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

MGFR – 10/10 Ed.

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