

# Fluid-o-Tech pump-motor unit MGFR Series



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

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

The integration of 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 every condition.

A choice of materials is available for a wide array of fluids.

A built-in relief valve is available upon request.

### Main applications

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



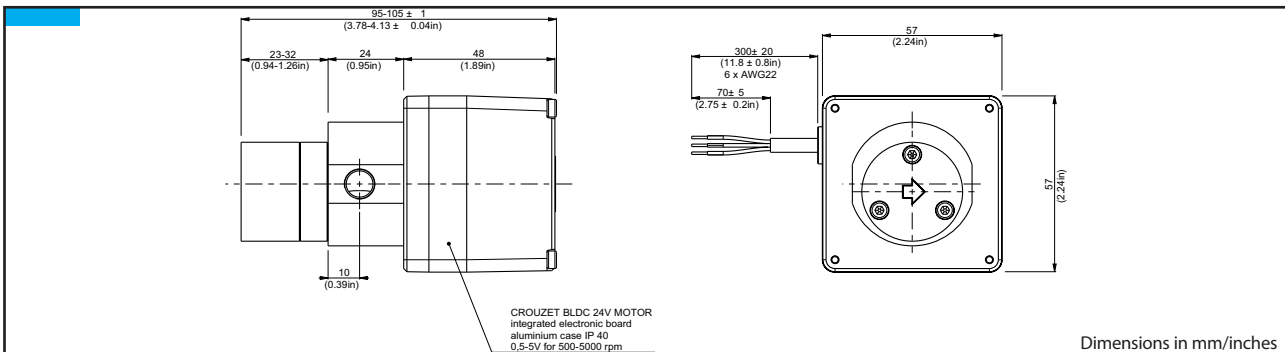
### Technical Information

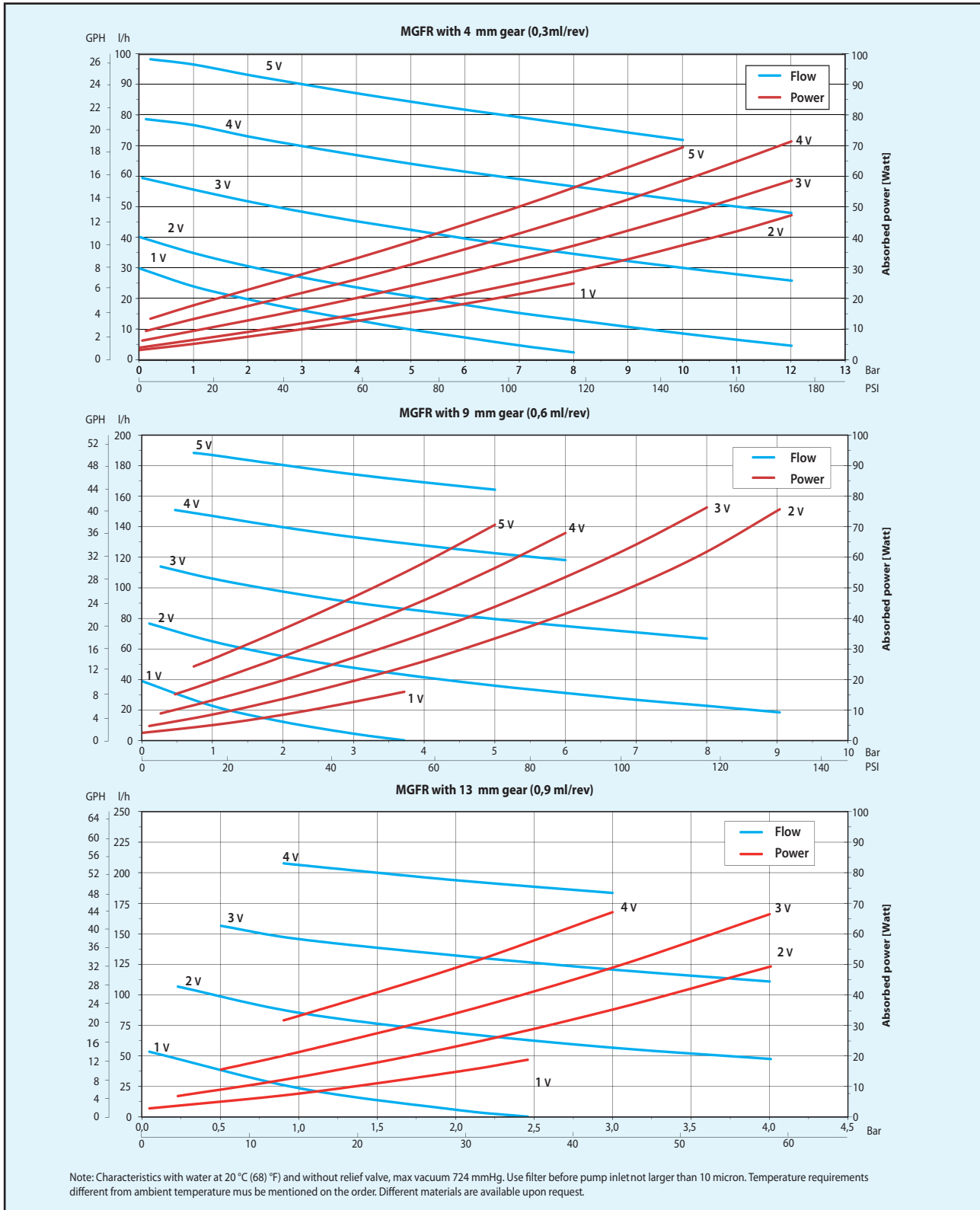
Pump housing material	AISI 303/AISI 316L/SAF 2205	Speed range	from 500 to 5000 rpm
Gears and bushings material	Peek/PTFE	Max static pressure	20 bar/290 psi
Ports	1/8" GAS or NPT	Max Vacuum	724 mmHg
Unit weight	910 g (2 Lbs)	Wet lift with water	~ 8 m

\* Priming ability varies with operating conditions and fluid characteristics

### Temperature Operating Range

Range torque	0 to 30 mNm	0 to 70 mNm	71 to 100 mNm
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
Characteristic	30 mNm at 5000 rpm	70 mNm at 3500 rpm	100 mNm at 3500 rpm
Min ambient temperature	5 °C		





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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