

# Magnet drive gear pump-motor units MG517 series

The compact precision performance pumps MG500 series are designed to fit high technology applications. The magnet drive principle provides a totally sealed pump chamber which is capable of handling a wide range of corrosive fluids with a high degree of safety. The pump housing is available in AISI 316L, SAF 2205, AISI 303 or PPS. In operation the MG and PG series pumps are noiseless, pulsation-free and capable of handling relatively high temperature liquids up to 120 °C (248 F). The coupling with the MGCS95S units designed for heavy duty, provides a reliable and noiseless operation in a compact size package. 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 coupling torque between the magnets.



## MAIN APPLICATIONS

- EV fast charging
- Thermal management
- Immersive cooling
- High efficiency industrial thermoregulation
- Coolant distribution units



## TECHNICAL INFORMATION

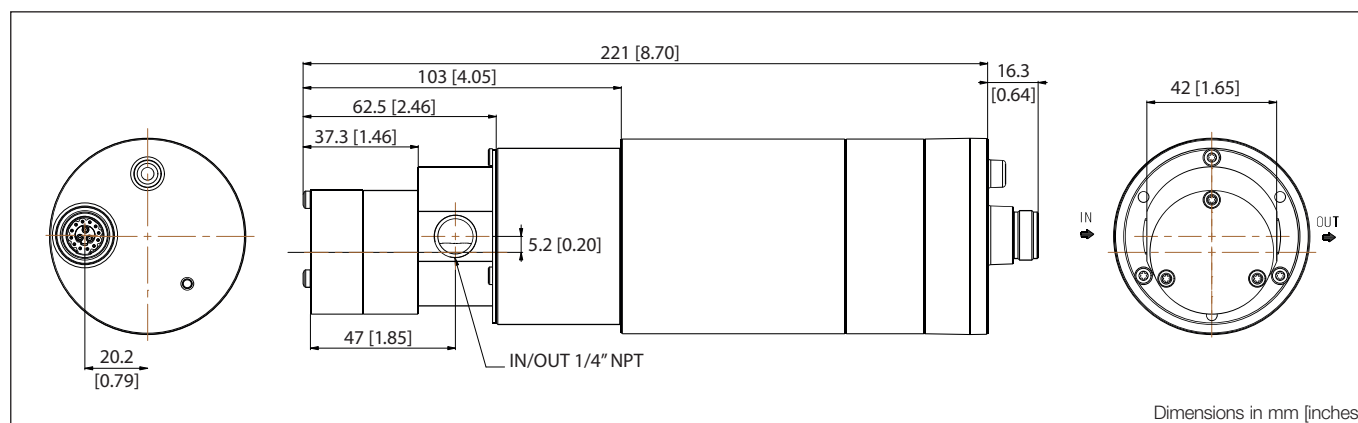
Pump housing material	AISI 316L or PPS	Motor type	24 V BLDC
Gears and bushing material	Peek/PTFE	Speed range	from 100 to 5000 rpm
Ports	1/4" GAS or NPT	Max output power	178 W
Max static pressure	20 bar/290 psi	Motor IP protection	IP 54
Max vacuum	724 mmHg/28.5 inHg	Insulation class	E
Wet lift with water*	~ 8 m/26.2 ft	Unit weight	AISI 316L

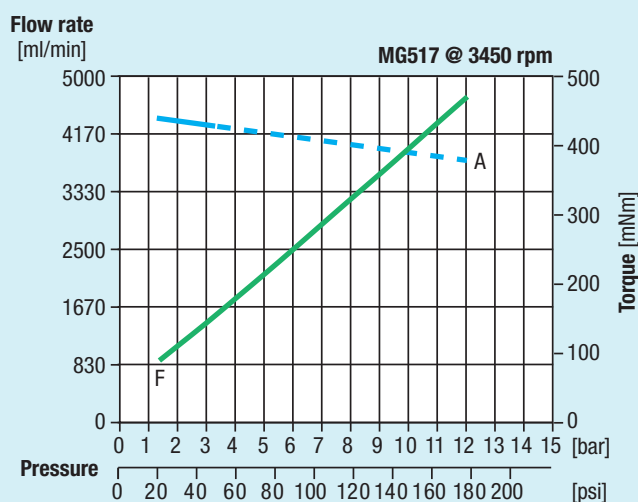
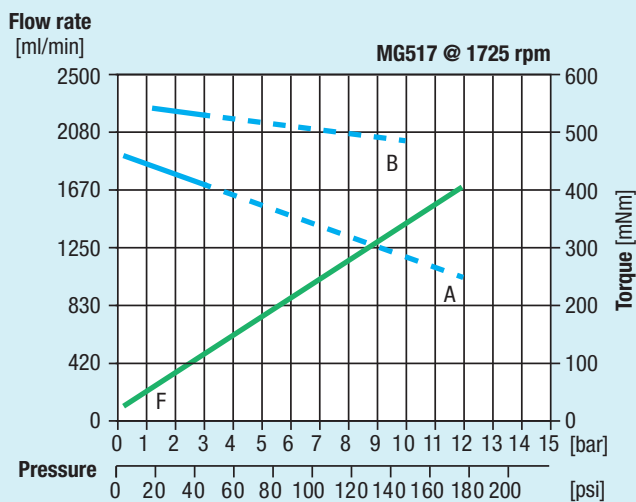
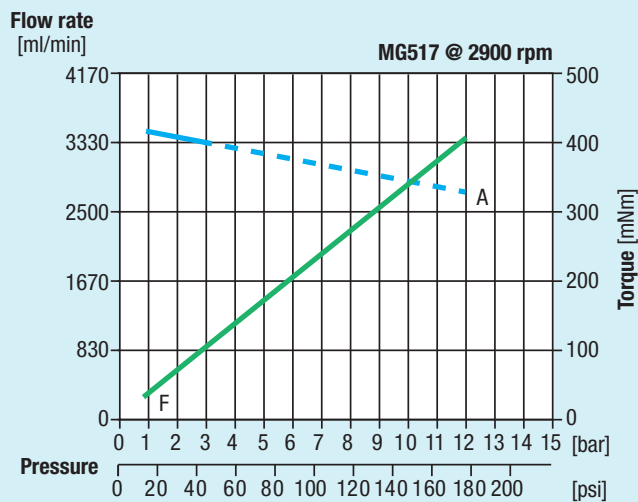
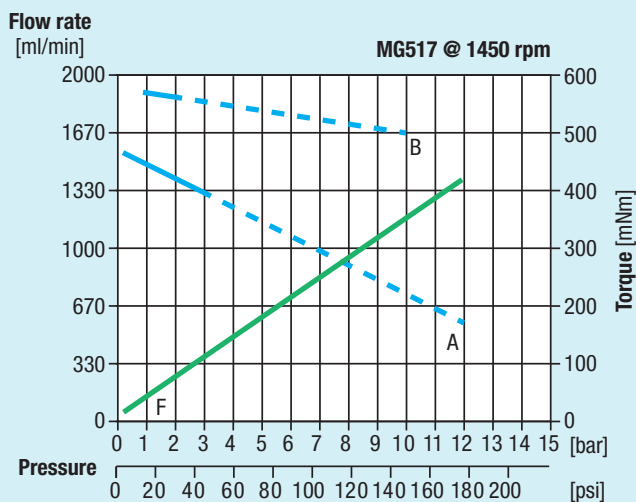
\* Priming ability varies with operating conditions and fluid characteristics

## OPERATING RANGE

Ambient temperature	- 35 + 55 °C S2 Cycle	Fluid temperature	0 + 120°C*
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\*Extended fluid temperature range available upon request.





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

A = 1 cP B = 20 cP F = 1 cP Torque

Note: Fluids different from water must be validated by the Customer. 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

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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