

**Product Datasheet: 1000ml/min Optima Series**

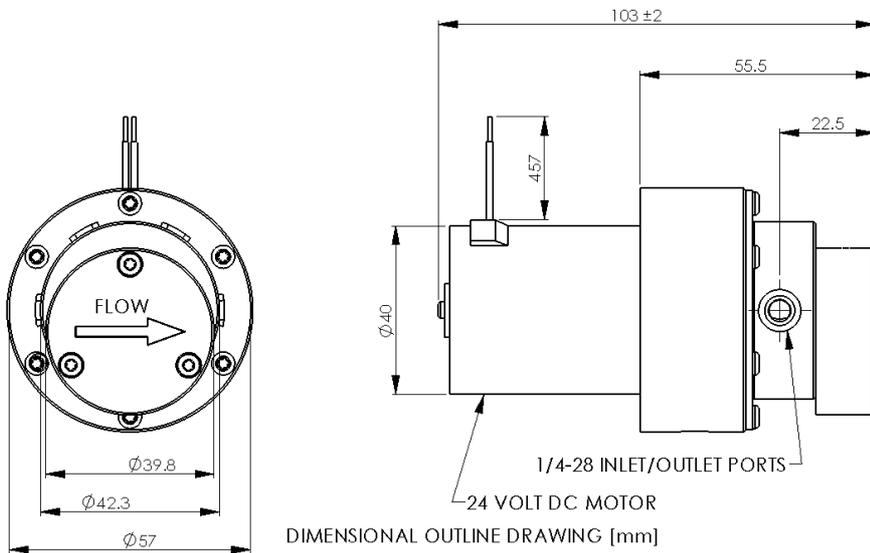
All Diener pumps are customized to suit your requirements: the information below represents one of the possibilities...



Pump shown with 1/4-28 UNF side ports and 3mm I.D. tube fittings

The Optima series is designed for applications requiring accurate flow in a very small package size. The wetted materials and gear construction are the same as those of its larger cousins, but by removing one of the shaft bearings the overall length is much shorter. In addition, the magnetic coupling has been miniaturized to further reduce the overall length without sacrificing high-pressure performance. The inlet and outlet port locations can be located on the side, top, or end of the pump, and are available in a variety of sizes. The brush-style DC motor is oversized and gives excellent brush life at a relatively low cost.

- Magnetically Coupled: No seal leaks
- Positive Displacement: Pulse-less flow delivery across pressure range.
- Mounting Versatility: Adjustable base bracket mounting with a variety of porting styles/locations.
- Extremely Efficient: Very low power consumption
- Mounted to long-life brush-style motor



DIMENSIONAL OUTLINE DRAWING [mm]

**Specifications**

Performance:

Max. continuous pressure: 2 bar  
 Max. intermittent pressure: 4 bar  
 Max. static case pressure: 20 bar  
 Inlet: Self-priming  
 Speed range: 0-5000 rpm  
 Fluid viscosity range: 0.3 to 1000 cps

Electrical:

Supply voltage: 0 to 24vdc (vary voltage to vary motor speed).  
 Rotation: Clockwise  
 Max. current: 1.5 amps  
 2-wire PVC insulated leads: 22 AWG  
 Color code: Black = ground, Red = +24vdc

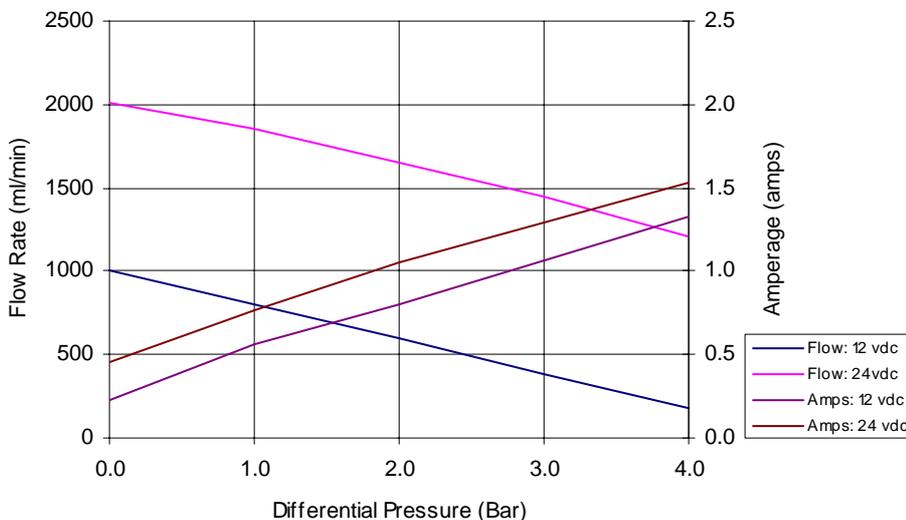
Temperature:

Fluid temp. range: -20 to +100°C  
 Ambient air temp. range: 0-60°C  
 Relative humidity range: 0-95% non-condensing

Construction:

Standard: 316L stainless steel, PEEK®, EPDM. Optional: 304 SS, Alloy-C, PPS, Teflon®, Silicone, Viton®, Kalrez®  
 Inlet/Outlet: 1/8"-NPT (standard); Optional: 1/4-28 UNF, 1/4"-NPT, G1/8, G1/4, exiting the side, top, or end of the pump.  
 Marking: Permanent laser-mark identification for 100% traceability.  
 Mass: 0.7 kg

**Typical Performance Curve: Water at Room Temperature**



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