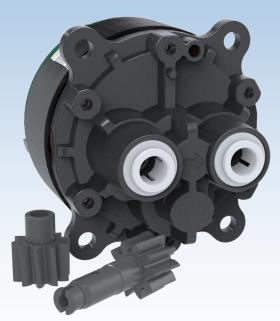
# SILENCER LDP SERIES GEAR PUMPS





The Silencer LDP has no metallic contact with the fluids yet provides a durable, leak-free, reliable, quiet pump solution.

All of the benefits of a magnetically coupled gear pump are now available in a compact package with no metal fluid contact. Ideal for low-pressure applications where aggressive chemicals may attack stainless steel, or where exposure to metallic ions causes the fluids to degrade. Wetted materials include polymers, ceramic, elastomers, and Parylene-C. The molded components save on the cost yet include the same accuracy and tolerancing that make Diener Precision Pumps the preferred pumping solution. Push-to-connect fittings are shown, but the pump face can be modified to include alternate ports and mounting points.

The Silencer LDP Series - Engineering Your Flow.

- > Life Science Analytical Diagnostics
- > Bulk & Sample Fluid Transfer
- > Dialysis Degas and Dialysate
- Continuous Ink Jet Printing
- > Industrial Cooling

### **Benefits**



Low Cost: Not all applications require maximum pump capability. Silencer LD has been optimized to lower cost while still providing superior Diener quality.



Long Life: DPP pumps are all characterized by their robustness and performance. Wear and tear is at its lowest, and their smart designs ensure a sustainable reduction of operating costs.



100% Outgoing Test: Before any pump leaves our factory, it is stringently and extensively tested in accordance with its specifications. Our customers receive detailed test reports, to confirm performance.



Non-metallic Fluid Contact: This pump is specially constructed to have no metal fluid contact. The gears and body are made from engineering thermoplastics and ceramics. The stainless steel piece separating the magnet from the stator is coated with Parylene-C.



Low Pressure Pulsation: Thanks to their smart drives and innovative helical gear design, our pumps ensure extremely smooth fluid delivery with almost no pressure pulsation.



No Shaft Seals: DPP gear pumps are hermetically sealed instead of using conventional shaft seals. This means low maintenance for you and your customers, a long service life and the highest degree of productivity.

# Specifications\*

### **Performance**

Max. continuous pressure:2 barMax. intermittent pressure:4 barMax. static case pressure:10 barFlow Rate(see pages 4-5)Inlet:Self-primingFluid viscosity range:0.3 - 1000 cps

#### **Temperature**

Fluid temperature range: 0-95°C
Ambient air temp. range: 0-80°C
Relative humidity range: 0-95%
non-condensing

#### Construction

Body: Ryton R-4-02 (PPS)
Gears: PEEK
O-ring options: EPDM, Silicone, FKM, Nitrile
Other Wetted Materials: Zirconia (ceramic), Parylene-C
Inlet/Outlet: 1/4" Push Connect
Marking: Permanent laser-mark
identification for 100% traceability

\*Performance values are limits and cannot all happen simultaneously.

Please contact your sales engineer for further technical information and customized options.



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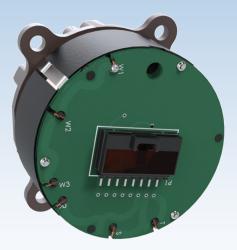
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**Product Datasheet** 

# **Motor Options**



#### 12 & 25W Basic BLDC



Centralize controls away from the pump onto an OEM circuit board. This gives the customer maximum flexibility and may reduce overall costs.

# **Specifications**

Supply Voltage: 24 vdc Rotation: Bi-directional

Control Options: Customer provided

Max. Current: 2 amps
Feedback: Hall sensors

IP Rating: Parylene-C splash

protection

Electrical Connection: Board-mounted

connector, flying leads or custom termination

Total Pump Mass: 0.25 kg

## **12 & 25W Smart BLDC**



On board control simplifies electronics for the customer. Supply 24 vdc power and a 0-5 vdc control and let the pump do the rest.

# **Specifications**

Supply Voltage: 24 vdc

Rotation: Bi-directional

Control Options: 0-5 vdc PWM

Potentiometer

Max. Current: 1.6 amps

Feedback: Tachometer

IP Rating: Parylene-C splash

protection

Electrical Connection: Board-mounted

connector, flying leads or

custom termination

Total Pump Mass: 0.30 kg

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# **Pump Sizes**



Various pump displacements are easily achieved by changing the gear width or tooth profile, all while maintaining the same envelope diameter. Performance values are limits and cannot all happen simultaneously. See flow curves for more information.

	Silencer LDP 500	Silencer LDP 1000	Silencer LDP 1500	Silencer LDP 2000
Maximum Flow Rate (ml/min)	Coming Summer 2020		1700	3000
Maximum Pressure (bar)			4	4
"b" Pump Body Height (mm)			28	28

Р

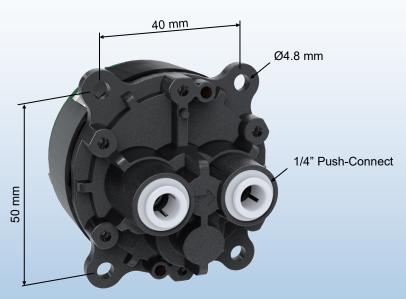
# **Dimensional Outline**

#### **Basic BLDC**

# Ø58 mm 12W: 29 mm 25W: 35 mm 3.5 mm

#### **Smart BLDC**







3D models available at www.dpp.swiss

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Silencer LDP 500

# Coming Summer 2020

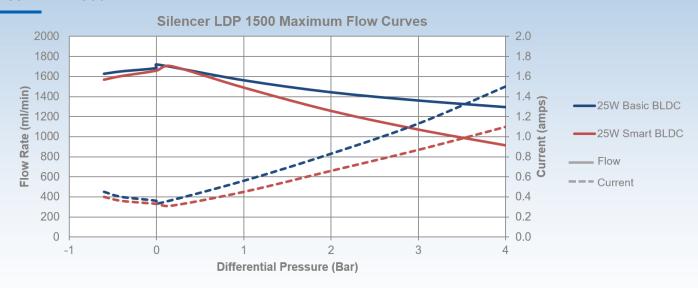
Silencer LDP 1000

# Coming Summer 2020

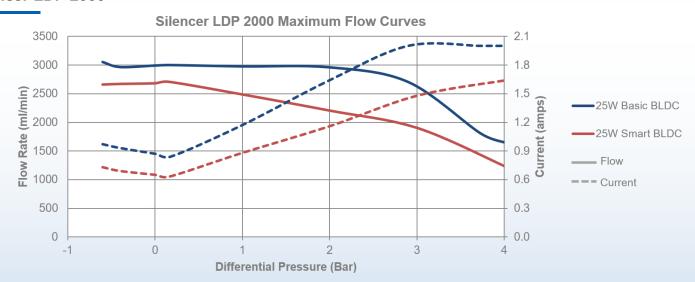
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#### Silencer LDP 1500



#### Silencer LDP 2000



DPP is certified to ISO 9001 and operates a clean-room according to ISO Class 7. All pumps are customized; the information given represents one of the possibilities.

None of the information supplied by Diener Precision Pumps constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as a suggestion for investigation for use, based upon Diener Precision Pump's or other customers' experience. DPP makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe upon any patents. All new DPP product developments are tested and confirmed according to the «ROHS Directive».

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