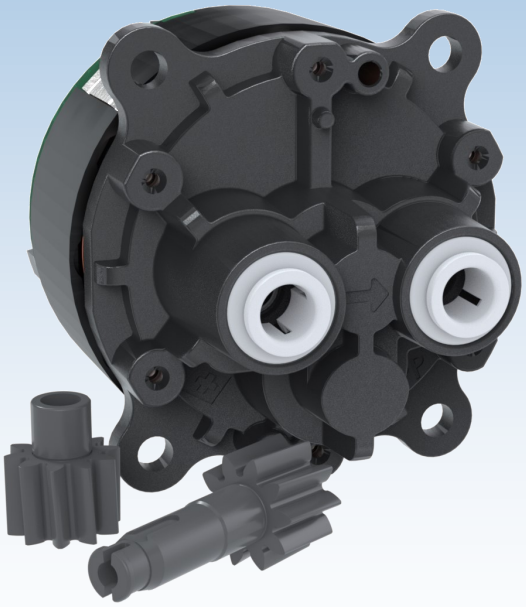
SILENCER LDP SERIES GEAR PUMPS

DIENER Precision 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 bar
Max. intermittent pressure:	4 bar
Max. static case pressure:	10 bar
Flow Rate	(see pages 4-5)
Inlet:	Self-priming
Fluid 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

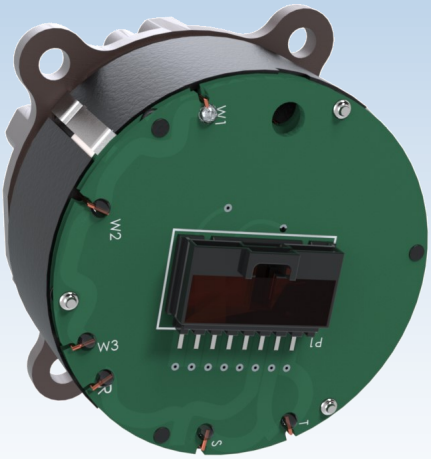
Construction

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.

Motor Options

12 & 25W Basic BLDC

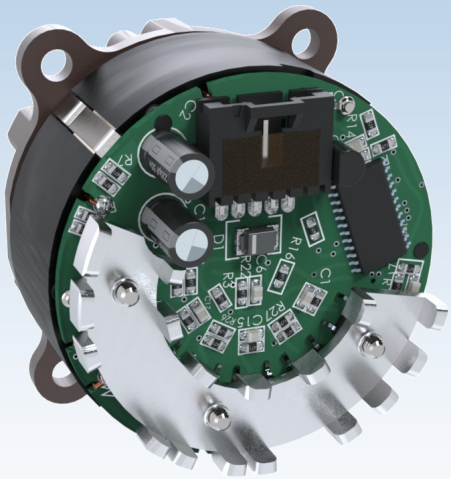


Centralize controls away from the pump onto an OEM circuit board. This gives the customer maximum flexibility and may reduce overall costs.

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

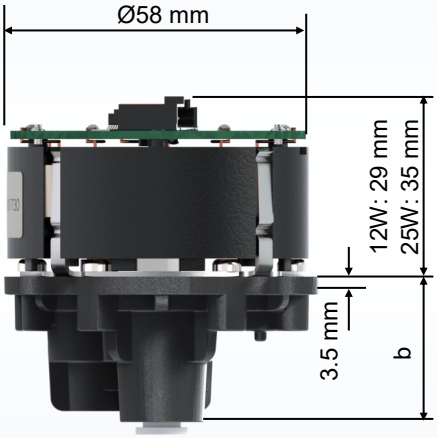
Pump Sizes

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.

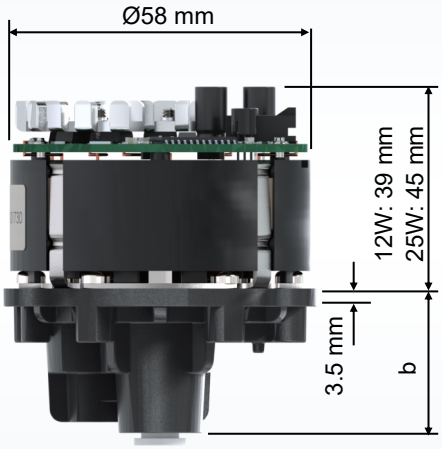
	Silencer LDP 500	Silencer LDP 1000	Silencer LDP 1500	Silencer LDP 2000
Maximum Flow Rate (ml/min)	Coming Summer 2020		1700	3000
Maximum Pressure (bar)			4	4
"b" Pump Body Height (mm)			28	28

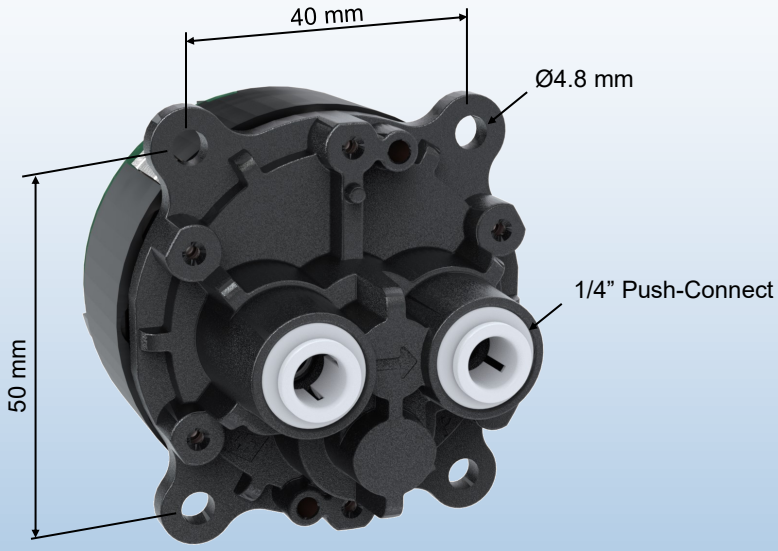
Dimensional Outline

Basic BLDC



Smart BLDC





3D models available at www.dpp.swiss

Performance

Data represents performance pumping water at room temperature

DIENER Precision Pumps

Silencer LDP 500

Coming
Summer 2020

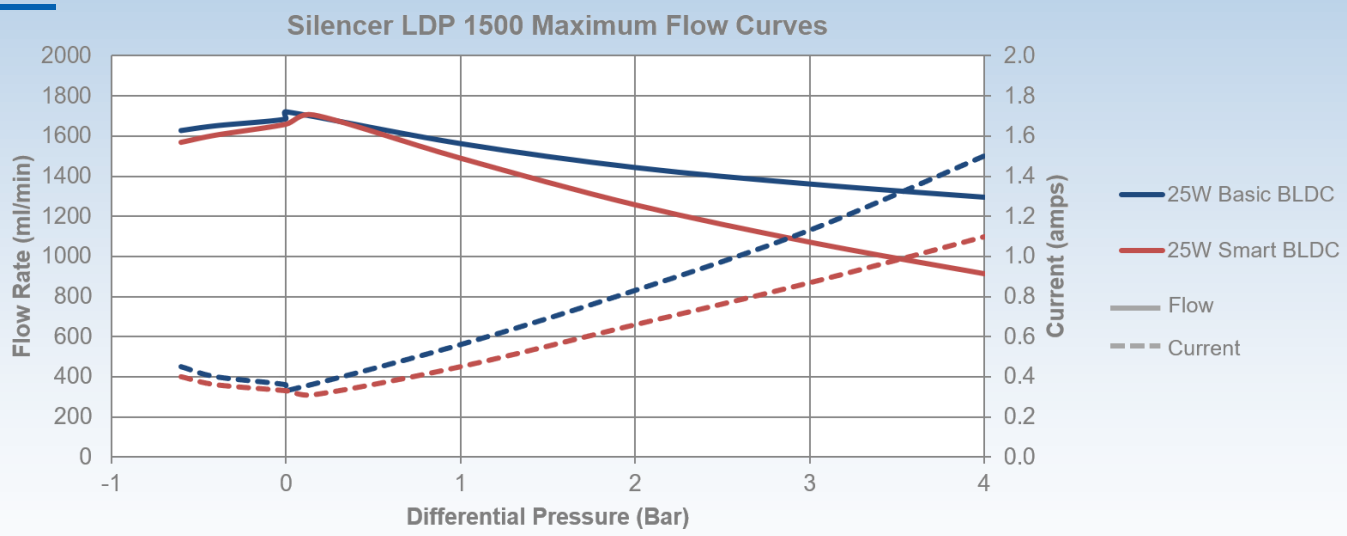
Silencer LDP 1000

Coming
Summer 2020

Performance

Data represents performance pumping water at room temperature

Silencer LDP 1500



Silencer LDP 2000